



TOOLING SYSTEMS



WIDIA™ Means Complete Quality

As an innovator for more than 80 years, the WIDIA Products Group has been designing and manufacturing metalcutting products that make customer machining processes more efficient and effective.

With thousands of products in our portfolio, the WIDIA Products Group offers competitive advantages that will enhance your productivity and bolster your profitability.

To learn more, contact your local Authorized WIDIA Distributor or visit www.widia.com.

TOOLING SYSTEMS

Tooling Systems

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WIDIA™ means complete quality

When you buy products from the WIDIA family of brands, you're not just buying speed, power, and precision — you're buying complete quality.

The WIDIA Products Group brands offer the most complete portfolio of precision-engineered products and engineered-solution services available today. With more than 14,000 turning, milling, and holmaking products in our portfolio and a skilled network of Authorized Distributor partners, you'll find everything you need from one single source.

80+ Years of Quality

1925

Application to register "WIDIA" as a trademark

1930

WIDIA wins the Grand Prix at the world exposition EXPO in Liege

1962

First patent granted for coated carbide inserts

1987

Launch of the Widaflex™ tooling system for turning, holmaking, and milling

2006

WIDIA celebrates 80 years

2011

Launch KM™ and Erickson™ Portfolio

1926

Tungsten carbide production begins

1968

Launch of first global coated grade

2000

QS 9000 TES and VDA 6.4 certification for the WIDIA operations in Essen and Lichtenau

2009

Launch of the TN5100 and TN7100 Series grades for turning



Technical expertise you can count on



WIDIA™ brand cutting tools are available exclusively through a specialized network of Authorized Distributor partners whom you can count on to deliver much more than products.

They will show you how to:

- Significantly reduce cycle time.
- Improve machine tool utilization.
- Achieve measurable productivity improvements.
- Take advantage of proven supply chain solutions.
- Access local inventory and best-in-class technical support.
- Request onsite demonstrations of the latest tooling technology.

The most powerful family of brands in the industry

The WIDIA family of brands is well served by a global network of the finest Authorized Distributors in the industry, selected for their specialized expertise in the areas of:

Turning, Holemaking, Indexable Milling, and Tooling Systems

WIDIA 

WIDIA 
MANCHESTER

WIDIA 
CLAPDICO

WIDIA 
CIRCLE

WIDIA 
METCUT

Solid Carbide End Milling and Solid Carbide Drilling and Reaming

WIDIA 
HANITA

WIDIA 
RÜBIG

WIDIA 
METAL REMOVAL

Tapping Operations

WIDIA 
GTD



Easy to order

Finding the right WIDIA™ products for your machining applications has never been easier. Our engineers and Authorized Distributor partners are experts in high-performance machining. They will work with you to determine the correct product for your application, then order, ship, and deliver the product with the attention to customer service you would expect from a world-leading brand.

Supply chain services

Whether your manufacturing enterprise involves batch processes or mass production, or your metalcutting machines are organized in lines, cells, or as standalone units, our supply chain services program will eliminate unnecessary overhead, ensure tooling availability, shorten setup times, and minimize costs by 30–90%.

In fact, our solutions often quickly pay for themselves by delivering savings that well exceed your annual spend on cutting tools and supplies.



Global manufacturing

WIDIA products are developed and manufactured at our Centers of Manufacturing Excellence in:

- Essen, Germany
- Lichtenau, Germany
- Nabburg, Germany
- Johnson City, Tennessee, USA
- New Market, Virginia, USA
- Orwell, Ohio, USA
- Solon, Ohio, USA
- Bangalore, India
- Shlomi, Israel



Robust training programs

As a WIDIA™ customer, you can gain access to our exclusive online training program, where you'll find dozens of training courses on our newest products and services.

On the web

Visit our website to read up-to-the-minute information about new products, download electronic copies of product literature, and see a list of industry events in which we are participating. Visit www.widia.com and use the Distributor Finder to locate the Authorized Distributor nearest you.



When you think
speed, power, and precision,
think complete quality —
think WIDIA.

To find the Authorized WIDIA Distributor nearest you,
use the Distributor Finder at www.widia.com.



Environmental responsibility

We are deeply committed to offering environmentally responsible products that deliver high performance and proven value. With decades of experience in tooling and manufacturing, combined with the synergy of superior engineering, we offer customers some of the most effective opportunities for sustainable manufacturing in the industry.



Sustainable engineering

Leading the way with innovation, engineering, and service in standard and custom tooling. A proven methodology and partnership.

Successful project engineering requires planning, teamwork, and disciplined execution. Through our extensive experience in developing and implementing new project engineering strategies, we have pioneered a proven methodology to help you manufacture new products and bring them to market quickly. Service deliverables are carefully outlined and jointly agreed to before the project begins. We formally evaluate progress and results with you throughout the project through our stage-gate management systems.

With our best-in-class process, you'll experience accelerated time to market, lower overall costs, and reduced risks to implement new technologies.



Vendor of choice

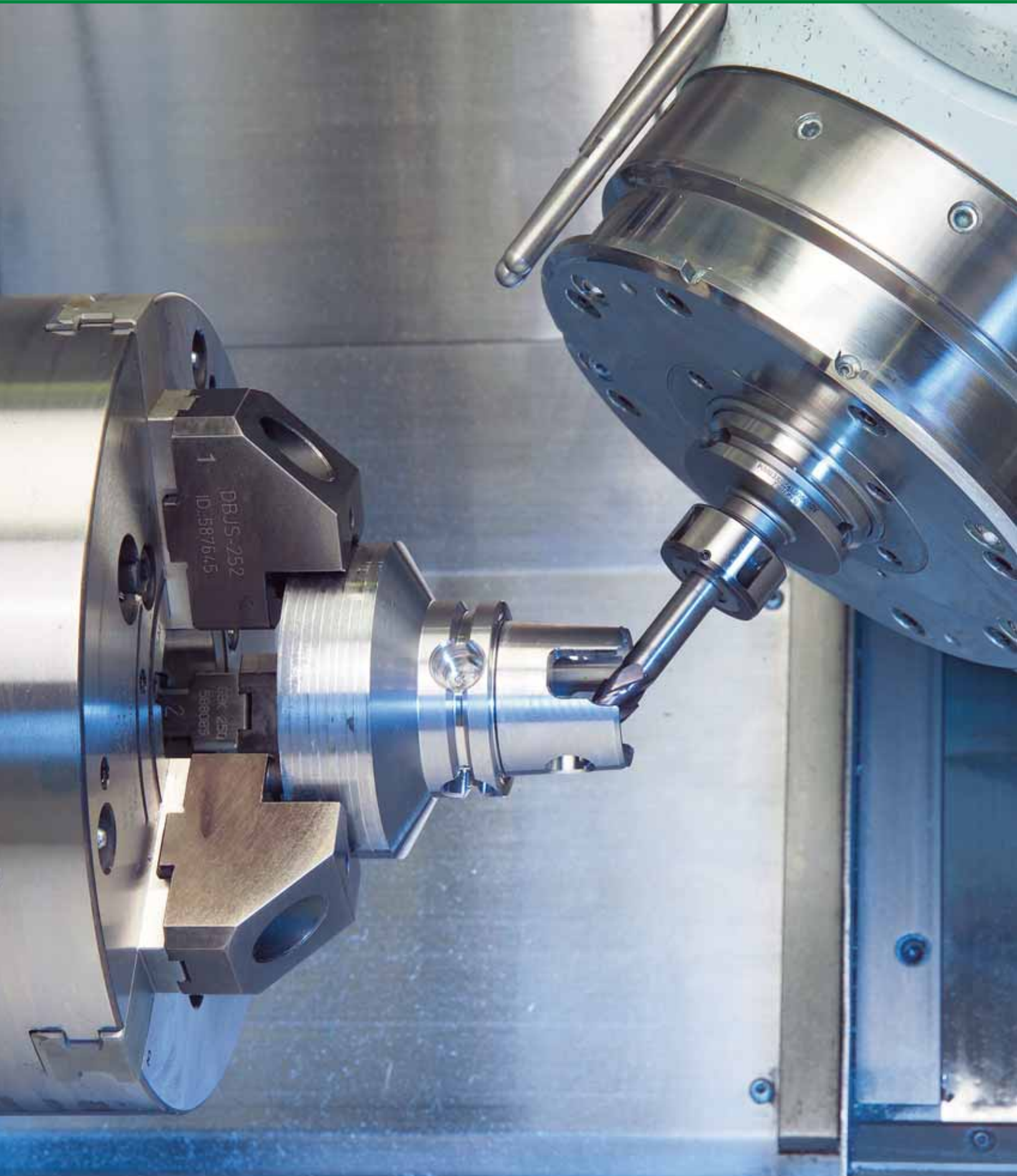
We serve every major industrial market throughout the world and are a brand of choice in the most demanding industries, including aerospace, die and mold, automotive, heavy equipment, medical, and general engineering. Throughout our more than 80-year history, we have achieved a reputation for providing our customers with a constant flow of new and unique products and services, specially designed for maximum efficiency and performance. We have enabled customers to become more competitive and more profitable in their own industries, producing parts in less time, with fewer tool changes and longer tool life.

We are committed to providing you with tools and services that deliver the ultimate in customer satisfaction, and we are pleased to feature some of our latest breakthroughs in this catalog. For more information about how these products can impact your bottom line, please contact your local Authorized WIDIA™ Distributor today.



To find the Authorized WIDIA Distributor nearest you,
use the Distributor Finder at www.widia.com.





KM™ Quick Change

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KM™ Quick Change

KM™ Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

The necessary tasks of changing, setting up, and gaging tools create an excess of machine downtime. For small batch manufacturing operations requiring these frequent setups, KM™ Quick Change Tooling is the most efficient method for reducing lost time and improving the overall quality of the machining process by generating greater productivity and increasing profits.

Aside from Quick Change Clamping units, KM™ has other economical means to improving machine utility. For example, Shrink Fit technology and Hydraulic Chucks are other methods offered for Quick Change Tooling.

There's no better way to begin maximizing production than switching to KM™ Quick Change Tooling. Whether you're looking to purchase a new machine or to gain greater output from your current equipment, WIDIA offers a variety of methods to upgrade your tooling system. The cost of these improvements will be justified by time saved, production increased, and profits.



Uniquely Designed

A uniquely designed clamping mechanism is the driving force of KM™ Quick Change Tooling technology, which is designed around a single shank tapered at a shallow angle.

Using a simple mechanism involving lock rods and a ball track, a high clamping force is generated from a minimal amount of input force. This design is universal, and enables faster tool changes, reducing downtime.





Extremely Rigid

The most heavy-duty, rigid modular quick-change tooling available on the market today. The strength of the metal-to-metal locking device is extremely rigid, reducing vibration between components.



Reliability

Not only is KM™ Quick Change Tooling faster and more economical, it's also more reliable. The rigid coupling design enables a high degree of accuracy and repeatability. Low activation forces and decreased vibration provide longer life for clamping units and protect the mechanism in the event of a crash. Clamp strength enables operators to run machines at high maximum speeds without loss of force after continuous use.



Versatility

The KM™ System is a true modular system. It has been designed for all metalcutting operations and provides a standard platform for use throughout your shop. The KM™ clamping mechanism is designed to be used on all types of manufacturing equipment. Available in manual, VDI, KM-LOC-II™, automatic and rotating spindles.



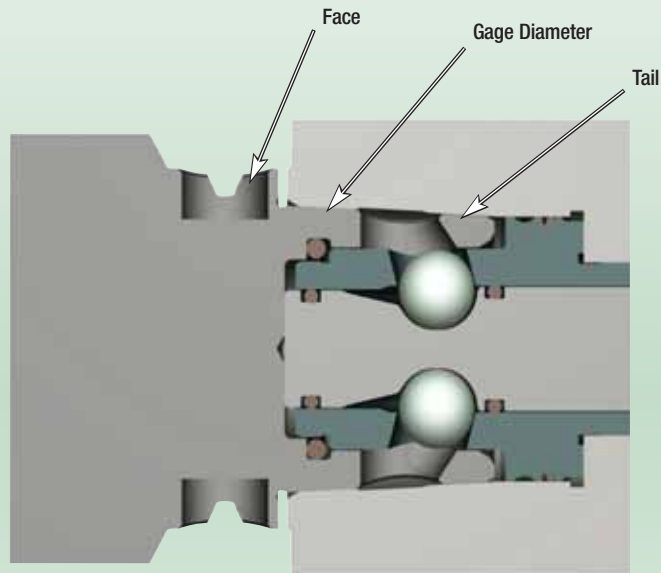
Which KM Backend?

KM Mechanism

The KM Quick Change clamp is a self-locking system with a mechanical amplification of 3:1 to 7:1. This system is effective because it locks by having three contact areas, and the mechanism is sealed with Viton® O-rings to prevent component contamination.

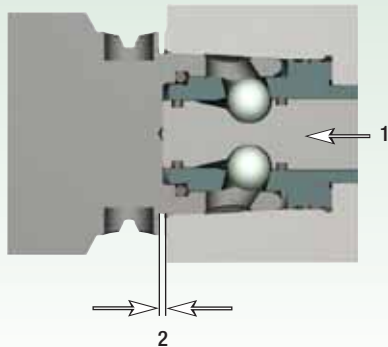
When in the locked position, there is increased interference between contact surfaces, resulting in superior rigidity. Because the face and taper contact within the unit is simultaneous, this provides accurate radial and axial repeatability. Elastic deformation provides greater static and dynamic stiffness.

Three effective contact areas:



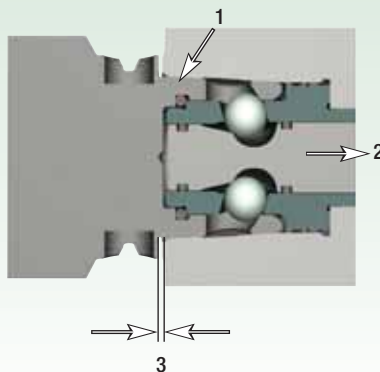
Load/Release Position

1. Bump-off force
2. Bump-off



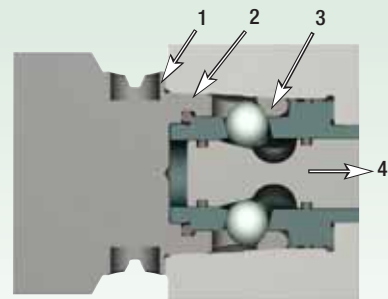
First Contact Position

1. Point of first contact
2. Clamping force
3. Stand-off



Locked Position

1. Face contact
2. Interference at gage line
3. Tail contact
4. Clamping force



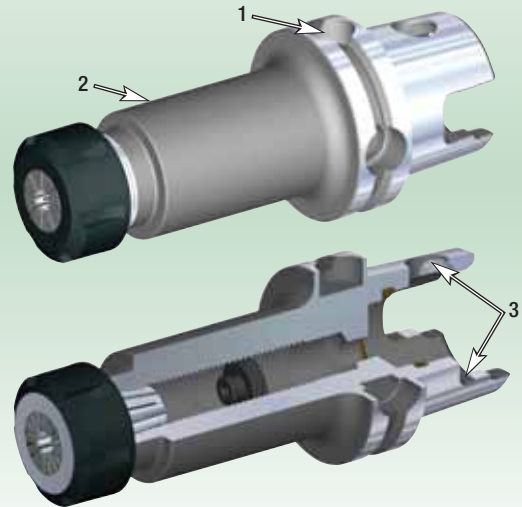
KM Today

All KM Quick Change tooling is made from H13 high-strength steel and comes in a silver satin finish. After the parts are heat treated, qualified pads are machined into the part, which increases the repeatability of the clamping mechanism. KM is an ISO standard (26622).

The addition of the ATC configuration and data carrier capability provides machine tool builders with one standard KM design. Integrating these components also enables customers to use data carriers to record tool offsets and tool life information on the tool.

KM-TS Standardized System

1. **Addition of ATC configuration and data carrier capability:**
 - a. Provides machine tool builders with one standard KM design.
 - b. Enables customers to use data carriers to record tool offsets and tool life information on the tool.
2. **H13 high-strength steel, silver satin finish.**
3. **Qualification after heat-treat process:**
 - a. Heat-treated, qualified pads are machined into the part, increasing the repeatability.
 - b. Qualification of the ball tracks after heat treat.

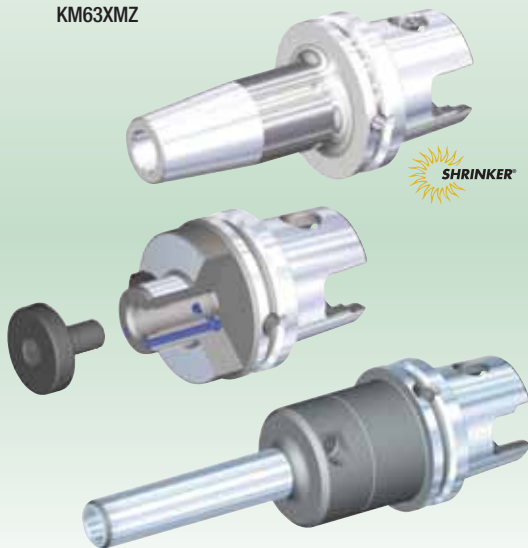


KM Specific Systems

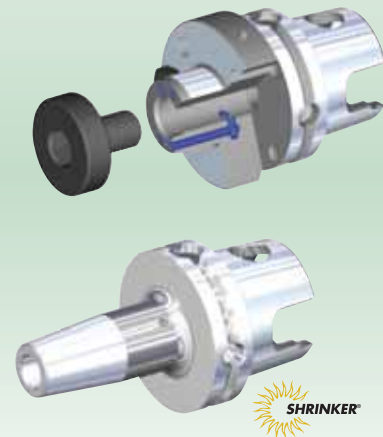
KM63XMZ™ — Designed and used exclusively on Mazak® INTEGREX® Mark IV Series, I-Series, and J-Series machines.

KM80ATC™ — Designed and used on Giddings & Lewis™ VTLs.

KM63XMZ

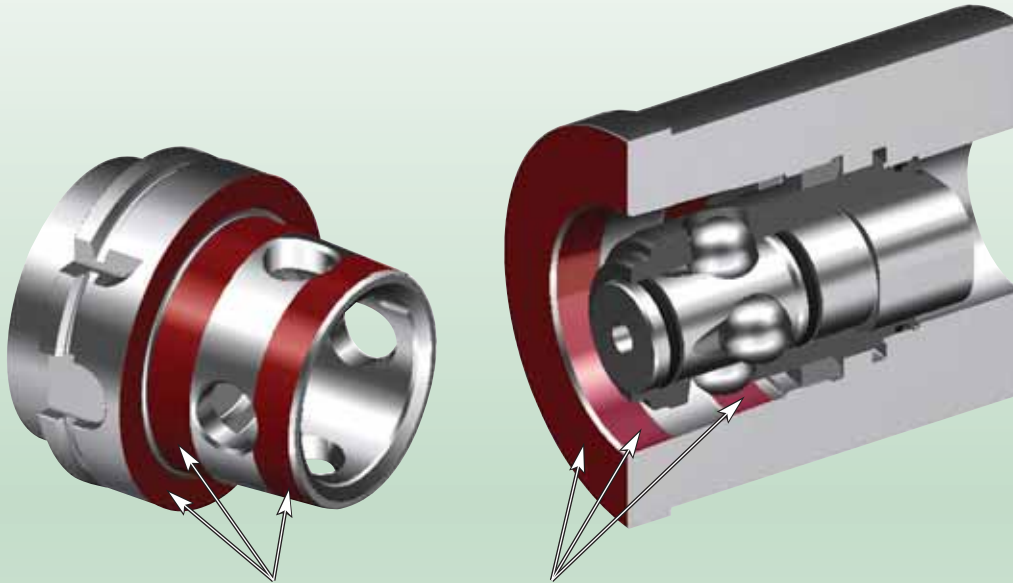


KM80ATC



KM4X — The Next Generation Spindle Connection System

- Heavy-duty, rigid configuration with evenly distributed clamping force.
- Simple design enables front-loaded spindle configuration.
- Balanced-by-design for high spindle speed capacity.
- Capable of performing in a wide range of operations from low speed, high torque to high speed, low torque.



KM4X three-surface contact for improved stability and accuracy.
Optimized clamping force distribution and interference fit provides higher stiffness.



Figure 1 represents the load capacity of HSK, PSC, and KM4X. The shaded areas represent the typical requirements for heavy duty in various machining processes. KM4X is the only system that can deliver the torque and bending required to

achieve high-performance machining. Some systems may be able to transmit considerable amount of torque, but the cutting forces also generate bending moments that will exceed the interface's limits before torque limits are exceeded.

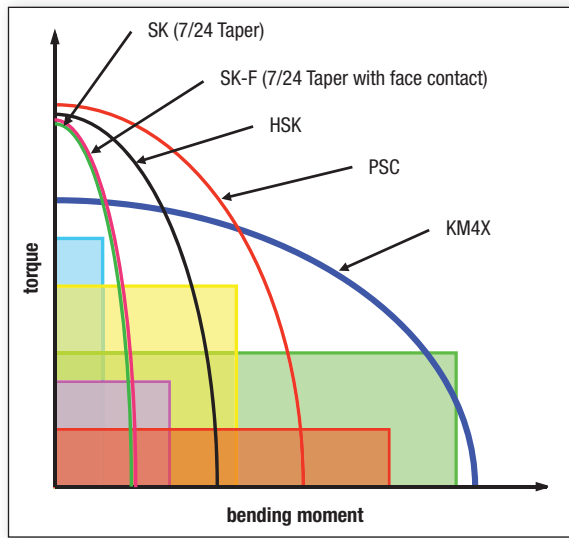
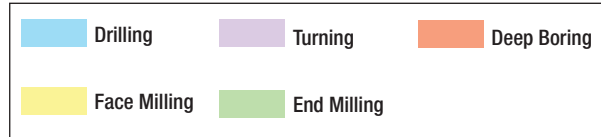


Figure 1



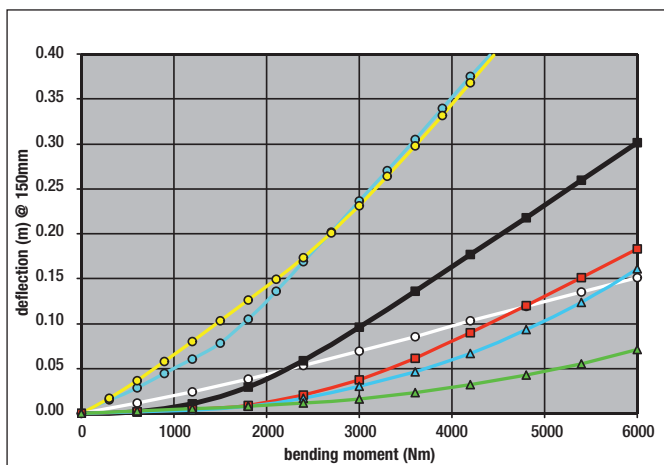
Choosing What's Right

When machining tough materials like titanium, cutting speeds are relatively low due to thermal effects on cutting tools. In response, machine tool builders have improved stiffness and damping on spindles and machine structures over the years. Spindles have been designed with abundant torque at low rotational speeds. Nevertheless, the spindle connection remains the weak link in the system.

The spindle connection must provide torque and bending capacity compatible with the machine tool specifications and the requirements for higher productivity. It becomes obvious that in end-milling applications where the projection lengths are typically greater, the limiting factor is bending capacity of the spindle interface.

With more materials that are tougher to machine and require considerably higher cutting forces from the machine tool, choosing wisely on the spindle interface to maximize cutting edge performance is the key to success.

The KM spindle connections greatly outperform the conventional 7/24 steep taper and its face taper contact derivative, HSK and PSC systems with their greater stiffness advantages to help minimize undesirable vibrations, gaining the best possible productivity from the machine tool. The KM4X is the best large, heavy-duty spindle connection, where optimal rigidity is necessary. It has superb balance between bending and torsion capabilities from the machine tool.



As an example, an indexable helical cutter with 250mm projection from spindle face and 80mm in diameter generates 4620 Nm of bending moment and less than 900 Nm of torque.

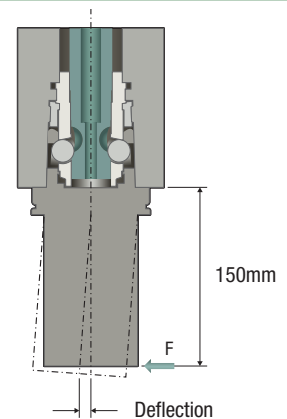


Chart shows a comparison of Steep Taper with and without face contact, HSK, and KM4X.

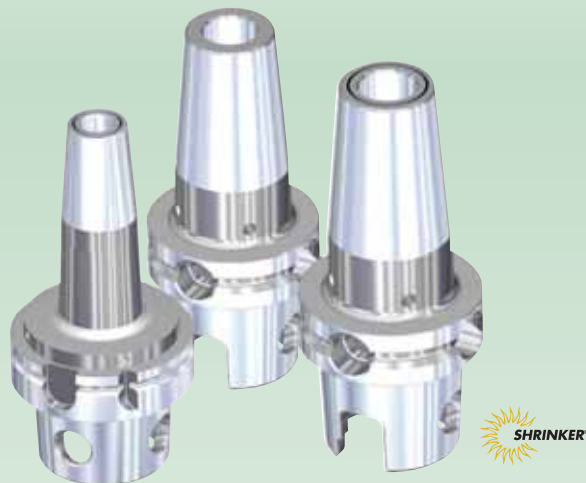
Milling and Holemaking

WIDIA™ Shrink Fit Technology

How it works...

Heat shrinking is not new technology in the tooling industry, but only recently has it been applied to quick-change toolholding systems. Shrink fitting works by having toolholders with an internal bore that is slightly smaller than the connecting end of a cutting shank.

When the toolholder is heated, the bore expands and the shank is able to slip inside the bore. As the toolholder cools, it shrinks, clamping the two pieces together. This creates evenly distributed pressure with minimal vibration between the toolholder and shank that resembles a monoblock tool.



Advantages of Shrink Fit Tooling:

- Evenly distributed pressure 360° along the length of the cutting tool.
- Slim and short toolholder designs can be achieved due to the lack of moveable parts.
- Absolute symmetry of the grip provides the best possible balance for high-speed operations.
- Stronger clamping force than collet or hydraulic chucks.
- Can be repeated thousands of times.
- Capable of greater speeds and feeds.
- Adapts to various shank types.
- Increased productivity.

WIDIA™ Hydraulic Chucks

WIDIA Hydraulic Chucks provide optimum performance when clamping full-cylindrical straight shanks such as solid carbide drills and end mills. Turning a piston pressurizes hydraulic fluid, which expands a thin-walled membrane along the length of the clamping bore.

This creates a secure grip that reduces vibration and eliminates micro-cracking on cutting tools. All chucks are capable of utilizing reducer sleeves to maximize their versatility. Hydraulic chucks require virtually no maintenance, aside from routinely cleaning the bore and removing any grease.



Slim Line

Slim-shaped hydraulic chucks for universal use with maximum precision.



Standard/HP Line

Prebalanced chucks with an external screw for radial adjustments. This eliminates the need for removing cutting tools to make fine adjustments.

Trend Line

Like the Standard Line chucks but with 3/8" radial adjustment of the cutting tool length by use of an axial back-up screw through the chuck bore.

Basic Line

Similar to the Trend Line but with larger body diameters that translate to higher stability and increased torque transmission.

WIDIA Collet Chucks



TG Collet Series

A single angle collet that grips 1:3 tightening torque versus grip torque without a stop screw.

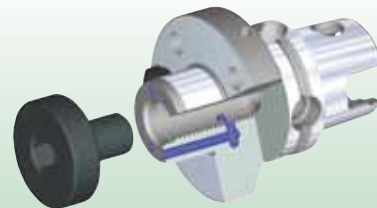


ER Collet Series

An international standard-style collet that can be used in machining applications such as milling, reaming, tapping, and grinding.

WIDIA Shell Mill Adapters

All units come standard with a new coolant to the cutting edge capability. This improves tool life and chip control. Shell mill adapters are available in extended lengths and a range of small mounting diameters.



Turning • Tooling a Turret-Style Lathe

Selection Guide for Turning Products

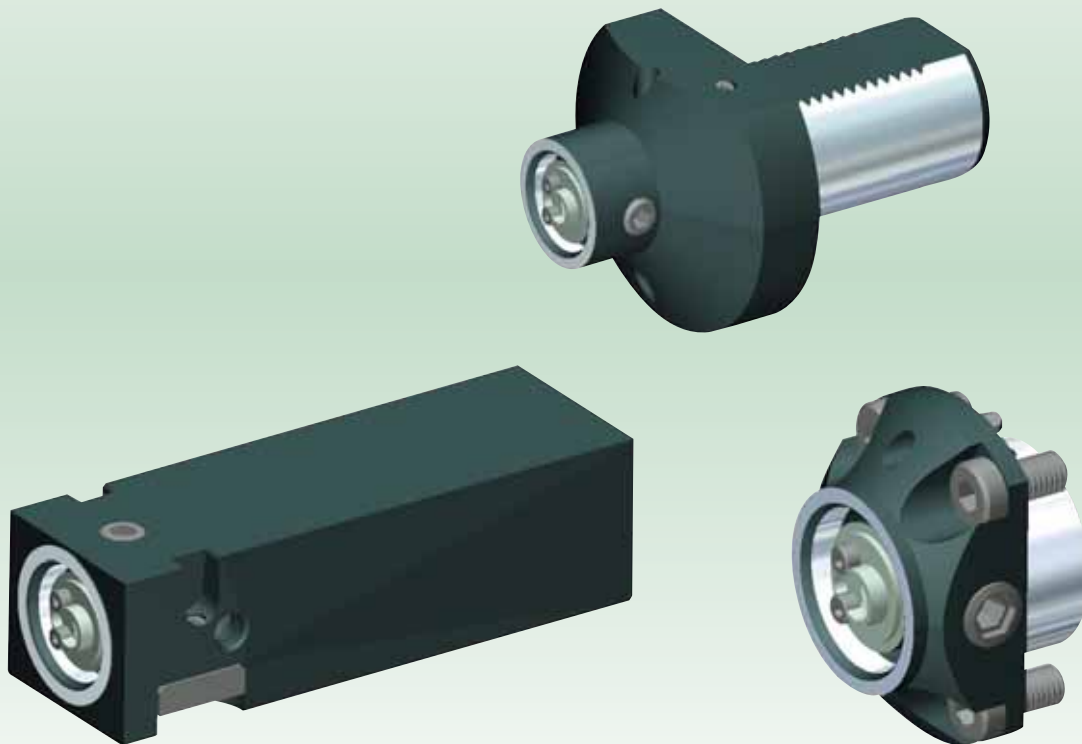
There are several things to consider before choosing the correct KM clamping mechanism. Manufacturers should take an account of how much time is spent setting up a machine or changing the tool. Customers should know if they are comfortable with using a torque wrench regularly, as well.

Other issues may arise when considering the machine tool mounting configurations needed to maximize production and cut downtime. KM clamping has options for manufacturers to upgrade their existing machinery and customize it to fit their needs.

KM Manual Clamping Units

KM Manual Quick Change Tooling is the most economical way to reduce costly downtime caused by setup and tool change. With approximately three turns of a readily accessible activation screw, a specified amount of torque is generated, locking the device. KM Manual Clamping Units accept internal and external cutting tools, as well as left- and right-handed tools.

The units also enable tools to be inverted if necessary. Variants of machine tool mounting configurations for KM Manual Quick Change Tooling include flange mounts, square, round, and VDI shanks.



KM-LOC II™ Clamping Units

KM-LOC II Quick Change units have an increased mechanical advantage of up to 7:1. Due to the compact styling of these units, users are able to mount the clamping unit directly into the machine turret. KM-LOC II units require less activation torque when clamping tools, which reduces the overall stress on the component's clamping mechanism.

The KM-LOC II Quick Change system is available in various square shank sizes that have a 40–50% greater wedge surface area than comparable units. The cartridge style of these units enables the user to manufacture their own machine-specific blocks. A flange style is available as well.



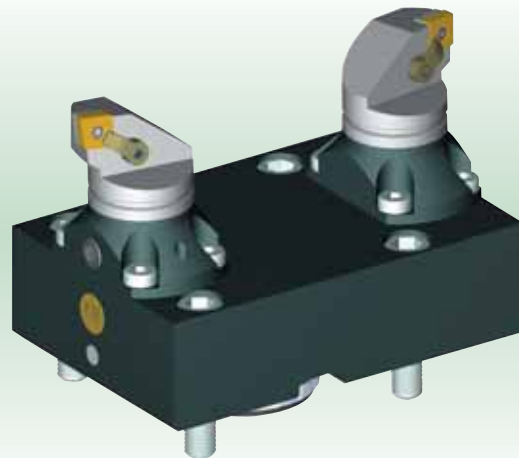
VDI to KM Clamping Units

KM Quick Change lets users upgrade VDI tooling without the need to modify their machines. This is because the KM clamping units act as a direct replacement for standard VDI tooling. VDI-style units are available to be used with KM Manual, KM-LOC, and KM-LOC II clamps.



Builder-Specific Blocks

There are a variety of builder-specific blocks offered that provide customers a way to easily modify and upgrade their current tooling system to the KM Quick Change. These blocks are supported by Mori Seiki®, Mazak®, Hardinge™, Daewoo™, Nakamura-Tome™, OKUMA®, HAAS, and other machine builders.



The KM Mechanical Advantage

A comparatively increased mechanical advantage is one of the central reasons why the KM Quick Change Tooling system is superior to other tooling methods. The high mechanical advantage is achieved through the system's rigid interference fit that is generated by additional forces in the clamping mechanism. A clamping device with greater than ordinary mechanical advantage offers many benefits in regard to tool life, downtime, and overall machine cost.

In the following sections, you'll find expanded information about the KM Quick Change Tooling system's mechanical advantage and how enhanced levels of these forces make WIDIA tooling superior to other quick-change systems.

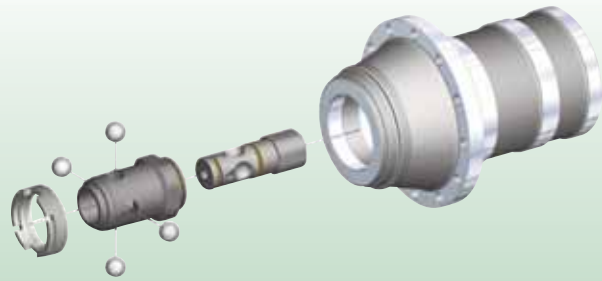
Front-Loading Spindle Design

The KM Advantage

KM spindle designs are front loading; this enables easy access to the KM spindle if repairs are necessary.

The Competitor Disadvantage

Most other spindle systems are not a front-load design, and when repairs are necessary, the entire spindle must be removed. This causes the machine to be down for an extended period of time.



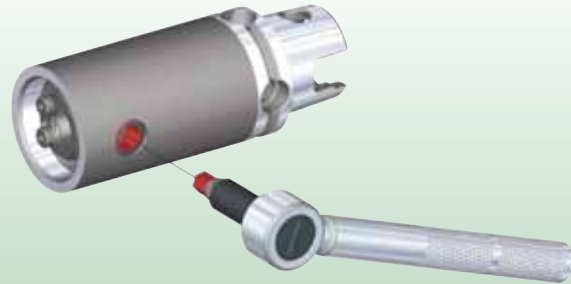
Side-Activated Tools

The KM Advantage

All KM extensions and reducers are side activated. This enables you to change tools without disassembling the entire setup.

The Competitor Disadvantage

Competing modular systems do not offer side activation. For these systems, you must completely disassemble tooling in order to change cutting units.



Mechanical Advantage in Clamping Force

The KM Advantage

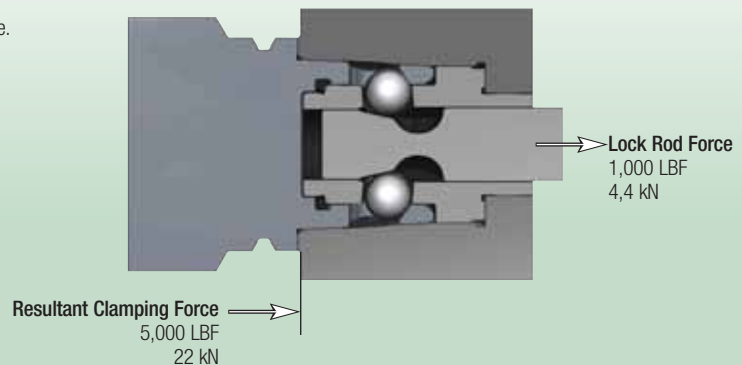
The KM design is an interference fit that enables the KM system to generate 4:1 and upwards of 7:1 mechanical advantage in clamping force.

The Competitor Disadvantage

CV, BT, HSK, and PSC mechanisms requires a high degree of pull-back force to generate clamping force. The design generates a high amount of pent-up force within the spindle. When a crash occurs, the forces are released and could possibly damage the entire spindle mechanism.

Mechanical Advantage Provides:

- Lower tool release forces.
- Smaller clamping mechanism envelope.



Machine Utilization Strategy (MUS)

Tool change and setup/gaging can significantly decrease production time. WIDIA recommends the implementation of a Machine Utilization Strategy (MUS). This system incorporates the products, technologies, and procedures that generate the maximum utility from capital equipment.

Listed below are the products and services WIDIA recommends to provide the most time and cost savings, which are principle to the MUS.



This manufacturing strategy hastens every aspect of the production process from the machine to the tool room. It will improve tool maintenance, increase machining time and productivity, and decrease non-conforming percentages.

1. KM Quick Change Tooling

Reduces downtime and increases productivity by cutting the time spent on tool change and setup.

2. Advanced Cutting Tool Materials

Increase production through the utilization of the most advanced cutting tools that enable machines to run longer and faster between tool changes.

3. Tool Kitting

Provides all the tooling (fixturing included) required to complete a production run or shift operation.

4. Pregaged Tooling

Eliminates measuring cuts from the setup process, reduces the risk of human error at the machine control, and provides a quick and efficient method for changing worn tools.

5. Advanced Tool Management Systems

Specifically designed to facilitate the effective management of cutting tools but are equally capable of controlling other types of inventory and consumable goods.

ISO 26622

The power of the WIDIA™ enterprise

As a world leader in the development, manufacture, application, and supply of metalcutting tools and services, WIDIA is the trusted source for top-quality quick-change products designed with the manufacturer in mind.

Our products are proven to significantly increase machining productivity and competitiveness, as well as generate cost-savings of up to 30% annually. Our unique Productivity Worksheet can calculate just how much time and money WIDIA KM™ Quick Change products can save. Enter your data to see how WIDIA can maximize your competitiveness!



Benefits of the Productivity Worksheet:

- See documented savings of 10–30% in machining costs.
- Uses your unique data to compare current productivity to potential savings.
- Relative and flexible to your specific machines and operation rates.
- Highlights how lost time can cost your business.
- Tracks weaknesses in machining setup that can reduce production time.
- Proves the WIDIA Machine Utilization Strategy (MUS) is the ultimate way to optimize performance.

The way to increase productivity is simple — complete the Productivity Worksheet and see how much WIDIA could be saving you. If you're impressed by the increase in manufacturing productivity that the calculations show, contact us. Our application experts are accessible when you need them and will work with you to solve production problems. Switching to WIDIA will bring about the manufacturing capability and profits your business needs to strengthen customer loyalty and thrive in an increasingly competitive marketplace.



KM Tooling Increase Your Productivity

Issued by: _____

Machine Manufacturer: _____ Date: _____

Hourly Cost for Machine: _____ Model and Year: _____

Step 1 • Enter number of setups on machine per shift:

1

Step 2 • Enter number of shifts per day:

2

Step 3 • Enter number of insert changes per shift:

10



Step 4 • Enter set-up time for conventional tooling (minutes):

10

KM Quick Change Tooling*

2.5

time savings (minutes)

7.5

Step 5 • Enter insert change time (minutes):

3

0.5

2.5

Step 6 • Enter trial cut time (minutes):

5

0

5

Step 7 • Multiply the number of shifts per day (see Step 2) by number of days per year the machine will be used.

shifts per day
2

days per year
200

shifts per year
400

Step 8 • Multiply the number of insert changes per shift (see Step 3) by the number of shifts per year (see Step 7).

insert changes per shift
10

shifts per year
400

insert changes per year
4,000

Step 9 • Multiply the number of insert changes per year (see Step 8) by the % of required trial cuts.

insert changes per year
4,000

% required trial cuts
0.25

trial cuts per year
1,000

Annual Time Savings with KM Quick Change Tooling Package

Step 10 • Enter shifts per year from Step 7.

number
400

time savings (minutes)
7.5

total (minutes)
3,000

Step 11 • Enter insert changes per year from Step 8.

4,000

2.5

10,000

Step 12 • Enter trial cuts per year from Step 9.

1,000

5

5,000

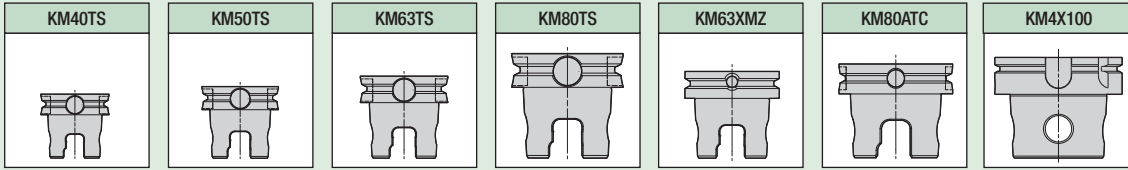
18,000

18,000 minutes divided by 60 minutes = 300 hours

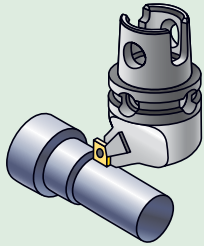
total hours saved		hourly machine cost		annual \$\$ saved**
300	x	\$50.00	=	\$15,000.00

*Data provided by your Authorized WIDIA Representative. **Annual savings per machine. Multiply by number of machines to see total overall annual savings.

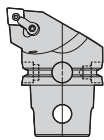
KM Quick Change Toolholder Options



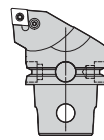
External Turning



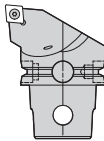
M-Clamping System

	KM40TS	Page: A71
	KM50TS	Pages: A119–A130
	KM63TS	Pages: A181–A192
	KM80TS	Pages: A245–A251
	KM63XMZ	Pages: A277–A280
	KM80ATC	Pages: A310–A313
	KM4X100	∇

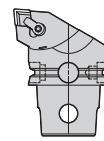
P-Clamping System

	KM40TS	Pages: A71–A78
	KM50TS	Pages: A130–A136
	KM63TS	Pages: A192–A200
	KM80TS	Pages: A252–A254
	KM63XMZ	Pages: A280–A281
	KM80ATC	Page: A314
	KM4X100	∇

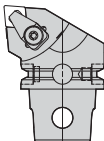
S-Clamping System

	KM40TS	Pages: A80–A85
	KM50TS	Pages: A136–A137
	KM63TS	Pages: A200–A202
	KM80TS	∇
	KM63XMZ	Page: A335
	KM80ATC	∇
	KM4X100	∇

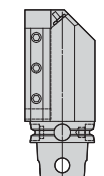
C-Clamping System

	KM40TS	∇
	KM50TS	Page: A138
	KM63TS	Page: A203
	KM80TS	∇
	KM63XMZ	∇
	KM80ATC	∇
	KM4X100	∇

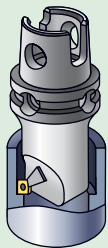
C-MX Clamping Ceramic

	KM40TS	∇
	KM50TS	Pages: A139–A142
	KM63TS	∇
	KM80TS	∇
	KM63XMZ	∇
	KM80ATC	∇
	KM4X100	∇

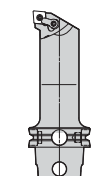
STA, ETA, and 45° TA Square Shank Adapters

	KM40TS	∇
	KM50TS	∇
	KM63TS	Pages: A179–A180
	KM80TS	Pages: A243–A244
	KM63XMZ	Pages: A273–A276
	KM80ATC	Pages: A309–A310
	KM4X100	∇

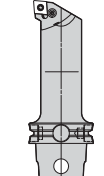
Internal Turning



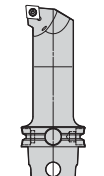
M-Clamping System

	KM40TS	Pages: A92–A94
	KM50TS	Pages: A148–A152
	KM63TS	Pages: A212–A215
	KM80TS	∇
	KM63XMZ	∇
	KM80ATC	∇
	KM4X100	∇

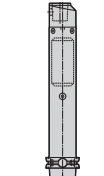
P-Clamping System

	KM40TS	Pages: A95–A97
	KM50TS	Pages: A153–A154
	KM63TS	Pages: A216–A218
	KM80TS	∇
	KM63XMZ	Pages: A283–A284
	KM80ATC	∇
	KM4X100	∇

S-Clamping System

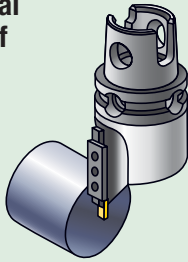
	KM40TS	∇
	KM50TS	Page: A155
	KM63TS	Pages: A219–A220
	KM80TS	∇
	KM63XMZ	∇
	KM80ATC	∇
	KM4X100	∇

Tunable System

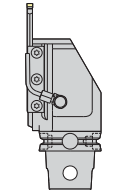



	KM40TS	∇
	KM50TS	∇
	KM63TS	Page: A222
	KM80TS	∇
	KM63XMZ	Page: A287
	KM80ATC	∇
	KM4X100	∇

∇ Indicates "Not Available".

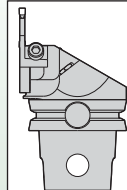


External Cut-Off



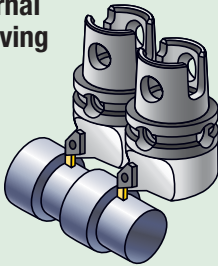
ProGroove™

	KM40TS	Page: A90
	KM50TS	Page: A146
	KM63TS	Pages: A209–A210
	KM80TS	
	KM63XMZ	Page: A282
	KM80ATC	
	KM4X100	

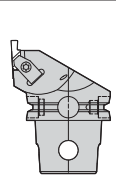


WMT™ SLS

	KM40TS	Page: A91
	KM50TS	Page: A147
	KM63TS	Page: A211
	KM80TS	Page: A256
	KM63XMZ	Pages: A282–A283
	KM80ATC	
	KM4X100	

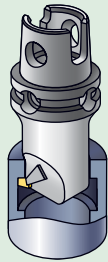
External Grooving



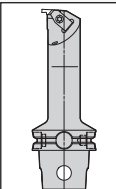




TopGroove™

	KM40TS	Pages: A86–A87
	KM50TS	Pages: A142–A143
	KM63TS	Page: A207
	KM80TS	Page: A255
	KM63XMZ	
	KM80ATC	Page: A315
	KM4X100	

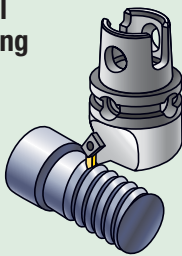
Internal Grooving



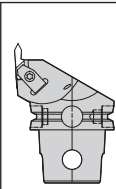


TopGroove

	KM40TS	Pages: A98–A100
	KM50TS	Page: A156
	KM63TS	Page: A220
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

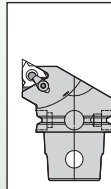




External Threading



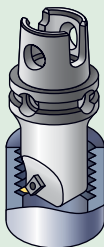
TopThread™

	KM40TS	Pages: A86–A87
	KM50TS	Pages: A142–A143
	KM63TS	Page: A207
	KM80TS	Page: A255
	KM63XMZ	
	KM80ATC	Page: A315
	KM4X100	

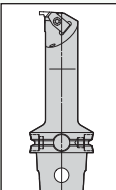




Laydown Threading

	KM40TS	Pages: A88–A89
	KM50TS	Pages: A144–A145
	KM63TS	Page: A208
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

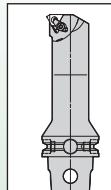





Internal Threading



TopThread

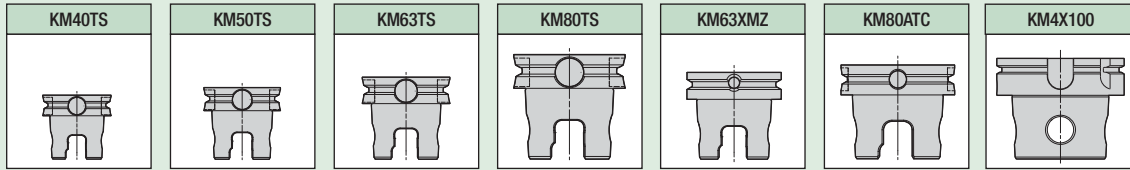
	KM40TS	Pages: A98–A100
	KM50TS	Page: A156
	KM63TS	Page: A220
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

Laydown Threading

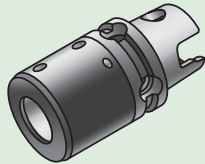
	KM40TS	Page: A101
	KM50TS	Page: A158
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

 Indicates "Not Available".

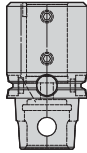

KM Quick Change Toolholder Options



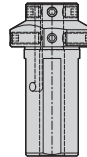
Turning Adapters



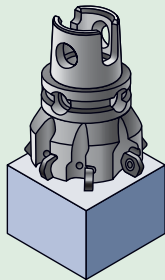
Boring Bar Adapters

	KM40TS	Pages: A102–A103
	KM50TS	Pages: A159–A160
	KM63TS	Page: A223
	KM80TS	Page: A257
	KM63XMZ	Page: A285
	KM80ATC	Page: A316
	KM4X100	

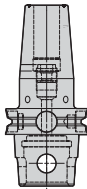

Boring Bar Sleeves

	KM40TS	Page: A286
	KM50TS	Page: A286
	KM63TS	Page: A286
	KM80TS	Page: A286
	KM63XMZ	Page: A286
	KM80ATC	Page: A286
	KM4X100	Page: A286

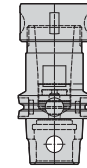
Milling







Shrink Fit

	KM40TS	
	KM50TS	
	KM63TS	Pages: A224–A227
	KM80TS	Pages: A258–A261
	KM63XMZ	Pages: A288–A291
	KM80ATC	Pages: A318–A321
	KM4X100	Page: A333

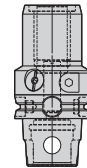


TG Collet Chucks

	KM40TS	Pages: A105–A106
	KM50TS	Pages: A162–A163
	KM63TS	Page: A230
	KM80TS	Page: A262
	KM63XMZ	Page: A295
	KM80ATC	Page: A322
	KM4X100	Page: A336

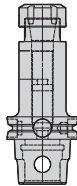
Slim Line Hydraulic

	KM40TS	
	KM50TS	
	KM63TS	Page: A228
	KM80TS	
	KM63XMZ	Page: A294
	KM80ATC	
	KM4X100	

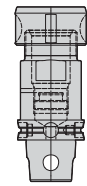

Hydraulic Chucks

	KM40TS	Page: A104
	KM50TS	Page: A161
	KM63TS	Page: A229
	KM80TS	
	KM63XMZ	Page: A292
	KM80ATC	
	KM4X100	

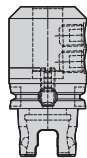
ER Collet Chucks

	KM40TS	Page: A107
	KM50TS	Page: A164
	KM63TS	Pages: A231–A232
	KM80TS	Pages: A263–A264
	KM63XMZ	Pages: A296–A297
	KM80ATC	Page: A323
	KM4X100	Page: A337

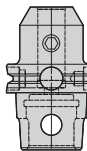
DA Collet Chucks

	KM40TS	Page: A108
	KM50TS	Pages: A165–A166
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

Whistle Notch™ Adapters

	KM40TS	Page: A110
	KM50TS	Page: A167
	KM63TS	Page: A233
	KM80TS	Page: A265
	KM63XMZ	Page: A298
	KM80ATC	Page: A324
	KM4X100	Page: A338

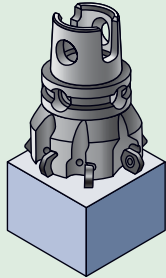
End Mill Adapters

	KM40TS	Page: A113
	KM50TS	Page: A172
	KM63TS	Page: A234
	KM80TS	Page: A266
	KM63XMZ	Pages: A299–A300
	KM80ATC	Pages: A224–A225
	KM4X100	Page: A339



 Indicates "Not Available".

(continued)

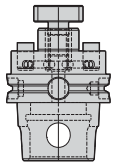
Milling *(continued)*



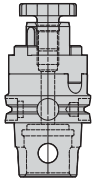

Tunable Shell Mill Adapters

	KM40TS	
	KM50TS	
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100		Page: A342

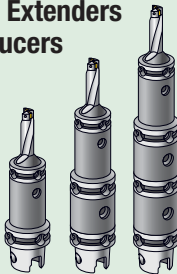
Shell Mill Adapters

	KM40TS	Page: A114
	KM50TS	Page: A173
	KM63TS	Page: A235
	KM80TS	Page: A267
	KM63XMZ	Page: A304
	KM80ATC	Page: A327
	KM4X100	Page: A340

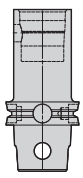
Combi-Shell Mill Adapters

	KM40TS	Page: A115
	KM50TS	Page: A174
	KM63TS	Page: A236
	KM80TS	Page: A268
	KM63XMZ	Page: A304
	KM80ATC	
	KM4X100	

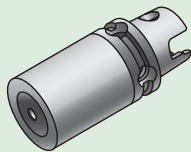
Modular Extenders and Reducers



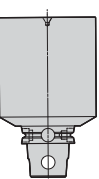
KM Modular

	KM40TS	Pages: A116–A117
	KM50TS	Page: A176
	KM63TS	Pages: A238–A239
	KM80TS	Pages: A269–A270
	KM63XMZ	Pages: A305–A307
	KM80ATC	Pages: A328–A329
	KM4X100	Page: A343

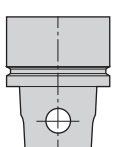

Auxilliary



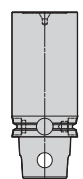


Blanks


	KM40TS	Page: A117
	KM50TS	Page: A177
	KM63TS	Page: A240
	KM80TS	Page: A271
	KM63XMZ	Page: A307
	KM80ATC	Page: A329
	KM4X100	Page: A344

Plugs

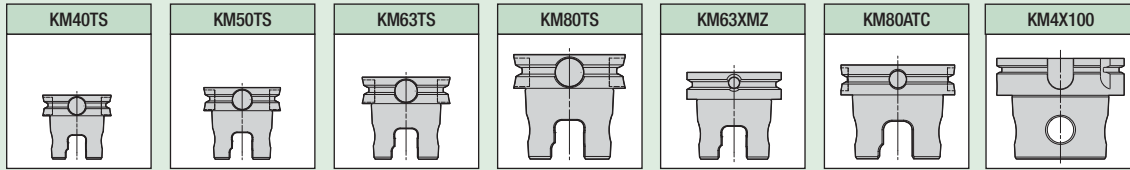
	KM40TS	Page: J30
	KM50TS	Page: J30
	KM63TS	Page: J30
	KM80TS	Page: J30
	KM63XMZ	
	KM80ATC	
KM4X100		

Gage Bars

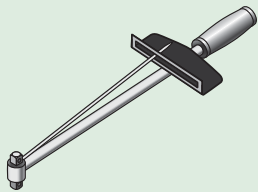
	KM40TS	Page: A117
	KM50TS	Page: A177
	KM63TS	Page: A240
	KM80TS	
	KM63XMZ	Page: A240
	KM80ATC	
	KM4X100	Page: A344

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KM Quick Change Toolholder Options



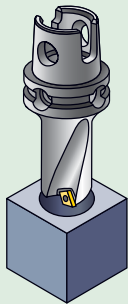
Accessories



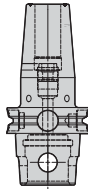


Torque Wrenches

	KM40TS	Page: J40
	KM50TS	Page: J40
	KM63TS	Page: J40
	KM80TS	Page: J40
	KM63XMZ	Page: J40
	KM80ATC	Page: J40
	KM4X100	

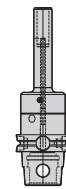





Drilling



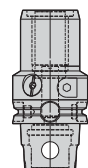



Shrink Fit

	KM40TS	
	KM50TS	
	KM63TS	Pages: A224–A227
	KM80TS	Pages: A258–A261
	KM63XMZ	Pages: A288–A291
	KM80ATC	Pages: A318–A321
	KM4X100	Page: A333

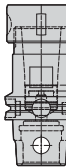
Slim Line Hydraulic

	KM40TS	
	KM50TS	
	KM63TS	Page: A228
	KM80TS	
	KM63XMZ	Page: A294
	KM80ATC	
	KM4X100	

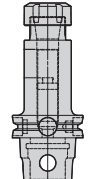
Hydraulic Chucks

	KM40TS	Page: A104
	KM50TS	Page: A161
	KM63TS	Page: A229
	KM80TS	
	KM63XMZ	Page: A292
	KM80ATC	
	KM4X100	



TG Collet Chucks

	KM40TS	Pages: A105–A106
	KM50TS	Pages: A162–A163
	KM63TS	Page: A230
	KM80TS	Page: A262
	KM63XMZ	Page: A295
	KM80ATC	Page: A322
	KM4X100	Page: A336

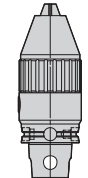




ER Collet Chucks

	KM40TS	Page: A107
	KM50TS	Page: A164
	KM63TS	Pages: A231–A232
	KM80TS	Pages: A263–A264
	KM63XMZ	Pages: A296–A297
	KM80ATC	Page: A323
	KM4X100	Page: A337

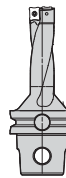

DA Collet Chucks

	KM40TS	Page: A108
	KM50TS	Pages: A165–A166
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

Drill Chucks

	KM40TS	Page: A109
	KM50TS	Page: A167
	KM63TS	
	KM80TS	
	KM63XMZ	Page: A298
	KM80ATC	
	KM4X100	

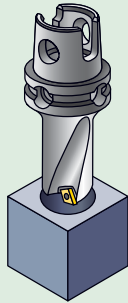
Top Cut™

	KM40TS	Page: A112
	KM50TS	Page: A169
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

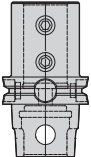

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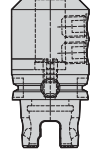
Drilling *(continued)*



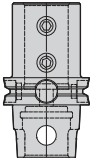



Top Cut Plus™ Adapters

	KM40TS	Page: A111
	KM50TS	Page: A168
	KM63TS	Page: A236
	KM80TS	Page: A268
	KM63XMZ	Page: A301
	KM80ATC	
	KM4X100	

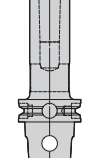

Whistle Notch™ Adapters

	KM40TS	Page: A110
	KM50TS	Page: A167
	KM63TS	Page: A233
	KM80TS	Page: A265
	KM63XMZ	Page: A298
	KM80ATC	Page: A324
	KM4X100	Page: A338

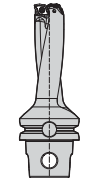



Straight Shanks

	KM40TS	
	KM50TS	
	KM63TS	
	KM80TS	Page: A269
	KM63XMZ	
	KM80ATC	Page: A326
	KM4X100	

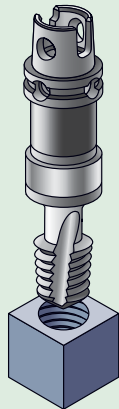
Morse Tapers

	KM40TS	Page: A116
	KM50TS	Page: A175
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

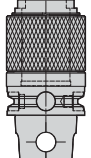

Top Cut Plus

	KM40TS	
	KM50TS	Page: A170
	KM63TS	Page: A237
	KM80TS	
	KM63XMZ	Pages: A302–A303
	KM80ATC	
	KM4X100	

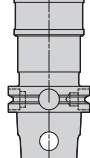


Tapping



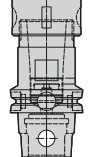
Solid Tapping

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	KM50TS	Page: A175
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

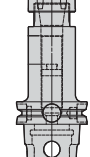
RC Rapid Change

	KM40TS	
	KM50TS	
	KM63TS	Page: A238
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

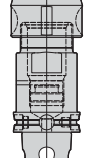

TG Collet Chucks

	KM40TS	Pages: A105–A106
	KM50TS	Pages: A162–A163
	KM63TS	Page: A230
	KM80TS	Page: A263
	KM63XMZ	Page: A295
	KM80ATC	Page: A322
	KM4X100	Page: A336

ER Collet Chucks

	KM40TS	Page: A107
	KM50TS	Page: A164
	KM63TS	Pages: A231–A232
	KM80TS	Pages: A263–A264
	KM63XMZ	Pages: A296–A297
	KM80ATC	Page: A323
	KM4X100	Page: A337

DA Collet Chucks

	KM40TS	Page: A108
	KM50TS	Pages: A165–A166
	KM63TS	
	KM80TS	
	KM63XMZ	
	KM80ATC	
	KM4X100	

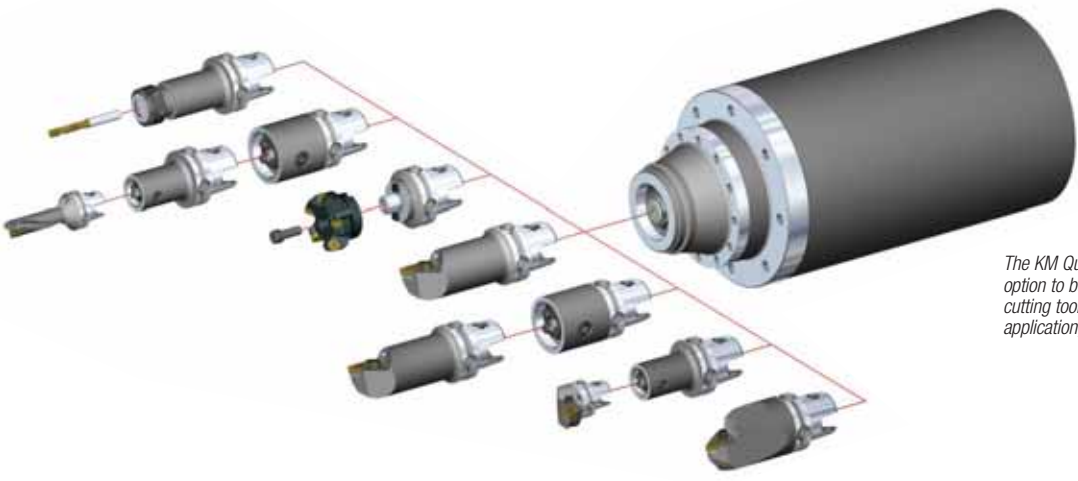
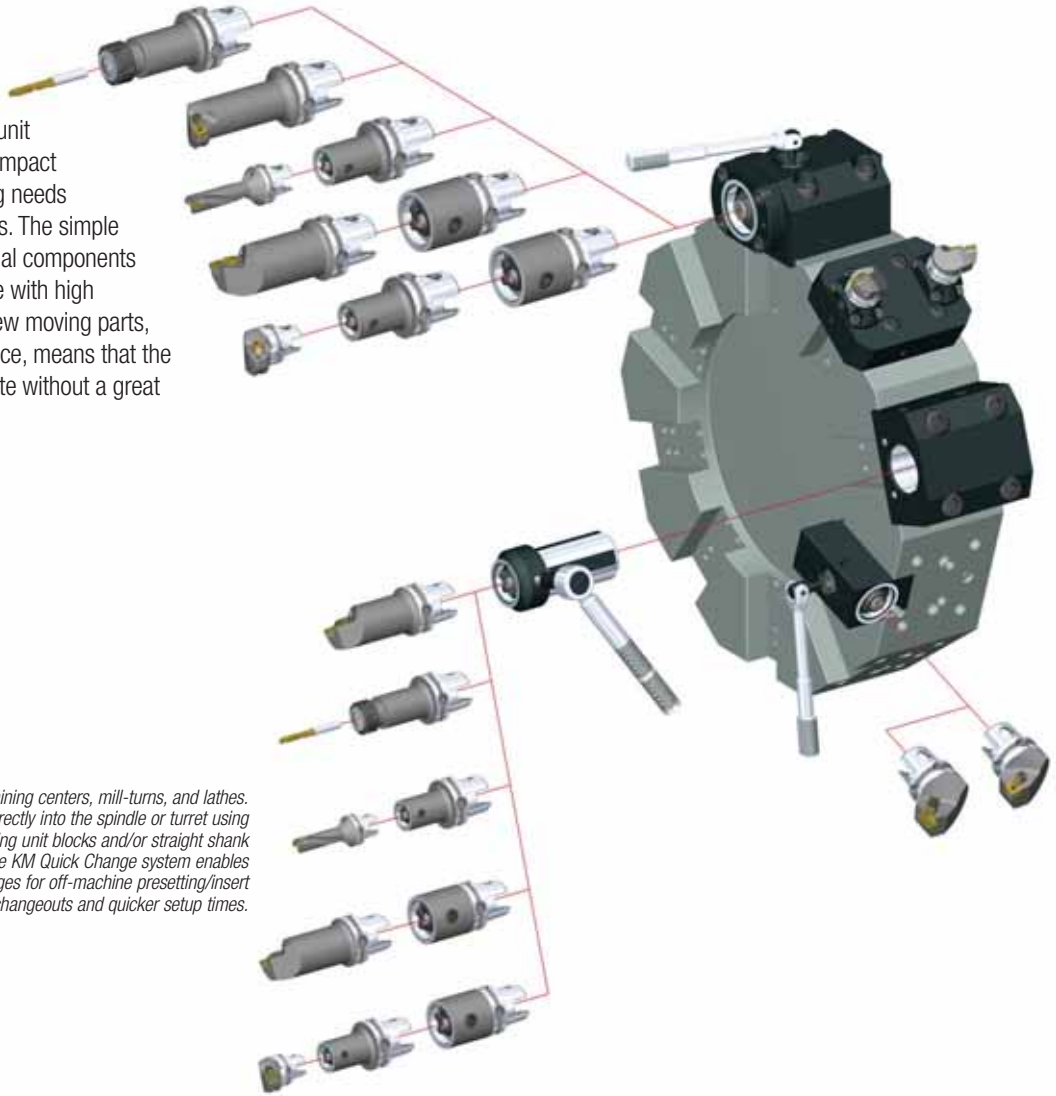
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Conversion and Clamping System

Clamping Units

KM™ offers a variety of different clamping designs to suit manufacturing needs. Each unit design comes in a portfolio of compact options to further diversify tooling needs across a multitude of applications. The simple design of the units utilizes minimal components to create a strong clamping force with high mechanical advantage. Having few moving parts, and requiring a low activation force, means that the KM Quick Change Clamps operate without a great deal of maintenance or error.

One system for machining centers, mill-turns, and lathes. Can be integrated directly into the spindle or turret using standardized clamping unit blocks and/or straight shank conversions to KM. The KM Quick Change system enables speedy tool changes for off-machine presetting/insert changeouts and quicker setup times.



The KM Quick Change modular system offers the option to build a combination of many possible cutting tool lengths for best rigidity for the application, optimizing costs and inventory.

Manual and Automatic Clamping Units



Manual Square Shank Replacements



Manual Round Shanks



Manual Flange Mounts



LOC II Square Shanks



LOC II Round Shanks



LOC II VDI Axial



Automatic Static

Manual Clamping Units

- Simple, compact design for use in many applications.
- Single- or four-pin clamping mechanisms.
- Torque values used to clamp/unclamp tooling — 2-1/2 turns to activate.
- Available options: square shank, straight shank, flange mount, VDI, extensions/reducers, and machine tool blocks.

LOC II Clamping Units

- Newest design in turn-to-turn clamping.
- Compact design with fewer components.
- Single- and two-piece designs.
- Virtually maintenance free.
- Increased clamping force.
- Available options: flange cartridge, boring cartridge, straight shank, and VDI.
- 100 bar (1,500 psi) coolant capability standard on all LOC II units.

LOC Clamping Units

- First generation of turn-to-turn clamping units.
- Low activation torque required.
- Stop-to-stop activation.
- Cam-driven spring pack.

LOC Clamping units are available in a limited portfolio to meet the needs of previous installations.

Automatic Spring Packs

NACA, RACA Units

- Based on VDI turret concept.
- Common release point.
- Flexible turret.
- Right-angle mechanism.

KM80 Pancake Design

- Compact and rigid.
- More than 14,000 lbs of clamping force.

Rotating Spindle

- Easily incorporated into machine tool applications.
- Over 5:1 mechanical clamping force.
- Front-loading design for easy access maintenance that reduces downtime.
- No gripping fingers or retention knobs to reduce long-term performance.

Toolholding Systems



45° Centerline



Single-Square Shank Adapters



Single-Square Shank Adapters



Cutting Units



Boring Bar Adapters



Shrink Fit Toolholders



Slim Line Hydraulic Chucks



Single-Angle Collet Chucks



Top Cut™ Drills



KM Reducers

Clamping Units

KM offers a variety of different clamping designs to suit manufacturing needs. Each unit design comes in a portfolio of compact options to further diversify tooling needs across a multitude of applications.

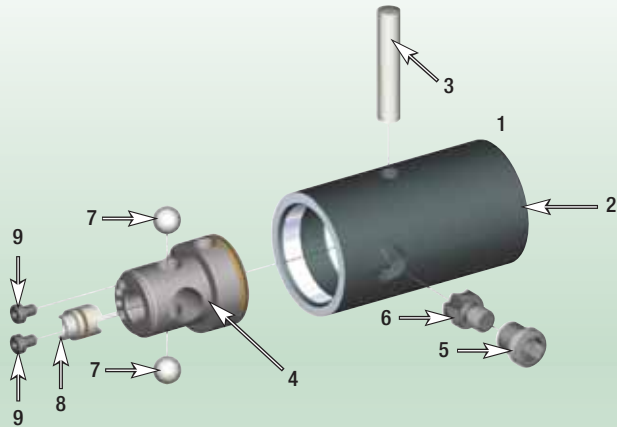
The simple design of the units utilizes minimal components to create a strong clamping force with high mechanical advantage. Having few moving parts and requiring a low activation force, means that the KM Quick Change clamps operate without a great deal of maintenance or error.

Manual Clamping Units

- Simple, compact design for use in many applications.
- Single- or four-pin clamping mechanisms.
- Torque values used to clamp/unclamp tooling — 2-1/2 turns to activate.
- Available options: square shank, straight shank, flange mount, VDI, extensions/reducers, and machine tool blocks.

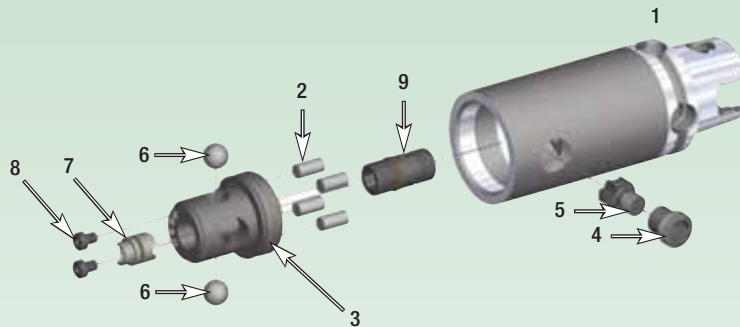
Single-Pin Design

1. KM Clamping Unit Assembly
2. Clamping Unit Body
3. Canister Pin
4. Canister
5. Torque Screw
6. Lockrod
7. Locking Balls
8. Bump-Off Pin
9. Bump-Off Pin Screws



Four-Pin Design

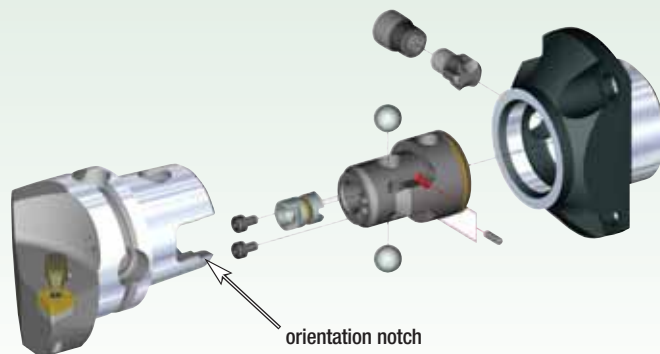
1. KM Clamping Unit Assembly
2. Canister Pin (4x)
3. Canister
4. Torque Screw
5. Lockrod
6. Locking Balls
7. Bump-Off Pin
8. Bump-Off Pin Screws
9. Canister Screw



Error-Proofing Capability for KM Manual Clamping Units

KM Manual units must be disassembled in order to be error proofed. After disassembling the unit, you will find two holes within the canister. To error-proof the unit, insert a metric slotted pin into one of the holes within the canister. Reassemble, and the clamping unit is now error-proofed.

- KM40TS — 3mm x 6mm metric slotted pin
- KM50TS — 4mm x 8mm metric slotted pin
- KM63TS — 5mm x 10mm metric slotted pin
- KM80TS — 5mm x 10mm metric slotted pin
- KM63XMZ — 5mm x 10mm metric slotted pin
- KM80ATC — 5mm x 10mm metric slotted pin

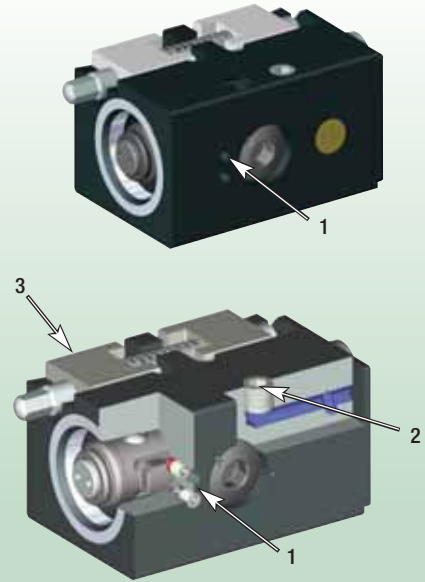


KM LOC II™ Clamping Units

- Newest design in turn-to-turn clamping.
- Compact design with fewer components.
- Single- and two-piece designs.
- Virtually maintenance free.
- Increased clamping force.
- Available options: flange cartridge, boring cartridge, straight shank, and VDI.
- 100 bar (1,500 psi) coolant.

- 1. Error Proofing**
- 2. Coolant Port**
- 3. Locking Wedges**

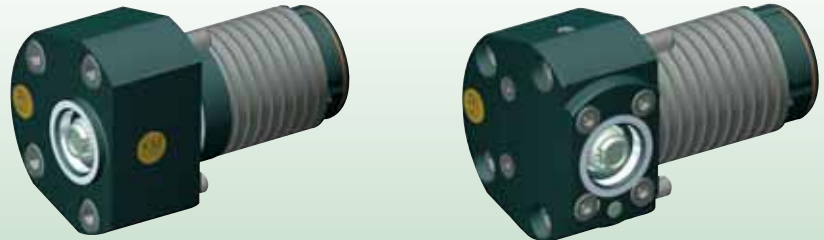
KM LOC II clamping units offer an increased mechanical advantage of up to 7:1. They require less activation torque, which creates less stress on the clamp's components. The readily adaptable design of the KM LOC II clamping unit enables the device's user to manufacture the tool block as they choose.



Automatic Spring Packs

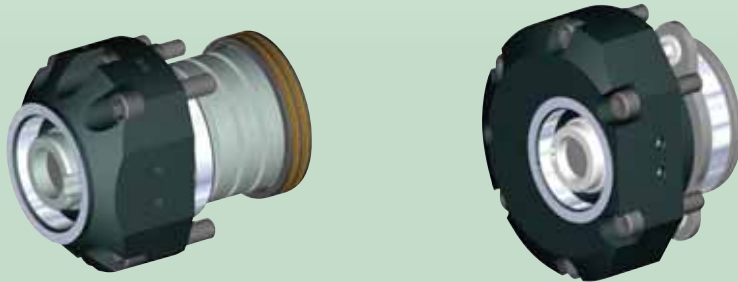
NACA, RACA Units

- Based on VDI turret concept.
- Common release point.
- Flexible turret.
- Axial and right-angle mechanism.



KM80 XGL Static

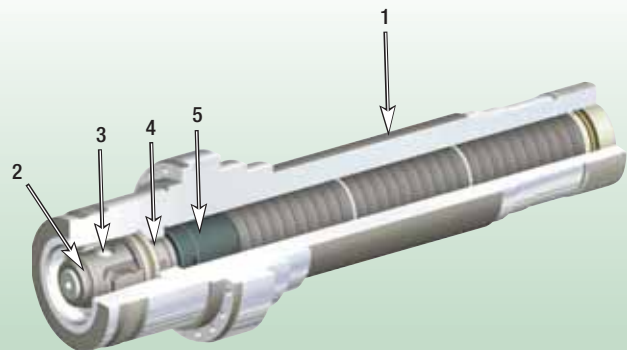
- Compact and rigid.
- More than 14,000 lbs of clamping force.



Rotating Spindle

- Easily incorporated into machine tool applications.
- Over 5:1 mechanical clamping force.
- Front-loading design for easy access maintenance that reduces downtime.
- No gripping fingers or retention knobs to reduce long-term performance.

- 1. KM Spindle Cartridge**
- 2. Canister**
- 3. Clamping Balls**
- 4. Lockrod**
- 5. Canister Nut**

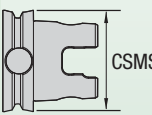
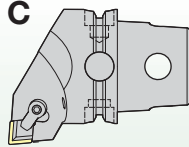
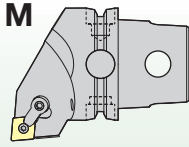
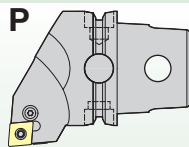
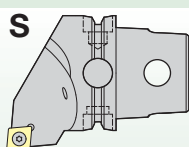


How Do Catalog Numbers Work?

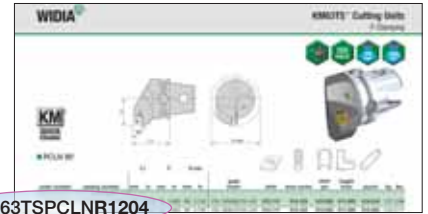
Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63TS PCLNR1204

KM	63	TS	P	C	L	N
KM Quick Change	System Size	Feature	Insert Holding Method	Insert Shape	Toolholder Style	Insert Clearance Angle
	<p>40 = 40mm 50 = 50mm 63 = 63mm 80 = 80mm 100 = 100mm</p> 	<p>TS XMZ ATC 4X</p>	<p>C</p>  <p>Top clamping by clamping finger for inserts without hole</p>	<p>C 80° D 55° K 55° R S 90° T 60° V 35° W 80°</p>	<p>D 45° E 30° F 0° G 0° H 50° J 3° K 15° L 5° N 63° P 27° 30'</p>	<p>B 5° C 7° N 0° P 11° Q 17° 30' R 15° S 45° U 3° V 17° 30' X 120°</p>
			<p>M</p>  <p>Top and hole clamping for inserts with hole</p>			
			<p>P</p>  <p>Insert clamping by toggle lever for insert with hole</p>			
			<p>S</p>  <p>Center clamping by screw for inserts with hole</p>			

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



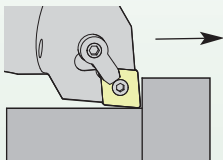
KM63TSPCLNR1204

R

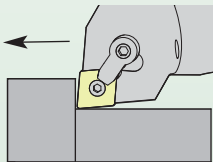
Hand of Tool

- R** = Right hand
- L** = Left hand
- N** = Neutral

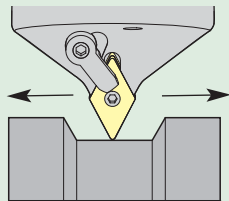
R



L



N



12

Insert Size
Cutting Edge
Length L10

Additional
Information

MX =
Ceramic
inserts

04

Insert
Thickness

- 03** = .125"
- 04** = .188"
- 06** = .250"
- 07** = .312"

Gage
Length

- 30** = 30mm
- 45** = 45mm
- 120** = 120mm

Special
Features

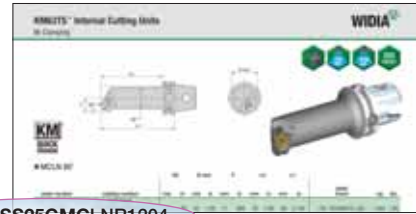
- Y** = Mazak®
INTEGREX®
- M** = Metric

Metric













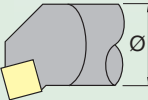
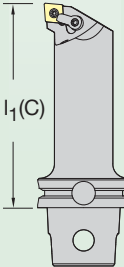


IC	C	D	K	R	S	T	V	W
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4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
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8,00				08			11	
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12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
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19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

How Do Catalog Numbers Work?

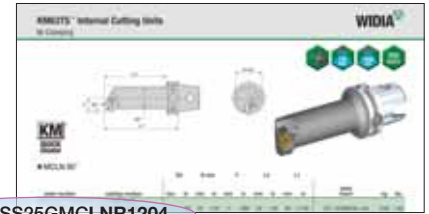
Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63TSS25GMCLNR1204

KM	63	TS	S	25	G	M	C																																								
KM Quick Change	System Size	Feature	Bar Type	Bar Diameter	Bar Gage Length	Insert Holding Method	Insert Shape																																								
	40 = 40mm 50 = 50mm 63 = 63mm 80 = 80mm 100 = 100mm	TS XMZ ATC 4X	<p>S</p>  <p>Steel with through coolant</p>	10 = 10mm 12 = 12mm 16 = 16mm 20 = 20mm 25 = 25mm 32 = 32mm 40 = 40mm 50 = 50mm	<table border="1"> <tr><td>C</td><td>50</td></tr> <tr><td>D</td><td>60</td></tr> <tr><td>E</td><td>70</td></tr> <tr><td>F</td><td>80</td></tr> <tr><td>G</td><td>90</td></tr> <tr><td>H</td><td>100</td></tr> <tr><td>J</td><td>110</td></tr> <tr><td>K</td><td>125</td></tr> <tr><td>L</td><td>140</td></tr> <tr><td>M</td><td>150</td></tr> <tr><td>N</td><td>160</td></tr> <tr><td>P</td><td>170</td></tr> <tr><td>R</td><td>200</td></tr> <tr><td>S</td><td>250</td></tr> <tr><td>T</td><td>300</td></tr> <tr><td>U</td><td>350</td></tr> <tr><td>V</td><td>400</td></tr> <tr><td>W</td><td>450</td></tr> <tr><td>Y</td><td>500</td></tr> <tr><td>X</td><td>special</td></tr> </table>	C	50	D	60	E	70	F	80	G	90	H	100	J	110	K	125	L	140	M	150	N	160	P	170	R	200	S	250	T	300	U	350	V	400	W	450	Y	500	X	special	<p>M</p>  <p>Top and hole clamping for inserts with hole</p>	<p>C</p>  <p>80°</p> <p>D</p>  <p>55°</p> <p>K</p>  <p>55°</p> <p>R</p>  <p>S</p>  <p>90°</p> <p>T</p>  <p>60°</p> <p>V</p>  <p>35°</p> <p>W</p>  <p>80°</p>
C	50																																														
D	60																																														
E	70																																														
F	80																																														
G	90																																														
H	100																																														
J	110																																														
K	125																																														
L	140																																														
M	150																																														
N	160																																														
P	170																																														
R	200																																														
S	250																																														
T	300																																														
U	350																																														
V	400																																														
W	450																																														
Y	500																																														
X	special																																														
	 <p>CSMS</p>		<p>E</p>  <p>Carbide with through coolant</p>		 <p>$I_1(C)$</p>	<p>P</p>  <p>Insert clamping by toggle lever for insert with hole</p>																																									
						<p>S</p>  <p>Center clamping by screw for inserts with hole</p>																																									

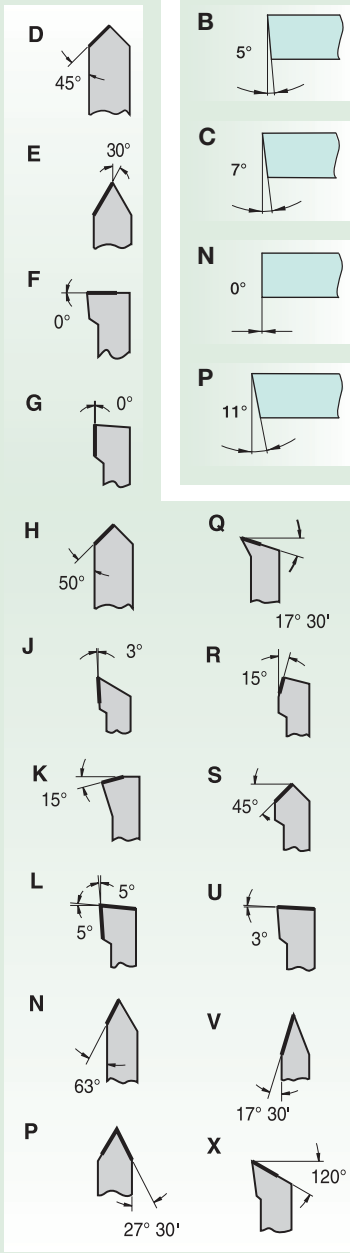
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KM63TSS25GMCLNR1204

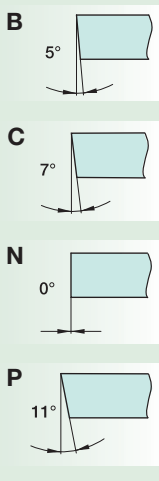
L

Toolholder Style or Lead Angle



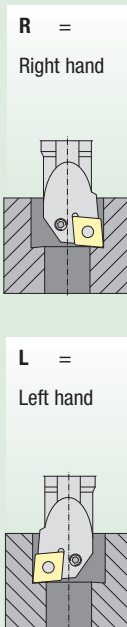
N

Insert Clearance Angle



R

Hand of Tool



12

Insert Size Cutting Edge Length L10

04

Insert Thickness

- 03 = .125"
- 04 = .188"
- 06 = .250"
- 07 = .312"

Special Features

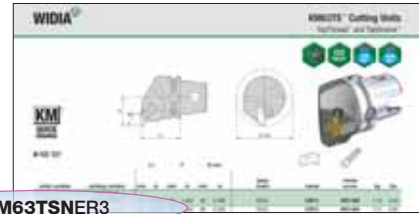
- Y = Mazak® INTEGREX®
- M = Metric


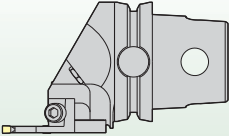
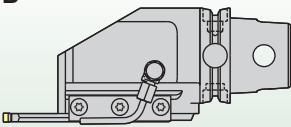
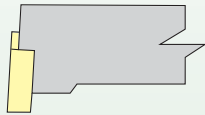
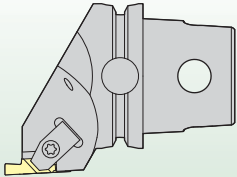

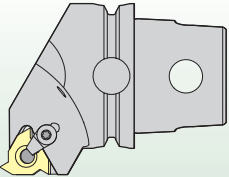
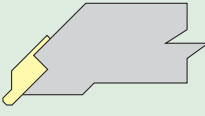
Metric

IC	C	D	K	R	S	T	V	W
3,97		04		03	03	06		
4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00				08			11	
9,52	09	11	06	09	09	16	16	06
9,52								
10,00				10				
11,11	11	13	07	11	11	19	19	07
12,00				12				
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

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KM	63	TS	N	S
KM Quick Change	System Size	Feature	Insert Holding Method	Insert Location
	<p>40 = 40mm 50 = 50mm 63 = 63mm 80 = 80mm 100 = 100mm</p> 	<p>TS XMZ ATC 4X</p>	<p>WGM</p>  <p>WMT™ SLS</p>	<p>E = End mount S = Side mount R = Angle mount</p>
			<p>B</p>  <p>ProGroove™</p>	<p>E</p> 
			<p>N</p>  <p>TopGroove™/TopThread™ clamping</p>	<p>S</p> 
			<p>LS</p>  <p>Laydown</p>	<p>R</p> 

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSNER3

R

Hand of Tool

- R = Right hand
- L = Left hand

End mount

R

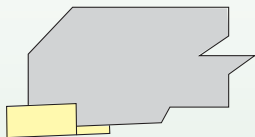


L

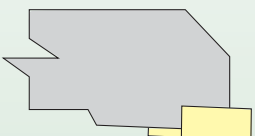


Side mount

R



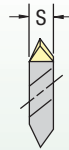
L



3

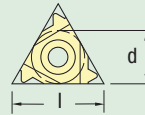
Insert Cutting Edge Length

N = Insert size



2	3,18
3	4,95
4	6,48
5	9,65
6	11,13

LT = Cutting edge length



l	d (IC)
16	9,52
22	12,70
—	—
—	—

E

Additional Information

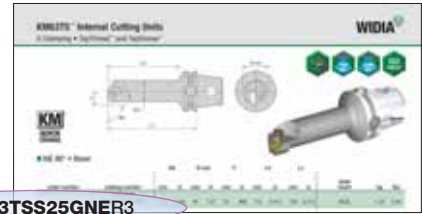
- E = External only
- N = Internal only
- C = GC-style insert



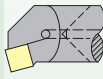
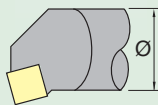
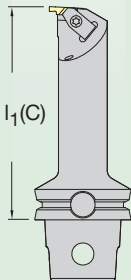
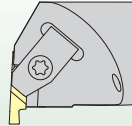
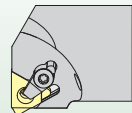

Special Features

- Y = Mazak® INTEGREX®
- M = Metric

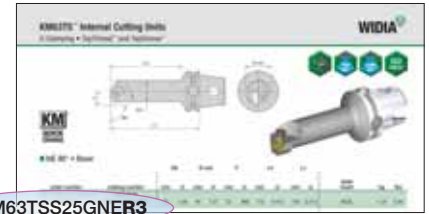
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KM	63	TS	S	25	G	N	E																																										
KM Quick Change	System Size	Feature	Bar Type	Bar Diameter	Bar Gage Length	Insert Holding Method	Insert Location																																										
	40 = 40mm 50 = 50mm 63 = 63mm 80 = 80mm 100 = 100mm 	TS XMZ ATC 4X	S  Steel with through coolant E  Carbide with through coolant	10 = 10mm 12 = 12mm 16 = 16mm 20 = 20mm 25 = 25mm 32 = 32mm 40 = 40mm 50 = 50mm 	<table border="1"> <tr><td>C</td><td>50</td></tr> <tr><td>D</td><td>60</td></tr> <tr><td>E</td><td>70</td></tr> <tr><td>F</td><td>80</td></tr> <tr><td>G</td><td>90</td></tr> <tr><td>H</td><td>100</td></tr> <tr><td>J</td><td>110</td></tr> <tr><td>K</td><td>125</td></tr> <tr><td>L</td><td>140</td></tr> <tr><td>M</td><td>150</td></tr> <tr><td>N</td><td>160</td></tr> <tr><td>P</td><td>170</td></tr> <tr><td>Q</td><td>180</td></tr> <tr><td>R</td><td>200</td></tr> <tr><td>S</td><td>250</td></tr> <tr><td>T</td><td>300</td></tr> <tr><td>U</td><td>350</td></tr> <tr><td>V</td><td>400</td></tr> <tr><td>W</td><td>450</td></tr> <tr><td>Y</td><td>500</td></tr> <tr><td>X</td><td>special</td></tr> </table> 	C	50	D	60	E	70	F	80	G	90	H	100	J	110	K	125	L	140	M	150	N	160	P	170	Q	180	R	200	S	250	T	300	U	350	V	400	W	450	Y	500	X	special	N  TopGroove™/ TopThread™ clamping LS  Laydown	E = End mount 
C	50																																																
D	60																																																
E	70																																																
F	80																																																
G	90																																																
H	100																																																
J	110																																																
K	125																																																
L	140																																																
M	150																																																
N	160																																																
P	170																																																
Q	180																																																
R	200																																																
S	250																																																
T	300																																																
U	350																																																
V	400																																																
W	450																																																
Y	500																																																
X	special																																																

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSS25GNER3

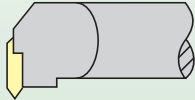
R

Hand of Tool

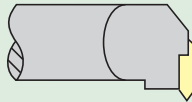
- R** = Right hand
- L** = Left hand

End mount

R



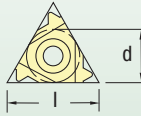
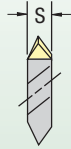
L



3

Insert Cutting Edge Length

N = Insert size **LT** = Cutting edge length



KGM blade size

2	3,18	l	d (IC)	50
3	4,95	16	9,52	50
4	6,48	22	12,70	50
5	9,65	—	—	50
6	11,13	—	—	50

E

Additional Information

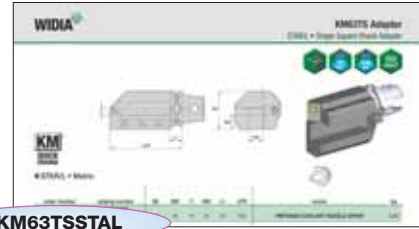
- E** = External
- N** = Internal
- C** = GC-style insert

Special Features


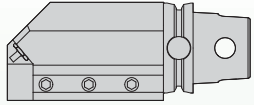
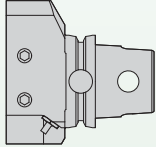
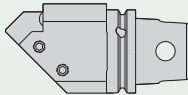
- Y** = Mazak® INTEGREX®
- M** = Metric

How Do Catalog Numbers Work?

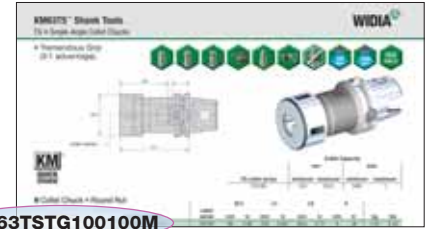
Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63TSSTAL

KM	63	TS		STA	L	
KM Quick Change	System Size	Feature	Variance	Toolholder Style	Hand of Tool	Special Features
	<p>40 = 40mm 50 = 50mm 63 = 63mm 80 = 80mm 100 = 100mm</p> 	<p>TS XMZ ATC 4X</p>	<p>2X 4X 45</p>	<p>STA</p>  <p>ETA</p>  <p>TA</p> 	<p>L = Left hand R = Right hand</p>	<p>Y = Mazak® INTEGREX®</p>

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSTG100100M

KM

KM Quick Change

63

System Size

- 40 = 40mm
- 50 = 50mm
- 63 = 63mm
- 80 = 80mm
- 100 = 100mm

TS

Feature

- TS
- XMZ
- ATC
- 4X

TG

Toolholder Style

100

Toolholder Style Size

Varies according to toolholder style

100

Tool Gage Length

100 = 100mm

M

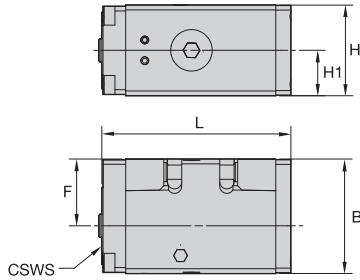
Metric

Special Features

Special Features

Y = Mazak® INTEGREX®

- | | |
|--|--|
| BN = Blank | P = Spindle plug |
| CS = Combi shell mill adapter | RDC = Drill chuck |
| DA = Double-angle collet chuck | S = KM extensions-reducers |
| DAT = Drill adapter | SMC = Shell Mill adapter with coolant |
| EM = Weldon® end mill adapter | SSF = Adapter for straight shanks with flat (drills) |
| ER = DIN 6499 single-angle collet chuck | ST = Solid tap adapter |
| ES = KM offset extensions | SWN = Whistle Notch™ 2° — short — not to DIN standard |
| GB = Gage bar | TC = Tension-compression tap adapter |
| HC = Hydraulic chuck — Standard Line | TCD = Top Cut™ drill |
| HCSL = Hydraulic chuck — Slim Line | TCP = Top Cut Plus™ |
| HCSLT = Hydraulic chuck — Slim Line — Trend | TG = Tremendous Grip single-angle collet chuck |
| HPHC = Hydraulic chuck — high performance | TT = Shrink Fit thermo toolholder |
| HPMC = Milling chuck — high performance | WD = Drill adapter |
| JT = Jacobs taper adapter | WN = Whistle Notch (2° metric; 5° inch) |
| MT = Morse taper adapter | WN/EM = Whistle Notch — Weldon chuck |



■ CLS • Square Shank • Metric

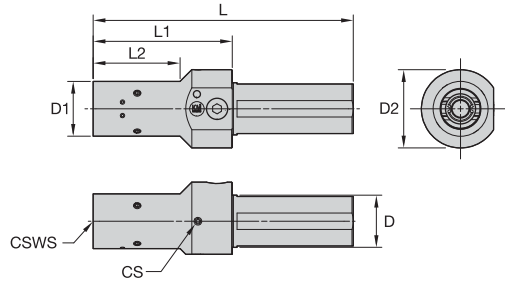
order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw
1024718	right hand KM32CLSR2050K	KM32	48	28	40,0	20,0	90,0	6mm
1024719	left hand KM32CLSL2050K	KM32	48	28	40,0	20,0	90,0	6mm

■ CLS • Square Shank • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw
1024682	right hand KM32CLSR1250B	KM32	1.890	1.102	1.500	.75	3.122	6mm
1024714	KM32CLSR1250C	KM32	1.890	1.102	1.500	.75	3.622	6mm
1024716	KM32CLSR1650C	KM32	1.890	1.102	2.000	1.00	3.622	6mm

■ Wedge Tightening Torque

catalog number	KM size	torque range (Nm)	torque range (ft. lbs.)	wedge hex size
KM32CLSR/L...	32	14-18	10-14	4mm

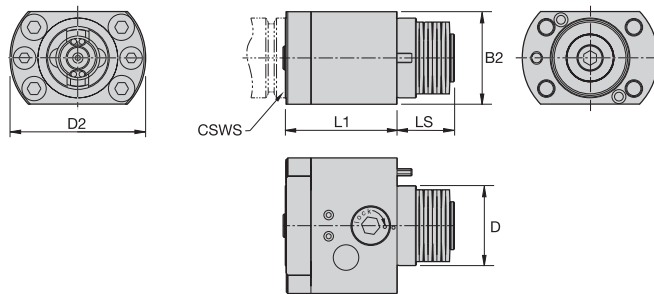


■ CLN-SS • Round Shank • Metric

order number	catalog number	CSWS system size	D	D1	D2	L1	L	L2	CS	wrench size actuation screw
1279247	KM32CLNSS3255	KM32	32	32	45	55	125	18	RP1/8	6mm
1145081	KM40CLNSS5070	KM40	50	40	63	70	155	20	RP1/8	8mm
1145073	KM50CLNSS5080	KM50	50	50	63	80	190	25	RP1/8	10mm
1145087	KM63CLNSS6090	KM63	60	63	90	90	229	30	RP1/8	10mm

■ CLN-SS • Round Shank • Inch

order number	catalog number	CSWS system size	D	D1	D2	L1	L	L2	CS	wrench size actuation screw
1330758	KM32CLNSS20217	KM32	1.25	1.260	1.77	2.165	4.92	.69	1/8-27 NPSC	6mm
1330759	KM32CLNSS24217	KM32	1.50	1.260	2.01	2.165	4.92	.69	1/8-27 NPSC	6mm
1145079	KM40CLNSS32274	KM40	2.00	1.575	2.48	2.737	6.10	.79	1/8-27 NPSC	8mm
1145072	KM50CLNSS40316	KM50	2.50	1.969	3.15	3.156	7.47	.98	1/8-27 NPSC	10mm
1145088	KM63CLNSS60160	KM63	2.36	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm
1145084	KM63CLNSS40630	KM63	2.50	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm
1145086	KM63CLNSS48630	KM63	3.00	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm



■ CLNS-EF • Flange Mount, Side Access • Metric

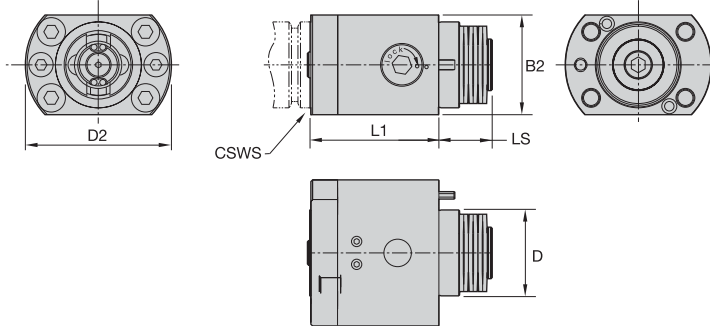
order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330780	KM32CLNSEF	KM32	32	60	40	50	28,3	6mm	MS1936
1024679	KM40CLNSEF	KM40	40	70	48	55	41,4	8mm	DWG MS1365
1024646	KM50CLNSEF	KM50	50	85	58	70	46,6	10mm	DWG MS1585



■ CLNS-EF • Flange Mount, Side Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330780	KM32CLNSEF	KM32	1.260	2.36	1.58	1.969	1.11	6mm	MS1936
1024679	KM40CLNSEF	KM40	1.575	2.76	1.89	2.165	1.63	8mm	DWG MS1365
1024646	KM50CLNSEF	KM50	1.969	3.35	2.28	2.756	1.83	10mm	DWG MS1585





■ CLNT-EF • Flange Mount, Top Access • Metric

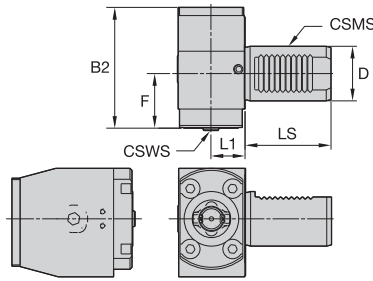


order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330781	KM32CLNTEF	KM32	32	60	40	55	23,3	6mm	MS1936
1024681	KM40CLNTEF	KM40	40	70	48	60	36,4	8mm	DWG MS1365
1024680	KM50CLNTEF	KM50	50	85	58	75	41,6	10mm	DWG MS1585

■ CLNT-EF • Flange Mount, Top Access • Inch



order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330781	KM32CLNTEF	KM32	1.260	2.36	1.57	2.165	.92	6mm	MS1936
1024681	KM40CLNTEF	KM40	1.575	2.76	1.89	2.362	1.43	8mm	DWG MS1365
1024680	KM50CLNTEF	KM50	1.969	3.35	2.28	2.953	1.64	10mm	DWG MS1585



KM-LOC Clamping Units

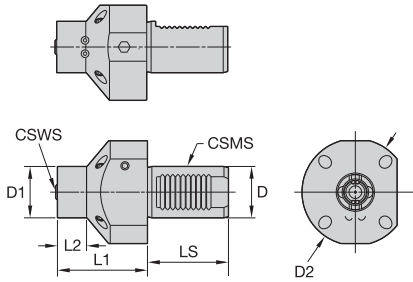


■ CLRR/L • VDI Right Angle • Metric

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
right hand									
1324688	KM32CLRRVDI3035	KM32	VDI30	30	35	80,0	23	55	6mm
1145076	KM40CLRRVDI4040	KM40	VDI40	40	40	88,5	25	63	8mm
1145069	KM50CLRRVDI5050	KM50	VDI50	50	50	113,0	30	78	10mm
1145089	KM63CLRRVDI6060	KM63	VDI60	60	60	122,5	37	94	10mm
left hand									
1330776	KM32CLRLVDI3035	KM32	VDI30	30	35	80,0	23	55	6mm
1145077	KM40CLRLVDI4040	KM40	VDI40	40	40	88,5	25	63	8mm
1145070	KM50CLRLVDI5050	KM50	VDI50	50	50	113,0	30	78	10mm
1145091	KM63CLRLVDI6060	KM63	VDI60	60	60	122,5	37	94	10mm

■ CLRR/L • VDI Right Angle • Inch

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
right hand									
1324688	KM32CLRRVDI3035	KM32	VDI30	1.181	1.378	3.15	.906	2.17	6mm
1145076	KM40CLRRVDI4040	KM40	VDI40	1.575	1.575	3.48	.984	2.48	8mm
1145069	KM50CLRRVDI5050	KM50	VDI50	1.969	1.969	4.45	1.181	3.07	10mm
1145089	KM63CLRRVDI6060	KM63	VDI60	2.362	2.362	4.82	1.457	3.70	10mm
left hand									
1330776	KM32CLRLVDI3035	KM32	VDI30	1.181	1.378	3.15	.906	2.17	6mm
1145077	KM40CLRLVDI4040	KM40	VDI40	1.575	1.575	3.48	.984	2.48	8mm
1145070	KM50CLRLVDI5050	KM50	VDI50	1.969	1.969	4.45	1.181	3.07	10mm
1145091	KM63CLRLVDI6060	KM63	VDI60	2.362	2.362	4.82	1.457	3.70	10mm

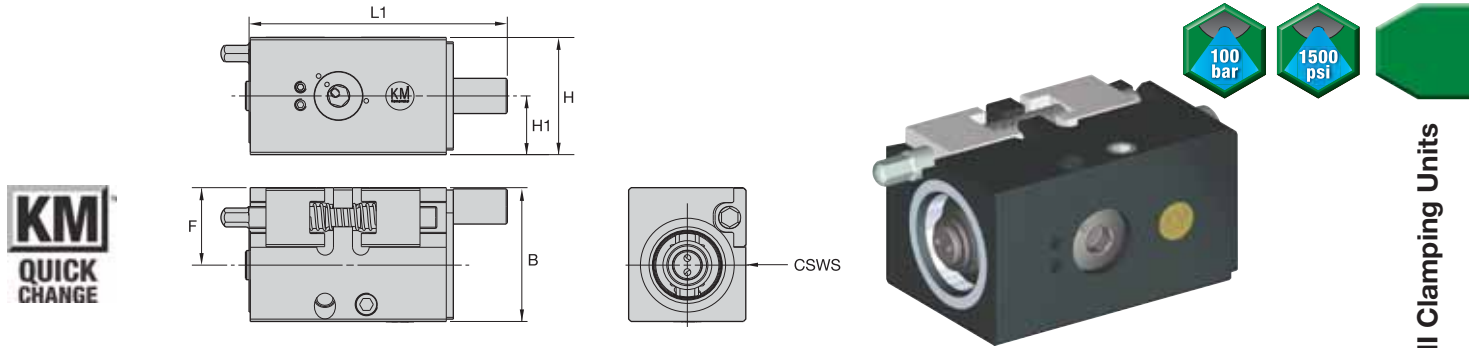


■ CLAN/V • VDI • Metric

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
right hand										
1228680	KM32CLANVDI3060	KM32	VDI30	32	30	68	60	20	55	6mm
1145074	KM40CLANVDI4070	KM40	VDI40	40	40	83	70	23	63	8mm
1145067	KM50CLANVDI5080	KM50	VDI50	50	50	98	80	25	78	10mm
1145093	KM63CLANVDI60160	KM63	VDI60	63	60	123	160	100	94	10mm
1145092	KM63CLANVDI6090	KM63	VDI60	63	60	123	90	30	94	10mm
left hand										
1145075	KM40CLAVVDI4070	KM40	VDI40	40	40	83	70	23	63	8mm
1145068	KM50CLAVVDI5080	KM50	VDI50	50	50	98	80	25	78	10mm
1145095	KM63CLAVVDI60160	KM63	VDI60	63	60	123	160	100	94	10mm
1145094	KM63CLAVVDI6090	KM63	VDI60	63	60	123	90	30	94	10mm

■ CLAN/V • VDI • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
right hand										
1228680	KM32CLANVDI3060	KM32	VDI30	1.26	1.181	2.68	2.362	.79	2.17	6mm
1145074	KM40CLANVDI4070	KM40	VDI40	1.57	1.575	3.27	2.756	.91	2.48	8mm
1145067	KM50CLANVDI5080	KM50	VDI50	1.97	1.969	3.86	3.150	.98	3.07	10mm
1145093	KM63CLANVDI60160	KM63	VDI60	2.48	2.362	4.84	6.299	3.94	3.70	10mm
1145092	KM63CLANVDI6090	KM63	VDI60	2.48	2.362	4.84	3.543	1.18	3.70	10mm
left hand										
1145075	KM40CLAVVDI4070	KM40	VDI40	1.57	1.575	3.27	2.756	.91	2.48	8mm
1145068	KM50CLAVVDI5080	KM50	VDI50	1.97	1.969	3.86	3.150	.98	3.07	10mm
1145095	KM63CLAVVDI60160	KM63	VDI60	2.48	2.362	4.84	6.299	3.94	3.70	10mm
1145094	KM63CLAVVDI6090	KM63	VDI60	2.48	2.362	4.84	3.543	1.18	3.70	10mm



KM-LOC II Clamping Units

■ CL2S • Square Shank • Metric

order number	catalog number	CSWS system size	B	F	H	H1	L1	wrench size actuation screw
right hand								
1785187	KM40CL2SR2560M	KM40	57	33	50	25	110	8mm
1785188	KM40CL2SR3260P	KM40	57	33	64	32	130	8mm
2044928	KM50CL2SR2575M	KM50	70	40	50	25	100	10mm
2044930	KM50CL2SR3275P	KM50	70	40	64	32	120	10mm
2044942	KM63CL2SR3290P	KM63	85	47	64	32	110	10mm
left hand								
1785189	KM40CL2SL2560M	KM40	57	33	50	25	110	8mm
1785190	KM40CL2SL3260P	KM40	57	33	64	32	130	8mm
2044929	KM50CL2SL2575M	KM50	70	40	50	25	100	10mm
2044931	KM50CL2SL3275P	KM50	70	40	64	32	120	10mm
2044943	KM63CL2SL3290P	KM63	85	47	64	32	110	10mm

■ CL2S • Square Shank • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L1	wrench size actuation screw
right hand								
1785156	KM40CL2SR1260B	KM40	2.244	1.299	1.50	.75	2.925	8mm
1785157	KM40CL2SR1660C	KM40	2.244	1.299	2.00	1.00	3.425	8mm
1785158	KM40CL2SR1660D	KM40	2.244	1.299	2.00	1.00	4.425	8mm
1785159	KM40CL2SR2060D	KM40	2.244	1.299	2.50	1.25	4.425	8mm
2044920	KM50CL2SR1675D	KM50	2.756	1.575	2.00	1.00	4.031	10mm
2044922	KM50CL2SR2075D	KM50	2.756	1.575	2.50	1.25	4.031	10mm
2044938	KM63CL2SR2090E	KM63	3.347	1.850	2.50	1.25	4.638	10mm
left hand								
1785161	KM40CL2SL1260B	KM40	2.244	1.299	1.50	.75	2.925	8mm
1785162	KM40CL2SL1660C	KM40	2.244	1.299	2.00	1.00	3.425	8mm
1785183	KM40CL2SL1660D	KM40	2.244	1.299	2.00	1.00	4.425	8mm
1785184	KM40CL2SL2060D	KM40	2.244	1.299	2.50	1.25	4.425	8mm
2044921	KM50CL2SL1675D	KM50	2.756	1.575	2.00	1.00	4.031	10mm
2044923	KM50CL2SL2075D	KM50	2.756	1.575	2.50	1.25	4.031	10mm
2044939	KM63CL2SL2090E	KM63	3.347	1.850	2.50	1.25	4.638	10mm

■ Wedge Tightening Torque

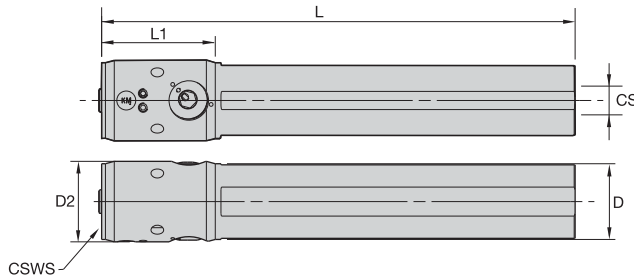
catalog number	KM size	torque range (ft. lbs.)	torque range (Nm)	wedge hex size
KM40CL2SR/L1260B	40	30-34	41-46	6mm
KM40CL2SR/L....	40	43-47	58-64	7mm
KM50CL2SR/L1675D KM50CL2SR/L2575M	50	43-47	58-64	7mm
KM50CL2SR/L2075D KM50CL2SR/L3275P	50	58-62	79-84	8mm
KM63CL2SR/L.....	63	58-62	79-84	8mm

KM-LOC II™ Clamping Units

Lathe



KM-LOC II Clamping Units

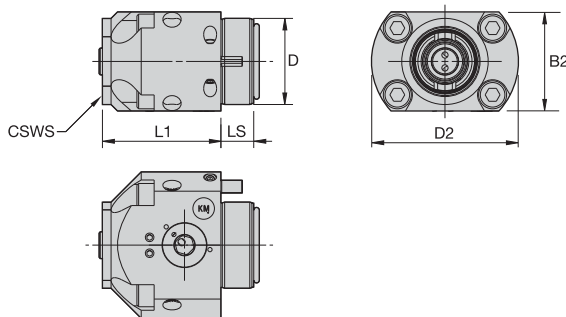


■ CL2N-SS • Round Shank • Metric

order number	catalog number	CSWS system size	D	D2	L1	L	CS	wrench size actuation screw
1785191	KM40CL2NSS4060	KM40	40	42,5	60	250	RP3/8	8mm
2044932	KM50CL2NSS5075	KM50	50	52,5	75	300	RP3/8	10mm
2044944	KM63CL2NSS6085	KM63	60	64,5	85	350	RP3/8	10mm

■ CL2N-SS • Round Shank • Inch

order number	catalog number	CSWS system size	D	D2	L1	L	CS	wrench size actuation screw
1785185	KM40CL2NSS24236	KM40	1.500	1.673	2.362	10.000	3/8-18 NPSC	8mm
2044924	KM50CL2NSS32295	KM50	2.000	2.067	2.953	12.000	3/8-18 NPSC	10mm
2044940	KM63CL2NSS40335	KM63	2.500	2.539	3.346	14.000	3/8-18 NPSC	10mm



■ CL2NS-EF • Flange Mount, Side Access • Metric

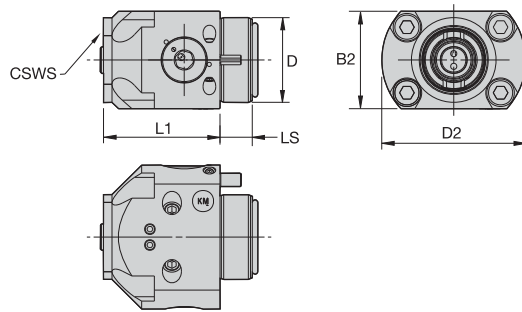
order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785153	KM40CL2NSEF	KM40	40	68	46	55	15,2	8mm	DWG MS1277
2044926	KM50CL2NSEF	KM50	50	84	58	65	20,0	10mm	DWG MS1494
2044936	KM63CL2NSEF	KM63	63	102	76	80	20,0	10mm	MS1252



■ CL2NS-EF • Flange Mount, Side Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785153	KM40CL2NSEF	KM40	1.575	2.68	1.81	2.165	.60	8mm	DWG MS1277
2044926	KM50CL2NSEF	KM50	1.969	3.31	2.28	2.559	.79	10mm	DWG MS1494
2044936	KM63CL2NSEF	KM63	2.480	4.02	2.99	3.150	.79	10mm	MS1252





KM-LOC II Clamping Units



■ CL2NT-EF • Flange Mount, Top Access • Metric

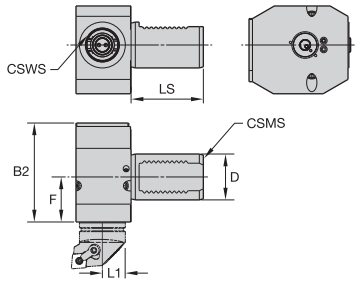


order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785032	KM40CL2NTEF	KM40	40	68	46	55	15,2	8mm	DWG MS1277
2044927	KM50CL2NTEF	KM50	50	84	58	65	20,0	10mm	DWG MS1494
2044937	KM63CL2NTEF	KM63	63	102	76	80	20,0	10mm	MS1252

■ CL2NT-EF • Flange Mount, Top Access • Inch



order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785032	KM40CL2NTEF	KM40	1.57	2.677	1.811	2.165	.600	8mm	DWG MS1277
2044927	KM50CL2NTEF	KM50	1.97	3.307	2.284	2.559	.787	10mm	DWG MS1494
2044937	KM63CL2NTEF	KM63	2.48	4.016	2.992	3.150	.787	10mm	MS1252

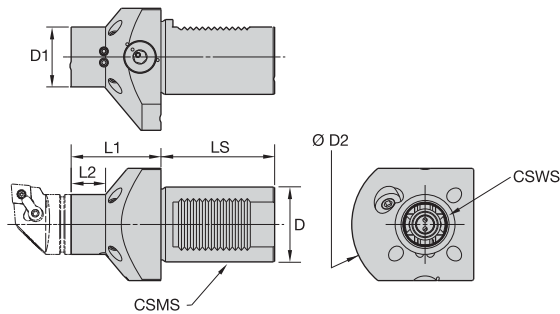


■ CL2RR/L • VDI Right Angle • Metric

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1785233	KM40CL2RRVDI4040	KM40	VDI40	40	40	87	25	63	8mm
1785236	KM40CL2RRVDI5040	KM40	VDI50	50	40	87	25	78	8mm
	left hand								
1785234	KM40CL2RLVDI4040	KM40	VDI40	40	40	87	25	63	8mm
1785240	KM40CL2RLVDI5040	KM40	VDI50	50	40	87	25	78	8mm

■ CL2RR/L • VDI Right Angle • Inch

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1785233	KM40CL2RRVDI4040	KM40	VDI40	1.575	1.575	3.43	.984	2.48	8mm
1785236	KM40CL2RRVDI5040	KM40	VDI50	1.969	1.575	3.43	.984	3.07	8mm
	left hand								
1785234	KM40CL2RLVDI4040	KM40	VDI40	1.575	1.575	3.43	.984	2.48	8mm
1785240	KM40CL2RLVDI5040	KM40	VDI50	1.969	1.575	3.43	.984	3.07	8mm

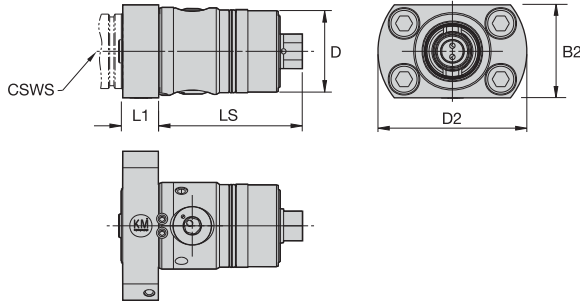


■ CL2AN/V • VDI Axial • Metric

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1785241	KM40CL2ANVDI4060	KM40	VDI40	40	40	83	60	23	63	8mm

■ CL2AN/V • VDI Axial • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1785241	KM40CL2ANVDI4060	KM40	VDI40	1.575	1.575	3.27	2.362	.91	2.48	8mm



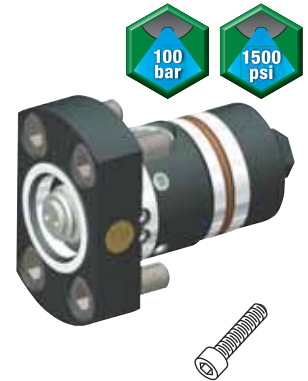
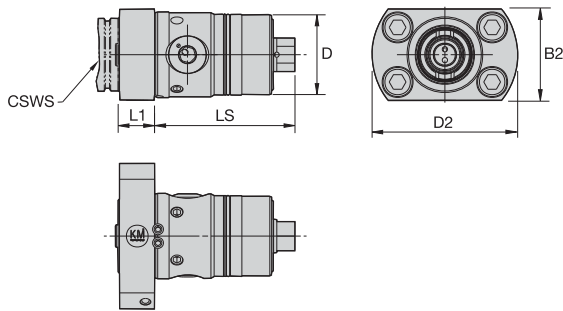
KM-LOC II Clamping Units

■ **CL2NS-BC • Boring Cartridge, Side Access • Metric**

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785155	KM40CL2NSBC3216B	KM40	47	80	50	20	77,2	8mm	MS1234
1908331	KM50CL2NSBC4010B	KM50	58	96	64	22	86,7	10mm	MS1085PKG
1920417	KM63CL2NSBC5010B	KM63	74	122	78	30	99,5	10mm	MS1239

■ **CL2NS-BC • Boring Cartridge, Side Access • Inch**

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785155	KM40CL2NSBC3216B	KM40	1.850	3.15	1.97	.787	3.04	8mm	MS1234
1908331	KM50CL2NSBC4010B	KM50	2.293	3.78	2.52	.866	3.41	10mm	MS1085PKG
1920417	KM63CL2NSBC5010B	KM63	2.913	4.80	3.07	1.181	3.92	10mm	MS1239

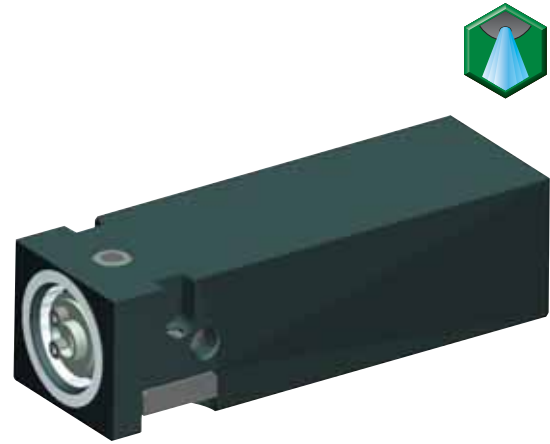
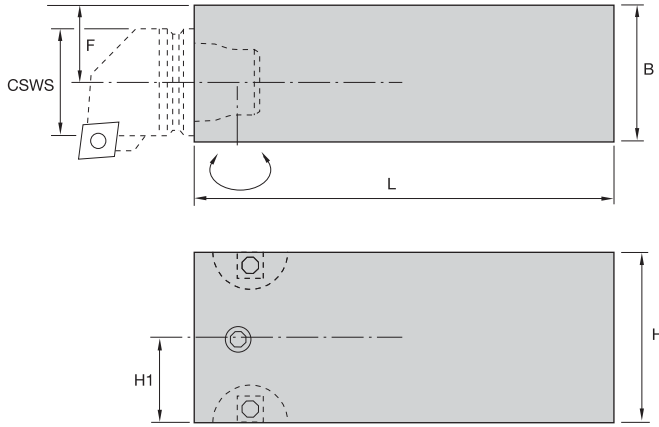


■ **CL2NT-BC • Boring Cartridge, Top Access • Metric**

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785154	KM40CL2NTBC3216B	KM40	47	80	50	20	77,2	8mm	MS1234
2044919	KM50CL2NTBC4010B	KM50	58	96	64	22	86,7	10mm	MS1085PKG
1962610	KM63CL2NTBC5010B	KM63	74	122	78	30	99,5	10mm	MS1239

■ **CL2NT-BC • Boring Cartridge, Top Access • Inch**

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785154	KM40CL2NTBC3216B	KM40	1.850	3.15	1.97	.787	3.04	8mm	MS1234
2044919	KM50CL2NTBC4010B	KM50	2.293	3.78	2.52	.866	3.41	10mm	MS1085PKG
1962610	KM63CL2NTBC5010B	KM63	2.913	4.80	3.07	1.181	3.92	10mm	MS1239



■ NCM • Square Shank Replacement • Metric

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw	spare parts package	Nm
1021574	KM32NCM4040	KM32	40	23	40	20	125	5mm	KM32PKG3S	8-11
1021575	KM32NCM5040	KM32	40	23	50	25	125	5mm	KM32PKG3S	8-11
1021641	KM40NCM5044	KM40	44	23	50	25	150	6mm	KM40PKG3S	12-16
1021640	KM40NCM6444	KM40	44	23	64	32	150	6mm	KM40PKG3S	12-16
1021748	KM50NCM6454	KM50	54	28	64	32	150	10mm	KM50PKG3S	27-34

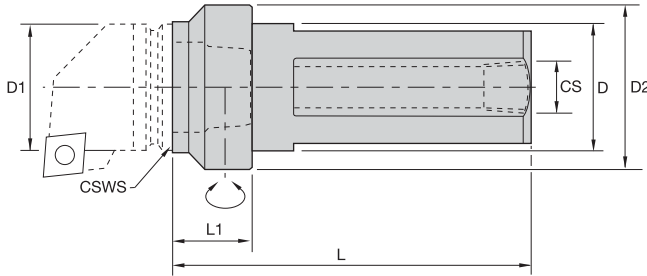
■ NCM • Square Shank Replacement • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw	spare parts package	ft. lbs.
1021531	KM32NCM2425	KM32	1.562	.884	1.50	.75	5.00	5mm	KM32PKG3S	6-8
1021532	KM32NCM3225	KM32	1.562	.884	2.00	1.00	5.00	5mm	KM32PKG3S	6-8
1021637	KM40NCM3228	KM40	1.750	.937	2.00	1.00	6.00	6mm	KM40PKG3S	9-12
1021638	KM40NCM4028	KM40	1.750	.937	2.50	1.25	6.00	6mm	KM40PKG3S	9-12
1021746	KM50NCM4034	KM50	2.125	1.122	2.50	1.25	6.00	10mm	KM50PKG3S	20-25

■ Wedge Tightening Torque

KM size CSWS	torque (ft. lbs.)	torque (Nm)
32	12	16
40	25	34
50	35	48

NOTE: Refer to page J40 for torque wrench.



KM Manual Clamping Units



■ NCM-SS • Round Shank, Standard Length • Metric



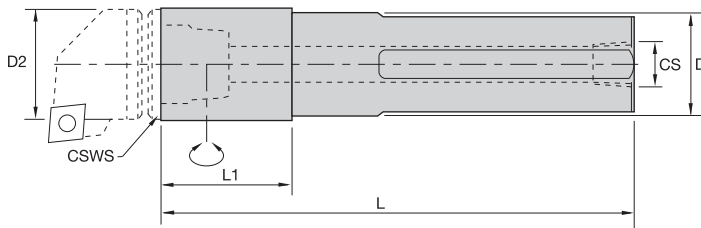
order number	catalog number	CSWS system size	D	D1	D2	L1	L	CS	wrench size actuation screw	spare parts package	Nm
1144817	KM32NCMSS3225	KM32	32	32	40	25	90	RP3/8	5mm	KM32PKG3L	8-11
1144818	KM32NCMSS4025	KM32	40	32	50	25	90	RP3/8	5mm	KM32PKG3L	8-11
1144830	KM40NCMSS4025	KM40	40	40	50	25	110	RP3/8	6mm	KM40PKG3L	12-16
1144831	KM40NCMSS5025	KM40	50	40	63	25	110	RP3/8	6mm	KM40PKG3L	12-16
1144848	KM50NCMSS5032	KM50	50	50	63	32	142	RP3/8	10mm	KM50PKG3L	27-34
1144847	KM50NCMSS6032	KM50	60	50	80	32	142	RP3/8	10mm	KM50PKG3L	27-34

■ NCM-SS • Round Shank, Standard Length • Inch



order number	catalog number	CSWS system size	D	D1	D2	L1	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1144815	KM32NCMSS20100	KM32	1.25	1.260	1.57	1.000	3.54	3/8-18NPT	5mm	KM32PKG3L	6-8
1144816	KM32NCMSS24100	KM32	1.50	1.260	1.97	1.000	3.54	3/8-18NPT	5mm	KM32PKG3L	6-8
1144829	KM40NCMSS24100	KM40	1.50	1.575	1.97	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1148349	KM40NCMSS28100	KM40	1.75	1.575	2.48	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1117705	KM40NCMSS32100	KM40	2.00	1.575	2.48	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1085675	KM50NCMSS32125	KM50	2.00	1.969	2.48	1.250	5.59	3/8-18NPT	10mm	KM50PKG3L	20-25
1144846	KM50NCMSS40125	KM50	2.50	1.969	3.15	1.250	5.59	3/8-18NPT	10mm	KM50PKG3L	20-25
1144798	KM63NCMSS40162	KM63	2.50	2.480	3.15	1.625	5.96	3/8-18NPT	12mm	KM63PKG3L	35-40

NOTE: Refer to page J40 for torque wrench.



■ NCM-S • Round Shank, Extended Length • Metric



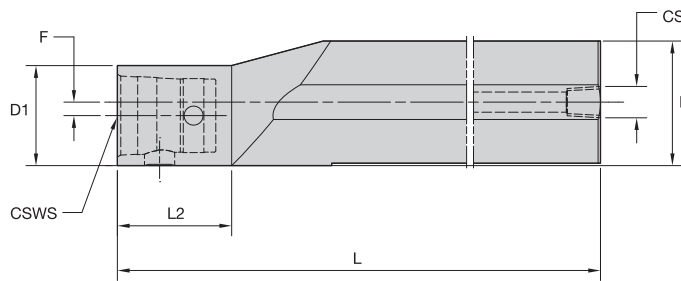
order number	catalog number	CSWS system size	D2	D	L1	L	CS	wrench size actuation screw	spare parts package	Nm
1021533	KM32NCMS32P	KM32	32	32	38	170	RP3/8	5mm	KM32PKG3S	8-11
1021578	KM32NCMS32R	KM32	32	32	38	200	RP3/8	5mm	KM32PKG3S	8-11
1021635	KM40NCMS40S	KM40	40	40	44	250	RP3/8	6mm	KM40PKG3S	12-16
1021744	KM50NCMS50T	KM50	50	50	52	300	RP3/8	10mm	KM50PKG3S	27-34
1021525	KM63NCMS60U	KM63	63	60	72	350	RP3/8	12mm	KM63PKG3S	47-54

■ NCM-S • Round Shank, Extended Length • Inch



order number	catalog number	CSWS system size	D2	D	L1	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1021530	KM32NCMS20	KM32	1.26	1.25	1.50	6.75	3/8-18NPT	5mm	KM32PKG3S	6-8
1021636	KM40NCMS24	KM40	1.57	1.50	1.75	10.00	3/8-18NPT	6mm	KM40PKG3S	9-12
1021747	KM50NCMS32	KM50	1.97	2.00	2.05	12.00	3/8-18NPT	10mm	KM50PKG3S	20-25
1021528	KM63NCMS40	KM63	2.48	2.50	2.83	14.00	3/8-18NPT	12mm	KM63PKG3S	35-40

NOTE: Refer to page J40 for torque wrench.



■ ECM-S • Round Shank, Offset Extended Length • Metric



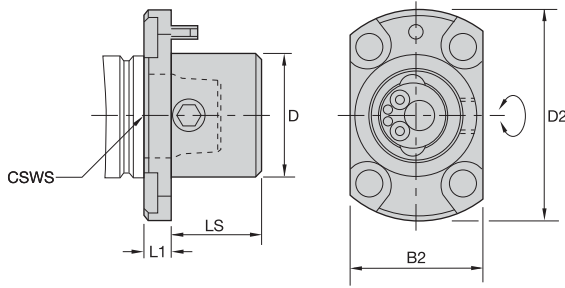
order number	catalog number	CSWS system size	D1	D	F	L2	L	CS	wrench size actuation screw	spare parts package	Nm
1021699	KM40ECMS50S	KM40	40	50	5	45	250	RP3/8	6mm	KM40PKG3S	12-16
1021745	KM50ECMS60U	KM50	50	60	5	52	350	RP3/8	10mm	KM50PKG3S	27-34
1021526	KM63ECMS80W	KM63	63	80	8	72	450	RP3/8	12mm	KM63PKG3S	47-54

■ ECM-S • Round Shank, Offset Extended Length • Inch



order number	catalog number	CSWS system size	D1	D	F	L2	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1021698	KM40ECMS32	KM40	1.57	2.00	.21	1.77	10.00	3/8-18 NPT	6mm	KM40PKG3S	9-12
1021703	KM50ECMS40	KM50	1.97	2.50	.27	2.05	14.00	3/8-18 NPT	10mm	KM50PKG3S	20-25
1021527	KM63ECMS48	KM63	2.48	3.00	.26	2.83	17.00	3/8-18 NPT	12mm	KM63PKG3S	35-40

NOTE: Refer to page J40 for torque wrench.



■ NCM-F • Flange Mount, Standard Length • Metric



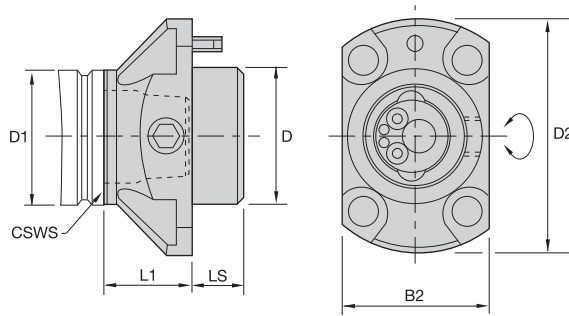
order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	Nm
1144814	KM32NCMF	KM32	32	54	36	7,5	24,5	5mm	MS1347	KM32PKG3S	8-11
1013675	KM40NCMF	KM40	40	68	44	10,0	30,0	6mm	MS1217	KM40PKG3S	12-16
1144845	KM50NCMF	KM50	50	84	55	12,0	38,0	10mm	MS1361	KM50PKG3S	27-34
1083015	KM63NCMF	KM63	63	102	72	15,0	45,0	12mm	MS1460	KM63PKG3S	47-54
1144800	KM80NCMF	KM80	80	132	90	18,5	57,0	14mm	DWG MS1599	KM80PKG3S	79-85

■ NCM-F • Flange Mount, Standard Length • Inch



order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	ft. lbs.
1144814	KM32NCMF	KM32	1.260	2.13	1.42	.295	.96	5mm	MS1347	KM32PKG3S	6-8
1013675	KM40NCMF	KM40	1.575	2.68	1.73	.394	1.18	6mm	MS1217	KM40PKG3S	9-12
1144845	KM50NCMF	KM50	1.969	3.31	2.17	.472	1.50	10mm	MS1361	KM50PKG3S	20-25
1083015	KM63NCMF	KM63	2.480	4.02	2.84	.591	1.77	12mm	MS1460	KM63PKG3S	35-40
1144800	KM80NCMF	KM80	3.150	5.20	3.54	.728	2.24	14mm	DWG MS1599	KM80PKG3S	58-63

NOTE: Refer to page J40 for torque wrench.



KM Manual Clamping Units



■ NCM-EF • Flange Mount, Extended Length • Metric



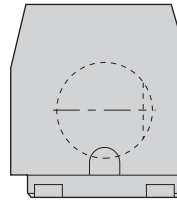
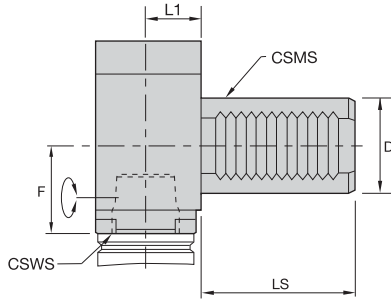
order number	catalog number	CSWS system size	D1	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	Nm
1021576	KM32NCMEF	KM32	32	32	54	36	20	12	5mm	MS1347	KM32PKG3L	8-11
1021642	KM40NCMEF	KM40	40	40	68	44	25	15	6mm	MS1217	KM40PKG3L	12-16
1021749	KM50NCMEF	KM50	50	50	84	55	30	20	10mm	MS1361	KM50PKG3L	27-34
1021753	KM63NCMEF	KM63	63	63	102	72	40	20	12mm	MS1460	KM63PKG3L	47-54
1144799	KM80NCMEF	KM80	80	80	132	90	50	25	14mm	DWG MS1599	KM80PKG3L	79-85
2420366	KM100NCMEF	KM100	100	100	167	112	56	32	17mm	—	—	100-120

■ NCM-EF • Flange Mount, Extended Length • Inch



order number	catalog number	CSWS system size	D1	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	ft. lbs.
1021576	KM32NCMEF	KM32	1.260	1.260	2.13	1.42	.787	.47	5mm	MS1347	KM32PKG3L	6-8
1021642	KM40NCMEF	KM40	1.575	1.575	2.68	1.73	.984	.59	6mm	MS1217	KM40PKG3L	9-12
1021749	KM50NCMEF	KM50	1.969	1.969	3.31	2.17	1.181	.79	10mm	MS1361	KM50PKG3L	20-25
1021753	KM63NCMEF	KM63	2.480	2.480	4.02	2.84	1.575	.79	12mm	MS1460	KM63PKG3L	35-40
1144799	KM80NCMEF	KM80	3.150	3.150	5.20	3.54	1.969	.98	14mm	DWG MS1599	KM80PKG3L	58-63
2420366	KM100NCMEF	KM100	3.937	3.937	6.57	4.41	2.205	1.26	17mm	—	—	75-85

NOTE: Refer to page J40 for torque wrench.



■ R/LCM • VDI • Right-Angle • Metric



order number	catalog number	CSWS system size	CSMS system size	D	F	L1	LS	wrench size actuation screw	spare parts package	Nm
right hand										
1144801	KM32RCMVDI3035	KM32	VDI30	30	35	23	55	5mm	KM32PKG3S	8-11
2420312	KM40RCMVDI3035	KM40	VDI30	30	35	25	55	6mm	KM40PKG3L	12-16
1144824	KM40RCMVDI4040	KM40	VDI40	40	40	25	63	6mm	KM40PKG3S	12-16
1144825	KM40RCMVDI5040	KM40	VDI50	50	40	25	78	6mm	KM40PKG3S	12-16
1144842	KM50RCMVDI4050	KM50	VDI40	40	50	30	63	10mm	KM50PKG3S	27-34
1144841	KM50RCMVDI5050	KM50	VDI50	50	50	30	78	10mm	KM50PKG3S	27-34
1144856	KM63RCMVDI6060	KM63	VDI60	60	60	37	94	12mm	KM63PKG3S	47-54
left hand										
2420363	KM40LCMVDI3035	KM40	VDI30	30	35	25	55	6mm	KM40PKG3L	12-16
1144827	KM40LCMVDI4040	KM40	VDI40	40	40	25	63	6mm	KM40PKG3S	12-16
2420370	KM40LCMVDI4060	KM40	VDI40	40	60	25	63	6mm	KM40PKG3L	12-16
1144828	KM40LCMVDI5040	KM40	VDI50	50	40	25	78	6mm	KM40PKG3S	12-16
1144844	KM50LCMVDI4050	KM50	VDI40	40	50	30	63	10mm	KM50PKG3S	27-34
1144843	KM50LCMVDI5050	KM50	VDI50	50	50	30	78	10mm	KM50PKG3S	27-34
1144857	KM63LCMVDI6060	KM63	VDI60	60	60	37	94	12mm	KM63PKG3S	47-54

■ R/LCM • VDI • Right-Angle • Inch

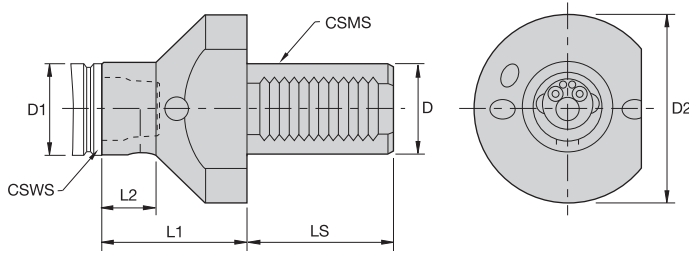


order number	catalog number	CSWS system size	CSMS system size	D	F	L1	LS	wrench size actuation screw	spare parts package	ft. lbs.
right hand										
1144801	KM32RCMVDI3035	KM32	VDI30	1.181	1.378	.906	2.17	5mm	KM32PKG3S	6-8
2420312	KM40RCMVDI3035	KM40	VDI30	1.181	1.378	.984	2.17	6mm	KM40PKG3L	9-12
1144824	KM40RCMVDI4040	KM40	VDI40	1.575	1.575	.984	2.48	6mm	KM40PKG3S	9-12
1144825	KM40RCMVDI5040	KM40	VDI50	1.969	1.575	.984	3.07	6mm	KM40PKG3S	9-12
1144842	KM50RCMVDI4050	KM50	VDI40	1.575	1.969	1.181	2.48	10mm	KM50PKG3S	20-25
1144841	KM50RCMVDI5050	KM50	VDI50	1.969	1.969	1.181	3.07	10mm	KM50PKG3S	20-25
1144856	KM63RCMVDI6060	KM63	VDI60	2.362	2.362	1.457	3.70	12mm	KM63PKG3S	35-40
left hand										
2420363	KM40LCMVDI3035	KM40	VDI30	1.181	1.378	.984	2.17	6mm	KM40PKG3L	9-12
1144827	KM40LCMVDI4040	KM40	VDI40	1.575	1.575	.984	2.48	6mm	KM40PKG3S	9-12
2420370	KM40LCMVDI4060	KM40	VDI40	1.575	2.362	.984	2.48	6mm	KM40PKG3L	9-12
1144828	KM40LCMVDI5040	KM40	VDI50	1.969	1.575	.984	3.07	6mm	KM40PKG3S	9-12
1144844	KM50LCMVDI4050	KM50	VDI40	1.575	1.969	1.181	2.48	10mm	KM50PKG3S	20-25
1144843	KM50LCMVDI5050	KM50	VDI50	1.969	1.969	1.181	3.07	10mm	KM50PKG3S	20-25
1144857	KM63LCMVDI6060	KM63	VDI60	2.362	2.362	1.457	3.70	12mm	KM63PKG3S	35-40

NOTE: Refer to page J40 for torque wrench.



KM Manual Clamping Units



■ R/L • CMI • VDI • Axial • Metric



order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw	spare parts package	Nm
right hand												
1329141	KM32RCMIVDI30100	KM32	VDI30	32	30	68	100	70	55	5mm	KM32PKG3S	8-11
1144821	KM32RCMIVDI3050	KM32	VDI30	32	30	68	50	20	55	5mm	KM32PKG3S	8-11
1144823	KM32RCMIVDI40100	KM32	VDI40	32	40	83	100	70	63	5mm	KM32PKG3S	8-11
1144822	KM32RCMIVDI4050	KM32	VDI40	32	40	83	50	20	63	5mm	KM32PKG3S	8-11
2420364	KM40RCMIVDI3050	KM40	VDI30	40	30	68	50	23	55	6mm	KM40PKG3S	12-16
1144840	KM40RCMIVDI40120	KM40	VDI40	40	40	83	120	83	63	6mm	KM40PKG3S	12-16
1144837	KM40RCMIVDI4060	KM40	VDI40	40	40	83	60	23	63	6mm	KM40PKG3S	12-16
1144839	KM40RCMIVDI50120	KM40	VDI50	40	50	98	120	83	78	6mm	KM40PKG3S	12-16
1144838	KM40RCMIVDI5060	KM40	VDI50	40	50	98	60	23	78	6mm	KM40PKG3S	12-16
1144851	KM50RCMIVDI40140	KM50	VDI40	50	40	83	140	95	63	10mm	KM50PKG3S	27-34
1144853	KM50RCMIVDI4070	KM50	VDI40	50	40	83	70	25	63	10mm	KM50PKG3S	27-34
1144854	KM50RCMIVDI50140	KM50	VDI50	50	50	98	140	95	78	10mm	KM50PKG3S	27-34
1144852	KM50RCMIVDI5070	KM50	VDI50	50	50	98	70	25	78	10mm	KM50PKG3S	27-34
1144809	KM63RCMIVDI50160	KM63	VDI50	63	50	98	160	110	78	12mm	KM63PKG3S	47-54
1144807	KM63RCMIVDI5080	KM63	VDI50	63	50	98	80	30	78	12mm	KM63PKG3S	47-54
1144859	KM63RCMIVDI60160	KM63	VDI60	63	60	123	160	110	94	12mm	KM63PKG3S	47-54
1144858	KM63RCMIVDI6080	KM63	VDI60	63	60	123	80	30	94	12mm	KM63PKG3S	47-54
left hand												
1312285	KM32LCMIVDI40100	KM32	VDI40	32	40	83	100	70	63	5mm	KM32PKG3S	8-11
1144820	KM32LCMIVDI4050	KM32	VDI40	32	40	83	50	20	63	5mm	KM32PKG3S	8-11
1144836	KM40LCMIVDI40120	KM40	VDI40	40	40	83	120	83	63	6mm	KM40PKG3S	12-16
1144833	KM40LCMIVDI4060	KM40	VDI40	40	40	83	60	23	63	6mm	KM40PKG3S	12-16
1144835	KM40LCMIVDI50120	KM40	VDI50	40	50	98	120	83	78	6mm	KM40PKG3S	12-16
1144834	KM40LCMIVDI5060	KM40	VDI50	40	50	98	60	23	78	6mm	KM40PKG3S	12-16
1144797	KM50LCMIVDI40140	KM50	VDI40	50	40	83	140	95	63	10mm	KM50PKG3S	27-34
1144850	KM50LCMIVDI4070	KM50	VDI40	50	40	83	70	25	63	10mm	KM50PKG3S	27-34
1144849	KM50LCMIVDI5070	KM50	VDI50	50	50	98	70	25	78	10mm	KM50PKG3S	27-34
1144810	KM63LCMIVDI50160	KM63	VDI50	63	50	98	160	110	78	12mm	KM63PKG3S	47-54
1144808	KM63LCMIVDI5080	KM63	VDI50	63	50	98	80	30	78	12mm	KM63PKG3S	47-54
1144861	KM63LCMIVDI60160	KM63	VDI60	63	60	123	160	110	94	12mm	KM63PKG3S	47-54
1144860	KM63LCMIVDI6080	KM63	VDI60	63	60	123	80	30	94	12mm	KM63PKG3S	47-54

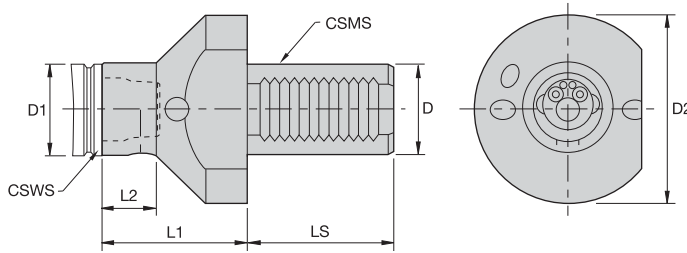
(continued)

KM™ Manual Clamping Units

Lathe



(R/L • CMI • VDI • Axial continued)



KM Manual Clamping Units

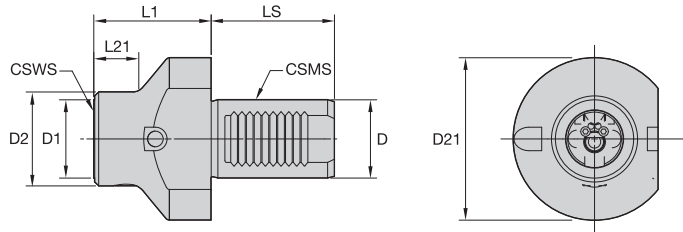
■ R/L • CMI • VDI • Axial • Inch



order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw	spare parts package	ft. lbs.
right hand												
1329141	KM32RCMIVDI30100	KM32	VDI30	1.26	1.181	2.677	3.94	2.76	2.17	5mm	KM32PKG3S	6-8
1144821	KM32RCMIVDI3050	KM32	VDI30	1.26	1.181	2.677	1.97	.79	2.17	5mm	KM32PKG3S	6-8
1144823	KM32RCMIVDI40100	KM32	VDI40	1.26	1.575	3.268	3.94	2.76	2.48	5mm	KM32PKG3S	6-8
1144822	KM32RCMIVDI4050	KM32	VDI40	1.26	1.575	3.268	1.97	.79	2.48	5mm	KM32PKG3S	6-8
2420364	KM40RCMIVDI3050	KM40	VDI30	1.57	1.181	2.677	1.97	.91	2.17	6mm	KM40PKG3S	9-12
1144840	KM40RCMIVDI40120	KM40	VDI40	1.57	1.575	3.268	4.72	3.27	2.48	6mm	KM40PKG3S	9-12
1144837	KM40RCMIVDI4060	KM40	VDI40	1.57	1.575	3.268	2.36	.91	2.48	6mm	KM40PKG3S	9-12
1144839	KM40RCMIVDI50120	KM40	VDI50	1.57	1.969	3.858	4.72	3.27	3.07	6mm	KM40PKG3S	9-12
1144838	KM40RCMIVDI5060	KM40	VDI50	1.57	1.969	3.858	2.36	.91	3.07	6mm	KM40PKG3S	9-12
1144851	KM50RCMIVDI40140	KM50	VDI40	1.97	1.575	3.268	5.51	3.74	2.48	10mm	KM50PKG3S	20-25
1144853	KM50RCMIVDI4070	KM50	VDI40	1.97	1.575	3.268	2.76	.98	2.48	10mm	KM50PKG3S	20-25
1144854	KM50RCMIVDI50140	KM50	VDI50	1.97	1.969	3.858	5.51	3.74	3.07	10mm	KM50PKG3S	20-25
1144852	KM50RCMIVDI5070	KM50	VDI50	1.97	1.969	3.858	2.76	.98	3.07	10mm	KM50PKG3S	20-25
1144809	KM63RCMIVDI50160	KM63	VDI50	2.48	1.969	3.858	6.30	4.33	3.07	12mm	KM63PKG3S	35-40
1144807	KM63RCMIVDI5080	KM63	VDI50	2.48	1.969	3.858	3.15	1.18	3.07	12mm	KM63PKG3S	35-40
1144859	KM63RCMIVDI60160	KM63	VDI60	2.48	2.362	4.843	6.30	4.33	3.70	12mm	KM63PKG3S	35-40
1144858	KM63RCMIVDI6080	KM63	VDI60	2.48	2.362	4.843	3.15	1.18	3.70	12mm	KM63PKG3S	35-40
left hand												
1312285	KM32LCMIVDI40100	KM32	VDI40	1.26	1.575	3.268	3.94	2.76	2.48	5mm	KM32PKG3S	6-8
1144820	KM32LCMIVDI4050	KM32	VDI40	1.26	1.575	3.268	1.97	.79	2.48	5mm	KM32PKG3S	6-8
1144836	KM40LCMIVDI40120	KM40	VDI40	1.57	1.575	3.268	4.72	3.27	2.48	6mm	KM40PKG3S	9-12
1144833	KM40LCMIVDI4060	KM40	VDI40	1.57	1.575	3.268	2.36	.91	2.48	6mm	KM40PKG3S	9-12
1144835	KM40LCMIVDI50120	KM40	VDI50	1.57	1.969	3.858	4.72	3.27	3.07	6mm	KM40PKG3S	9-12
1144834	KM40LCMIVDI5060	KM40	VDI50	1.57	1.969	3.858	2.36	.91	3.07	6mm	KM40PKG3S	9-12
1144797	KM50LCMIVDI40140	KM50	VDI40	1.97	1.575	3.268	5.51	3.74	2.48	10mm	KM50PKG3S	20-25
1144850	KM50LCMIVDI4070	KM50	VDI40	1.97	1.575	3.268	2.76	.98	2.48	10mm	KM50PKG3S	20-25
1144849	KM50LCMIVDI5070	KM50	VDI50	1.97	1.969	3.858	2.76	.98	3.07	10mm	KM50PKG3S	20-25
1144810	KM63LCMIVDI50160	KM63	VDI50	2.48	1.969	3.858	6.30	4.33	3.07	12mm	KM63PKG3S	35-40
1144808	KM63LCMIVDI5080	KM63	VDI50	2.48	1.969	3.858	3.15	1.18	3.07	12mm	KM63PKG3S	35-40
1144861	KM63LCMIVDI60160	KM63	VDI60	2.48	2.362	4.843	6.30	4.33	3.70	12mm	KM63PKG3S	35-40
1144860	KM63LCMIVDI6080	KM63	VDI60	2.48	2.362	4.843	3.15	1.18	3.70	12mm	KM63PKG3S	35-40

NOTE: Refer to page J40 for torque wrench.



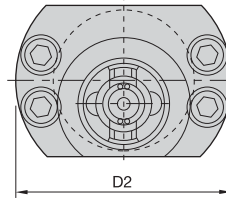
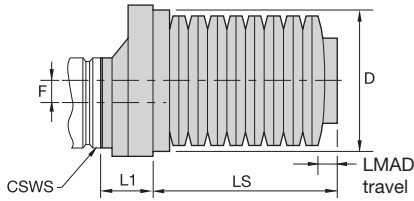

■ RCML • Axial VDI, Large Body Diameter • Metric


order number	catalog number	CSWS system size	CSMS system size	D1	D2	D	L1	L21	LS	D21	wrench size actuation screw	Nm	spare parts package
2032697	KM32RCMLVDI2050	KM32	VDI20	32	38	20	50	20	40	50	5mm	8-11	KM32PKG3L
2032703	KM32RCMLVDI4060	KM32	VDI40	32	38	40	60	21	63	83	5mm	8-11	KM32PKG3L
2013052	KM40RCMLVDI3050	KM40	VDI30	40	48	30	50	23	55	68	6mm	12-16	KM40PKG3L
2013076	KM40RCMLVDI40120	KM40	VDI40	40	48	40	120	83	63	83	6mm	12-16	KM40PKG3L
2013075	KM40RCMLVDI4060	KM40	VDI40	40	48	40	60	23	63	83	6mm	12-16	KM40PKG3L
2032762	KM40RCMLVDI50120	KM40	VDI50	40	48	50	120	77	78	98	6mm	12-16	KM40PKG3L
2013079	KM40RCMLVDI5060	KM40	VDI50	40	48	50	60	17	78	98	6mm	12-16	KM40PKG3L
2032763	KM40RCMLVDI6080	KM40	VDI60	40	48	60	80	42	94	123	6mm	12-16	KM40PKG3L
2032952	KM50RCMLVDI40120	KM50	VDI40	50	60	40	120	87	63	83	10mm	27-34	KM50PKG3L
2032951	KM50RCMLVDI4060	KM50	VDI40	50	60	40	60	30	63	83	10mm	27-34	KM50PKG3L
2032954	KM50RCMLVDI50140	KM50	VDI50	50	60	50	140	97	78	98	10mm	27-34	KM50PKG3L
2032953	KM50RCMLVDI5070	KM50	VDI50	50	60	50	70	32	78	98	10mm	27-34	KM50PKG3L
2033100	KM63RCMLVDI60160	KM63	VDI60	63	75	60	160	112	94	123	12mm	47-54	KM63PKG3L

■ RCML • Axial VDI, Large Body Diameter • Inch


order number	catalog number	CSWS system size	CSMS system size	D1	D2	D	L1	L21	LS	D21	wrench size actuation screw	ft. lbs.	spare parts package
2032697	KM32RCMLVDI2050	KM32	VDI20	1.260	1.50	.787	1.969	.79	1.57	1.97	5mm	6-8	KM32PKG3L
2032703	KM32RCMLVDI4060	KM32	VDI40	1.260	1.50	1.575	2.362	.83	2.48	3.27	5mm	6-8	KM32PKG3L
2013052	KM40RCMLVDI3050	KM40	VDI30	1.575	1.89	1.181	1.969	.91	2.17	2.68	6mm	9-12	KM40PKG3L
2013076	KM40RCMLVDI40120	KM40	VDI40	1.575	1.89	1.575	4.724	3.27	2.48	3.27	6mm	9-12	KM40PKG3L
2013075	KM40RCMLVDI4060	KM40	VDI40	1.575	1.89	1.575	2.362	.91	2.48	3.27	6mm	9-12	KM40PKG3L
2032762	KM40RCMLVDI50120	KM40	VDI50	1.575	1.89	1.969	4.724	3.03	3.07	3.86	6mm	9-12	KM40PKG3L
2013079	KM40RCMLVDI5060	KM40	VDI50	1.575	1.89	1.969	2.362	.67	3.07	3.86	6mm	9-12	KM40PKG3L
2032763	KM40RCMLVDI6080	KM40	VDI60	1.575	1.89	2.362	3.150	1.65	3.70	4.84	6mm	9-12	KM40PKG3L
2032952	KM50RCMLVDI40120	KM50	VDI40	1.969	2.36	1.575	4.724	3.43	2.48	3.27	10mm	20-25	KM50PKG3L
2032951	KM50RCMLVDI4060	KM50	VDI40	1.969	2.36	1.575	2.362	1.18	2.48	3.27	10mm	20-25	KM50PKG3L
2032954	KM50RCMLVDI50140	KM50	VDI50	1.969	2.36	1.969	5.512	3.82	3.07	3.86	10mm	20-25	KM50PKG3L
2032953	KM50RCMLVDI5070	KM50	VDI50	1.969	2.36	1.969	2.756	1.26	3.07	3.86	10mm	20-25	KM50PKG3L
2033100	KM63RCMLVDI60160	KM63	VDI60	2.480	2.95	2.362	6.299	4.41	3.70	4.84	12mm	35-40	KM63PKG3L

NOTE: Refer to page J40 for torque wrench.



■ NCA • DS • Axial Disk Spring Unit • Metric

order number	catalog number	CSWS system size	D	F	L1	LS	D2	LMAD travel
1021579	KM32NCADS16T	KM32	51	8	16,0	66	78	5,08
1021697	KM40NCADS40	KM40	62	10	40,0	53	114	5,60
1021750	KM50NCADS50	KM50	78	11	50,0	74	138	7,62

■ NCA • DS • Axial Disk Spring Unit • Inch

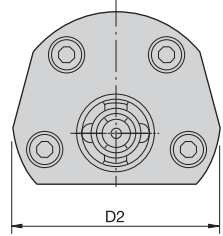
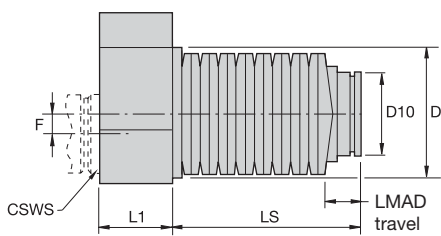
order number	catalog number	CSWS system size	D	F	L1	LS	D2	LMAD travel
1021579	KM32NCADS16T	KM32	2.007	.315	.630	2.60	3.07	.200
1021697	KM40NCADS40	KM40	2.439	.394	1.575	2.09	4.49	.220
1021750	KM50NCADS50	KM50	3.069	.433	1.969	2.92	5.43	.300

■ Actuating Force

catalog number	actuating force (kN)	actuating force (lbs)
KM32NCADS16T	14,2	3200
KM40NCADS40	16,9	3800
KM50NCADS50	26	6000



KM Automatic Clamping Units



■ NACA • DS • Axial Disk Spring Unit • Metric

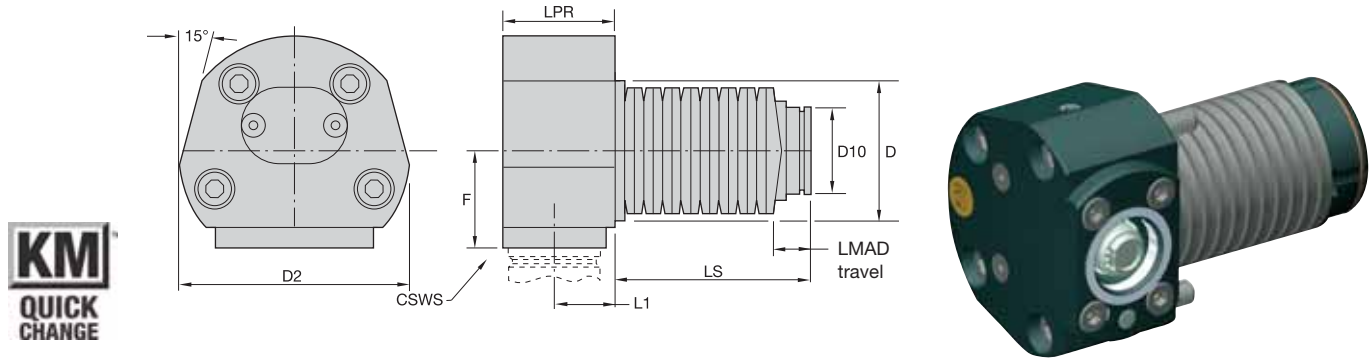
order number	catalog number	CSWS system size	D	D10	F	L1	LS	D2	LMAD travel
1021700	KM40NACADS55	KM40	62	38	10	55	90	100	6,50
1021702	KM40NACADS55DT	KM40	62	55	10	55	90	100	5,64
1021752	KM50NACADS70DT	KM50	72	65	11	70	111	120	7,62
1021529	KM63NACADS85DT	KM63	85	75	12	85	145	140	9,00

■ NACA • DS • Axial Disk Spring Unit • Inch

order number	catalog number	CSWS system size	D	D10	F	L1	LS	D2	LMAD travel
1021700	KM40NACADS55	KM40	2.441	1.496	.394	2.165	3.53	3.94	.256
1021702	KM40NACADS55DT	KM40	2.439	2.159	.394	2.165	3.53	3.94	.222
1021752	KM50NACADS70DT	KM50	2.833	2.553	.433	2.756	4.36	4.72	.300
1021529	KM63NACADS85DT	KM63	3.345	2.947	.472	3.346	5.71	5.51	.354

■ Actuating Force

catalog number	actuating force (kN)	actuating force (lbs)
KM40NACADS55DT	16,9	3800
KM50NACADS70DT	18	4000
KM63NACADS85DT	27	6000



■ RACA • DS • Right-Angle Disk Spring Unit • Metric

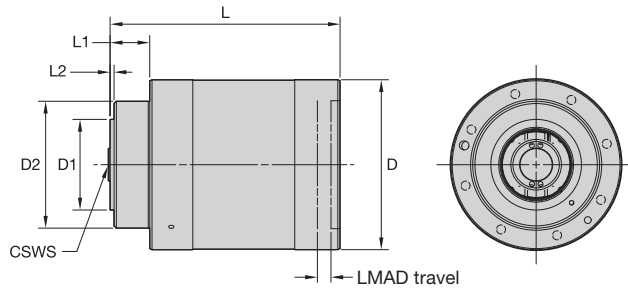
order number	catalog number	CSWS system size	D	D10	F	L1	LPR	LS	D2	LMAD travel
1021701	KM40RACADS40DT	KM40	62	55	40,0	28	52	94	100	10,67
1021524	KM63RACADS60DT	KM63	85	75	60,0	42	80	150	140	14,00

■ RACA • DS • Right-Angle Disk Spring Unit • Inch

order number	catalog number	CSWS system size	D	D10	F	L1	LPR	LS	D2	LMAD travel
1021701	KM40RACADS40DT	KM40	2.441	2.16	1.575	1.102	2.047	3.70	3.94	.420
1021524	KM63RACADS60DT	KM63	3.347	2.95	2.362	1.654	3.150	5.91	5.51	.551

■ Actuating Force

system size	actuating force (kN)	actuating force (lbs)
KM40	12,5	2800
KM50	39,5	8875

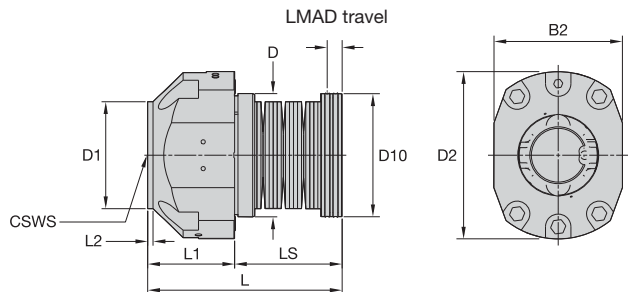


■ XGL • KM80 Rotating • Metric

order number	catalog number	CSWS system size	D1	D2	D	L1	L2	L	LMAD travel	kg
2247834	KM80XGL1062756	KM80	80	112	150	35	3,5	203	12	21,81
2452550	KM80XGL1560573	KM80	80	112	150	35	3,5	203	12	21,81

■ XGL • KM80 Rotating • Inch

order number	catalog number	CSWS system size	D1	D2	D	L1	L2	L	LMAD travel	lbs
2247834	KM80XGL1062756	KM80	3.15	4.41	5.906	1.378	.14	7.99	.472	48.08
2452550	KM80XGL1560573	KM80	3.15	4.41	5.906	1.378	.14	7.99	.472	48.08



■ XGL • KM80 Static • Metric

order number	catalog number	CSWS system size	D1	D	D10	D2	L1	LS	L	L2	B2	LMAD travel	kg
3449440	KM80XGL1724179	KM80	80	92	92,0	125	65	80,00	145,00	4	96	11,19	6,77
1954766	KM80XGL1064593	KM80	80	108	101,4	165	60	62,75	122,75	2	140	11,00	11,07
2500998	KM80XGL1555011	KM80	80	108	101,4	165	60	62,75	122,75	2	140	11,00	11,07

■ XGL • KM80 Static • Inch

order number	catalog number	CSWS system size	D1	D	D10	D2	L1	LS	L	L2	B2	LMAD travel	lbs
3449440	KM80XGL1724179	KM80	3.15	3.622	3.622	4.92	2.559	3.15	5.71	.16	3.78	.440	14.92
1954766	KM80XGL1064593	KM80	3.15	4.253	3.992	6.50	2.362	2.47	4.83	.06	5.49	.433	24.35
2500998	KM80XGL1555011	KM80	3.15	4.253	3.992	6.50	2.362	2.47	4.83	.06	5.49	.433	24.35

KM™ Quick Change Clamping System • **KM40TS™ Series**

The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.

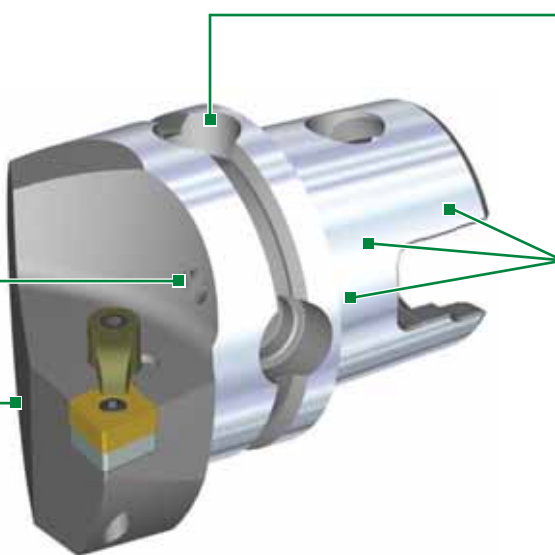


KM40TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.

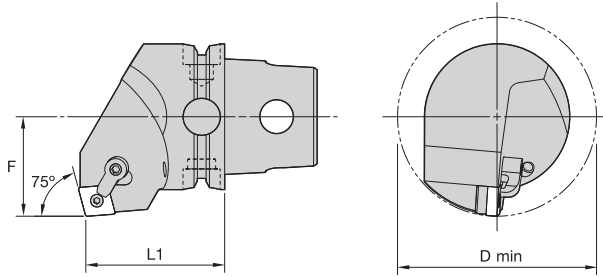
KM cutting units are equipped to use high-pressure coolant nozzles.

KM manufactured from high-strength tool steel.

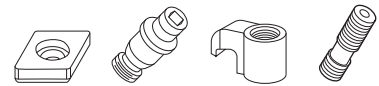


The KM flange is designed to provide ATC capability and to enable use of an RFID chip.

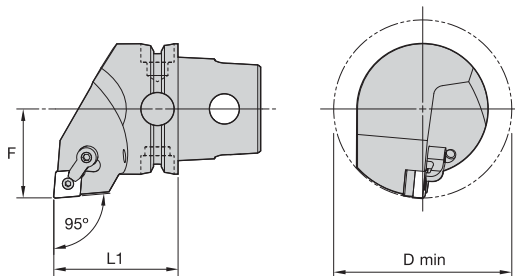
The KM System's superior rigidity is gained by the three points of contact the system develops when clamped.



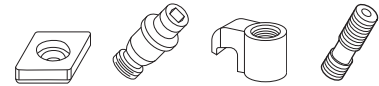
■ MCKN 75°



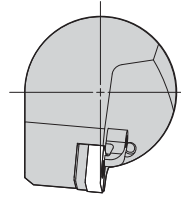
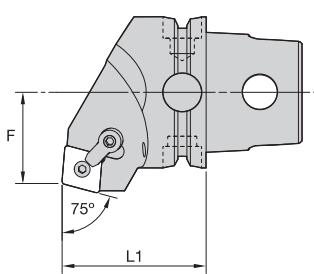
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		mm	in	mm	in	mm	in							
	right hand													
3901336	KM40TSMCKNR12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,36	.79
	left hand													
3901335	KM40TSMCKNL12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,36	.79



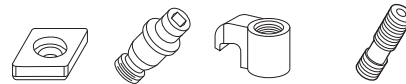
■ MCLN 95°



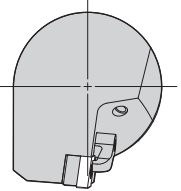
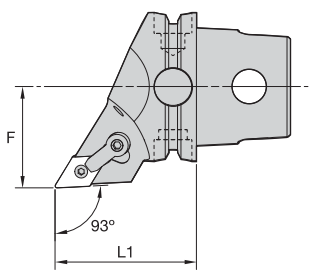
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
2647737	KM40TSMCLNR12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
3901339	KM40TSMCLNR16	40	1.575	27	1.063	120	4.724	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,33	.73
	left hand													
3901337	KM40TSMCLNL12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
3901338	KM40TSMCLNL16	40	1.575	27	1.063	120	4.724	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,33	.73



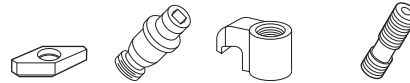
■ MCRN 75°



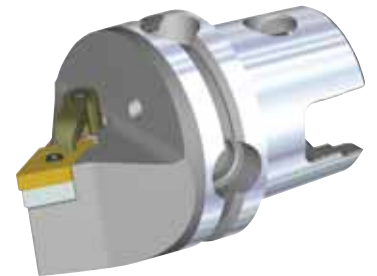
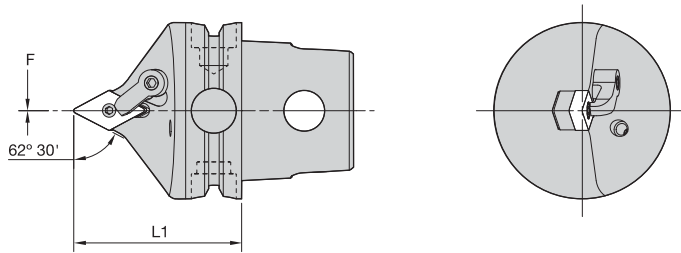
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
		right hand										
3901341	KM40TSMCRNR12	40	1.575	24	.945	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
		left hand										
3901340	KM40TSMCRNL12	40	1.575	24	.945	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72



■ MDJN 93°

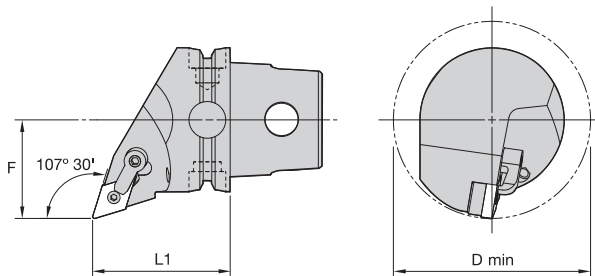
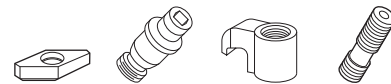


order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
		right hand										
3901291	KM40TSMDJNR1504	40	1.575	27	1.063	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,26	.570
3901292	KM40TSMDJNR1506	40	1.575	27	1.063	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,26	.570
		left hand										
3901289	KM40TSMDJNL1504	40	1.575	27	1.063	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,26	.570
3901290	KM40TSMDJNL1506	40	1.575	27	1.063	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,26	.570



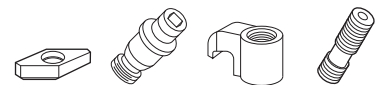
■ MDPN 62° 30'

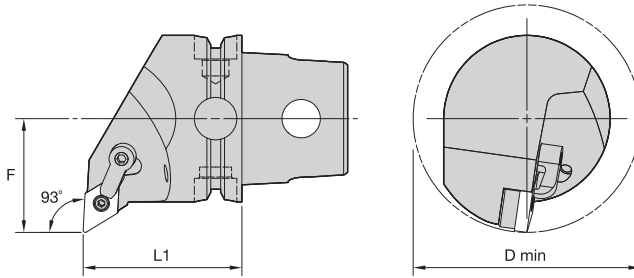
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3901293	KM40TSDPNN1504	40	1.575	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM20LP	STCM11	0,23	.50
3901294	KM40TSDPNN1506	40	1.575	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM20LP	STCM11	0,22	.49



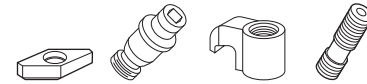
■ MDQN 107° 30'

order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
3901297	KM40TSMQNR1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,29	.63
3901298	KM40TSMQNR1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,28	.62
3901295	KM40TSMQNL1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,28	.63
3901296	KM40TSMQNL1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,28	.62

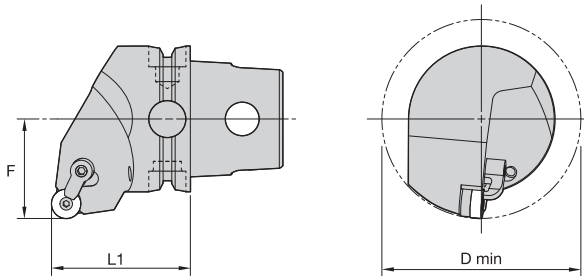




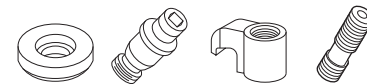
■ MDUN 93°



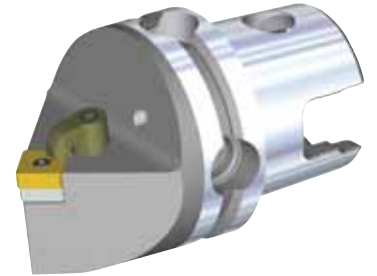
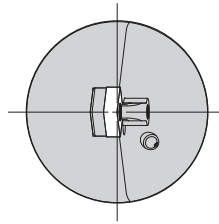
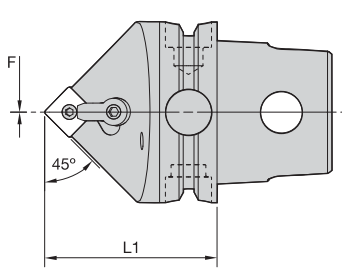
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3901301	KM40TSM DUNR1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,31	.69
3901302	KM40TSM DUNR1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,31	.68
left hand														
3901299	KM40TSM DUNL1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,31	.69
3901300	KM40TSM DUNL1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,31	.68



■ MRGN 0°



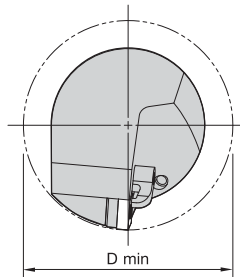
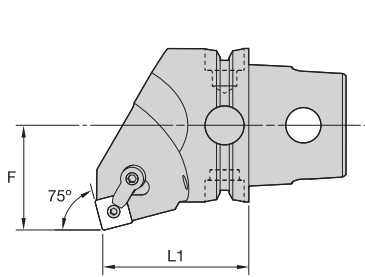
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
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right hand														
3901306	KM40TSM RGNR12	40	1.575	27	1.063	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,32	.71
left hand														
3901305	KM40TSM RGNL12	40	1.575	27	1.063	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,32	.71



■ MSDN 45°



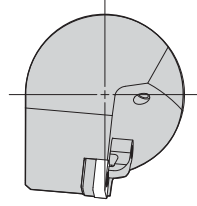
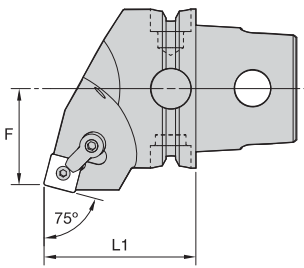
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		mm	in	mm	in							
3901307	KM40TMSDNN12	40	1.575	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,26	.57



■ MSKN 75°



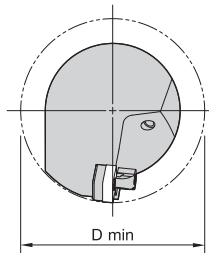
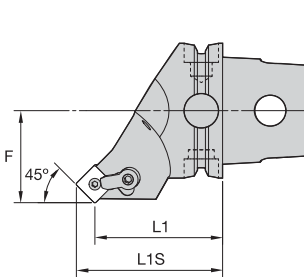
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		mm	in	mm	in	mm	in							
3901309	right hand	40	1.575	27	1.063	54	2.126	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,36	.80
	KM40TMSKNR12													
3901308	left hand	40	1.575	27	1.063	54	2.126	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,36	.80



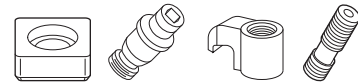
■ MSRN 75°



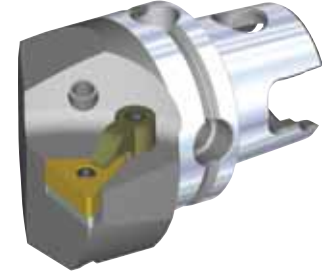
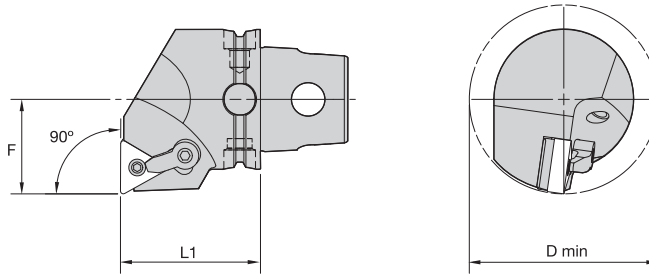
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		mm	in	mm	in							
right hand												
3901311	KM40TSMRNR12	40	1.575	24	.945	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,31	.67
3901312	KM40TSMRNR15	40	1.575	24	.945	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,33	.73
left hand												
3901310	KM40TSMRNL12	40	1.575	24	.945	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,31	.68



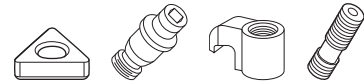
■ MSSN 45°



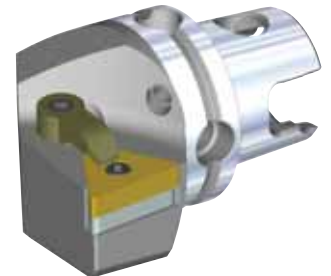
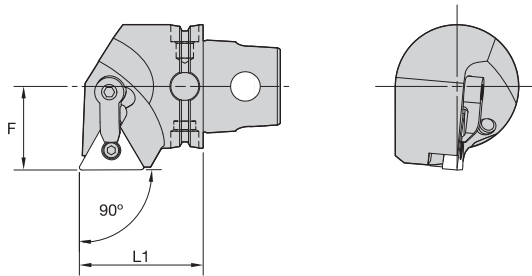
order number	catalog number	L1		L1S		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in							
right hand																
3901314	KM40TSMSSNR12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,32	.72
left hand																
3901313	KM40TSMSSNL12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,32	.71



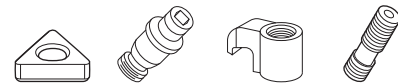
■ MTFN 90°



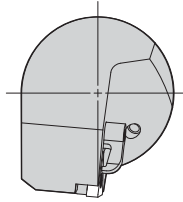
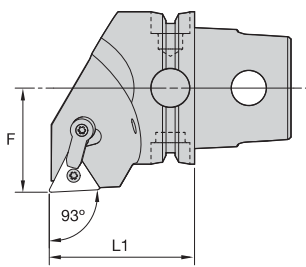
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
3902249	KM40TSMTFNR16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,35	.78
	left hand													
3902247	KM40TSMTFNL16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,35	.78



■ MTGN 90°

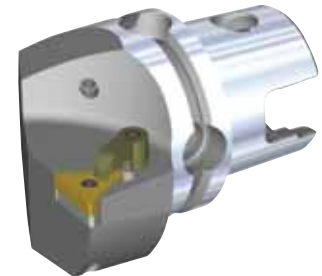
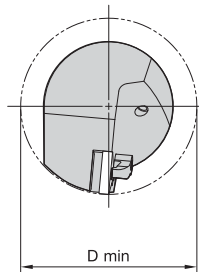
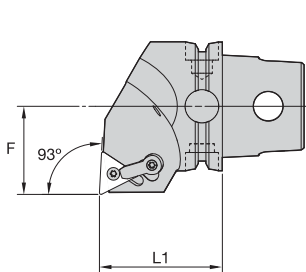
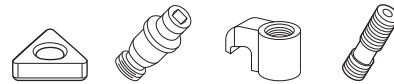


order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3902251	KM40TSMTGNR22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,35	.78
	left hand											
3902250	KM40TSMTGNL22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,35	.78



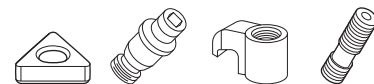
■ MTJN 93°

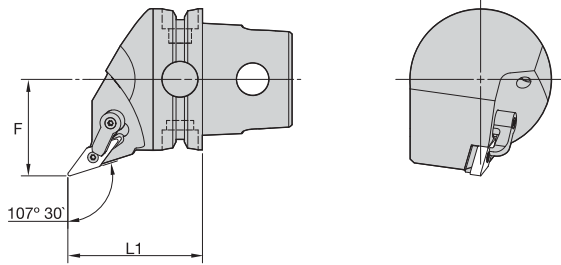
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3902274	KM40TSMTJNR16	40	1.575	27	1.063	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,33	.73
3902275	KM40TSMTJNR22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,36	.79
left hand												
3902252	KM40TSMTJNL16	40	1.575	27	1.063	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,33	.73
3902273	KM40TSMTJNL22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,36	.79



■ MTUN 93°

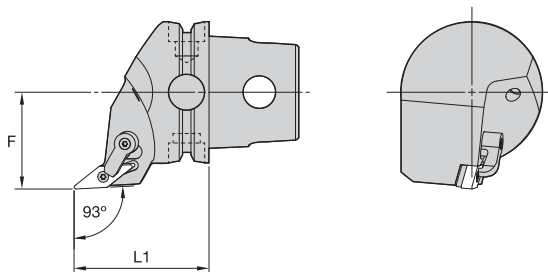
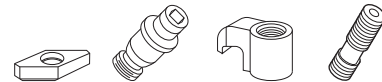
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3902278	KM40TSMTUNR16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,34	.76
left hand														
3902276	KM40TSMTUNL16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,34	.76
3902277	KM40TSMTUNL22	40	1.575	27	1.063	54	2.126	TN..220408/TN..432	ITSN433	KLM46	CKM20LP	STCM11	0,34	.75





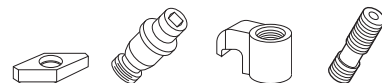
■ MVHN 107° 30'

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3902239	KM40TSMVHNR16050M	50	1.969	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,35	.77
	left hand											
3902238	KM40TSMVHNL16050M	50	1.969	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,35	.77



■ MVJN 93°

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3902241	KM40TSMVJNR16045M	45	1.772	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,30	.65
	left hand											
3902240	KM40TSMVJNL16045M	45	1.772	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,30	.65

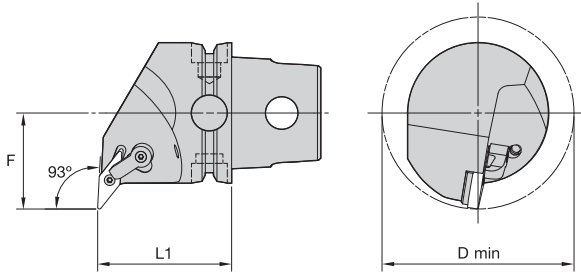


KM40TS™ Cutting Units

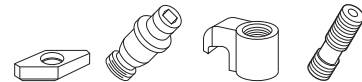
M-Clamping



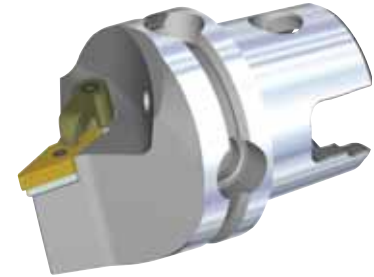
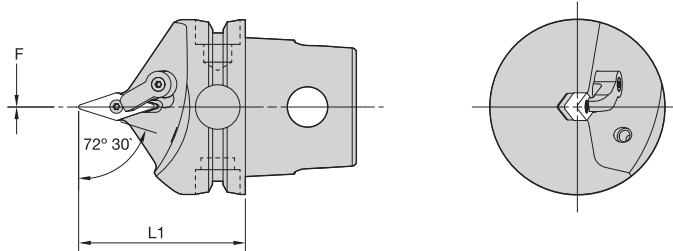
KM40TS Cutting Units



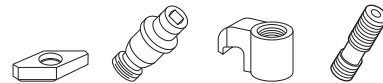
MVUN 93°



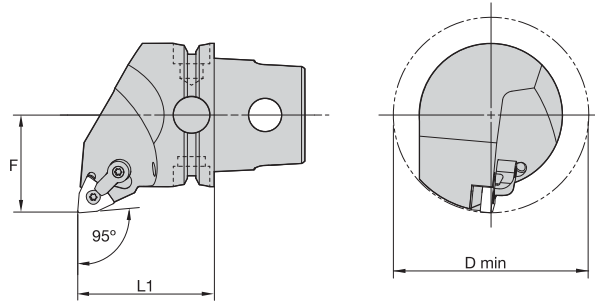
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3902253	KM40TSMVUNR16045M	45	1.772	27	1.063	54	2.126	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,36	.79	
		left hand													
3902242	KM40TSMVUNL16045M	45	1.772	27	1.063	54	2.126	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,36	.79	



MVVN 72° 30'



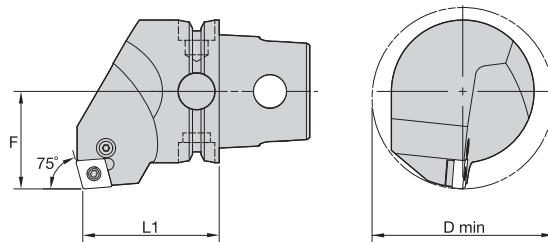
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3902254	KM40TSMVVNN16050M	50	1.969	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,29	.64



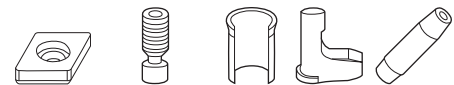
■ MWLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
3902256	KM40TSMWLN08	40	1.575	27	1.063	54	2.126	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,34	.76
	left hand													
3902255	KM40TSMWLN08	40	1.575	27	1.063	54	2.126	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,34	.76



■ PCKN 75°



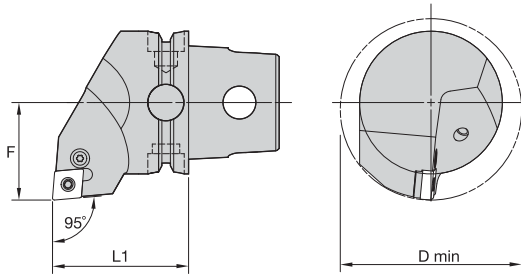
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
	right hand														
3902261	KM40TSPCKNR12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,36	.78
	left hand														
3902260	KM40TSPCKNL12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,35	.77

KM40TS™ Cutting Units

P-Clamping



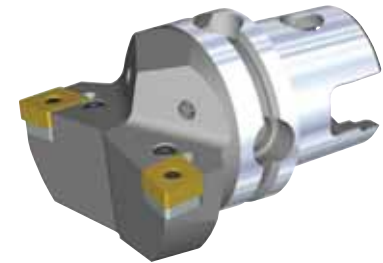
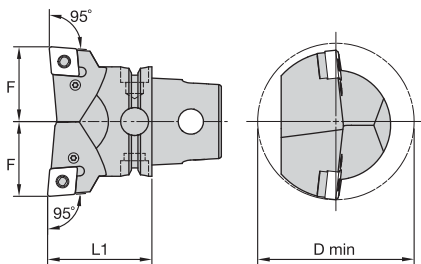
KM40TS Cutting Units



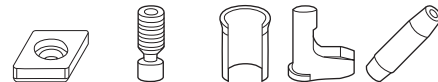
■ PCLN 95°



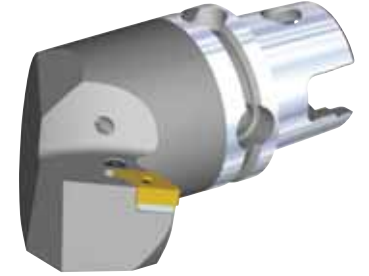
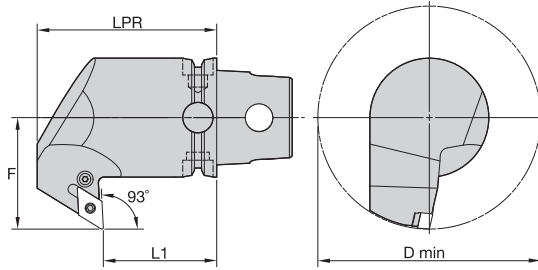
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
3902315	KM40TSPCLNR09	40	1.575	27	1.063	50	1.969	CN..090308/CN..322	512.111	514.118	513.019	511.018	515.018	0,32	.71
3902316	KM40TSPCLNR12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,32	.70
		left hand													
3902262	KM40TSPCLNL09	40	1.575	27	1.063	50	1.969	CN..090308/CN..322	512.111	514.118	513.019	511.018	515.018	0,33	.72
3902313	KM40TSPCLNL12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,32	.71



■ PCLN-2W 95°

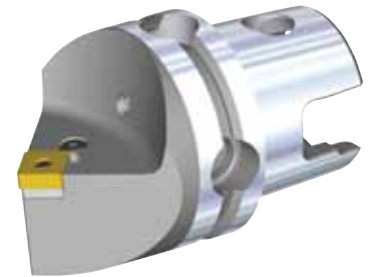
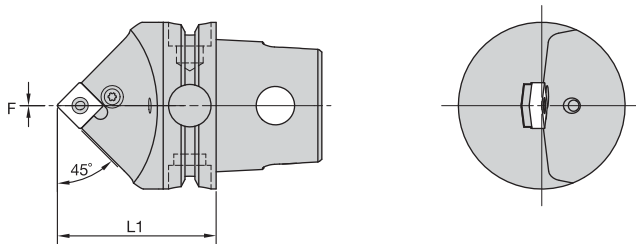
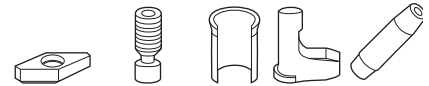


order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
3902317	KM40TSPCLNR122W	40	1.575	27	1.063	60	2.362	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,35	.77
		left hand													
3902314	KM40TSPCLNL122W	40	1.575	27	1.063	60	2.362	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,35	.77



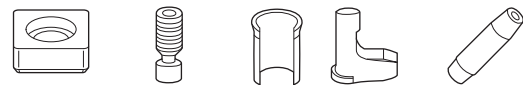
■ PDXN 93°

order number	catalog number	L1		LPR		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
		right hand															
3902333	KM40TSPDXNR15	40	1.575	65	2.559	47	1.850	94	3.701	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,66	1.45
		left hand															
3902332	KM40TSPDXNL15	40	1.575	65	2.559	47	1.850	94	3.701	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,65	1.44



■ PSDN 45°

order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
3950775	KM40TSPSDNN09	40	1.575	0	.000	SN..090308/SN..322	512.053	514.118	513.019	511.018	515.018	0,26	.57
3950776	KM40TSPSDNN12	40	1.575	0	.000	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,25	.54

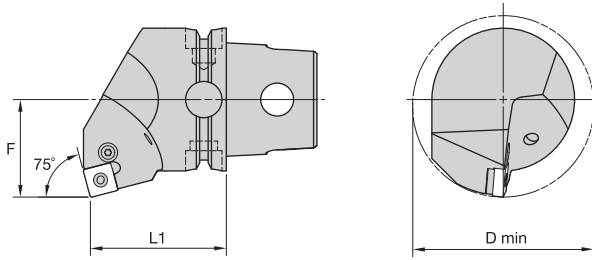


KM40TS™ Cutting Units

P-Clamping



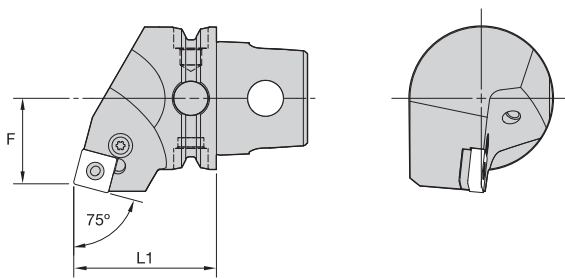
KM40TS Cutting Units



■ PSKN 75°



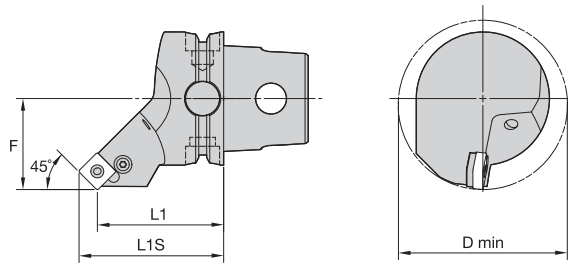
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
3950778	KM40TSPSKNR12	40	1.575	27	1.063	50	1.969	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,36	.79
		left hand													
3950777	KM40TSPSKNL12	40	1.575	27	1.063	50	1.969	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,36	.79



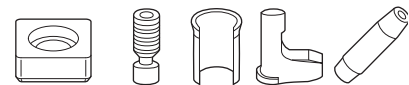
■ PSRN 75°



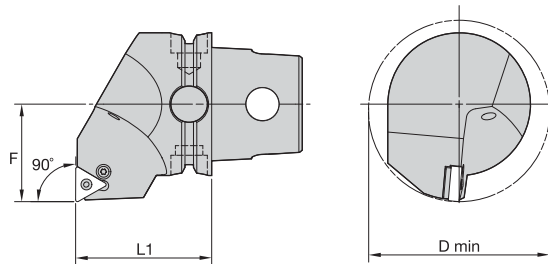
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
		right hand											
3950780	KM40TSPSRNR12	40	1.575	24	.945	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69
		left hand											
3950779	KM40TSPSRNL12	40	1.575	24	.945	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69



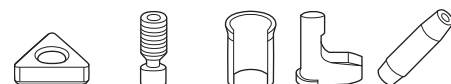
■ PSSN 45°



order number	catalog number	L1		L1S		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
		right hand															
3950781	KM40TSPSSNR12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69



■ PTFN 90°



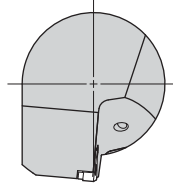
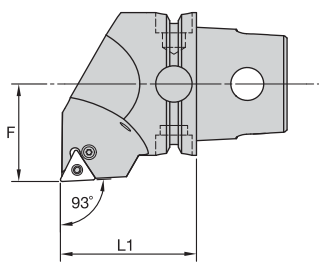
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
3950783	KM40TSPTFNR16	40	1.575	27	1.063	50	1.969	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,36	.78
		left hand													
3950782	KM40TSPTFNL16	40	1.575	27	1.063	50	1.969	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,36	.79

KM40TS™ Cutting Units

P-Clamping

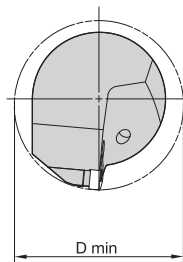
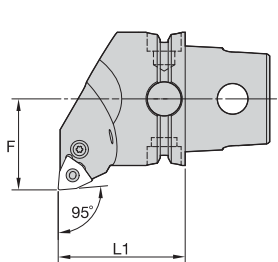


KM40TS Cutting Units



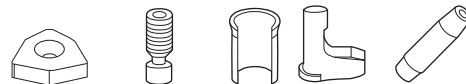
■ PTJN 93°

order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
	right hand												
3950785	KM40TSP TJNR16	40	1.575	27	1.063	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,34	.75
	left hand												
3950784	KM40TSP TJNL16	40	1.575	27	1.063	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,34	.75



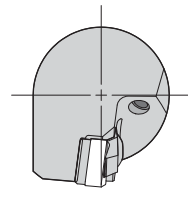
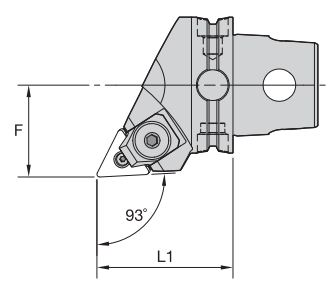
■ PWLN 95°

order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
	right hand														
3950788	KM40TSPWLN R06	40	1.575	27	1.063	50	1.969	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	0,33	.73
3950789	KM40TSPWLN R08	40	1.575	27	1.063	50	1.969	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,32	.70
	left hand														
3950786	KM40TSPWLN L06	40	1.575	27	1.063	50	1.969	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	0,33	.73
3950787	KM40TSPWLN L08	40	1.575	27	1.063	50	1.969	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,32	.71



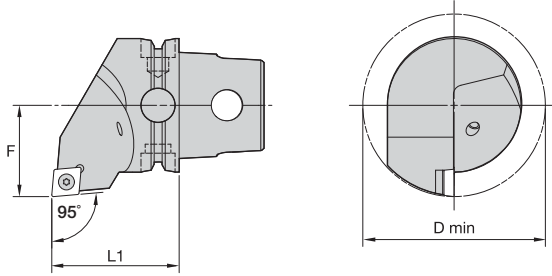


KM40TS Cutting Units



■ WTJN

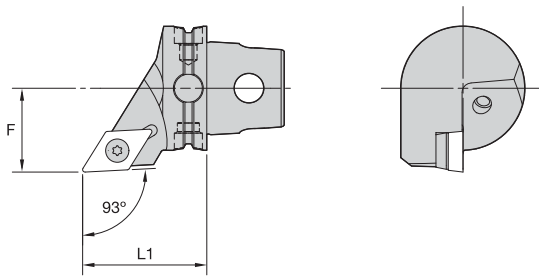
order number	catalog number	L1		F		gage insert	clamp	lock pin	shim	retaining ring	Wedgelock screw	kg	lbs
		mm	in	mm	in								
	right hand												
3964067	KM40TSWTJNR16	40	1.575	27	1.063	TN..160408/TN..332	WC4	FP4	SM290	MRA5	MS988	0,28	.63
	left hand												
3964066	KM40TSWTJNL16	40	1.575	27	1.063	TN..160408/TN..332	WC4	FP4	SM290	MRA5	MS988	0,28	.63



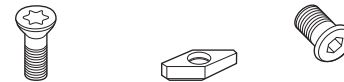
■ SCLC 95°



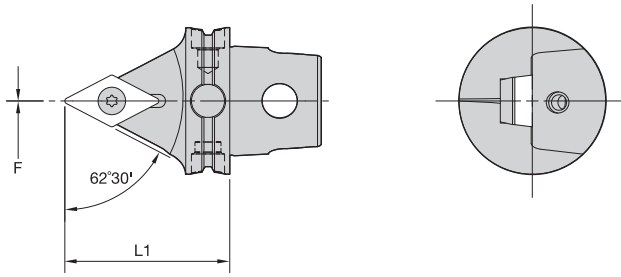
order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
	right hand												
3960003	KM40TSSCLR12	40	1.575	27	1.063	50	1.969	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,32	.70
	left hand												
3959952	KM40TSSCLL12	40	1.575	27	1.063	50	1.969	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,32	.70



■ SDJC 93°

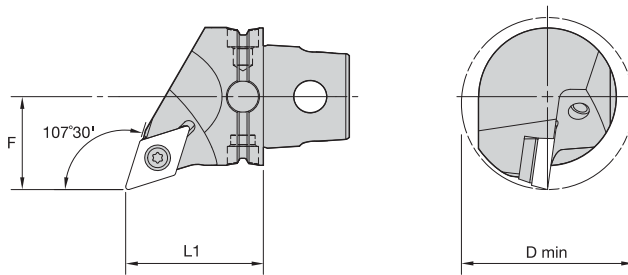
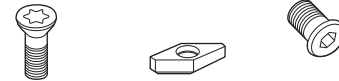


order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
3960005	KM40TSSDJCR11	40	1.575	27	1.063	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,25	.55
3960007	KM40TSSDJCR15	40	1.575	27	1.063	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,24	.53
	left hand										
3960004	KM40TSSDJCL11	40	1.575	27	1.063	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,25	.55
3960006	KM40TSSDJCL15	40	1.575	27	1.063	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,24	.52



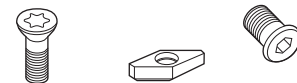
■ SDNC 62° 30'

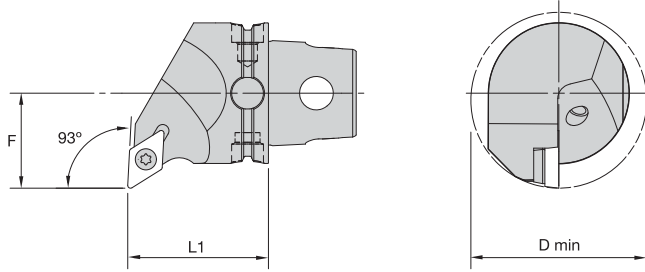
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
3960008	KM40TSSDNCN15045M	45	1.772	0	.000	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,23	.50



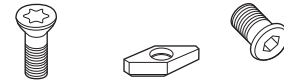
■ SDQC 107° 30'

order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
3960010	KM40TSSDQCR11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,27	.61
3960012	KM40TSSDQCR15	40	1.575	27	1.063	50	1.969	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,27	.60
3960009	KM40TSSDQCL11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,27	.61
3960011	KM40TSSDQCL15	40	1.575	27	1.063	50	1.969	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,27	.60

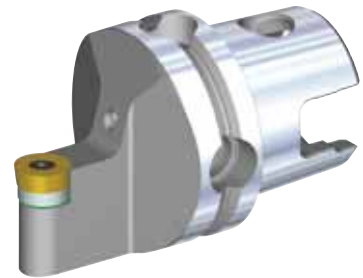
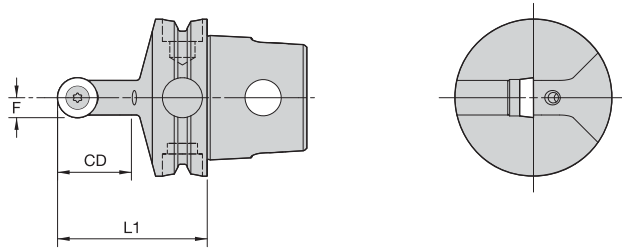




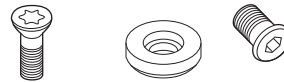
SDUC 93°



order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
	right hand												
3960014	KM40TSSDUCR11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,30	.66
	left hand												
3960013	KM40TSSDUCL11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,30	.66



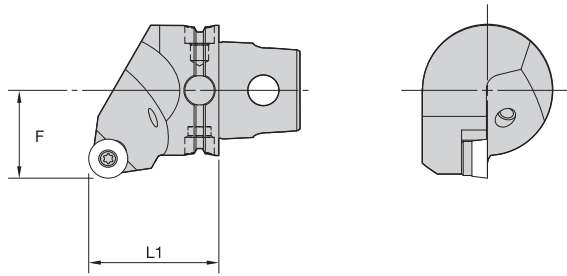
SRDC 0°



order number	catalog number	L1		F		CD		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
3960015	KM40TSSRDCN06	40	1.575	3	.118	12	.472	RC..0602M0	MS1153	—	—	0,22	.48
3960016	KM40TSSRDCN08	40	1.575	4	.158	16	.630	RC..0803M0	MS1154	—	—	0,22	.48
3960017	KM40TSSRDCN10	40	1.575	5	.197	20	.787	RC..10T3M0	MS1156	SKRN100300	SRS3	0,21	.47

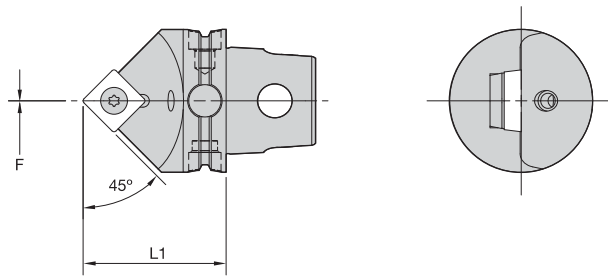


KM40TS Cutting Units



■ SRGC 0°

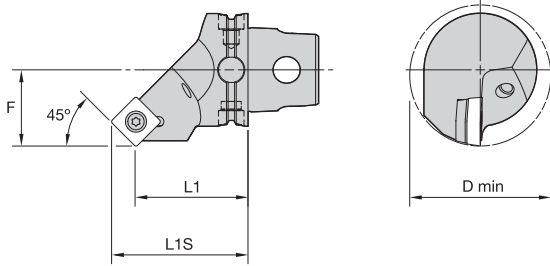
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
right hand											
3960019	KM40TSSRGCR10	40	1.575	27	1.063	RC..10T3M0	MS1156	SKRN100300	SRS3	0,31	.69
3960021	KM40TSSRGCR12	40	1.575	27	1.063	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,31	.69
left hand											
3960018	KM40TSSRGCL10	40	1.575	27	1.063	RC..10T3M0	MS1156	SKRN100300	SRS3	0,32	.70
3960020	KM40TSSRGCL12	40	1.575	27	1.063	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,31	.69



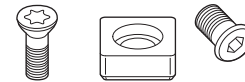
■ SSDC 45°

order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
3960022	KM40TSSSDCN12	40	1.575	0	.000	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,25	.55

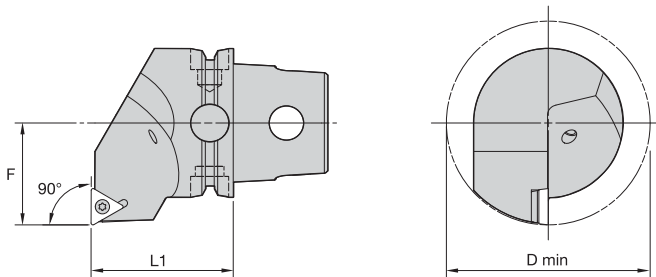




SSSC 45°



order number	catalog number	L1		L1S		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in						
	right hand														
3960034	KM40TSSSSCR12	40	1.575	48,3	1.902	27	1.063	50	1.969	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,29	.64
	left hand														
3960033	KM40TSSSCL12	40	1.575	48,3	1.902	27	1.063	50	1.969	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,29	.64



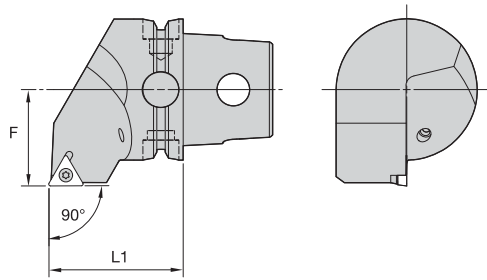
STFC 90°



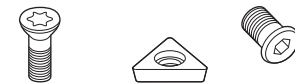
order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
	right hand												
3960036	KM40TSSTFCR16	40	1.575	27	1.063	50	1.969	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.72
	left hand												
3960035	KM40TSSTFCL16	40	1.575	27	1.063	50	1.969	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73



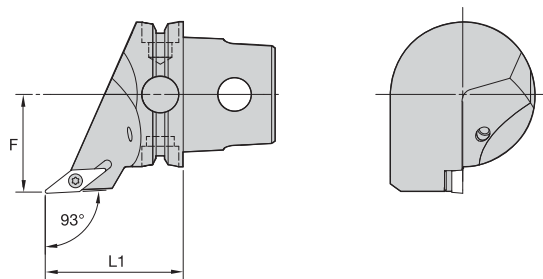
KM40TS Cutting Units



■ STGC 90°



order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
3960038	KM40TSSSTGCR16	40	1.575	27	1.063	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73
	left hand										
3960037	KM40TSSSTGCL16	40	1.575	27	1.063	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73



■ SVJB 93°



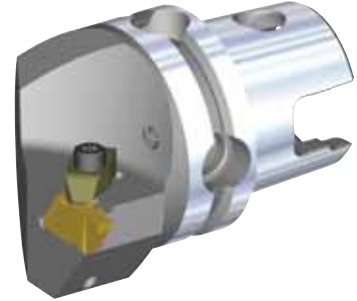
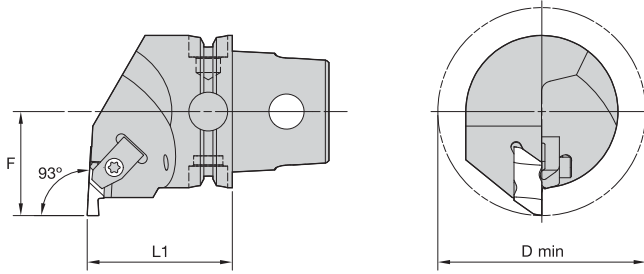
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
3960040	KM40TSSVJBR16	47	1.850	27	1.063	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,27	.59
	left hand										
3960039	KM40TSSVJBL16	47	1.850	27	1.063	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,27	.59

KM40TS™ Cutting Units

TopThread™ and TopGroove™



KM40TS Cutting Units



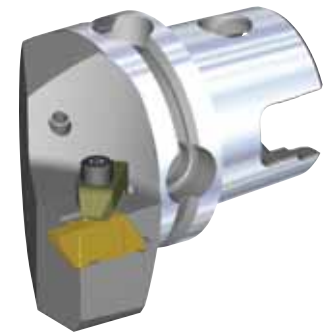
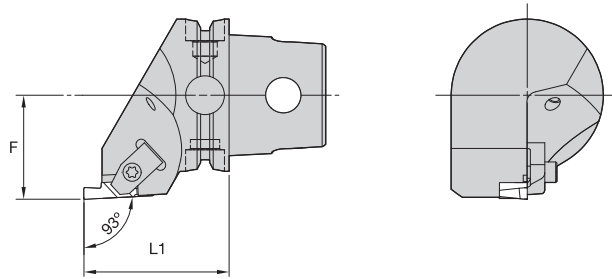
■ NE 93°



order number	catalog number	L1		F		D min		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in					
right hand												
3902285	KM40TSNER2	40	1.575	27	1.063	54	2.126	NG2L	CM75	MS1488	0,31	.68
3902286	KM40TSNER3	40	1.575	27	1.063	54	2.126	NG3L	CM73	MS1489	0,32	.70
3902287	KM40TSNER4	40	1.575	27	1.063	54	2.126	NG4L	CM73	MS1489	0,30	.66
left hand												
3902132	KM40TSNEL2	40	1.575	27	1.063	54	2.126	NG2R	CM74	MS1488	0,31	.68
3902283	KM40TSNEL3	40	1.575	27	1.063	54	2.126	NG3R	CM72	MS1489	0,32	.70
3902284	KM40TSNEL4	40	1.575	27	1.063	54	2.126	NG4R	CM72	MS1489	0,30	.66

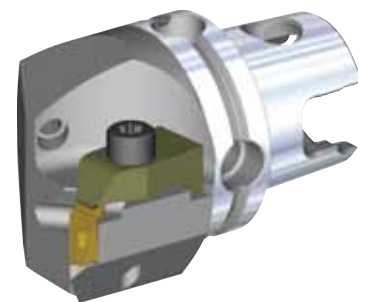
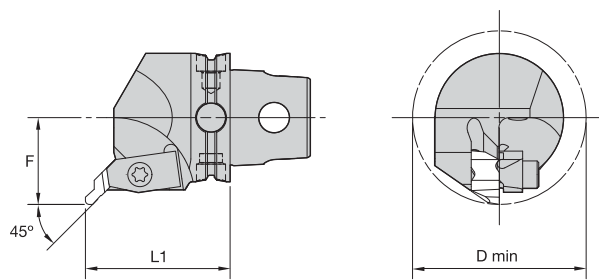


KM40TS Cutting Units



■ NS 93°

order number	catalog number	L1		F		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in					
right hand										
3902293	KM40TSNSR2	40	1.575	27	1.063	NG2R	CM74	MS1488	0,32	.70
3902294	KM40TSNSR3	47	1.850	27	1.063	NG3R	CM72	MS1489	0,32	.71
3902295	KM40TSNSR4	47	1.850	27	1.063	NG4R	CM72	MS1489	0,31	.68
left hand										
3902290	KM40TSNSL2	40	1.575	27	1.063	NG2L	CM75	MS1488	0,32	.70
3902291	KM40TSNSL3	47	1.850	27	1.063	NG3L	CM73	MS1489	0,33	.72
3902292	KM40TSNSL4	47	1.850	27	1.063	NG4L	CM73	MS1489	0,31	.68



■ NR 45°

order number	catalog number	L1		F		D min		gage insert	clamp	clamping screw	kg	lbs
		mm	in	mm	in	mm	in					
right hand												
3902289	KM40TSNRR3045M	45	1.772	27	1.063	54	2.126	NU3L	CM73	MS1489	0,34	.75
left hand												
3902288	KM40TSNRL3045M	45	1.772	27	1.063	54	2.126	NU3R	CM72	MS1489	0,33	.74

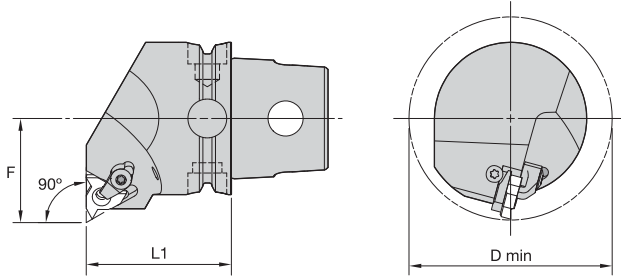


KM40TS™ Cutting Units

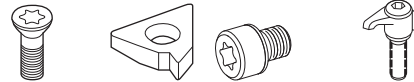
Laydown Threading



KM40TS Cutting Units



■ LSE-N 90° • Internal Only

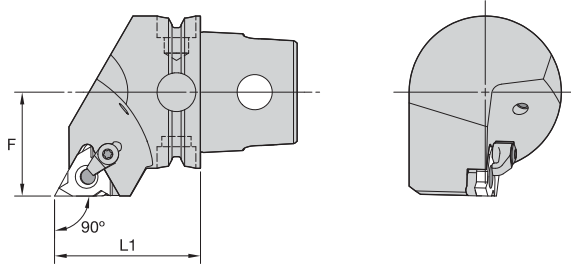


order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3950832	KM40TSLSER16N	40	1.575	27	1.063	54	2.126	LT16NR	SSA3T	SMYI3	SSY3T	CKC3	0,35	.77
3950854	KM40TSLSER22N	40	1.575	27	1.063	54	2.126	LT22NR	SSA4T	SMYI4	SSY4T	CKC4	0,35	.77
3959399	KM40TSLSER27N	45	1.772	27	1.063	54	2.126	LT27NR	SSA5T	SMYI5	SSY5T	CKC5	0,39	.86
left hand														
3950831	KM40TSLSEL16N	40	1.575	27	1.063	54	2.126	LT16NL	SSA3T	SMYE3	SSY3T	CKC3	0,35	.77
3950853	KM40TSLSEL22N	40	1.575	27	1.063	54	2.126	LT22NL	SSA4T	SMYE4	SSY4T	CKC4	0,35	.77
3959398	KM40TSLSEL27N	45	1.772	27	1.063	54	2.126	LT27NL	SSA5T	SMYE5	SSY5T	CKC5	0,39	.86

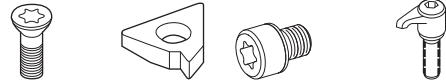
NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



KM40TS Cutting Units

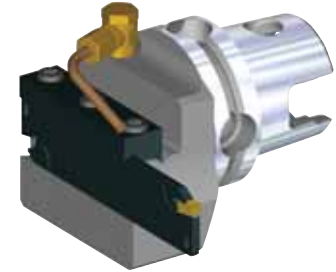
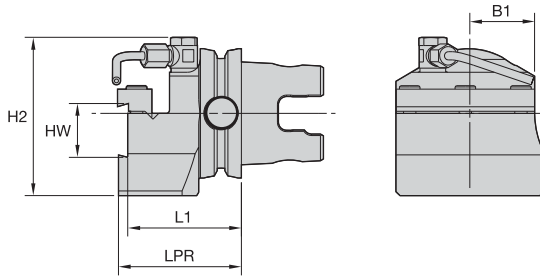


■ LSS 90°



order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in							
right hand												
3950857	KM40TSLSSR16	40	1.575	27	1.063	LT16ER	SSA3T	SMYE3	SSY3T	CKC3	0,31	.68
3950858	KM40TSLSSR22	40	1.575	27	1.063	LT22ER	SSA4T	SMYE4	SSY4T	CKC4	0,30	.66
3959401	KM40TSLSSR27	45	1.772	27	1.063	LT27ER	SSA5T	SMYE5	SSY5T	CKC5	0,37	.82
left hand												
3950855	KM40TSLSSL16	40	1.575	27	1.063	LT16EL	SSA3T	SMYI3	SSY3T	CKC3	0,32	.70
3950856	KM40TSLSSL22	40	1.575	27	1.063	LT22EL	SSA4T	SMYI4	SSY4T	CKC4	0,31	.68
3959400	KM40TSLSSL27	45	1.772	27	1.063	LT27EL	SSA5T	SMYI5	SSY5T	CKC5	0,37	.82





NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



■ BE • End Mount

order number	catalog number	L1		LPR		H2		HW		B1		cartridge size	cartridge 1	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in				
3950835	right hand KM40TSBER	50,3	1.980	55	2.16	66	2.58	26	1.02	20	.79	26	A2BNSN26...	1,07	2.36
3950834	left hand KM40TSBEL	50,3	1.980	55	2.16	66	2.58	26	1.02	20	.79	26	A2BNSN26...	1,07	2.36

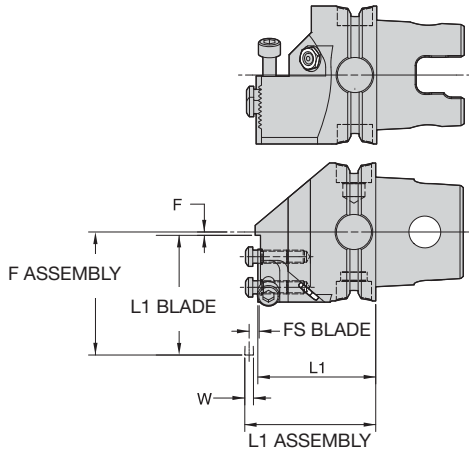
■ Spare Parts

catalog number				
	clamp	clamp screw	coolant tube	coolant swivel base
right hand KM40TSBER	CGS4	MS1595	12649910900	12649910800
left hand KM40TSBEL	CGS4	MS1595	12649910900	12649910800

NOTE: For cut-off blades, see the WIDIA Turning (A-09-02078) catalog.



KM40TS Cutting Units

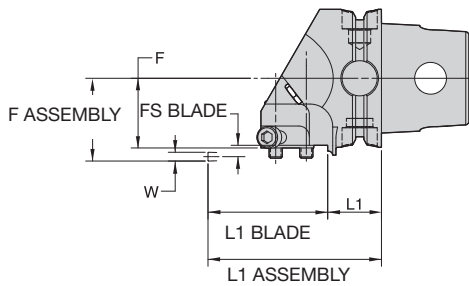
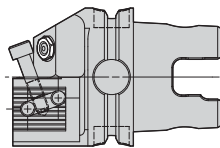


F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm

■ **WGME**

order number	catalog number	L1		F		button-head cap screw	nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in					
3949874	right hand	53,79	2.118	-9,98	-0.393	606256	PMT08430	MS337	0,56	1.24
	KM40TSWGMER55M									
3949875	left hand	53,79	2.118	-9,98	-0.393	606256	PMT08430	MS337	0,56	1.24
	KM40TSWGMEL55M									

NOTE: For SLS cartridges and WMT inserts, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE



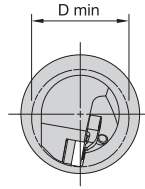
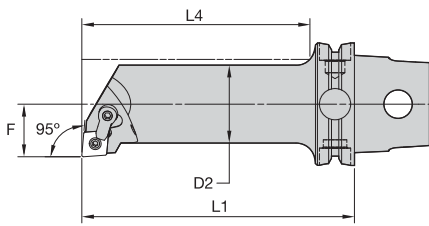
■ **WGMS**

order number	catalog number	L1		F		nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in				
3949802	right hand	24,52	.965	15,79	.622	PMT08430	MS337	0,49	1.08
	KM40TSWGMSR55M								
3949873	left hand	24,52	.965	15,79	.622	PMT08430	MS337	0,49	1.08
	KM40TSWGMSL55M								

NOTE: For SLS cartridges and WMT inserts, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.

KM40TS™ Internal Cutting Units





M-Clamping

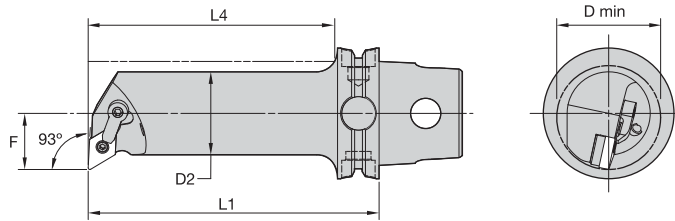


■ MCLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in				
		right hand													
3955549	KM40TSS25EMCLNR12	25	.98	32	1.26	17	.669	55	2.17	70	2.756	CN..120408/CN..432	0,35	.76	
3955551	KM40TSS25HMCLNR12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,50	1.10	
3955553	KM40TSS32GMCLNR12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29	
3955555	KM40TSS32JMCLNR12	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	CN..120408/CN..432	0,71	1.56	
		left hand													
3955548	KM40TSS25EMCLNL12	25	.98	32	1.26	17	.669	55	2.17	70	2.756	CN..120408/CN..432	0,35	.76	
3955550	KM40TSS25HMCLNL12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,50	1.10	
3955552	KM40TSS32GMCLNL12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29	
3955554	KM40TSS32JMCLNL12	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	CN..120408/CN..432	0,71	1.56	

■ Spare Parts

catalog number	 shim	 lock pin	 clamp	 clamp screw
	right hand			
KM40TSS25EMCLNR12	—	KLM43	CKM20LP	STCM11
KM40TSS25HMCLNR12	—	KLM43	CKM20LP	STCM11
KM40TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM40TSS32JMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
	left hand			
KM40TSS25EMCLNL12	—	KLM43	CKM20LP	STCM11
KM40TSS25HMCLNL12	—	KLM43	CKM20LP	STCM11
KM40TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM40TSS32JMCLNL12	ICSN432	KLM46	CKM20LP	STCM11

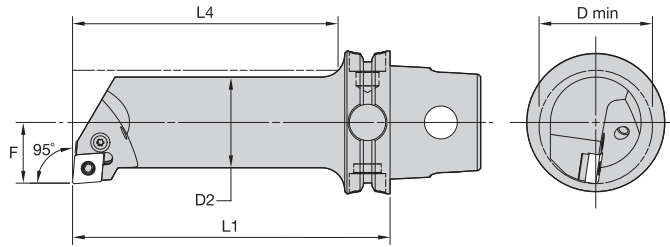

KM40TS Internal Cutting Units

■ MDUN 93°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3959375	KM40TSS25EMDUNR15	25	.98	32	1.26	17	.669	55	2.17	70	2.756	DN..150408/DN..432	0,33	.74
3959377	KM40TSS25HMDUNR15	25	.98	32	1.26	17	.669	75	2.95	100	3.937	DN..150408/DN..432	0,49	1.07
3959379	KM40TSS32GMDUNR15	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	DN..150408/DN..432	0,57	1.26
3959381	KM40TSS32JMDUNR15	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	DN..150408/DN..432	0,69	1.53
left hand														
3959374	KM40TSS25EMDUNL15	25	.98	32	1.26	17	.669	55	2.17	70	2.756	DN..150408/DN..432	0,33	.74
3959376	KM40TSS25HMDUNL15	25	.98	32	1.26	17	.669	75	2.95	100	3.937	DN..150408/DN..432	0,49	1.08
3959378	KM40TSS32GMDUNL15	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	DN..150408/DN..432	0,57	1.26
3959380	KM40TSS32JMDUNL15	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	DN..150408/DN..432	0,69	1.53

■ Spare Parts






catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM40TSS25EMDUNR15	—	KLM43	CKM20LP	STCM11
KM40TSS25HMDUNR15	—	KLM43	CKM20LP	STCM11
KM40TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM40TSS32JMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM40TSS25EMDUNL15	—	KLM43	CKM20LP	STCM11
KM40TSS25HMDUNL15	—	KLM43	CKM20LP	STCM11
KM40TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM40TSS32JMDUNL15	IDSN432	KLM46	CKM23LP	STCM11



■ PCLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3959339	KM40TSS25HPCLNR12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,49	1.09
3959337	KM40TSS25GPCLNR12	25	.98	32	1.26	17	.669	77	3.04	90	3.543	CN..120408/CN..432	0,41	.90
3959341	KM40TSS32GPCLNR12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29
left hand														
3959338	KM40TSS25HPCLNL12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,49	1.09
3959336	KM40TSS25GPCLNL12	25	.98	32	1.26	17	.669	77	3.04	90	3.543	CN..120408/CN..432	0,41	.90
3959340	KM40TSS32GPCLNL12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29

■ Spare Parts

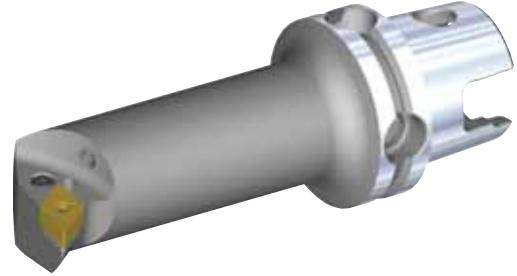
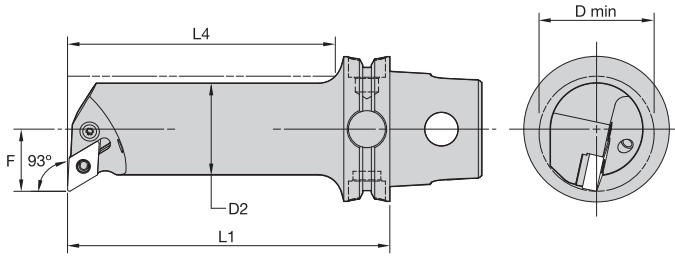
catalog number	 shim	 lever screw	 shim pin	 toggle lever	 punch
right hand					
KM40TSS25GPCLNR12	—	514.122	—	511.022	—
KM40TSS25HPCLNR12	—	514.122	—	511.022	—
KM40TSS32GPCLNR12	512.112	514.123	513.023	511.023	515.018
left hand					
KM40TSS25GPCLNL12	—	514.122	—	511.022	—
KM40TSS25HPCLNL12	—	514.122	—	511.022	—
KM40TSS32GPCLNL12	512.112	514.123	513.023	511.023	515.018

KM40TS™ Internal Cutting Units

P-Clamping



KM40TS Internal Cutting Units



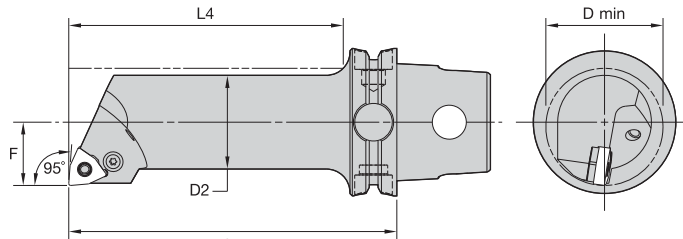
■ PDUN 93°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
	right hand													
3959343	KM40TSS25GPDUNR11	25	.98	32	1.26	17	.669	77	3.04	90	3.543	DN..110408/DN..332	0,41	.900
	left hand													
3959342	KM40TSS25GPDUNL11	25	.98	32	1.26	17	.669	77	3.04	90	3.543	DN..110408/DN..332	0,41	.900

■ Spare Parts



catalog number	lever screw	toggle lever
right hand KM40TSS25GPDUNR11	514.112	511.015
left hand KM40TSS25GPDUNL11	514.112	511.015



KM40TS Internal Cutting Units


■ PWLN 95°

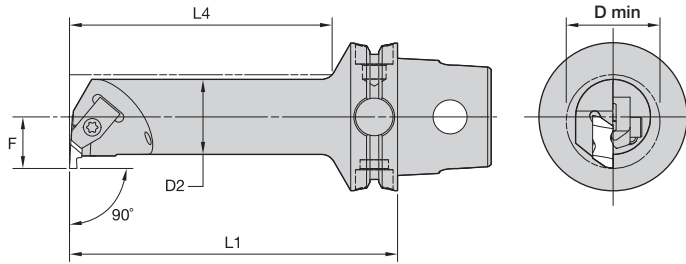
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3959345	KM40TSS25EPWLNRO8	25	.98	32	1.26	17	.669	55	2.17	70	2.756	WN..080408/WN..432	0,34	.75
3959351	KM40TSS25HPWLNRO8	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,49	1.08
3959347	KM40TSS25GPWLNRO6	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..060408/WN..332	0,41	.90
left hand														
3959349	KM40TSS25GPWLNRO8	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..080408/WN..432	0,40	.89
3959344	KM40TSS25EPWLNLO8	25	.98	32	1.26	17	.669	55	2.17	70	2.756	WN..080408/WN..432	0,34	.75
3959350	KM40TSS25HPWLNLO8	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,49	1.08
3959346	KM40TSS25GPWLNLO6	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..060408/WN..332	0,41	.90
3959348	KM40TSS25GPWLNLO8	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..080408/WN..432	0,40	.89

■ Spare Parts


catalog number	lever screw	toggle lever
right hand		
KM40TSS25EPWLNRO8	514.122	511.022
KM40TSS25GPWLNRO6	514.112	511.030
KM40TSS25GPWLNRO8	514.122	511.022
KM40TSS25HPWLNRO8	514.122	511.022
left hand		
KM40TSS25EPWLNLO8	514.122	511.022
KM40TSS25GPWLNLO6	514.112	511.030
KM40TSS25GPWLNLO8	514.122	511.022
KM40TSS25HPWLNLO8	514.122	511.022

KM40TS™ Internal Cutting Units

TopThread™ and TopGroove™



■ NE 90° • Steel



KM40TS Internal Cutting Units

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in				
right hand															
3955481	KM40TSS12ENER2	12	.47	19	.73	11	.433	42	1.655	70	2.756	NG2L	0,27	.58	
3955483	KM40TSS16FNER2	16	.63	20	.79	11	.433	56	2.209	80	3.150	NG2L	0,28	.62	
3955485	KM40TSS20GNER2	20	.79	25	.98	13	.512	70	2.757	90	3.543	NG2L	0,35	.76	
3955487	KM40TSS25ENER2	25	.98	32	1.26	17	.669	55	2.169	70	2.756	NG2L	0,34	.75	
3955491	KM40TSS25ENER3	25	.98	34	1.34	17	.669	55	2.169	70	2.756	NG3L	0,35	.77	
3955489	KM40TSS25HNER2	25	.98	32	1.26	17	.669	75	2.954	100	3.937	NG2L	0,49	1.08	
3955493	KM40TSS25HNER3	25	.98	34	1.34	17	.669	75	2.954	100	3.937	NG3L	0,49	1.09	
3955497	KM40TSS32GNER3	32	1.26	40	1.57	22	.866	76	2.993	90	3.543	NG3L	0,55	1.21	
3955495	KM40TSS32JNER3	32	1.26	40	1.57	22	.866	96	3.780	110	4.331	NG3L	0,67	1.48	
left hand															
3955480	KM40TSS12ENEL2	12	.47	19	.73	11	.433	42	1.655	70	2.756	NG2R	0,27	.59	
3955482	KM40TSS16FNEL2	16	.63	20	.79	11	.433	56	2.209	80	3.150	NG2R	0,28	.62	
3955484	KM40TSS20GNEL2	20	.79	25	.98	13	.512	70	2.757	90	3.543	NG2R	0,35	.76	
3955486	KM40TSS25ENEL2	25	.98	32	1.26	17	.669	55	2.169	70	2.756	NG2R	0,34	.75	
3955490	KM40TSS25ENEL3	25	.98	34	1.34	17	.669	55	2.169	70	2.756	NG3R	0,35	.77	
3955492	KM40TSS25HNEL3	25	.98	34	1.34	17	.669	75	2.954	100	3.937	NG3R	0,49	1.09	
3955488	KM40TSS25HNEL2	25	.98	32	1.26	17	.669	75	2.954	100	3.937	NG2R	0,49	1.08	
3955496	KM40TSS32GNEL3	32	1.26	40	1.57	22	.866	76	2.993	90	3.543	NG3R	0,55	1.21	
3955494	KM40TSS32JNEL3	32	1.26	40	1.57	22	.866	96	3.780	110	4.331	NG3R	0,67	1.48	

(continued)

(NE 90° • Steel continued)

■ Spare Parts

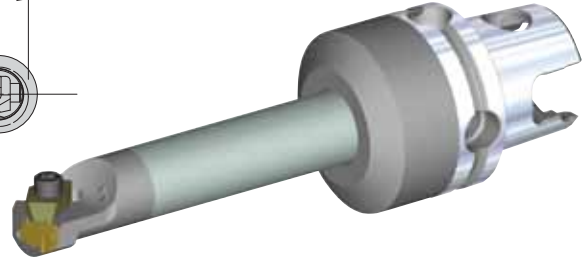
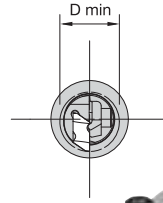
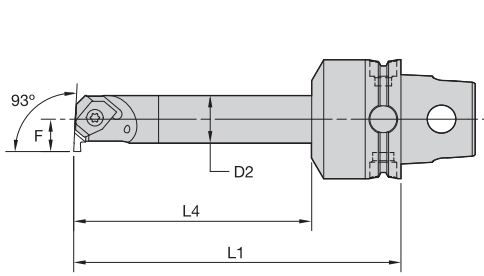
catalog number	 clamp	 clamp screw
right hand		
KM40TSS12ENER2	CM147	MS1488
KM40TSS16FNER2	CM147	MS1488
KM40TSS20GNER2	CM75	MS1488
KM40TSS25ENER2	CM75	MS1488
KM40TSS25ENER3	CM73	MS1489
KM40TSS25HNER2	CM75	MS1488
KM40TSS25HNER3	CM73	MS1489
KM40TSS32GNER3	CM73	MS1489
KM40TSS32JNER3	CM73	MS1489
left hand		
KM40TSS12ENEL2	CM146	MS1488
KM40TSS16FNEL2	CM146	MS1488
KM40TSS20GNEL2	CM74	MS1488
KM40TSS25ENEL2	CM74	MS1488
KM40TSS25ENEL3	CM72	MS1489
KM40TSS25HNEL2	CM74	MS1488
KM40TSS25HNEL3	CM72	MS1489
KM40TSS32GNEL3	CM72	MS1489
KM40TSS32JNEL3	CM72	MS1489

KM40TS™ Internal Cutting Units

TopThread™ and TopGroove™



KM40TS Internal Cutting Units



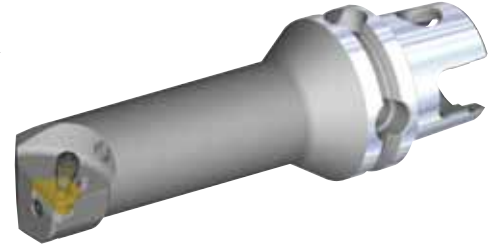
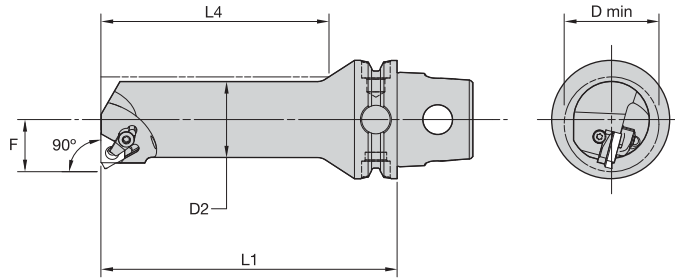
■ NE 90° • Carbide

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
	right hand													
3951836	KM40TSE16JNER2	16	.63	20	.79	11	.433	80	3.15	110	4.331	NG2L	0,41	.90
	left hand													
3951835	KM40TSE16JNEL2	16	.63	20	.79	11	.433	80	3.15	110	4.331	NG2R	0,41	.90

■ Spare Parts



catalog number	clamp	clamp screw
right hand KM40TSE16JNER2	CM146	MS1488
left hand KM40TSE16JNEL2	CM147	MS1488



■ LSE 90°

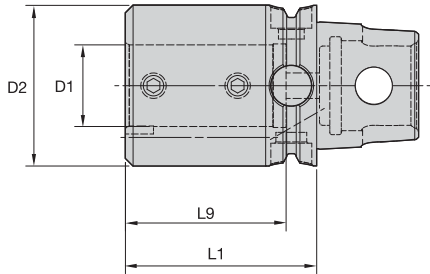
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3955464	KM40TSS10DLSER11	10	.39	13	.51	7	.276	35	1.38	60	2.362	LT11NR	0,22	.49
3955466	KM40TSS12ELSER11	12	.47	16	.63	9	.354	42	1.66	70	2.756	LT11NR	0,25	.56
3955468	KM40TSS16FLSER16	16	.63	20	.79	11	.433	56	2.21	80	3.150	LT16NR	0,28	.61
3955470	KM40TSS20GLSER16	20	.79	25	.98	13	.512	70	2.76	90	3.543	LT16NR	0,34	.75
3955472	KM40TSS25HLSER16	25	.98	32	1.26	17	.669	75	2.95	100	3.937	LT16NR	0,50	1.11
3955474	KM40TSS32JLSER16	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT16NR	0,72	1.58
3955476	KM40TSS32JLSER22	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT22NR	0,71	1.56
left hand														
3955463	KM40TSS10DLSEL11	10	.39	13	.51	7	.276	35	1.38	60	2.362	LT11NL	0,22	.49
3955465	KM40TSS12ELSEL11	12	.47	16	.63	9	.354	42	1.65	70	2.756	LT11NL	0,25	.55
3955467	KM40TSS16FLSEL16	16	.63	20	.79	11	.433	56	2.21	80	3.150	LT16NL	0,28	.61
3955469	KM40TSS20GLSEL16	20	.79	25	.98	13	.512	70	2.76	90	3.543	LT16NL	0,34	.75
3955471	KM40TSS25HLSSEL16	25	.98	32	1.26	17	.669	75	2.95	100	3.937	LT16NL	0,50	1.11
3955473	KM40TSS32JLSEL16	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT16NL	0,72	1.58
3955475	KM40TSS32JLSEL22	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT22NL	0,71	1.56

■ Spare Parts



catalog number	insert screw	shim	shim screw	clamp assembly
right hand				
KM40TSS10DLSER11	SSN2T	—	—	—
KM40TSS12ELSER11	SSN2T	—	—	—
KM40TSS16FLSER16	SN3TPKG	—	—	—
KM40TSS20GLSER16	SSA3T	SMYI3	SSY3T	CKC3
KM40TSS25HLSER16	SSA3T	SMYI3	SSY3T	CKC3
KM40TSS32JLSER16	SSA3T	SMYI3	SSY3T	CKC3
KM40TSS32JLSER22	SSA4T	SMYI4	SSY4T	CKC4
left hand				
KM40TSS10DLSEL11	SSN2T	—	—	—
KM40TSS12ELSEL11	SSN2T	—	—	—
KM40TSS16FLSEL16	SN3TPKG	—	—	—
KM40TSS20GLSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM40TSS25HLSSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM40TSS32JLSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM40TSS32JLSEL22	SSA4T	SMYE4	SSY4T	CKC4

NOTE: Items listed without a shim are designed for a 1.5° inclination angle.
Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



■ BA • Boring Bar Adapter • Internal and External Coolant • Metric



order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3950818	KM40TSBA06050M	6	40	50	36	MS1210	2,5mm	3	0,50
3950819	KM40TSBA08050M	8	40	50	36	MS1210	2,5mm	3	0,50
3950820	KM40TSBA10060M	10	40	60	48	MS1211	4mm	12	0,58
3950821	KM40TSBA12065M	12	40	65	52	MS1211	4mm	12	0,61
3950822	KM40TSBA16070M	16	40	70	55	MS1081	5mm	25	0,61
3950823	KM40TSBA20075M	20	40	75	58	MS1213	5mm	25	0,60
3950824	KM40TSBA25075M	25	50	75	56	MS1081	5mm	25	0,87

■ BA • Boring Bar Adapter • Internal and External Coolant • Inch

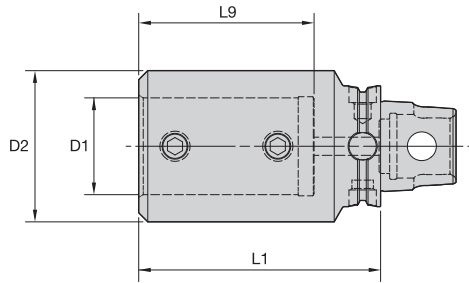


order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3950813	KM40TSBA06236	3/8	1.58	2.362	1.89	S843	1/8	5	1.27
3950814	KM40TSBA08256	1/2	1.58	2.559	2.05	S852	5/32	10	1.33
3950815	KM40TSBA10276	5/8	1.58	2.756	2.17	S862	3/16	15	1.35
3950816	KM40TSBA12295	3/4	1.58	2.953	2.28	S862	3/16	15	1.37
3950817	KM40TSBA16295	1	1.97	2.953	2.21	S862	3/16	15	1.90

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.



KM40TS Shank Tools



■ BAI • Boring Bar Adapter • Internal Coolant Only • Metric



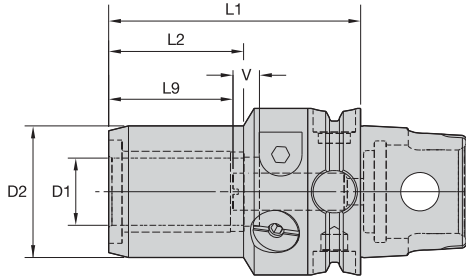
order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3950158	KM40TSBAI32080M	32	50	80	58	MS1213	5mm	25	0,81
3950159	KM40TSBAI40090M	40	58	90	68	MS1213	5mm	25	1,04

■ BAI • Boring Bar Adapter • Internal Coolant Only • Inch



order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3950156	KM40TSBAI20315	1 1/4	1.97	3.150	2.28	S861	3/16	15	1.78
3950157	KM40TSBAI24354	1 1/2	2.28	3.543	2.68	S861	3/16	15	2.43

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



■ HC • Metric



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3960498	KM40TSHC06065M	6	26	65	34	27	10	170.135	5mm	170.002	2,5mm	0,43
3960499	KM40TSHC08065M	8	28	65	34	27	10	170.135	5mm	170.002	2,5mm	0,44
3960500	KM40TSHC10070M	10	30	70	38	31	10	170.135	5mm	170.002	2,5mm	0,49
3960501	KM40TSHC12075M	12	32	75	41	36	10	170.135	5mm	170.002	2,5mm	0,53

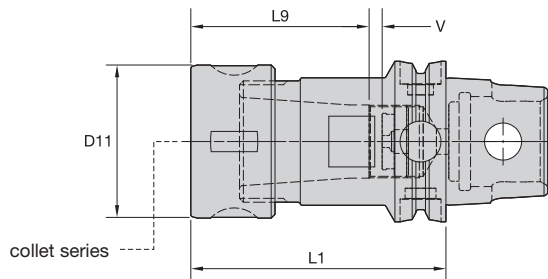
■ HC • Inch



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
3960497	KM40TSHC050300	1/2	1.24	3.000	1.75	1.42	.39	170.135	5mm	170.002	2,5mm	1.16

NOTE: Do not overtorque clamp screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.
Wrenches must be ordered separately.

- Tremendous Grip (3:1 advantage).



KM40TS Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3969764	KM40TSTG075075M	TG75	50	1.97	75	2.953	53	2.09	2	.08	0,64	1.41
3969765	KM40TSTG100100M	TG100	60	2.36	100	3.937	69	2.72	5	.20	1,17	2.58

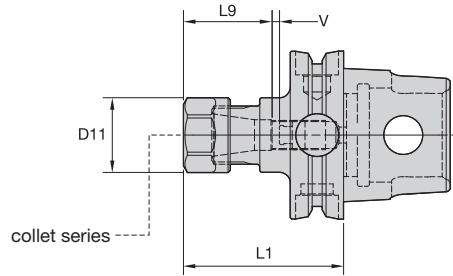
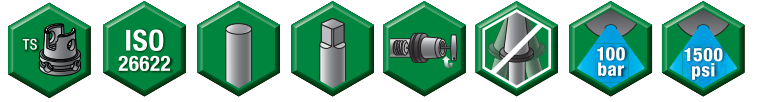
■ Spare Parts



catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSTG075075M	LNA075M	HSW45M	136	100	SS081041G	4mm & 5/32
KM40TSTG100100M	LNA100M	HSW58M	203	150	SS112041G	4mm & 5/32

(continued)

- Grip (2:1 advantage).



KM40TS Shank Tools

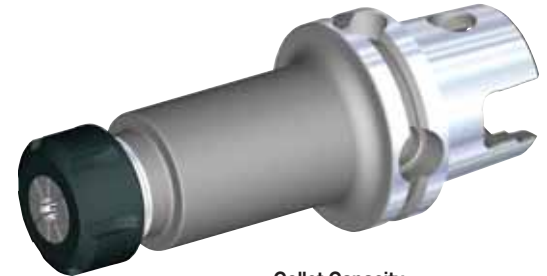
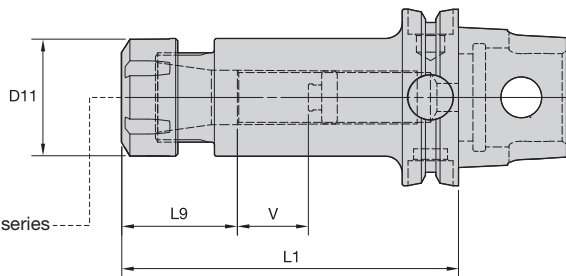
ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41

■ Collet Chuck • Hex Nut



order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	straight collet torque		counterbore collet torque			
			mm	in	mm	in	mm	in	mm	in			Nm	ft. lbs.	Nm	ft. lbs.	kg	lbs
3950246	KM40TSER16038M	ER16	28	1.10	38	1.496	32,8	1.29	—	—	LNHSER16M	OEW25M	56	42	384	30	0,20	.44

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque. Collet chuck technical section, see page K74. Supplied with locknut and stop screw. Locknut wrench must be ordered separately. Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9. Stop screw coolant caps are available and must be ordered separately; see page J22. ER standard straight-bore collets, see page I50. ER tap collets, see page I58. ER TCT tension-only tap collets, see page I60.



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

■ Collet Chuck • Round Nut



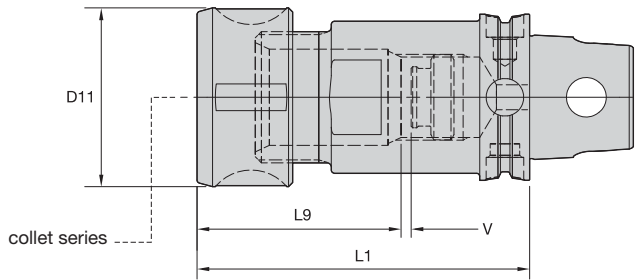
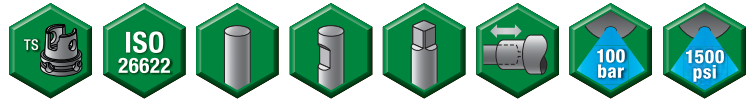
order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	Nm		kg		lbs	
			mm	in	mm	in	mm	in	mm	in			ft. lbs.	kg	ft. lbs.	kg	lbs	
3950247	KM40TSER25045M	ER25	42	1.65	45	1.772	41,2	1.62	—	—	LNSER25M	ER25WM	104	77	0,29	.64		
3950248	KM40TSER32060M	ER32	50	1.97	60	2.362	47,3	1.86	—	—	LNSER32M	ER32WM	136	100	0,46	1.01		

KM40TS™ Shank Tools

DA Double-Angle Collet Chucks



- Grip 1:1.



DA collet series	mm		inch	
	min	max	min	max
200DA	0,2	10,0	1/64	25/64
180DA	2,2	20,0	1/64	3/4

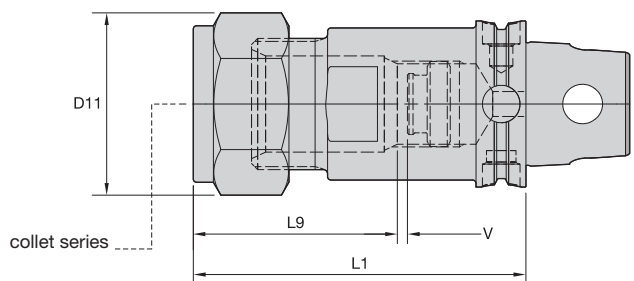
■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3950189	KM40TSDA188065M	DA180	43	1.69	65	2.559	49,0	1.93	—	—	0,48	1.05
3950190	KM40TSDA188080M	DA180	43	1.69	80	3.150	49,0	1.93	5	.20	0,58	1.28

■ Spare Parts



catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSDA188065M	LNA188M	HSW45M	80-100	60-75	—	—
KM40TSDA188080M	LNA188M	HSW45M	80-100	60-75	SS081041G	M4 & 5/32



■ Collet Chuck • Hex Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3950191	KM40TSDA208236	DA200	29	1.15	60	2.362	35,0	1.38	8	.32	0,28	.61
3950187	KM40TSDA188256	DA180	44	1.73	65	2.559	49,0	1.93	—	—	0,39	.85
3950188	KM40TSDA188315	DA180	44	1.73	80	3.150	49,0	1.93	5	.20	0,49	1.09

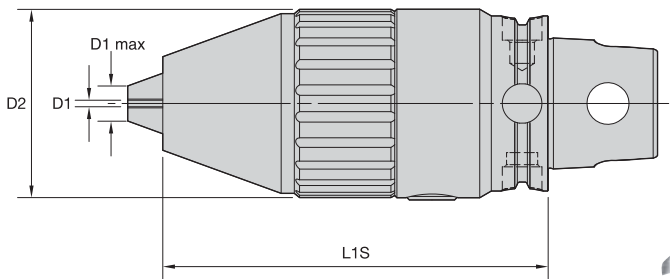
(continued)

(Collet Chuck continued)

■ Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSDA188256	NPA188	OEW150	80-100	60-75	—	—
KM40TSDA188315	NPA188	OEW150	80-100	60-75	SS081041G	M4 & 5/32
KM40TSDA208236	NPA208	OEW100	45-55	32-40	SS038031G	M2 & 5/64

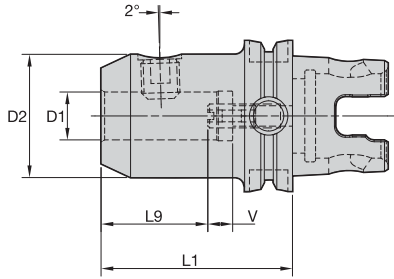
NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.



■ RDC • Drill Chucks

order number	catalog number	D1		D1 max		D2		L1S	
		mm	in	mm	in	mm	in	mm	in
4053778	KM40TSRDC13092M	1	.039	13	.512	43	1.693	91,9	3.618

NOTE: Activation size is 6mm.
Activation wrench included.
Wrench reorder number is 170.136.

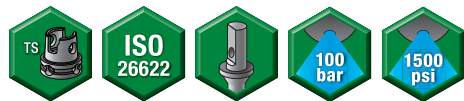


■ WN • Whistle Notch Adapter

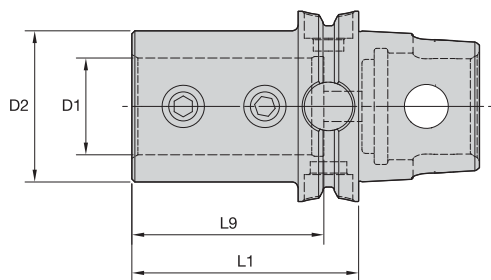


order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg	lbs
3950205	KM40TSWN06065M	6	25	65	30	10	SS03M012	3mm	7	571.060	2,5mm	0,32	.71
3950206	KM40TSWN08065M	8	28	65	30	10	SS03M014	4mm	15	571.067	3mm	0,37	.81
3950207	KM40TSWN10070M	10	35	70	35	10	SS03M018	5mm	25	571.068	4mm	0,52	1.15
3950208	KM40TSWN12080M	12	42	80	40	10	SS03M023	6mm	35	571.074	5mm	0,78	1.72
3950209	KM40TSWN14080M	14	44	80	40	10	SS03M023	6mm	35	571.074	5mm	0,83	1.84
3950210	KM40TSWN16085M	16	48	85	43	10	SS03M025	6mm	50	571.075	6mm	1,02	2.25
3950211	KM40TSWN18085M	18	50	85	43	10	SS03M025	6mm	50	571.075	6mm	1,08	2.38
3950212	KM40TSWN20095M	20	52	95	45	10	SS03M026	8mm	95	571.076	6mm	1,28	2.83

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw and stop screw wrenches are not included.



KM40TS Shank Tools



■ DAT Adapter • Metric



order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	cone point socket set screw	wrench size clamp screw	Nm	kg
3904029	KM40TSDAT25075M	25	45	75	60	12166903900	6mm	40	12166903700	6mm	40	0,69

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.

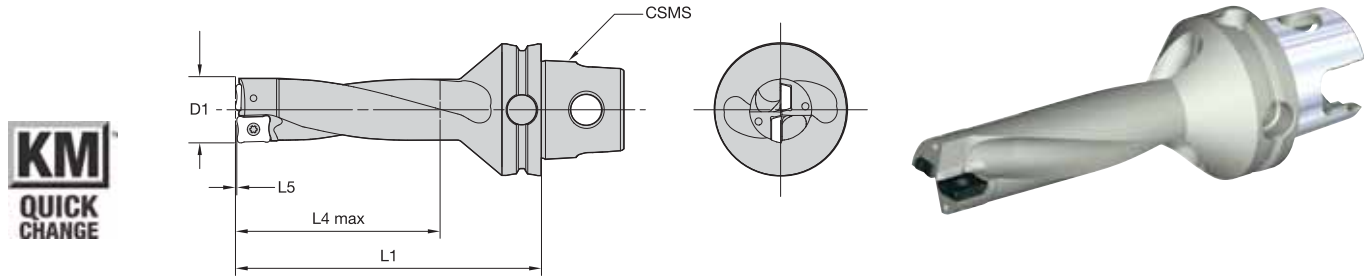
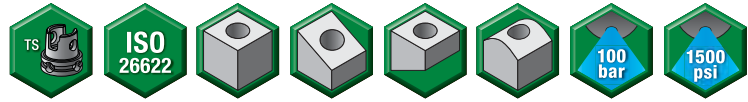
KM40TS™ Shank Tools

Top Cut™ Drill 3 x D



KM40TS Shank Tools

- Drill shipped with insert screws and Torx wrench.



■ 3 x D • Metric

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3895545	KM40TSTCD110R3M	KM40TS	11,0	59,0	33,00	0,22	LPGX06T103	12146011800	12146010000	T5
3895546	KM40TSTCD120R3M	KM40TS	12,0	62,0	36,00	0,06	LPGX06T103	12146011800	12146010000	T5
3895547	KM40TSTCD130R3M	KM40TS	13,0	65,0	39,00	0,08	LPGX06T103	12146011800	12146010000	T5
3895548	KM40TSTCD140R3M	KM40TS	14,0	68,0	42,00	0,07	LPGX07T204	12146012500	12147549000	T7
3895549	KM40TSTCD150R3M	KM40TS	15,0	71,0	45,00	0,05	LPGX07T204	12146012500	12147549000	T7
3895550	KM40TSTCD160R3M	KM40TS	16,0	74,0	48,00	0,18	LPGX07T204	12146012500	12147549000	T7
3895551	KM40TSTCD170R3M	KM40TS	17,0	79,0	51,00	0,31	LPGX07T204	12146012500	12147549000	T7
3895552	KM40TSTCD180R3M	KM40TS	18,0	82,0	54,00	0,31	LPGX07T204	12146012500	12147549000	T7
3895653	KM40TSTCD190R3M	KM40TS	19,0	85,0	57,00	0,06	LPGX100308	12148068700	12148086600	T8
3895654	KM40TSTCD200R3M	KM40TS	20,0	88,0	60,00	0,10	LPGX100308	12148068700	12148086600	T8
3895655	KM40TSTCD210R3M	KM40TS	21,0	93,0	63,00	0,28	LPGX100308	12148068700	12148086600	T8
3895656	KM40TSTCD220R3M	KM40TS	22,0	96,0	66,00	0,28	LPGX100308	12148068700	12148086600	T8
3895657	KM40TSTCD230R3M	KM40TS	23,0	99,0	69,00	0,45	LPGX100308	12148068700	12148086600	T8
3895658	KM40TSTCD240R3M	KM40TS	24,0	102,0	72,00	0,45	LPGX100308	12148068700	12148086600	T8
3895659	KM40TSTCD250R3M	KM40TS	25,0	106,0	75,00	0,45	LPGX100308	12148068700	12148086600	T8

■ 3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898334	KM40TSTCD0438R3	KM40TS	.438	2.375	1.314	.009	LPGX06T103	12146011800	12146010000	T5
3898335	KM40TSTCD0469R3	KM40TS	.469	2.500	1.407	.009	LPGX06T103	12146011800	12146010000	T5
3898336	KM40TSTCD0500R3	KM40TS	.500	2.500	1.500	.002	LPGX06T103	12146011800	12146010000	T5
3898337	KM40TSTCD0531R3	KM40TS	.531	2.625	1.593	.003	LPGX06T103	12146011800	12146010000	T5
3898338	KM40TSTCD0563R3	KM40TS	.563	2.750	1.689	.003	LPGX07T204	12146012500	12147549000	T7
3898339	KM40TSTCD0594R3	KM40TS	.594	2.875	1.782	.002	LPGX07T204	12146012500	12147549000	T7
3898340	KM40TSTCD0625R3	KM40TS	.625	3.000	1.875	.002	LPGX07T204	12146012500	12147549000	T7
3898341	KM40TSTCD0656R3	KM40TS	.656	3.125	1.968	.007	LPGX07T204	12146012500	12147549000	T7
3898342	KM40TSTCD0688R3	KM40TS	.688	3.250	2.064	.012	LPGX07T204	12146012500	12147549000	T7
3898353	KM40TSTCD0719R3	KM40TS	.719	3.375	2.157	.012	LPGX07T204	12146012500	12147549000	T7
3898354	KM40TSTCD0750R3	KM40TS	.750	3.500	2.250	.002	LPGX100308	12148068700	12148086600	T8
3898370	KM40TSTCD0813R3	KM40TS	.813	3.875	2.439	.004	LPGX100308	12148068700	12148086600	T8
3898371	KM40TSTCD0875R3	KM40TS	.875	4.000	2.625	.011	LPGX100308	12148068700	12148086600	T8
3898372	KM40TSTCD0938R3	KM40TS	.938	4.250	2.814	.018	LPGX100308	12148068700	12148086600	T8
3898373	KM40TSTCD1000R3	KM40TS	1.000	4.375	3.000	.018	LPGX100308	12148068700	12148086600	T8

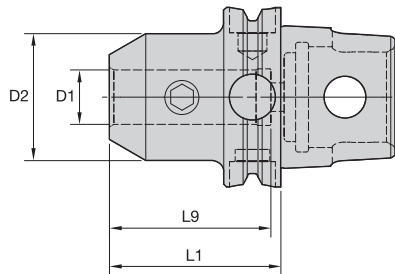


WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.





KM40TS Shank Tools


EM • Metric


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3950196	KM40TSEM06045M	6	25	45	40	SS03M012	3mm	7	0,25
3950197	KM40TSEM08045M	8	28	45	40	SS03M014	4mm	15	0,28
3950198	KM40TSEM10050M	10	35	50	45	SS03M018	5mm	25	0,38
3950199	KM40TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,52
3950200	KM40TSEM16060M	16	48	60	53	SS03M025	6mm	50	0,68
3950201	KM40TSEM20065M	20	52	65	55	SS03M026	8mm	95	0,81

EM • Inch


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3950139	KM40TSEM038197	3/8	1.00	1.969	1.73	ELS038031PKG	3/16	15	.58
3950140	KM40TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	.84
3950141	KM40TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	1.16
3950142	KM40TSEM075256	3/4	1.75	2.559	2.22	ELS062050PKG	5/16	70	1.35

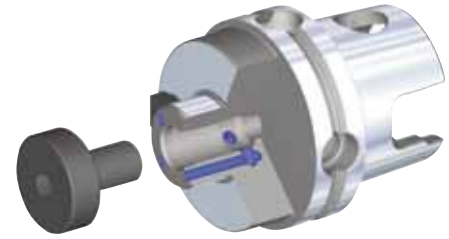
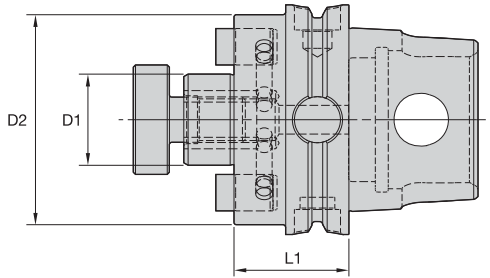
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.

KM40TS™ Shank Tools

SMC Shell Mill Adapters with Through Coolant



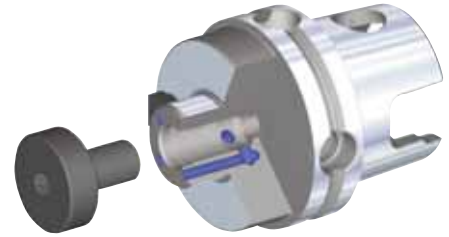
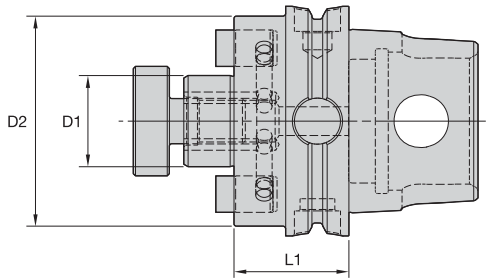
KM40TS Shank Tools



■ SMC • Metric



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950261	KM40TSSMC16026M	16	44	26	MS1294	KDK16M	6mm	0,34
3950262	KM40TSSMC22028M	22	49	28	MS1234	KDK22M	8mm	0,44
3950263	KM40TSSMC27032M	27	60	32	KLSS27M	KDK27M	10mm	0,68



■ SMC/SM2C • Inch



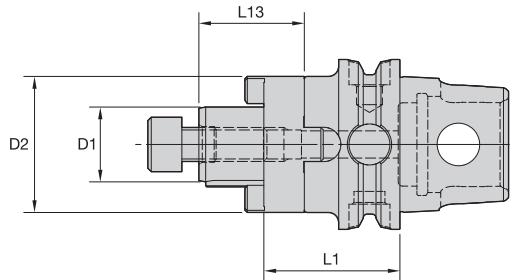
order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950256	KM40TSSMC050102	1/2	1.44	1.024	KLS05	KDK04	3/16	.63
3950257	KM40TSSM2C075102	3/4	1.46	1.024	KLS07	—	1/4	.71
3950258	KM40TSSMC075102	3/4	1.75	1.024	KLS07	KDK05	1/4	.82
3950259	KM40TSSM2C100126	1	2.19	1.260	KLS10	KDK06	5/16	1.33
3950260	KM40TSSMC100126	1	2.75	1.260	KLS10	KDK06	5/16	1.64

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.

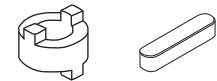




KM40TS Shank Tools



■ CS • Metric



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive ring	key	kg
3951833	KM40TSCS16036M	16	32	36	27	MS1294	6mm	CDR16M	CDK16M	0,33
3951834	KM40TSCS22038M	22	40	38	31	MS1234	8mm	CDR22M	CDK22M	0,47

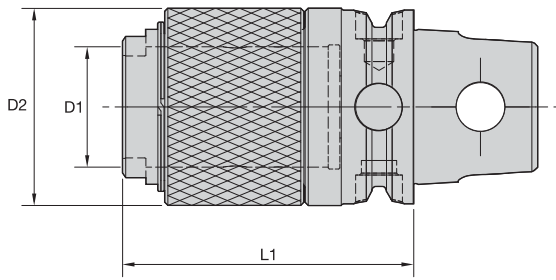
NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.

KM40TS™ Shank Tools

Tap Chucks • Morse Tapers • KM™ Extensions



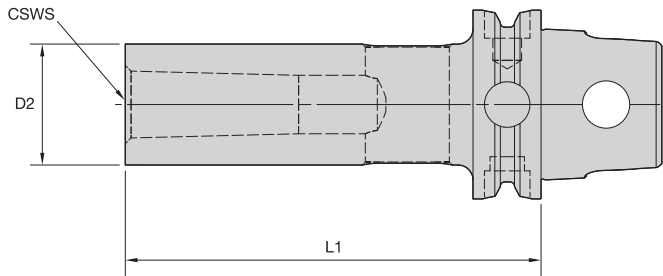
KM40TS Shank Tools



■ ST • Solid Tap Chuck

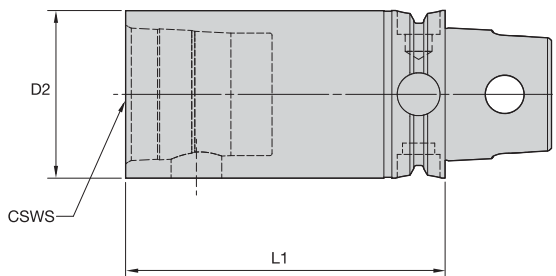
order number	catalog number	TQCS adapter size	D1		D2		L1		kg	lbs
			mm	in	mm	in	mm	in		
3964071	KM40TSST1045M	1	19	.749	35	1.375	45	1.774	0,30	.65
3964072	KM40TSST2070M	2	31	1.222	51	2.000	70	2.758	0,71	1.56

NOTE: Quick-change tap adapters available and must be ordered separately; see page 176.



■ MT • Morse Taper Adapter

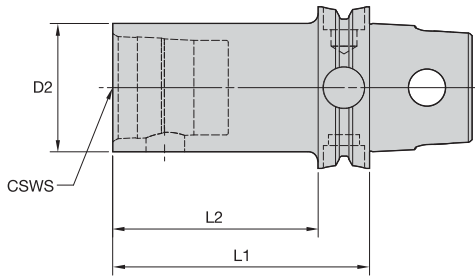
order number	catalog number	CSWS system size	D2		L1		kg	lbs
			mm	in	mm	in		
3950809	KM40TSMT1090M	1	25	.984	90	3.543	0,39	.86
3950810	KM40TSMT2105M	2	32	1.260	105	4.134	0,59	1.30
3950811	KM40TSMT3125M	3	40	1.575	125	4.921	0,95	2.09



■ S • KM Extension

order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw	Nm ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in					
3950179	KM40TSS40060M	KM40	40	1.575	60	2.362	6mm	12-16 9-12	KM40PKG3S	0,52	1.15
3950180	KM40TSS40080M	KM40	40	1.575	80	3.150	6mm	12-16 9-12	KM40PKG3S	0,71	1.57

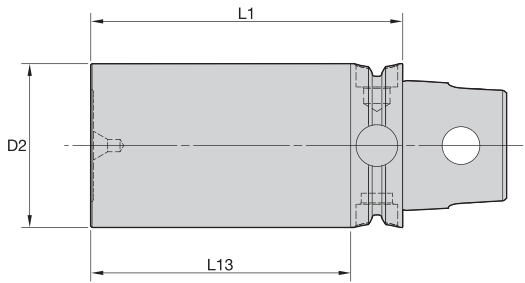




KM40TS Shank Tools

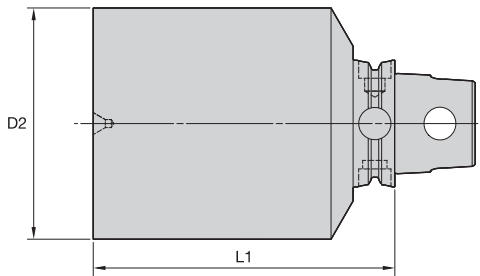
■ S • KM Reducer

order number	catalog number	CSWS system size	D2		L1		L2		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in	mm	in						
3950178	KM40TSS32070M	KM32	32	1.260	70	2.756	58	2.284	5mm	8-11	6-8	KM32PKG3S	0,46	1.01



■ GB • Gage Bar

order number	catalog number	D2		L1		L13		kg	lbs
		mm	in	mm	in	mm	in		
3959981	KM40TSGB40080M	40	1.58	80	3.15	68	2.68	0,81	1.79



■ BN • Blank

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
3950194	KM40TSBN63052M	63	2.480	52	2.047	32-38 HRC	1,11	2.45
3950193	KM40TSBN63125M	63	2.480	125	4.921	32-38 HRC	2,89	6.38
3950195	KM40TSBN90052M	90	3.543	52	2.047	32-38 HRC	2,00	4.42

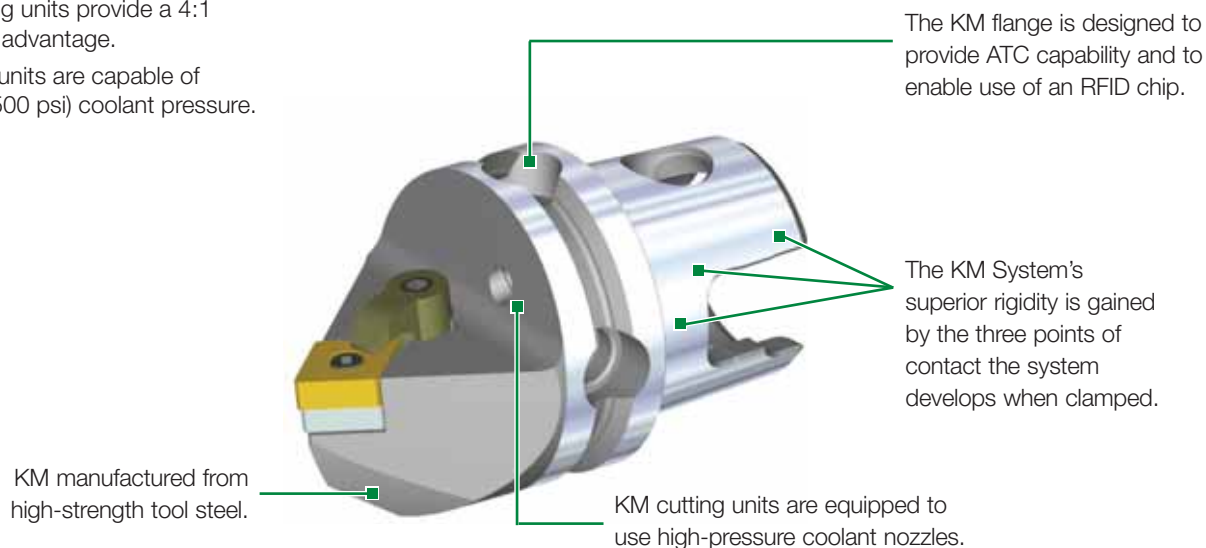
KM™ Quick Change Clamping System • **KM50TS™ Series**

The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



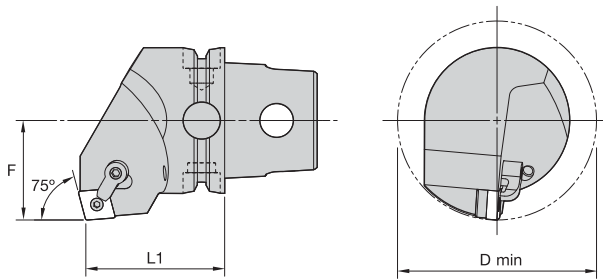
KM50TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.

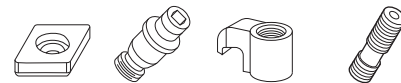




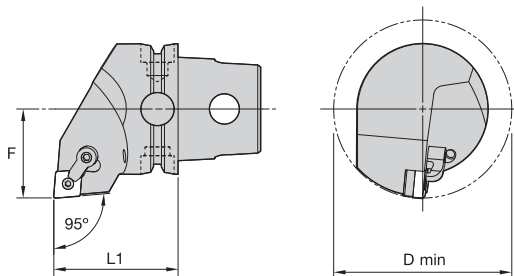
KM50TS Cutting Units



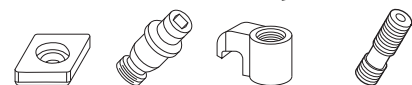
■ MCKN 75°



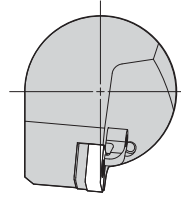
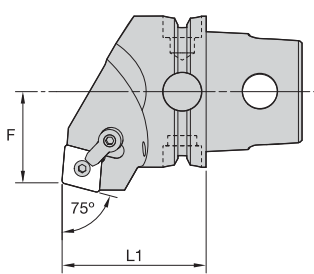
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		mm	in	mm	in	mm	in								
		right hand													
3738139	KM50TSMCKNR12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,68	1.51	
3738140	KM50TSMCKNR16	50	1.969	35	1.378	70	2.756	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,71	1.57	
		left hand													
3738137	KM50TSMCKNL12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,68	1.51	
3738138	KM50TSMCKNL16	50	1.969	35	1.378	70	2.756	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,71	1.57	



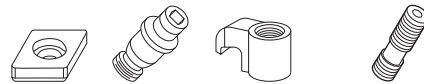
■ MCLN 95°



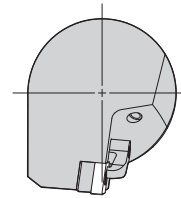
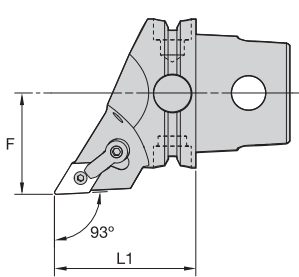
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3738164	KM50TSMCLNR12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,64	1.42	
3738165	KM50TSMCLNR16	50	1.969	35	1.378	90	3.543	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41	
3738166	KM50TSMCLNR19	50	1.969	35	1.378	90	3.543	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,63	1.39	
		left hand													
3738141	KM50TSMCLNL12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,64	1.41	
3738142	KM50TSMCLNL16	50	1.969	35	1.378	90	3.543	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41	
3738163	KM50TSMCLNL19	50	1.969	35	1.378	90	3.543	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,63	1.39	



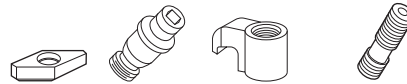
■ MCRN 75°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3738182	KM50TSMCRNR12	50	1.969	30	1.181	CN..120408/CN..432	ICSN433	KLM46	CKM20LP	STCM11	0,66	1.44
3838383	KM50TSMCRNR16	50	1.969	30	1.181	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,66	1.45
3738183	KM50TSMCRNR19	50	1.969	30	1.181	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,66	1.45
left hand												
3738179	KM50TSMCRNL12	50	1.969	30	1.181	CN..120408/CN..432	ICSN433	KLM46	CKM20LP	STCM11	0,66	1.45
3738181	KM50TSMCRNL16	50	1.969	30	1.181	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41
3838384	KM50TSMCRNL19	50	1.969	30	1.181	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,66	1.44



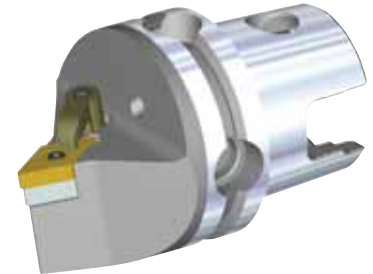
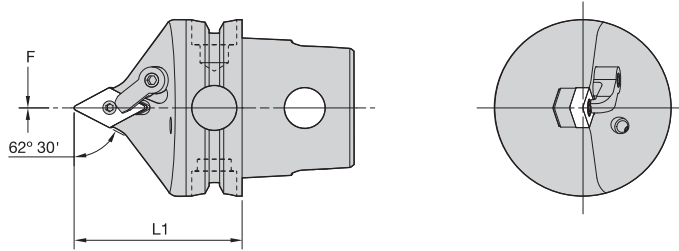
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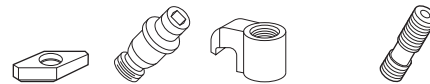
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3738151	KM50TSMDJNR1504	50	1.969	35	1.378	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,50	1.110
3738152	KM50TSMDJNR1506	50	1.969	35	1.378	DN..150408/DN..432	IDSN432	KLM46L	CKM23LP	STCM11	0,50	1.110
3738153	KM50TSMDJNR1906	50	1.969	35	1.378	DN..190612/DN..532	IDSN532	KLM58	CKM13LP	STCM8	0,55	1.200
left hand												
3738149	KM50TSMDJNL1504	50	1.969	35	1.378	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,51	1.110
3738150	KM50TSMDJNL1506	50	1.969	35	1.378	DN..150408/DN..432	IDSN432	KLM46L	CKM23LP	STCM11	0,50	1.110



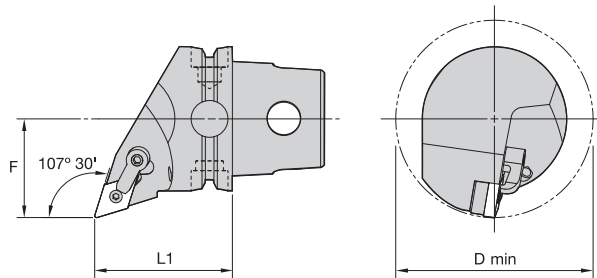
KM50TS Cutting Units



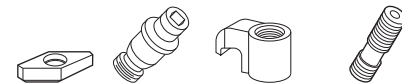
■ MDPN 62° 30'



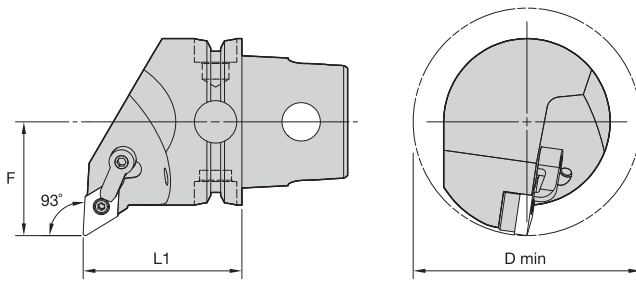
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738489	KM50TSM DPNN1504	50	1.969	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	0,46	1.02
3738509	KM50TSM DPNN1506	50	1.969	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,46	1.02



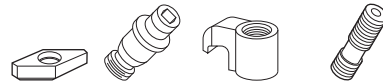
■ MDQN 107° 30'



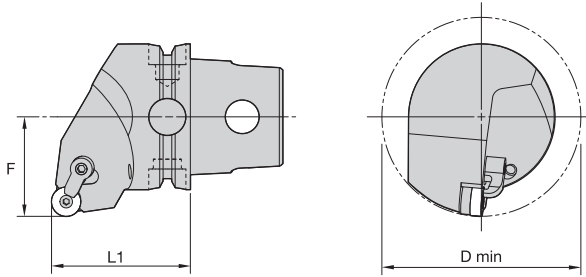
order number	catalog number	L1		F		D min	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in									mm	in
3738522	KM50TSM DQNR1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,59	1.30
3738524	KM50TSM DQNR1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,59	1.29
3738515	KM50TSM DQNL1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,59	1.30
3738519	KM50TSM DQNL1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,59	1.29



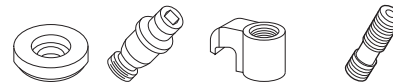
■ MDUN 93°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3738529	KM50TSM DUNR1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,64	1.41
3738530	KM50TSM DUNR1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,64	1.40
left hand														
3738526	KM50TSM DUNL1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,64	1.41
3738528	KM50TSM DUNL1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,64	1.40



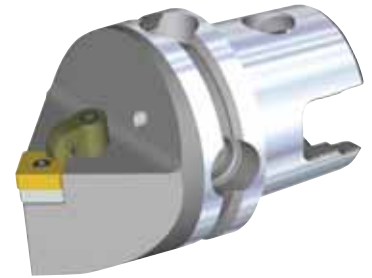
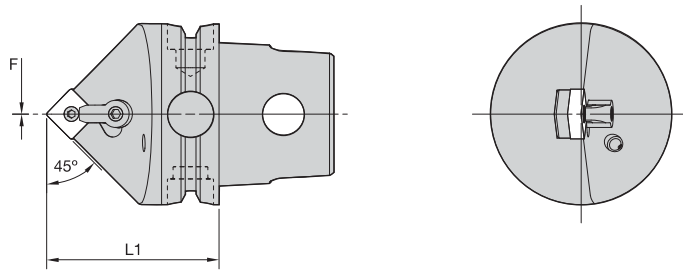
■ MRGN 0°



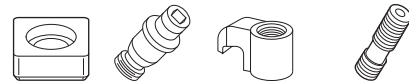
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3738485	KM50TSM RGNR12	50	1.969	35	1.378	100	3.937	RN..1204000/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,64	1.41
left hand														
3738484	KM50TSM RGNL12	50	1.969	35	1.378	100	3.937	RN..1204000/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,64	1.41



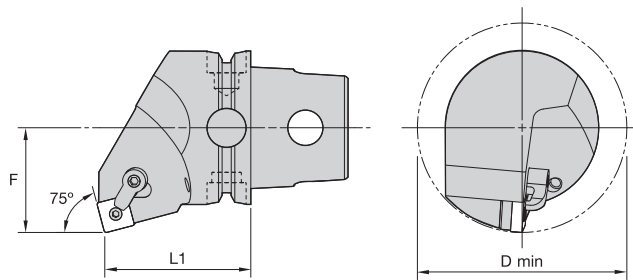
KM50TS Cutting Units



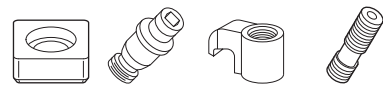
■ MSDN 45°



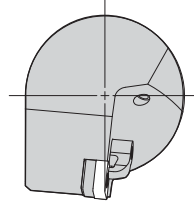
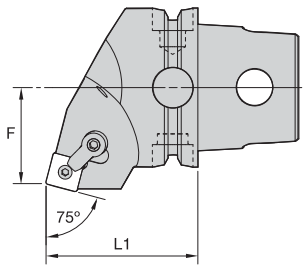
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738567	KM50TSMDDNN12	50	1.969	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,51	1.13



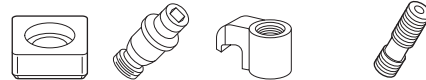
■ MSKN 75°



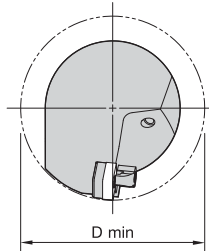
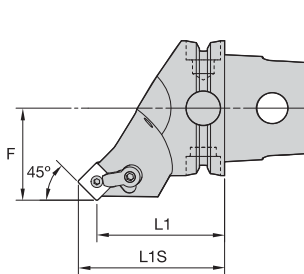
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3738572	KM50TSMKNNR12	50	1.969	35	1.378	70	2.756	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,69	1.52
3738583	KM50TSMKNNR15	50	1.969	35	1.378	70	2.756	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,71	1.57
3738585	KM50TSMKNNR19	50	1.969	35	1.378	70	2.756	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,72	1.59
left hand														
3738568	KM50TSMKNNL12	50	1.969	35	1.378	70	2.756	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,69	1.53
3738569	KM50TSMKNNL15	50	1.969	35	1.378	70	2.756	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,71	1.57
3738571	KM50TSMKNNL19	50	1.969	35	1.378	70	2.756	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,72	1.59



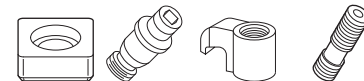
■ MSRN 75°



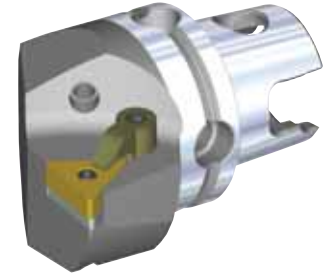
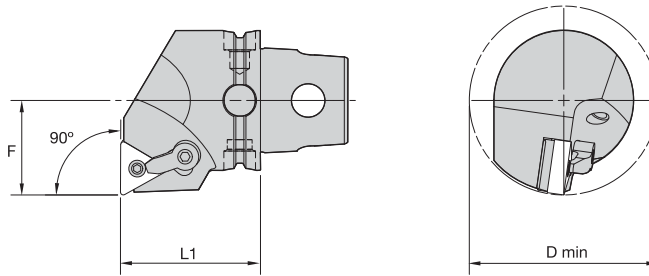
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3738615	KM50TSMSSNR12	50	1.969	30	1.181	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,58	1.28
3738616	KM50TSMSSNR15	50	1.969	30	1.181	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,60	1.32
3738617	KM50TSMSSNR19	50	1.969	30	1.181	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,60	1.31
left hand												
3738592	KM50TSMSSNL12	50	1.969	30	1.181	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,58	1.28
3738613	KM50TSMSSNL15	50	1.969	30	1.181	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,60	1.32
3738614	KM50TSMSSNL19	50	1.969	30	1.181	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,60	1.31



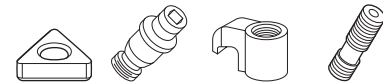
■ MSSN 45°



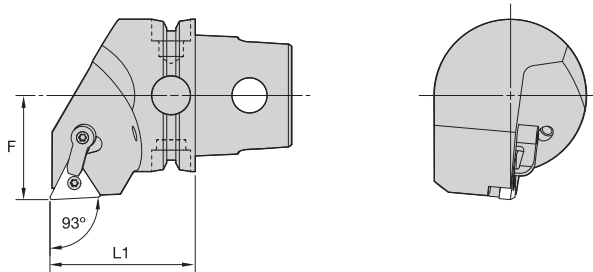
order number	catalog number	L1		L1S		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in							
right hand																
3738621	KM50TSMSSNR12	50	1.969	58,3	2.297	35	1.378	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,60	1.30
3738622	KM50TSMSSNR15	50	1.969	60,2	2.372	35	1.378	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,63	1.38
3738623	KM50TSMSSNR19	50	1.969	62,5	2.460	35	1.378	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,67	1.47
left hand																
3738618	KM50TSMSSNL12	50	1.969	58,3	2.297	35	1.378	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,60	1.30
3738619	KM50TSMSSNL15	50	1.969	60,2	2.372	35	1.378	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,63	1.38
3738620	KM50TSMSSNL19	50	1.969	62,5	2.460	35	1.378	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,67	1.47



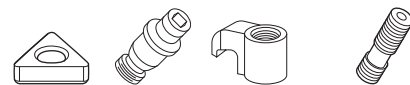
■ MTFN 90°



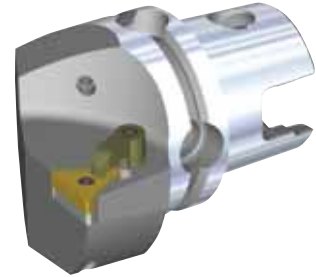
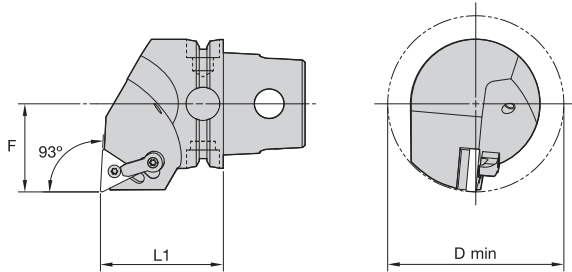
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3738587	KM50TSMTFNR16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,66	1.46	
3738588	KM50TSMTFNR22	50	1.969	35	1.378	70	2.756	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,68	1.50	
		left hand													
3838530	KM50TSMTFNL16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,66	1.44	
3838532	KM50TSMTFNL22	50	1.969	35	1.378	70	2.756	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,68	1.50	



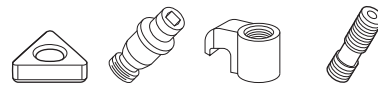
■ MTJN 93°



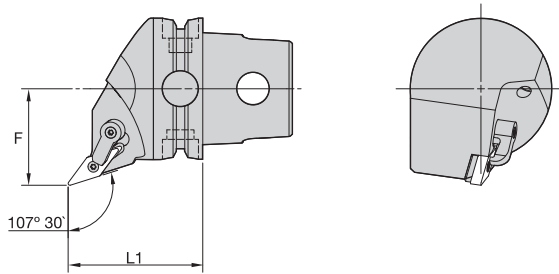
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
		right hand										
3738590	KM50TSMTJNR16	50	1.969	35	1.378	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,64	1.41
		left hand										
3738589	KM50TSMTJNL16	50	1.969	35	1.378	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,64	1.41



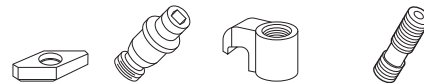
■ MTUN 93°



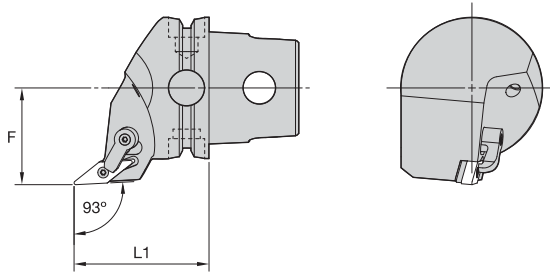
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
3738591	KM50TSMTUNL16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,63	1.39



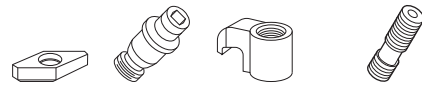
■ MVHN 107° 30'



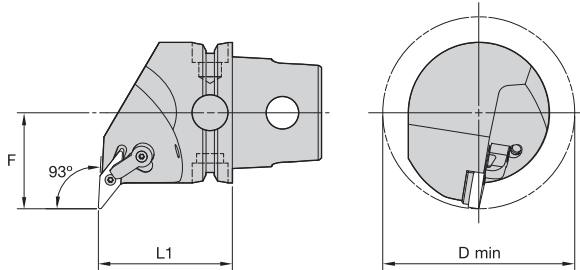
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738558	KM50TSMVHNR16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,56	1.23
3738557	KM50TSMVHNL16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,55	1.22



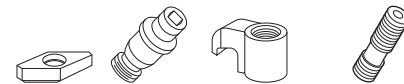
■ MVJN 93°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3738560	KM50TSMVJNR16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,53	1.16
	left hand											
3738559	KM50TSMVJNL16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,53	1.16



■ MVUN 93°



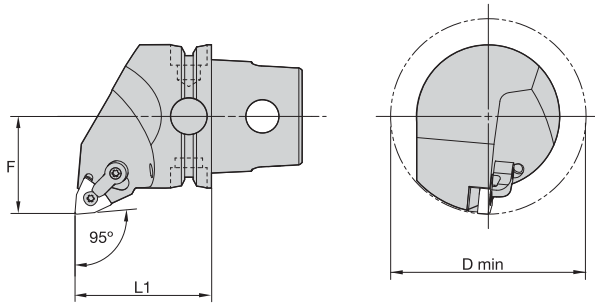
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
3738593	KM50TSMVUNR16	50	1.969	35	1.378	70	2.756	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,63	1.38
	left hand													
3738562	KM50TSMVUNL16	50	1.969	35	1.378	70	2.756	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,63	1.39

KM50TS™ Cutting Units

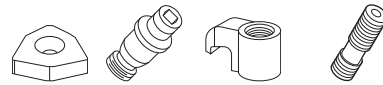
M-Clamping • M-Clamping Centerline



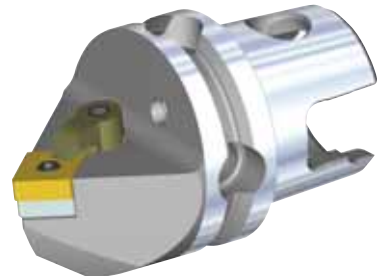
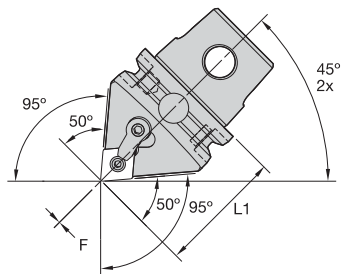
KM50TS Cutting Units



■ MWLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3738596	KM50TSMWLNRO8	50	1.969	35	1.378	70	2.756	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,64	1.41	
		left hand													
3738595	KM50TSMWLNLO8	50	1.969	35	1.378	70	2.756	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,64	1.41	



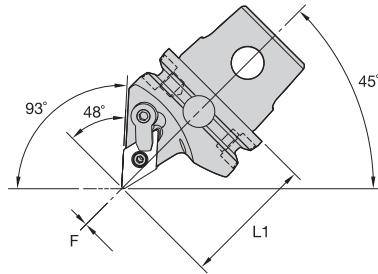
■ MCMN 50° • 95° Application • Centerline



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738167	KM50TSMCMNN12	50	1.969	0	.000	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	0,47	1.03

NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.



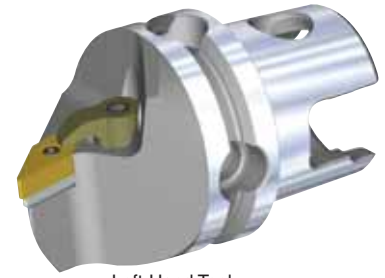
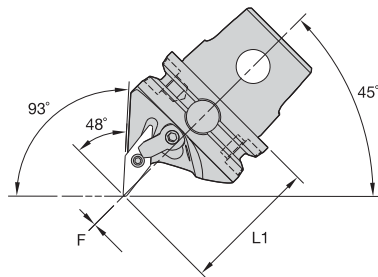
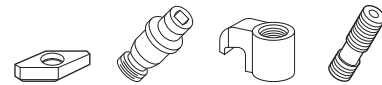


Left-Hand Tool

■ MDMN 48° • 93° Application • Centerline

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738154	KM50TSMNML1504	50	1.969	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM20	STCM11	0,45	.98
3738155	KM50TSMNML1506	50	1.969	0	.000	DN..150408/DN..432	IDSN432	KLM46L	CKM20	STCM11	0,44	.97

NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.

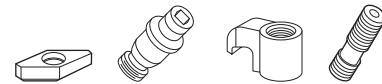


Left-Hand Tool

■ MVMN 48° • 93° Application • Centerline

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3738561	left hand KM50TSMVMNL16	50	1.969	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,44	.98

NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.

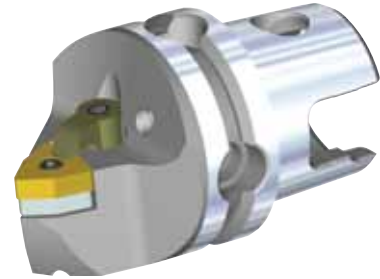
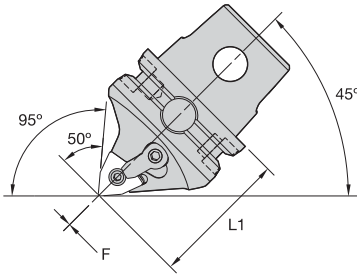


KM50TS™ Cutting Units

M-Clamping Centerline • P-Clamping



KM50TS Cutting Units



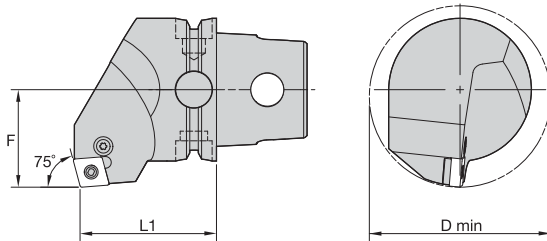
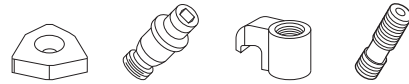
Left-Hand Tool



■ MWMN 50° • 95° Application • Centerline

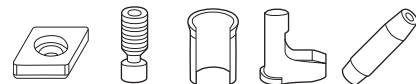
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3738598	KM50TSMWMNR08	50	1.969	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,49	1.08
left hand												
3738597	KM50TSMWMNL08	50	1.969	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,49	1.08

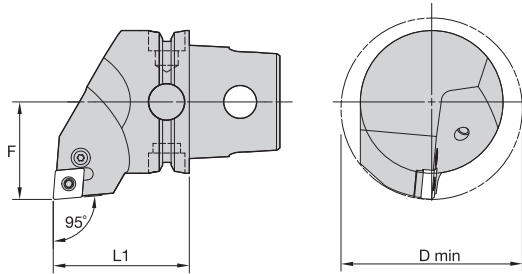
NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.



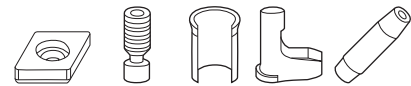
■ PCKN 75°

order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
3738514	KM50TSPCKNR12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,68	1.50
left hand															
3738513	KM50TSPCKNL12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,68	1.50

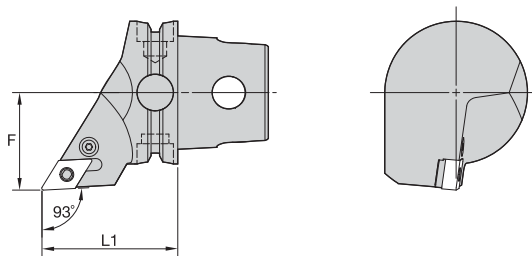




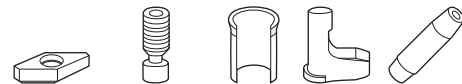
■ PCLN 95°



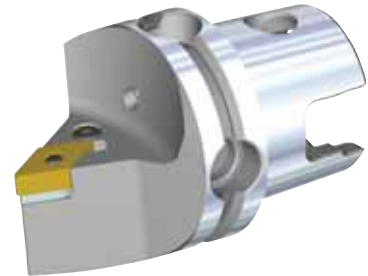
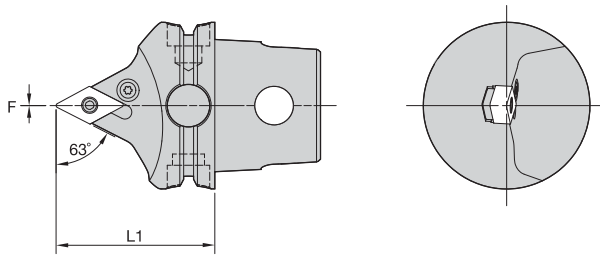
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
	right hand														
3738517	KM50TSPCLNR12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,63	1.39
3738520	KM50TSPCLNR16	50	1.969	35	1.378	63	2.480	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	0,63	1.38
	left hand														
3738516	KM50TSPCLNL12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,63	1.39
3738518	KM50TSPCLNL16	50	1.969	35	1.378	63	2.480	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	0,63	1.38



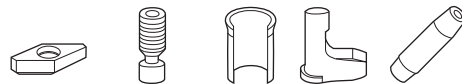
■ PDJN 93°



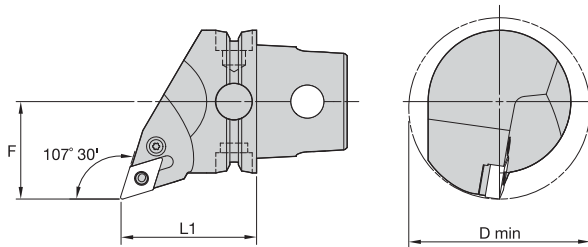
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
	right hand												
3741390	KM50TSPDJNR11	50	1.969	35	1.378	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,52	1.15
3741392	KM50TSPDJNR15	50	1.969	35	1.378	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,51	1.12
	left hand												
3741362	KM50TSPDJNL11	50	1.969	35	1.378	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,52	1.15
3741388	KM50TSPDJNL15	50	1.969	35	1.378	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,51	1.12



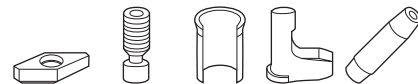
■ PDNN 63°



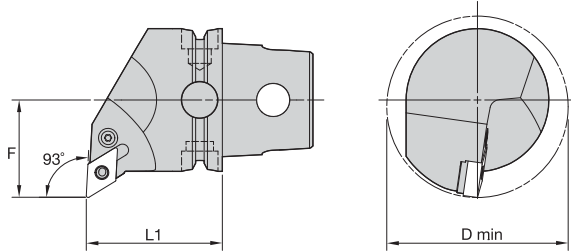
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
	right hand												
3741394	KM50TSPDNNR15	50	1.969	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,42	.93
	left hand												
3741393	KM50TSPDNNL15	50	1.969	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,43	.94



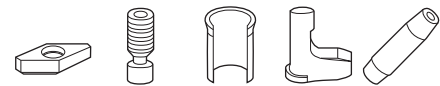
■ PDQN 107° 30'



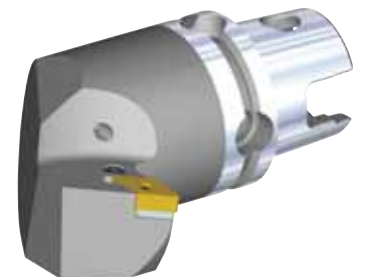
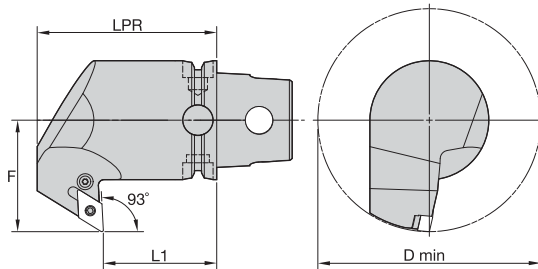
order number	catalog number	L1		F		D min	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in										mm	in
	right hand													
3741396	KM50TSPDQNR11	50	1.969	35	1.378	63 2.480	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,57	1.25
	left hand													
3741395	KM50TSPDQNL11	50	1.969	35	1.378	63 2.480	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,57	1.25



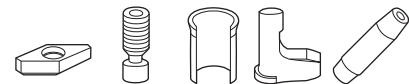
■ PDUN 93°



order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
	right hand														
3741398	KM50TSPDUNR15	50	1.969	35	1.378	63	2.480	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,64	1.40
	left hand														
3741397	KM50TSPDUNL15	50	1.969	35	1.378	63	2.480	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,64	1.40



■ PDXN 93°



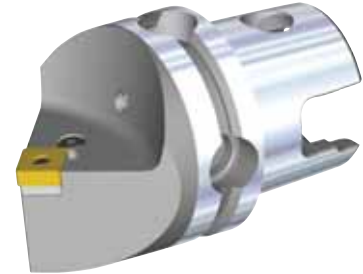
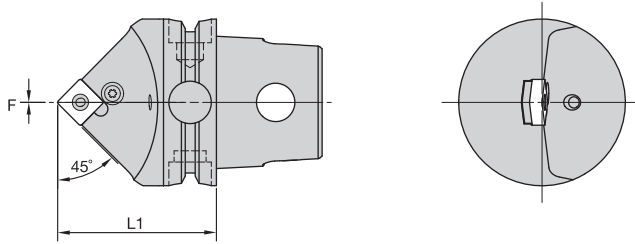
order number	catalog number	L1		LPR		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
	right hand																
3741400	KM50TSPDXNR15	50	1.969	75	2.953	52	2.047	104	4.095	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,17	2.57
	left hand																
3741399	KM50TSPDXNL15	50	1.969	75	2.953	52	2.047	104	4.095	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,17	2.57

KM50TS™ Cutting Units

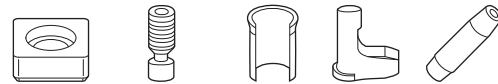
P-Clamping



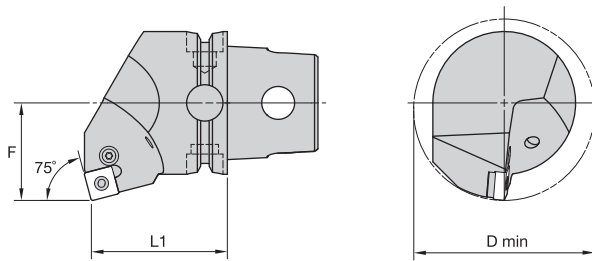
KM50TS Cutting Units



PSDN 45°



order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
3752980	KM50TSPSDNN12	50	1.969	0	.000	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,50	1.09
3752981	KM50TSPSDNN15	50	1.969	0	.000	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,50	1.08



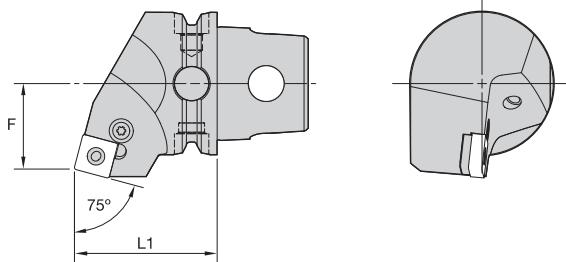
PSKN 75°



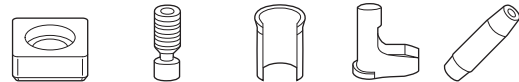
order number	catalog number	L1		F		D min	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in									
3753153	KM50TSPSKNR12	50	1.969	35	1.378	63 2.480	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,69	1.52
3753155	KM50TSPSKNR15	50	1.969	35	1.378	63 2.480	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,69	1.53
3752982	KM50TSPSKNL12	50	1.969	35	1.378	63 2.480	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,69	1.52
3753154	KM50TSPSKNL15	50	1.969	35	1.378	63 2.480	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,69	1.53



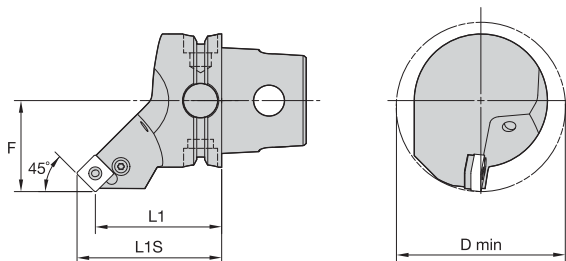
KM50TS Cutting Units



■ PSRN 75°



order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
3752977	KM50TSPSRNR12	50	1.969	30	1.181	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,61	1.34
3752979	KM50TSPSRNR15	50	1.969	30	1.181	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,60	1.31
left hand													
3752976	KM50TSPSRNL12	50	1.969	30	1.181	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,61	1.34
3752978	KM50TSPSRNL15	50	1.969	30	1.181	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,60	1.31



■ PSSN 45°



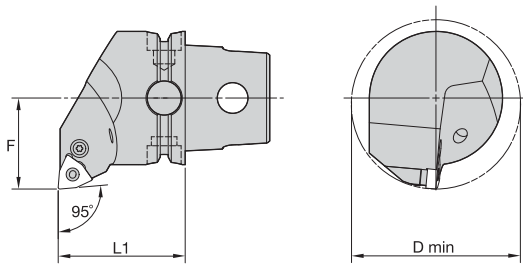
order number	catalog number	L1		L1S		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
right hand																	
3753157	KM50TSPSSNR12	50	1.969	58,3	2.30	35	1.38	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,55	1.22
left hand																	
3753156	KM50TSPSSNL12	50	1.969	58,3	2.30	35	1.38	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,55	1.22

KM50TS™ Cutting Units

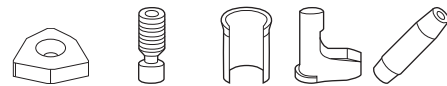
P-Clamping • S-Clamping



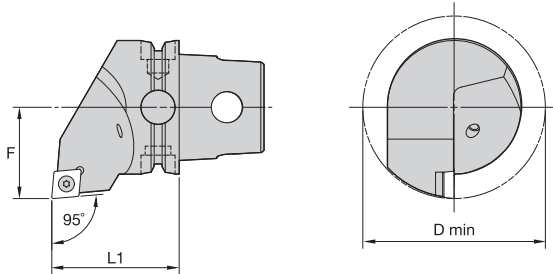
KM50TS Cutting Units



■ PWLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
3753159	KM50TSPWLN R08	50	1.969	35	1.378	63	2.480	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,67	1.48
		left hand													
3753158	KM50TSPWLN L08	50	1.969	35	1.378	63	2.480	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,67	1.48



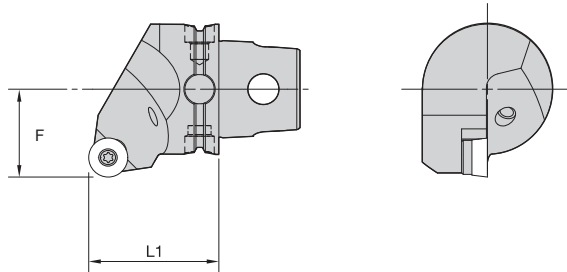
■ SCLC 95°



order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
		right hand											
3746594	KM50TSSCLCR12	50	1.969	35	1.378	70	2.756	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,64	1.40
		left hand											
3746593	KM50TSSCLCL12	50	1.969	35	1.378	70	2.756	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,64	1.40

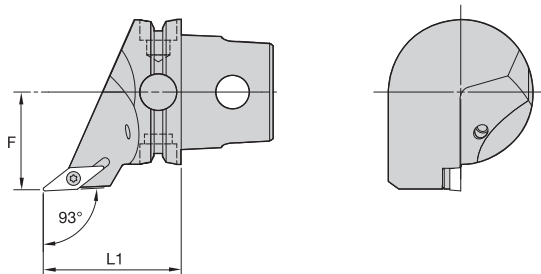


KM50TS Cutting Units



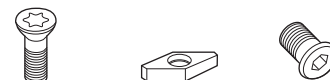
■ SRGC 0°

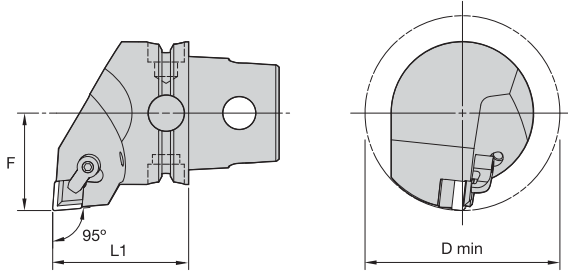
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
3746595	KM50TSSRGCR12	50	1.969	35	1.378	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,65	1.43
	left hand										
3838582	KM50TSSRGCL12	50	1.969	35	1.378	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,65	1.43



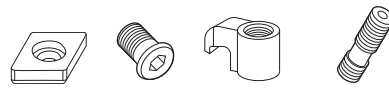
■ SVJB 93°

order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
3746597	KM50TSSVJBR16	50	1.969	35	1.378	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,51	1.13
	left hand										
3746596	KM50TSSVJBL16	50	1.969	35	1.378	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,51	1.13



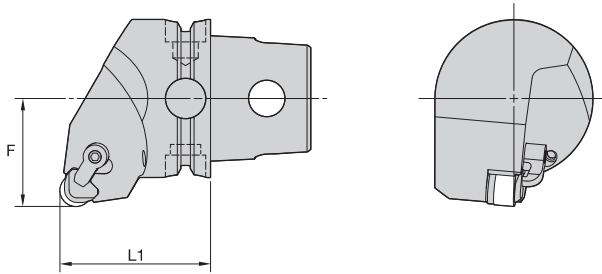


■ CCLN 95°

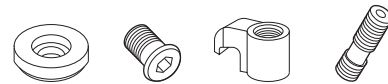


order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3746732	KM50TSCCLNR12	50	1.969	35	1.378	70	2.756	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	0,70	1.55	
		left hand													
3746726	KM50TSCCLNL12	50	1.969	35	1.378	70	2.756	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	0,70	1.54	

NOTE: Chipbreakers must be ordered separately. Chipbreaker catalog number is CBD-16F.



■ CRGN 0°

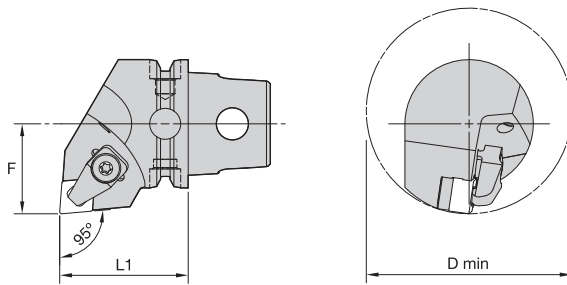


order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs	
		mm	in	mm	in								
		right hand											
3746739	KM50TSCRGNR12	50	1.969	35	1.378	RN..120700/RN.45	IRSN42	KMS4	CKM23	STCM11	0,67	1.47	
		left hand											
3746735	KM50TSCRGNL12	50	1.969	35	1.378	RN..120700/RN.45	IRSN42	KMS4	CKM23	STCM11	0,67	1.47	

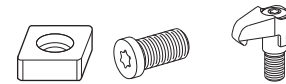
NOTE: Chipbreakers must be ordered separately. Chipbreaker catalog number is CBR-16.



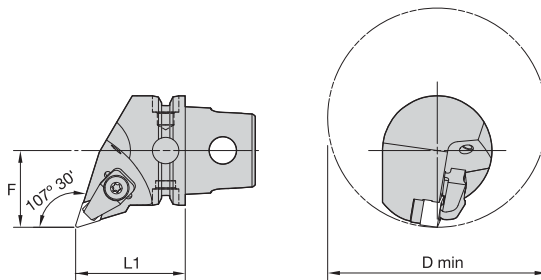
KM50TS Cutting Units



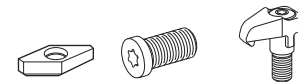
■ CCLN • MX 95°



order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in						
	right hand												
3746972	KM50TSCCLNR12MX7	50	1.969	35	1.378	80	3.150	CN.X120708/CN.X452	552.221	554.260	551.326	0,67	1.48
	left hand												
3746966	KM50TSCCLNL12MX7	50	1.969	35	1.378	80	3.150	CN.X120708/CN.X452	552.221	554.260	551.326	0,67	1.48



■ CDQN • MX 107° 30'



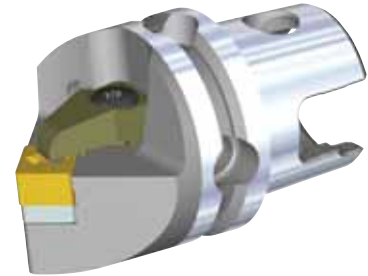
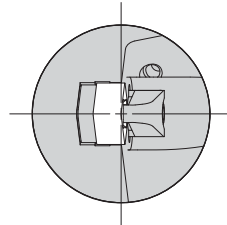
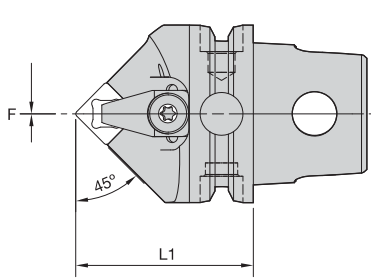
order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp screw	kg	lbs
		mm	in	mm	in	mm	in						
	right hand												
3746978	KM50TSCDQNR12MX7	50	1.969	35	1.378	100	3.937	DNGX120708	552.225	554.254	551.326	0,60	1.31
	left hand												
3746975	KM50TSCDQNL12MX7	50	1.969	35	1.378	100	3.937	DNGX120708	552.225	554.254	551.326	0,60	1.31

KM50TS™ Cutting Units

C-MX-Clamping

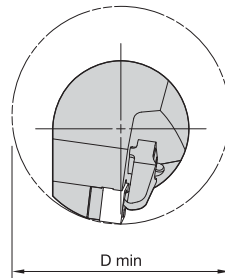
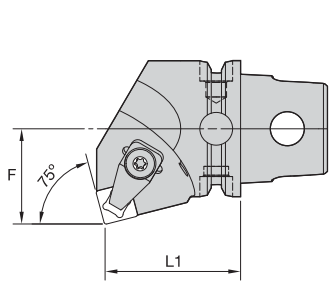


KM50TS Cutting Units



■ CSDN • MX 45°

order number	catalog number	L1		F		gage insert	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in						
3746980	KM50TSCSDNN12MX7	50	1.969	0	.000	SN.X120708/SN.X452	552.232	554.260	551.326	0,52	1.15



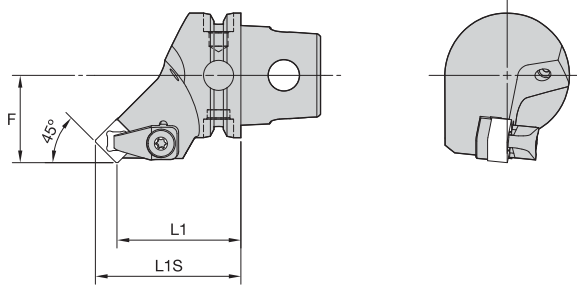
■ CSKN • MX 75°

order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in						
3746986	right hand	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	552.232	554.260	551.326	0,74	1.62
	KM50TSCSKNR12MX7												
3746984	left hand	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	552.232	554.260	551.326	0,74	1.62
	KM50TSCSKNL12MX7												

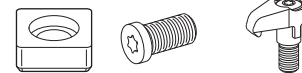




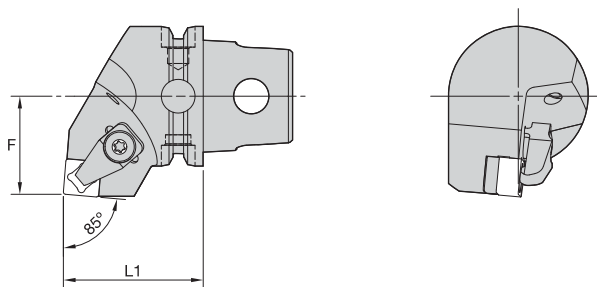
KM50TS Cutting Units



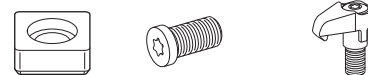
■ CSSN • MX 45°



order number	catalog number	L1		L1S		F		gage insert	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in						
3746992	KM50TSCSSNR12MX7	50	1.969	58	2.297	35	1.378	SN.X120708/SN.X452	552.232	554.252	551.326	0,60	1.32
	right hand												
3746989	KM50TSCSSNL12MX7	50	1.969	58	2.297	35	1.378	SN.X120708/SN.X452	552.232	554.252	551.326	0,60	1.32
	left hand												



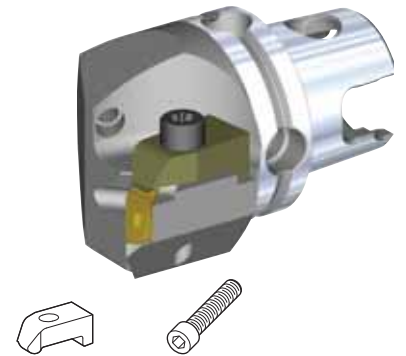
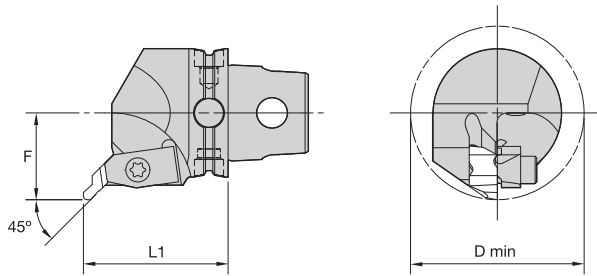
■ CSXN • MX 85°



order number	catalog number	L1		F		gage insert	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in						
3746998	KM50TSCSXNR12MX7	50	1.969	35	1.378	SN.X120708/SN.X452	552.232	554.260	551.326	0,67	1.48
	right hand										
3746996	KM50TSCSXNL12MX7	50	1.969	35	1.378	SN.X120708/SN.X452	552.232	554.260	551.326	0,67	1.48
	left hand										

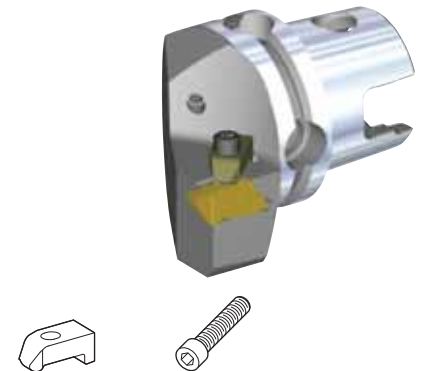
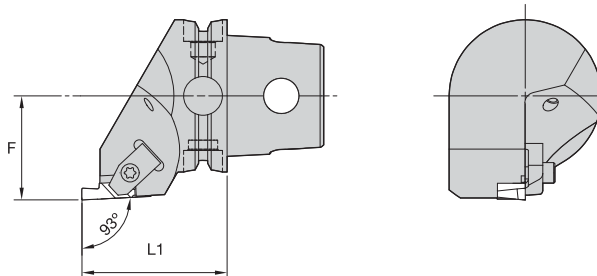


KM50TS Cutting Units



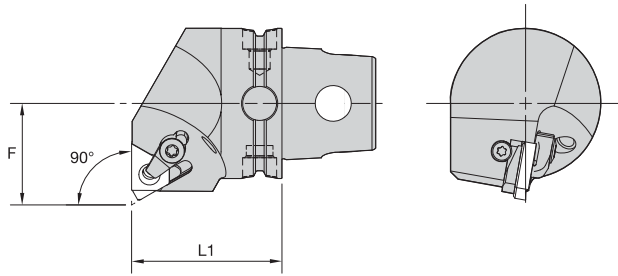
■ NR 45°

order number	catalog number	L1		F		D min		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in					
	right hand											
3753587	KM50TSNRR3	50	1.969	35	1.378	70	2.756	NU3L	CM73	MS1489	0,57	1.26
	left hand											
3753586	KM50TSNRL3	50	1.969	35	1.378	70	2.756	NU3R	CM72	MS1489	0,57	1.26



■ NS 93°

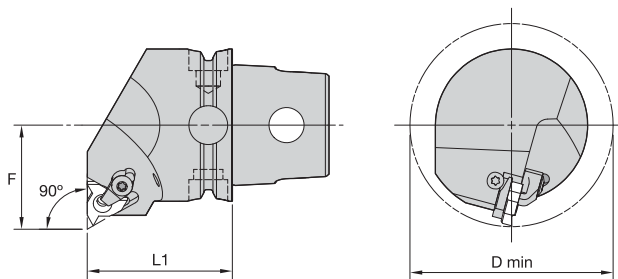
order number	catalog number	L1		F		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in					
	right hand									
3753590	KM50TSNSR3	50	1.969	35	1.378	NG3R	CM72	MS1489	0,59	1.29
3753591	KM50TSNSR4	60	2.362	35	1.378	NG4R	CM72	MS1489	0,69	1.53
	left hand									
3753588	KM50TSNSL3	50	1.969	35	1.378	NG3L	CM73	MS1489	0,59	1.29
3753589	KM50TSNSL4	60	2.362	35	1.378	NG4L	CM73	MS1489	0,70	1.54



■ LSE-E 90° • External Only

order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in							
right hand												
3753566	KM50TSLSER16E	50	1.969	35	1.378	LT16EL	SSA3T	SMYI3	SSY3T	CKC3	0,68	1.51
3959391	KM50TSLSER27E	50	1.969	35	1.378	LT27EL	SSA5T	SMYI5	SSY5T	CKC5	0,70	1.55
left hand												
3753565	KM50TSLSEL16E	50	1.969	35	1.378	LT16ER	SSA3T	SMYE3	SSY3T	CKC3	0,68	1.51
3959390	KM50TSLSEL27E	50	1.969	35	1.378	LT27ER	SSA5T	SMYE5	SSY5T	CKC5	0,70	1.55

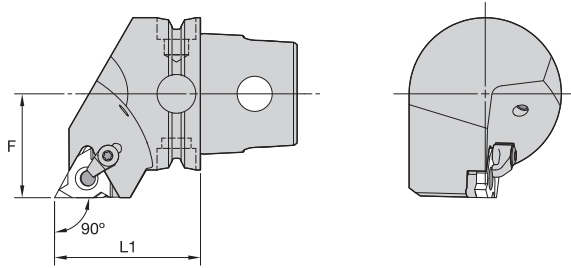
NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



■ LSE-N 90° • Internal Only

order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3753567	KM50TSLSER16N	50	1.969	35	1.378	70	2.756	LT16NR	SSA3T	SMYI3	SSY3T	CKC3	0,68	1.51
3753568	KM50TSLSER22N	50	1.969	35	1.378	70	2.756	LT22NR	SSA4T	SMYI4	SSY4T	CKC4	0,67	1.49
3959393	KM50TSLSER27N	50	1.969	35	1.378	70	2.756	LT27NR	SSA5T	SMYI5	SSY5T	CKC5	0,72	1.59
left hand														
3867563	KM50TSLSEL16N	50	1.969	35	1.378	70	2.756	LT16NL	SSA3T	SMYE3	SSY3T	CKC3	0,69	1.51
3867564	KM50TSLSEL22N	50	1.969	35	1.378	70	2.756	LT22NL	SSA4T	SMYE4	SSY4T	CKC4	0,68	1.49
3959392	KM50TSLSEL27N	50	1.969	35	1.378	70	2.756	LT27NL	SSA5T	SMYE5	SSY5T	CKC5	0,72	1.59

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.

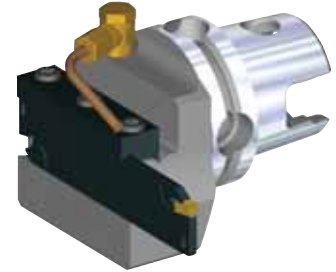
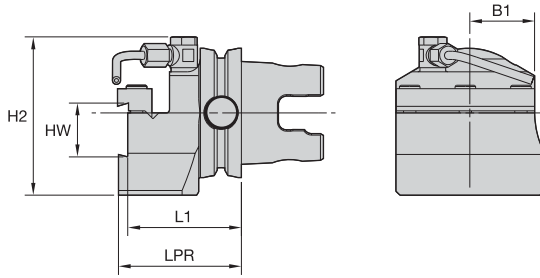


■ LSS 90°



order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in							
right hand												
3753570	KM50TSLSSR16	50	1.969	35	1.378	LT16ER	SSA3T	SMYE3	SSY3T	CKC3	0,60	1.33
3753571	KM50TSLSSR22	50	1.969	35	1.378	LT22ER	SSA4T	SMYE4	SSY4T	CKC4	0,59	1.30
3959395	KM50TSLSSR27	50	1.969	35	1.378	LT27ER	SSA5T	SMYE5	SSY5T	CKC5	0,61	1.34
left hand												
3753569	KM50TSLSSL16	50	1.969	35	1.378	LT16EL	SSA3T	SMYI3	SSY3T	CKC3	0,60	1.31
3959394	KM50TSLSSL27	50	1.969	35	1.378	LT27EL	SSA5T	SMYI5	SSY5T	CKC5	0,63	1.38





NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



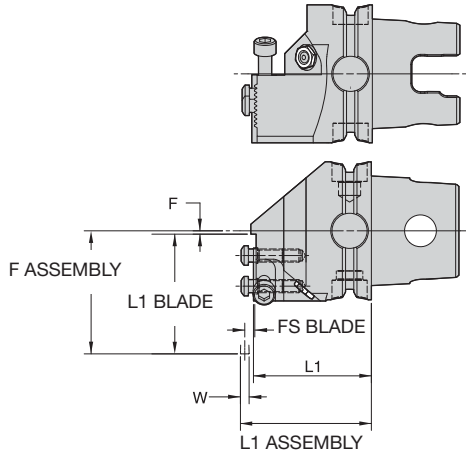
■ BE • End Mount

order number	catalog number	L1		LPR		H2		HW		B1		cartridge size	cartridge 1	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in				
3747118	right hand KM50TSBER	54,9	2.162	60	2.36	61	2.40	26	1.02	25	.98	26	A2BNSN26...	1,30	2.86
3747117	left hand KM50TSBEL	54,9	2.162	60	2.36	61	2.40	26	1.02	25	.98	26	A2BNSN26...	1,30	2.86

■ Spare Parts

catalog number				
	clamp	clamp screw	coolant tube	coolant swivel base
right hand KM50TSBER	CGS4	MS1595	12649910900	12649910800
left hand KM50TSBEL	CGS4	MS1595	12649910900	12649910800

NOTE: For cut-off blades, see the WIDIA Turning (A-09-02078) catalog.

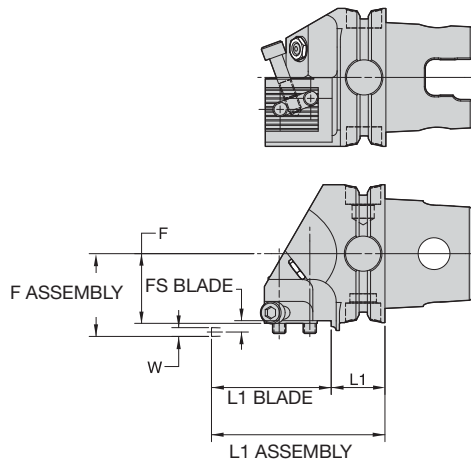


F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm

■ **WGME**

order number	catalog number	L1		F		button-head cap screw	nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in					
	right hand									
3949882	KM50TSWGMER55M	53,79	2.118	-4,98	-0.196	606256	PMT08430	MS337	0,79	1.73
	left hand									
3949893	KM50TSWGME55M	53,79	2.118	-4,98	-0.196	606256	PMT08430	MS337	0,78	1.73

NOTE: For SLS cartridges and WMT insert, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.

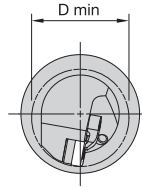
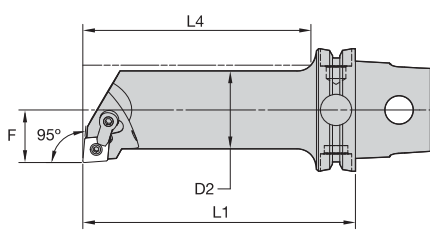


F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

■ **WGMS**

order number	catalog number	L1		F		nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in				
	right hand								
3949880	KM50TSWGMSR55M	24,52	.965	23,79	.937	PMT08430	MS1132PKG	0,74	1.64
	left hand								
3949881	KM50TSWGMSL55M	24,52	.965	23,79	.937	PMT08430	MS1132PKG	0,74	1.64

NOTE: For SLS cartridges and WMT insert, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.







■ MCLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3753688	KM50TSS25DMCLNR12	25	.98	32	1.26	17	.669	38	1.51	60	2.362	CN..120408/CN..432	0,48	1.06
3753690	KM50TSS25EMCLNR12	25	.98	32	1.26	17	.669	49	1.94	70	2.756	CN..120408/CN..432	0,51	1.13
3753692	KM50TSS25JMCLNR12	25	.98	32	1.26	17	.669	87	3.43	110	4.331	CN..120408/CN..432	0,67	1.48
3753694	KM50TSS32FMCLNR12	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	CN..120408/CN..432	0,67	1.48
3753696	KM50TSS32GMCLNR12	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	CN..120408/CN..432	0,78	1.61
3753698	KM50TSS32KMCLNR12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	1,00	2.20
3753668	KM50TSS40HMCLNR12	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	CN..120408/CN..432	1,03	2.27
3753670	KM50TSS40JMCLNR12	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	CN..120408/CN..432	1,13	2.49
3753684	KM50TSS40LMCLNR16	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..160612/CN..543	1,44	3.17
3753683	KM50TSS40LMCLNR12	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..120408/CN..432	1,42	3.14
3753686	KM50TSS50LMCLNR12	50	1.97	63	2.48	35	1.378	140	5.51	140	5.512	CN..120408/CN..432	2,00	4.41
left hand														
3753687	KM50TSS25DMCLNL12	25	.98	32	1.26	17	.669	38	1.51	60	2.362	CN..120408/CN..432	0,48	1.06
3753689	KM50TSS25EMCLNL12	25	.98	32	1.26	17	.669	49	1.94	70	2.756	CN..120408/CN..432	0,51	1.13
3753691	KM50TSS25JMCLNL12	25	.98	32	1.26	17	.669	87	3.43	110	4.331	CN..120408/CN..432	0,67	1.48
3753693	KM50TSS32FMCLNL12	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	CN..120408/CN..432	0,67	1.48
3753695	KM50TSS32GMCLNL12	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	CN..120408/CN..432	0,78	1.61
3753697	KM50TSS32KMCLNL12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	1,00	2.20
3753667	KM50TSS40HMCLNL12	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	CN..120408/CN..432	1,03	2.27
3753669	KM50TSS40JMCLNL12	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	CN..120408/CN..432	1,13	2.48
3753672	KM50TSS40LMCLNL16	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..160612/CN..543	1,44	3.17
3753671	KM50TSS40LMCLNL12	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..120408/CN..432	1,42	3.13
3753685	KM50TSS50LMCLNL12	50	1.97	63	2.48	35	1.378	140	5.51	140	5.512	CN..120408/CN..432	2,00	4.41

(continued)

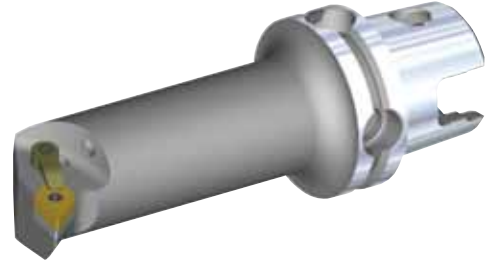
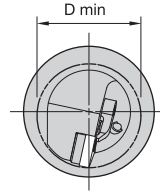
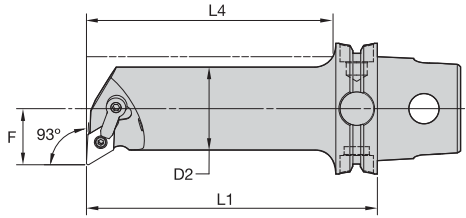
(MCLN 95° continued)

■ Spare Parts

catalog number	 shim	 lock pin	 clamp	 clamp screw
right hand				
KM50TSS25DMCLNR12	—	KLM43	CKM20LP	STCM11
KM50TSS25EMCLNR12	—	KLM43	CKM20LP	STCM11
KM50TSS25JMCLNR12	—	KLM43	CKM20LP	STCM11
KM50TSS32FMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32KMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40HMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40JMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNR16	ICSN533	KLM58	CKM20LP	STCM11
KM50TSS50LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
left hand				
KM50TSS25DMCLNL12	—	KLM43	CKM20LP	STCM11
KM50TSS25EMCLNL12	—	KLM43	CKM20LP	STCM11
KM50TSS25JMCLNL12	—	KLM43	CKM20LP	STCM11
KM50TSS32FMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32KMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40HMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40JMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNL16	ICSN533	KLM58	CKM20LP	STCM11
KM50TSS50LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11

KM50TS™ Internal Cutting Units

M-Clamping



KM50TS Internal Cutting Units





■ MDUN 93°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3753598	KM50TSS25DMDUNR15	25	.98	32	1.26	17	.669	38	1.51	60	2.362	DN..150408/DN..432	0,47	1.03
3753601	KM50TSS25JMDUNR15	25	.98	32	1.26	17	.669	87	3.43	110	4.331	DN..150408/DN..432	0,66	1.46
3753603	KM50TSS32FMDUNR15	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	DN..150408/DN..432	0,66	1.46
3753605	KM50TSS32GMDUNR15	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	DN..150408/DN..432	0,72	1.59
3753607	KM50TSS32KMDUNR15	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	DN..150408/DN..432	0,99	2.18
3753485	KM50TSS40HMDUNR15	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	DN..150408/DN..432	1,03	2.27
3753490	KM50TSS40JMDUNR15	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	DN..150408/DN..432	1,13	2.49
3753493	KM50TSS40LMDUNR15	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	DN..150408/DN..432	1,42	3.12
left hand														
3753597	KM50TSS25DMDUNL15	25	.98	32	1.26	17	.669	38	1.51	60	2.362	DN..150408/DN..432	0,47	1.03
3753599	KM50TSS25EMDUNL15	25	.98	32	1.26	17	.669	48	1.90	70	2.756	DN..150408/DN..432	0,51	1.11
3753600	KM50TSS25JMDUNL15	25	.98	32	1.26	17	.669	87	3.43	110	4.331	DN..150408/DN..432	0,66	1.45
3753602	KM50TSS32FMDUNL15	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	DN..150408/DN..432	0,66	1.46
3753604	KM50TSS32GMDUNL15	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	DN..150408/DN..432	0,72	1.59
3753606	KM50TSS32KMDUNL15	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	DN..150408/DN..432	0,99	2.18
3753480	KM50TSS40HMDUNL15	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	DN..150408/DN..432	1,03	2.28
3753488	KM50TSS40JMDUNL15	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	DN..150408/DN..432	1,13	2.49
3753492	KM50TSS40LMDUNL15	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	DN..150408/DN..432	1,42	3.12

(continued)

(MDUN 93° continued)

■ Spare Parts

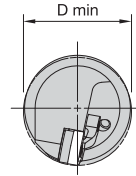
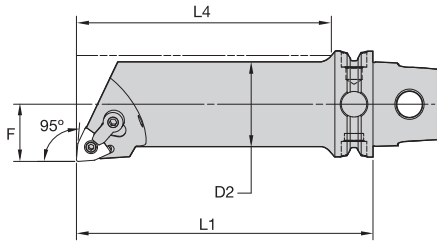
catalog number	 shim	 lock pin	 clamp	 clamp screw
right hand				
KM50TSS25DMDUNR15	—	KLM43	CKM20LP	STCM11
KM50TSS25JMDUNR15	—	KLM43	CKM20LP	STCM11
KM50TSS32FMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32KMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40HMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40JMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM50TSS25DMDUNL15	—	KLM43	CKM20LP	STCM11
KM50TSS25EMDUNL15	—	KLM43	CKM20LP	STCM11
KM50TSS25JMDUNL15	—	KLM43	CKM20LP	STCM11
KM50TSS32FMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32KMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40HMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40JMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11

KM50TS™ Internal Cutting Units

M-Clamping



KM50TS Internal Cutting Units



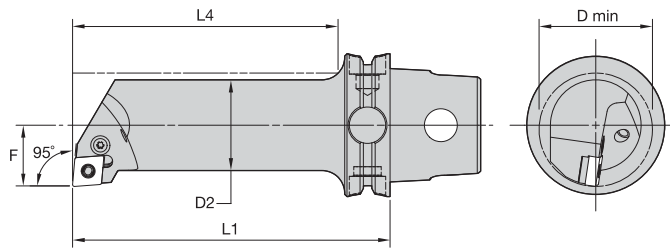
■ MWLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3747121	KM50TSS25JMWLNR08	25	.98	32	1.26	17	.669	87	3.43	110	4.331	WN..080408/WN..432	0,67	1.48
3747123	KM50TSS32KMWLNR08	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	WN..080408/WN..432	0,99	2.17
3747120	KM50TSS40LMWLNR08	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,40	3.08
left hand														
3747122	KM50TSS25JMWLNL08	25	.98	32	1.26	17	.669	87	3.43	110	4.331	WN..080408/WN..432	0,67	1.47
3747119	KM50TSS40LMWLNL08	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,40	3.08

■ Spare Parts








catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM50TSS25JMWLNR08	—	KLM43	CKM20LP	STCM11
KM50TSS32KMWLNR08	IWSN433	KLM46	CKM20LP	STCM11
KM50TSS40LMWLNR08	IWSN433	KLM46	CKM20LP	STCM11
left hand				
KM50TSS25JMWLNL08	—	KLM43	CKM20LP	STCM11
KM50TSS40LMWLNL08	IWSN433	KLM46	CKM20LP	STCM11



■ PCLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in				
right hand															
3789272	KM50TSS25JPCLNR12	25	.98	32	1.26	17	.669	88	3.48	110	4.331	CN..120408/CN..432	0,66	1.46	
3789294	KM50TSS32KPCLNR12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	0,99	2.17	
left hand															
3789270	KM50TSS25GPCLNL12	25	.98	32	1.26	17	.669	70	2.77	90	3.543	CN..120408/CN..432	0,57	1.26	
3789271	KM50TSS25JPCLNL12	25	.98	32	1.26	17	.669	88	3.48	110	4.331	CN..120408/CN..432	0,66	1.46	
3789293	KM50TSS32KPCLNL12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	0,99	2.17	

■ Spare Parts

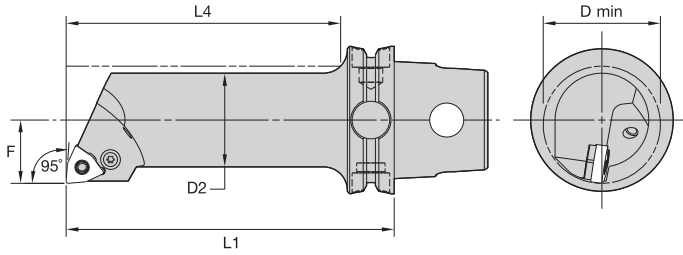
catalog number	    				
	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM50TSS25JPCLNR12	—	514.122	—	511.022	515.018
KM50TSS32KPCLNR12	512.112	514.123	513.023	511.023	515.018
left hand					
KM50TSS25GPCLNL12	—	514.122	—	511.022	515.018
KM50TSS25JPCLNL12	—	514.122	—	511.022	515.018
KM50TSS32KPCLNL12	512.112	514.123	513.023	511.023	515.018

KM50TS™ Internal Cutting Units

P-Clamping



KM50TS Internal Cutting Units



■ PWLN 95°

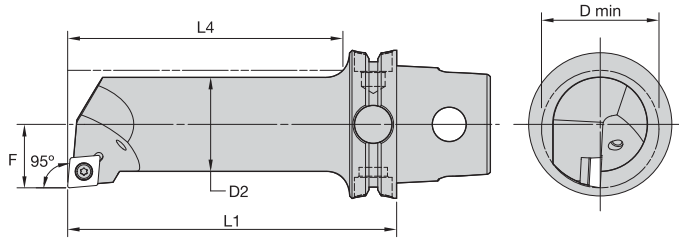
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in			
3789296	right hand	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,39	3.07
	KM50TSS40LPWLN R08													
3789295	left hand	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,39	3.07
	KM50TSS40LPWLN L08													

■ Spare Parts

catalog number					
	shim	lever lock screw	shim pin	toggle lever	punch
right hand KM50TSS40LPWLN R08	512.135	514.123	513.023	511.023	515.018
left hand KM50TSS40LPWLN L08	512.135	514.123	513.023	511.023	515.018






KM50TS Internal Cutting Units



■ SCLC 95°

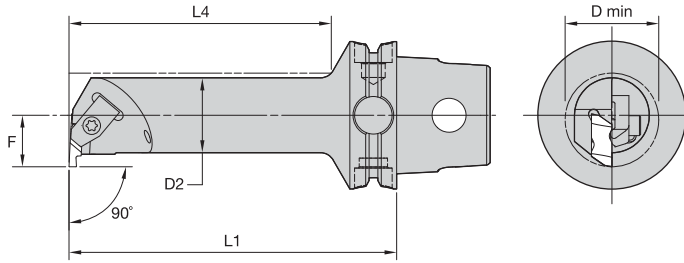
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in			
3838715	KM50TSS32GSCLCL12	32	1.26	40	1.57	22	.866	70	2.756	90	3.543	CC..120408/CC..432	0,72	1.58

■ Spare Parts

catalog number	 insert screw	 shim	 shim screw
left hand KM50TSS32GSCLCL12	MS1158	SKCP453	SRS4

KM50TS™ Internal Cutting Units

TopThread™ and TopGroove™



KM50TS Internal Cutting Units

■ NE 90° • Steel

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3790585	KM50TSS12ENER2	12	.47	19	.73	11	.433	42	1.654	70	2.756	NG2L	0,44	.97
3790583	KM50TSS16FNER2	16	.63	20	.79	11	.433	56	2.211	80	3.150	NG2L	0,44	.97
3790587	KM50TSS20HNER2	20	.79	25	.98	13	.512	70	2.769	100	3.937	NG2L	0,58	1.28
3790589	KM50TSS25JNER3	25	.98	34	1.34	17	.669	88	3.469	110	4.331	NG3L	0,67	1.48
3790591	KM50TSS32GNER3	32	1.26	40	1.57	22	.866	70	2.774	90	3.543	NG3L	0,71	1.57
3790593	KM50TSS32KNER3	32	1.26	40	1.57	22	.866	96	3.790	125	4.921	NG3L	0,97	2.14
3790595	KM50TSS40JNER4	40	1.57	50	1.97	27	1.063	91	3.593	110	4.331	NG4L	1,09	2.41
3790599	KM50TSS40LNER4	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG4L	1,39	3.06
3790598	KM50TSS40LNER3	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG3L	1,40	3.09
left hand														
3790584	KM50TSS12ENEL2	12	.47	19	.73	11	.433	42	1.654	70	2.756	NG2R	0,44	.97
3790291	KM50TSS16FNEL2	16	.63	20	.79	11	.433	56	2.211	80	3.150	NG2R	0,44	.97
3790586	KM50TSS20HNEL2	20	.79	25	.98	13	.512	70	2.769	100	3.937	NG2R	0,58	1.28
3790588	KM50TSS25JNEL3	25	.98	34	1.34	17	.669	88	3.469	110	4.331	NG3R	0,67	1.48
3790590	KM50TSS32GNEL3	32	1.26	40	1.57	22	.866	70	2.774	90	3.543	NG3R	0,71	1.57
3790592	KM50TSS32KNEL3	32	1.26	40	1.57	22	.866	96	3.790	125	4.921	NG3R	0,97	2.14
3790594	KM50TSS40JNEL4	40	1.57	50	1.97	27	1.063	91	3.593	110	4.331	NG4R	1,09	2.41
3790596	KM50TSS40LNEL3	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG3R	1,40	3.09
3790597	KM50TSS40LNEL4	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG4R	1,39	3.06

(continued)

(NE 90° • Steel continued)

■ Spare Parts



catalog number	clamp	clamp screw
right hand		
KM50TSS12ENER2	CM147	MS1488
KM50TSS16FNER2	CM147	MS1488
KM50TSS20HNER2	CM75	MS1488
KM50TSS25JNER3	CM73	MS1489
KM50TSS32GNER3	CM73	MS1489
KM50TSS32KNER3	CM73	MS1489
KM50TSS40JNER4	CM73	MS1489
KM50TSS40LNER3	CM73	MS1489
KM50TSS40LNER4	CM73	MS1489
left hand		
KM50TSS12ENEL2	CM146	MS1488
KM50TSS16FNEL2	CM146	MS1488
KM50TSS20HNEL2	CM74	MS1488
KM50TSS25JNEL3	CM72	MS1489
KM50TSS32GNEL3	CM72	MS1489
KM50TSS32KNEL3	CM72	MS1489
KM50TSS40JNEL4	CM72	MS1489
KM50TSS40LNEL3	CM72	MS1489
KM50TSS40LNEL4	CM72	MS1489

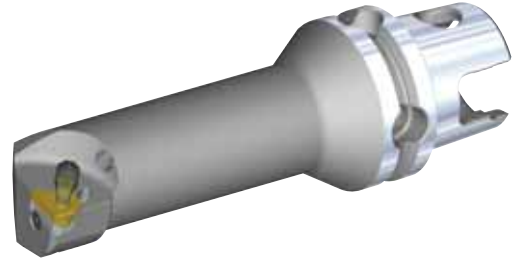
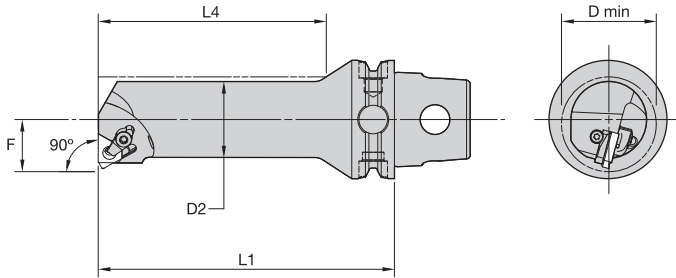
KM50TS Internal Cutting Units

KM50TS™ Internal Cutting Units

Laydown Threading



KM50TS Internal Cutting Units



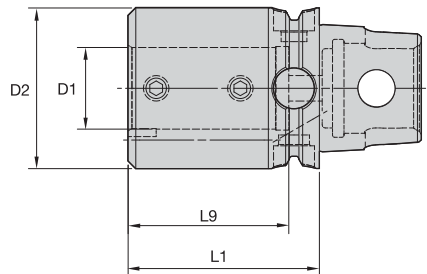
■ LSE 90°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
3838705	KM50TSS20HLSER16	20	.79	25	.98	13	.512	70	2.77	100	3.937	LT16NR	0,57	1.27
3838724	KM50TSS25JLSER16	25	.98	32	1.26	17	.669	88	3.48	110	4.331	LT16NR	0,68	1.49
3838709	KM50TSS32KLSER16	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	LT16NR	1,01	2.24
3838710	KM50TSS40LLSER16	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT16NR	1,46	3.21
3838711	KM50TSS40LLSER22	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT22NR	1,45	3.21
left hand														
3964139	KM50TSS20HLSSEL16	20	.79	25	.98	13	.512	70	2.77	100	3.937	LT16NL	0,58	1.27
3838706	KM50TSS25JLSSEL16	25	.98	32	1.26	17	.669	88	3.48	110	4.331	LT16NL	0,68	1.49
3838708	KM50TSS32KLSSEL16	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	LT16NL	1,01	2.24
3964141	KM50TSS40LLSEL22	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT22NL	1,45	3.21
3964140	KM50TSS40LLSEL16	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT16NL	1,46	3.21

■ Spare Parts

catalog number	insert screw	shim	shim screw	clamp assembly
right hand				
KM50TSS20HLSER16	SSA3T	SMY13	SSY3T	CKC3
KM50TSS25JLSER16	SSA3T	SMY13	SSY3T	CKC3
KM50TSS32KLSER16	SSA3T	SMY13	SSY3T	CKC3
KM50TSS40LLSER16	SSA3T	SMY13	SSY3T	CKC3
KM50TSS40LLSER22	SSA4T	SMY14	SSY4T	CKC4
left hand				
KM50TSS20HLSSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM50TSS25JLSSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM50TSS32KLSSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM50TSS40LLSEL16	SSA3T	SMYE3	SSY3T	CKC3
KM50TSS40LLSEL22	SSA4T	SMYE4	SSY4T	CKC4

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.


■ BA • Boring Bar Adapter • Internal and External Coolant • Metric


order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3790547	KM50TSBA06045M	6	40	45	36	MS1210	2,5mm	4	0,59
3790548	KM50TSBA08045M	8	40	45	36	MS1210	2,5mm	4	0,58
3790549	KM50TSBA10055M	10	40	55	48	MS1211	4mm	15	0,67
3790550	KM50TSBA12060M	12	40	60	52	MS1211	4mm	15	0,70
3790551	KM50TSBA16065M	16	40	65	55	MS1211	4mm	15	0,70
3790552	KM50TSBA20070M	20	40	70	58	MS1212	5mm	25	0,70
3790573	KM50TSBA25070M	25	50	70	56	MS1212	5mm	25	0,90

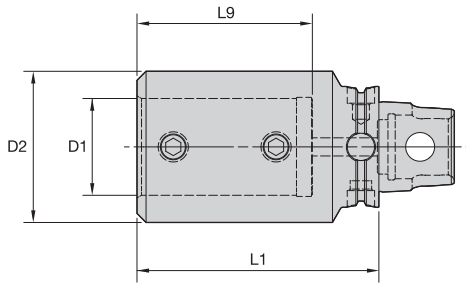
■ BA • Boring Bar Adapter • Internal and External Coolant • Inch


order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3789937	KM50TSBA06217	3/8	1.57	2.165	1.89	S843	1/8	3	1.47
3789938	KM50TSBA08236	1/2	1.57	2.362	2.05	S852	5/32	8	1.53
3789939	KM50TSBA10256	5/8	1.57	2.559	2.17	S862	3/16	11	1.55
3789940	KM50TSBA12276	3/4	1.57	2.756	2.28	S862	3/16	11	1.57
3789941	KM50TSBA16276	1	1.97	2.756	2.20	S862	3/16	11	1.97

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.

KM50TS™ Shank Tools

Boring Bar Adapters



KM50TS Shank Tools



■ BAI • Boring Bar Adapter • Internal Coolant Only • Metric



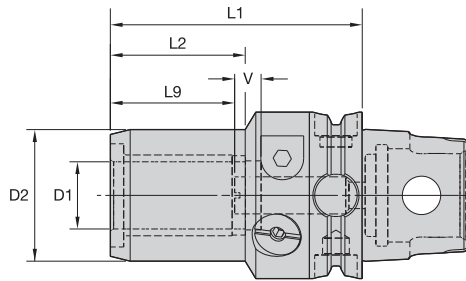
order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3790289	KM50TSBAI32080M	32	50	80	58	MS1213	5mm	25	0,91
3790290	KM50TSBAI40090M	40	58	90	68	MS1213	5mm	25	1,13

■ BAI • Boring Bar Adapter • Internal Coolant Only • Inch



order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3790287	KM50TSBAI20315	1 1/4	1.97	3.150	2.28	S861	3/16	11	2.01
3790288	KM50TSBAI24354	1 1/2	2.28	3.543	2.68	S861	3/16	11	2.62

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.



KM50TS Shank Tools



■ HC • Metric

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
4007723	KM50TSHC06065M	6	26	65	30	27	10	170.135	5mm	170.002	2,5mm	0,63
4007724	KM50TSHC08065M	8	28	65	30	27	10	170.135	5mm	170.002	2,5mm	0,65
4007725	KM50TSHC10070M	10	30	70	36	31	10	170.135	5mm	170.002	2,5mm	0,69
4007726	KM50TSHC12075M	12	32	75	40	36	10	170.135	5mm	170.002	2,5mm	0,73
4007727	KM50TSHC14075M	14	34	75	43	36	10	170.135	5mm	170.003	3mm	0,72
4007728	KM50TSHC16080M	16	38	80	47	39	10	170.135	5mm	170.003	3mm	0,83
4007729	KM50TSHC18080M	18	40	80	47	39	10	170.135	5mm	170.003	3mm	0,85
4007730	KM50TSHC20085M	20	42	85	48	71	10	170.135	5mm	170.003	3mm	0,94

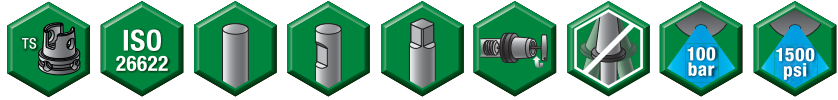
NOTE: Do not overtorque clamp screw; tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.
Wrenches must be ordered separately.

KM50TS™ Shank Tools

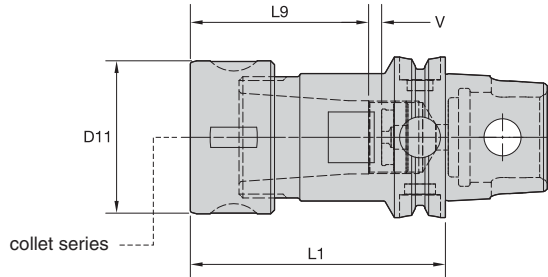
TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



KM50TS Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3790601	KM50TSTG075080M	TG75	50	1.97	80	3.150	53	2.09	10	.39	0,95	2.09
3790602	KM50TSTG100110M	TG100	60	2.36	110	4.331	69	2.72	10	.39	1,40	3.09

■ Spare Parts

catalog number	locknut	wrench	Nm		ft. lbs.		stop screw	wrench size stop screw
KM50TSTG075080M	LNA075M	HSW45M	108 - 136	80 - 100	SS081041G	4mm & 5/32		
KM50TSTG100110M	LNA100M	HSW58M	163 - 203	120 - 150	SS112041G	4mm & 5/32		

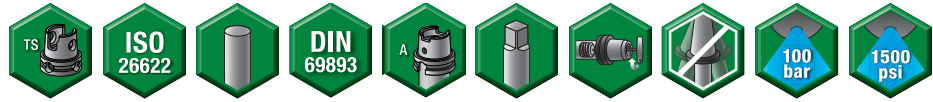
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KM50TS™ Shank Tools

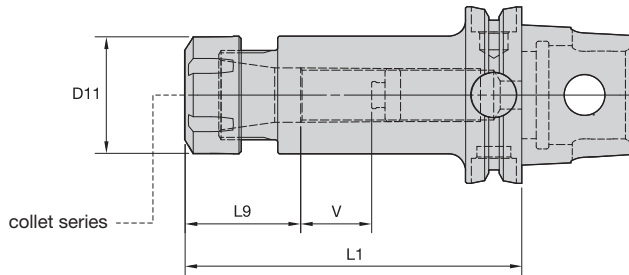
ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



KM50TS Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER25	1,0	16,0	.04	.63
ER32	1,0	20,0	.08	.81
ER40	3,0	26,0	.08	1.00

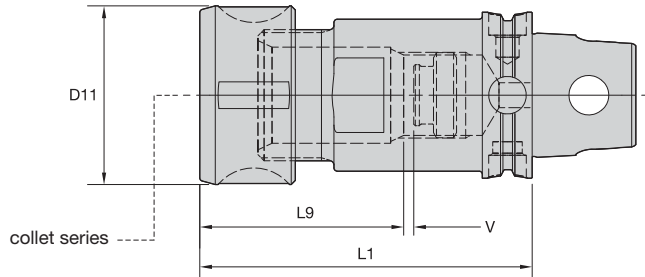
■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	Nm	ft. lbs.	kg	lbs
			mm	in	mm	in	mm	in	mm	in						
3795029	KM50TSER25050M	ER25	42	1.65	50	1.969	41,2	1.62	—	—	LNSER25M	ER25WM	104	77	0,47	1.03
3795030	KM50TSER32060M	ER32	50	1.97	60	2.362	47,3	1.86	—	—	LNSER32M	ER32WM	136	100	0,62	1.36
3795031	KM50TSER40070M	ER40	63	2.48	70	2.756	53,3	2.10	—	—	LNSER40M	ER40WM	176	130	0,88	1.94



NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.

- Grip 1:1.



KM50TS Shank Tools



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0.2	10,0	1/64	25/64
DA180	2.2	20,0	1/64	3/4

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3789365	KM50TSDA208060M	DA200	28	1.10	60	2.362	35	1.38	8	.32	0,48	1.05
3789364	KM50TSDA188075M	DA180	43	1.69	75	2.953	49	1.93	5	.20	0,69	1.52

■ Spare Parts



catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSDA208060M	LNA208RM	—	32-40	45-55	SS038031G	2mm & 5/64
KM50TSDA188075M	LNA188M	HSW45M	60-75	80-100	SS081041G	4mm & 5/32

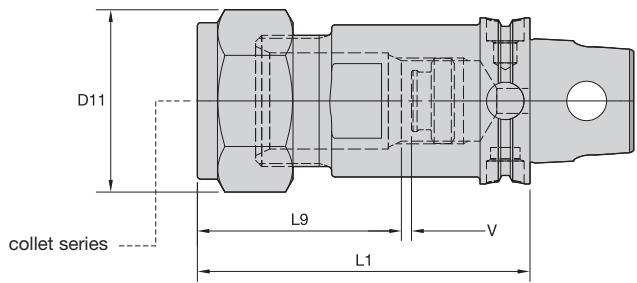
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KM50TS™ Shank Tools

DA Double-Angle Collet Chucks



(Collet Chuck continued)



KM50TS Shank Tools



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10,0	1/64	25/64
DA180	2,2	20,0	1/64	3/4

■ Collet Chuck • Hex Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3789365	KM50TSDA208060M	DA200	28	1.10	60	2.362	35	1.38	8	.32	0,48	1.05
3789364	KM50TSDA188075M	DA180	43	1.69	75	2.953	49	1.93	5	.20	0,69	1.52

■ Spare Parts



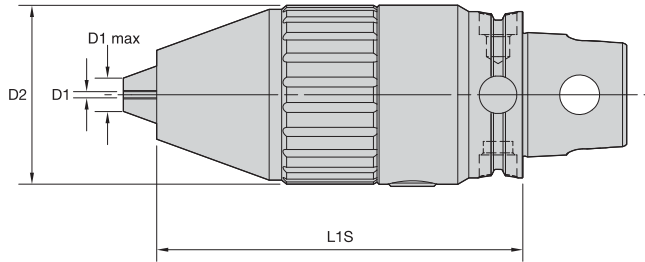
catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSDA188075M	—	—	60-75	80-100	SS081041G	4mm & 5/32
KM50TSDA208060M	—	—	32-40	45-55	SS038031G	2mm & 5/64

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

- Activation size is 6mm.
- Activation wrench included.
- Wrench reorder number is 170.136.

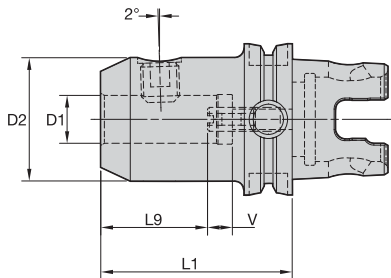
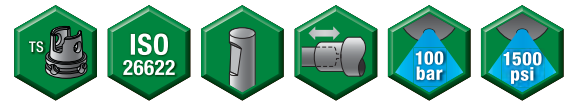


KM50TS Shank Tools



■ RDC • Drill Chuck

order number	catalog number	D1		D1 max		D2		L1S	
		mm	in	mm	in	mm	in	mm	in
4053779	KM50TSRDC16106M	3	.098	16	.630	56	2.205	106,0	4.055



■ WN • Whistle Notch Adapter



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg	lbs
3795102	KM50TSWN06065M	6	25	65	30	10	SS03M012	3mm	7	571.060	2,5mm	0,49	1.07
3795103	KM50TSWN08065M	8	28	65	30	10	SS03M014	4mm	15	571.067	3mm	0,53	1.16
3795104	KM50TSWN10070M	10	35	70	35	10	SS03M018	5mm	25	571.068	4mm	0,66	1.46
3795105	KM50TSWN12080M	12	42	80	40	10	SS03M023	6mm	35	571.074	5mm	0,91	2.00
3795106	KM50TSWN14080M	14	44	80	40	10	SS03M023	6mm	35	571.074	5mm	0,95	2.10
3795107	KM50TSWN16085M	16	48	85	43	10	SS03M025	6mm	50	571.075	6mm	1,13	2.49
3795108	KM50TSWN18085M	18	50	85	43	10	SS03M025	6mm	50	571.075	6mm	1,18	2.61
3795109	KM50TSWN20095M	20	52	95	45	10	SS03M026	8mm	95	571.076	6mm	1,69	3.05
3795110	KM50TSWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.077	6mm	2,06	4.53
3795111	KM50TSWN32105M	32	72	105	54	10	SS03M029	10mm	160	571.077	6mm	2,50	5.51

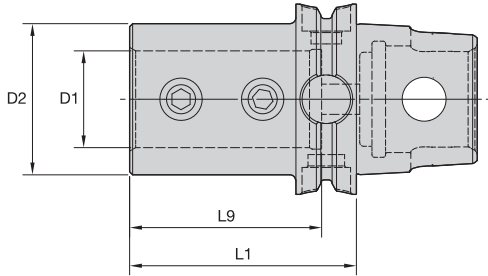
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.

KM50TS™ Shank Tools

Top Cut Plus™ Adapters



KM50TS Shank Tools



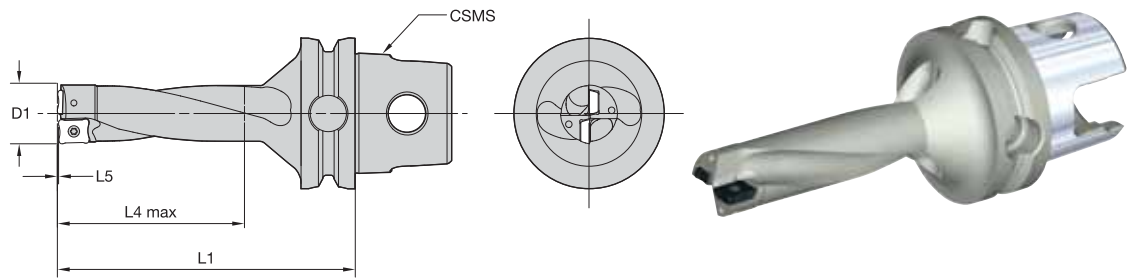
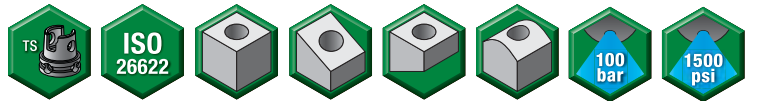
■ DAT • Metric



order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3904056	KM50TSDAT25075M	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	0,80
3904057	KM50TSDAT32080M	32	50	80	64	12166903700	6mm	40	12166903900	6mm	40	0,87

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamping screw.
 Clamp screw wrench is not included.
 Cone point screw to be tightened first.

- Drill shipped with insert screws and Torx wrench.


KM50TS Shank Tools
■ TCD • 3 x D • Metric


order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3895660	KM50TSTCD110R3M	KM50TS	11,0	63,0	33,0	0,22	LPGX06T103	12146011800	12146010000	T5
3895661	KM50TSTCD120R3M	KM50TS	12,0	66,0	36,0	0,06	LPGX06T103	12146011800	12146010000	T5
3895662	KM50TSTCD130R3M	KM50TS	13,0	69,0	39,0	0,08	LPGX06T103	12146011800	12146010000	T5
3895663	KM50TSTCD140R3M	KM50TS	14,0	72,0	42,0	0,07	LPGX07T204	12146012500	12147549000	T7
3895664	KM50TSTCD150R3M	KM50TS	15,0	75,0	45,0	0,05	LPGX07T204	12146012500	12147549000	T7
3895665	KM50TSTCD160R3M	KM50TS	16,0	78,0	48,0	0,18	LPGX07T204	12146012500	12147549000	T7
3895666	KM50TSTCD170R3M	KM50TS	17,0	83,0	51,0	0,31	LPGX07T204	12146012500	12147549000	T7
3895667	KM50TSTCD180R3M	KM50TS	18,0	86,0	54,0	0,31	LPGX07T204	12146012500	12147549000	T7
3895668	KM50TSTCD190R3M	KM50TS	19,0	89,0	57,0	0,06	LPGX100308	12148068700	12148086600	T8
3895669	KM50TSTCD200R3M	KM50TS	20,0	92,0	60,0	0,10	LPGX100308	12148068700	12148086600	T8
3895670	KM50TSTCD210R3M	KM50TS	21,0	97,0	63,0	0,28	LPGX100308	12148068700	12148086600	T8
3895671	KM50TSTCD220R3M	KM50TS	22,0	100,0	66,0	0,28	LPGX100308	12148068700	12148086600	T8
3895672	KM50TSTCD230R3M	KM50TS	23,0	103,0	69,0	0,45	LPGX100308	12148068700	12148086600	T8
3895693	KM50TSTCD240R3M	KM50TS	24,0	106,0	72,0	0,45	LPGX100308	12148068700	12148086600	T8
3895694	KM50TSTCD250R3M	KM50TS	25,0	110,0	75,0	0,45	LPGX100308	12148068700	12148086600	T8

■ TCD • 3 x D • Inch


order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898355	KM50TSTCD0438R3	KM50TS	.438	2.375	1.314	.009	LPGX06T103	12146011800	12146010000	T5
3898356	KM50TSTCD0469R3	KM50TS	.469	2.500	1.407	.009	LPGX06T103	12146011800	12146010000	T5
3898357	KM50TSTCD0500R3	KM50TS	.500	2.625	1.500	.002	LPGX06T103	12146011800	12146010000	T5
3898358	KM50TSTCD0531R3	KM50TS	.531	2.750	1.593	.003	LPGX06T103	12146011800	12146010000	T5
3898359	KM50TSTCD0563R3	KM50TS	.563	2.875	1.689	.003	LPGX07T204	12146012500	12147549000	T7
3898360	KM50TSTCD0594R3	KM50TS	.594	3.000	1.782	.002	LPGX07T204	12146012500	12147549000	T7
3898361	KM50TSTCD0625R3	KM50TS	.625	3.125	1.875	.002	LPGX07T204	12146012500	12147549000	T7
3898362	KM50TSTCD0656R3	KM50TS	.656	3.250	1.968	.007	LPGX07T204	12146012500	12147549000	T7
3898363	KM50TSTCD0688R3	KM50TS	.688	3.375	2.064	.012	LPGX07T204	12146012500	12147549000	T7
3898364	KM50TSTCD0719R3	KM50TS	.719	3.500	2.157	.012	LPGX07T204	12146012500	12147549000	T7
3898365	KM50TSTCD0750R3	KM50TS	.750	3.625	2.250	.002	LPGX100308	12148068700	12148086600	T8
3898366	KM50TSTCD0813R3	KM50TS	.813	3.750	2.439	.004	LPGX100308	12148068700	12148086600	T8
3898367	KM50TSTCD0875R3	KM50TS	.875	4.000	2.625	.011	LPGX100308	12148068700	12148086600	T8
3898368	KM50TSTCD0938R3	KM50TS	.938	4.250	2.814	.018	LPGX100308	12148068700	12148086600	T8
3898369	KM50TSTCD1000R3	KM50TS	1.000	4.500	3.000	.018	LPGX100308	12148068700	12148086600	T8



WARNING

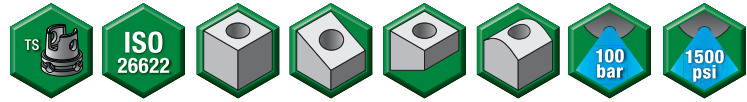
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM50TS™ Shank Tools

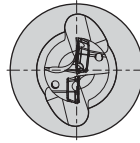
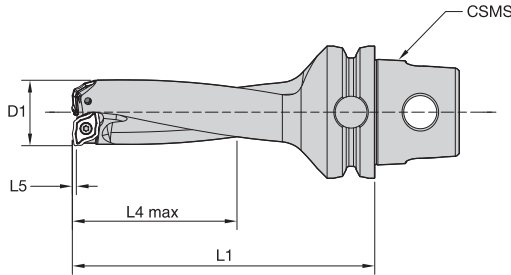
Top Cut Plus™ Drill 3 x D



- Drill shipped with insert screws and Torx wrench.



KM50TS Shank Tools



■ TCP • 3 x D • Metric



order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898290	KM50TSTCP250R3M	KM50TS	25,0	112,0	75,0	0,80	XOMT070304	12148080000	12148086600	T8
3898291	KM50TSTCP260R3M	KM50TS	26,0	116,0	78,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898292	KM50TSTCP270R3M	KM50TS	27,0	120,0	81,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898383	KM50TSTCP280R3M	KM50TS	28,0	123,0	84,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898384	KM50TSTCP290R3M	KM50TS	29,0	127,0	87,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898385	KM50TSTCP300R3M	KM50TS	30,0	131,0	90,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898386	KM50TSTCP310R3M	KM50TS	31,0	135,0	93,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898387	KM50TSTCP320R3M	KM50TS	32,0	138,0	96,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898388	KM50TSTCP330R3M	KM50TS	33,0	142,0	99,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898389	KM50TSTCP340R3M	KM50TS	34,0	146,0	102,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898390	KM50TSTCP350R3M	KM50TS	35,0	150,0	105,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898391	KM50TSTCP360R3M	KM50TS	36,0	153,0	108,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898392	KM50TSTCP370R3M	KM50TS	37,0	157,0	111,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898393	KM50TSTCP380R3M	KM50TS	38,0	160,0	114,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898394	KM50TSTCP390R3M	KM50TS	39,0	165,0	117,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898395	KM50TSTCP400R3M	KM50TS	40,0	168,0	120,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898396	KM50TSTCP410R3M	KM50TS	41,0	172,0	123,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898397	KM50TSTCP420R3M	KM50TS	42,0	176,0	126,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898398	KM50TSTCP430R3M	KM50TS	43,0	180,0	129,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898399	KM50TSTCP440R3M	KM50TS	44,0	183,0	132,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898400	KM50TSTCP450R3M	KM50TS	45,0	187,0	135,0	0,96	XOMT12T308	12148055800	12148082400	T15

(continued)

(TCP • 3 x D continued)

■ TCP • 3 x D • Inch


order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898374	KM50TSTCP1000R3	KM50TS	1.000	4.500	3.000	.032	XOMT070304	12148080000	12148086600	T8
3898375	KM50TSTCP1125R3	KM50TS	1.125	5.000	3.375	.028	XOMT09T306	12148067200	12148086600	T8
3898376	KM50TSTCP1250R3	KM50TS	1.250	5.500	3.750	.028	XOMT09T306	12148067200	12148086600	T8
3898377	KM50TSTCP1313R3	KM50TS	1.313	5.750	3.939	.028	XOMT09T306	12148067200	12148086600	T8
3898378	KM50TSTCP1375R3	KM50TS	1.375	5.875	4.125	.028	XOMT09T306	12148067200	12148086600	T8
3898379	KM50TSTCP1438R3	KM50TS	1.438	6.125	4.314	.038	XOMT12T308	12148055800	12148082400	T15
3898380	KM50TSTCP1500R3	KM50TS	1.500	6.375	4.500	.038	XOMT12T308	12148055800	12148082400	T15
3898381	KM50TSTCP1563R3	KM50TS	1.563	6.625	4.689	.038	XOMT12T308	12148055800	12148082400	T15
3898382	KM50TSTCP1625R3	KM50TS	1.625	6.875	4.875	.038	XOMT12T308	12148055800	12148082400	T15
3898443	KM50TSTCP1688R3	KM50TS	1.688	7.125	5.064	.038	XOMT12T308	12148055800	12148082400	T15
3898444	KM50TSTCP1750R3	KM50TS	1.750	7.375	5.250	.038	XOMT12T308	12148055800	12148082400	T15


WARNING

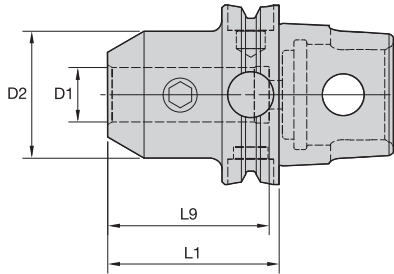
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM50TS™ Shank Tools

EM End Mill Adapters



KM50TS Shank Tools



EM • Metric



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3812617	KM50TSEM10050M	10	35	50	45	SS03M018	5mm	25	0,53
3812618	KM50TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,65
3812619	KM50TSEM16060M	16	48	60	53	SS03M025	6mm	50	0,79
3812620	KM50TSEM20060M	20	52	60	55	SS03M026	8mm	95	0,84
3812621	KM50TSEM25080M	25	65	80	60	SS03M027	10mm	135	1,59
3812622	KM50TSEM32085M	32	72	85	65	SS03M029	10mm	160	1,94

EM • Inch

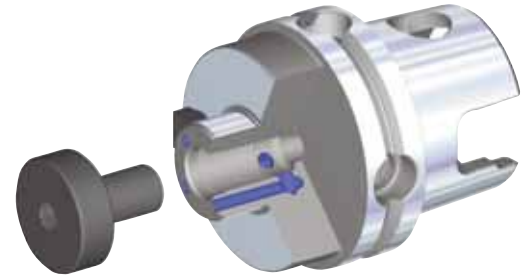
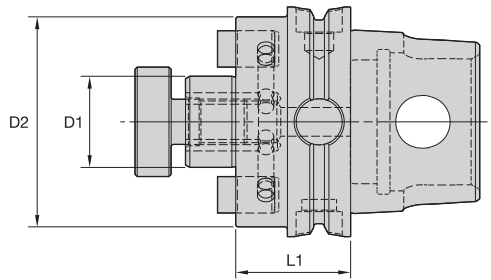


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3812635	KM50TSEM038197	3/8	1.00	1.969	1.73	ELS038031PKG	3/16	15	.95
3812636	KM50TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.16
3812637	KM50TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	1.43
3812638	KM50TSEM075236	3/4	1.75	2.362	2.22	ELS062050PKG	5/16	70	1.48
3812639	KM50TSEM100335	1	2.00	3.347	2.56	ELS075056PKG	3/8	110	2.38
3812640	KM50TSEM125335	1 1/4	2.50	3.347	2.51	ELS075056PKG	3/8	110	3.31

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.



KM50TS Shank Tools



■ SMC • Metric



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950842	KM50TSSMC22028M	22	49	28	MS1234	KDK22M	8mm	0,54
3950913	KM50TSSMC27032M	27	60	32	KLSS27M	KDK27M	10mm	0,77
3950914	KM50TSSMC32040M	32	78	40	KLSS32M	KDK32M	14mm	1,30

■ SMC/SM2C-KM • Inch



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950836	KM50TSSMC050102	1/2	1.44	1.024	KLS05	KDK04	3/16	.92
3950838	KM50TSSM2C075102	3/4	1.46	1.024	KLS07	—	1/4	1.02
3950837	KM50TSSMC075102	3/4	1.75	1.024	KLS07	KDK05	3/16	1.08
3950840	KM50TSSM2C100126	1	2.19	1.260	KLS10	KDK06	5/16	1.53
3950839	KM50TSSMC100126	1	2.75	1.260	KLS10	KDK06	5/16	1.81
3950841	KM50TSSMC125157	1 1/4	2.88	1.575	KLS12	KDK08	5/16	2.60

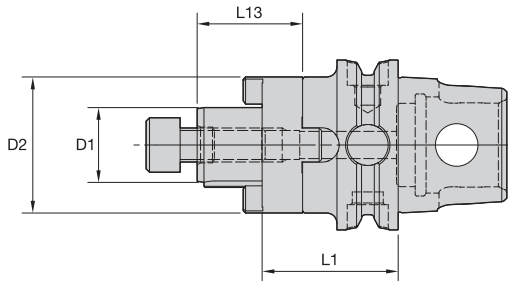
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.

KM50TS™ Shank Tools

CS Combi-Type Shell Mill Adapters



KM50TS Shank Tools



■ CS • Metric

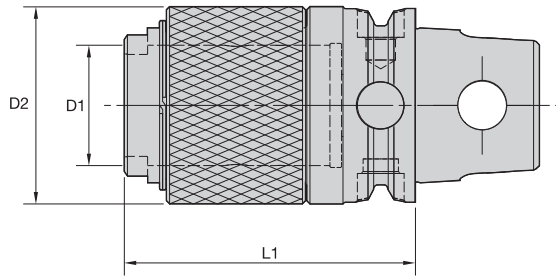


order number	catalog number	D1	D2	L1	L13	lock screw	lock screw	wrench size lock screw	combi driver	combi drive key	kg
3862017	KM50TSCS22040M	22	40	40	31	MS1234	—	8mm	CDR22M	CDK22M	0,61
3862018	KM50TSCS27042M	27	48	42	33	—	KLS27M	—	CDR27M	CDK27M	0,79
3862019	KM50TSCS32050M	32	58	50	38	—	KLS32M	—	CDR32M	CDK32M	1,19

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.



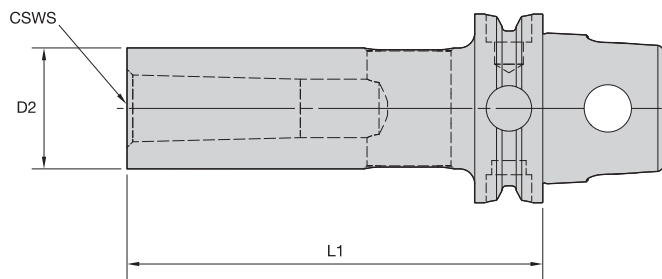
KM50TS Shank Tools



■ **ST • Solid Tap Chuck**

order number	catalog number	TQCS adapter size	D1		D2		L1		kg	lbs
			mm	in	mm	in	mm	in		
3964133	KM50TSST1050M	1	19	.749	35	1.375	50	1.971	0,48	1.06
3964134	KM50TSST2075M	2	31	1.222	51	2.000	75	2.955	0,89	1.95

NOTE: Quick-change tap adapters available and must be ordered separately; see page I76.



■ **MT • Morse Taper Adapter**

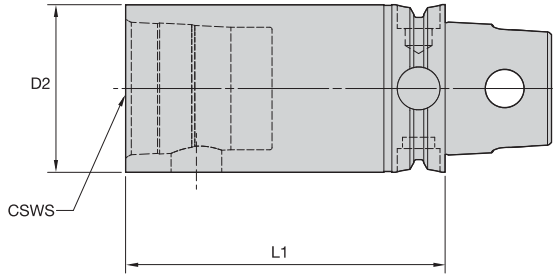
order number	catalog number	CSWS system size	D2		L1		kg	lbs
			mm	in	mm	in		
3862043	KM50TSMT1095M	1	25	.984	95	3.740	0,57	1.26
3862044	KM50TSMT2110M	2	32	1.260	110	4.331	0,77	1.70
3862045	KM50TSMT3130M	3	40	1.575	130	5.118	1,12	2.47
3862046	KM50TSMT4150M	4	48	1.890	150	5.906	1,54	3.40

KM50TS™ Shank Tools

KM™ Extensions • Reducers

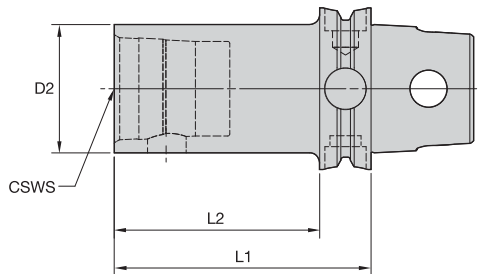


KM50TS Shank Tools



■ S • KM Extension

order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw	Nm ft. lbs.		spare parts package	kg lbs	
			mm	in	mm	in		Nm	ft. lbs.		kg	lbs
3862083	KM50TSS50070M	KM50	50	1.969	70	2.756	10mm	27-34	20-25	KM50PKG3S	0,92	2.03
3862084	KM50TSS50100M	KM50	50	1.969	100	3.937	10mm	27-34	20-25	KM50PKG3S	1,37	3.02



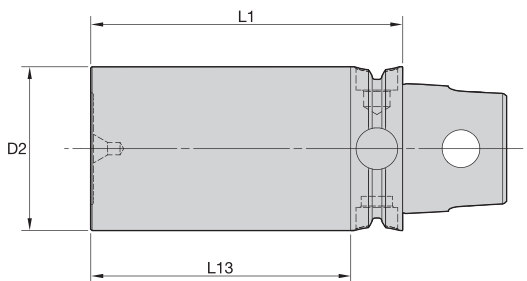
■ S • KM Reducer

order number	catalog number	CSWS system size	D2		L1		L2		wrench size actuation screw	Nm ft. lbs.		spare parts package	kg lbs	
			mm	in	mm	in	mm	in		Nm	ft. lbs.		kg	lbs
3862071	KM50TSS32070M	KM32	32	1.260	70	2.756	52	2.047	5mm	8-11	6-8	KM32PKG3S	0,61	1.34
3862072	KM50TSS40080M	KM40	40	1.575	80	3.150	62	2.441	6mm	12-16	9-12	KM40PKG3S	0,84	1.86



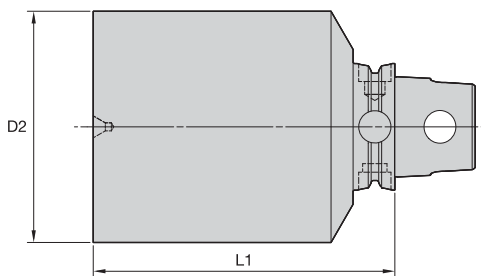


KM50TS Shank Tools



■ GB • Gage Bar

order number	catalog number	D2		L1		L13		kg	lbs
		mm	in	mm	in	mm	in		
3959978	KM50TSGB50100M	50	1.97	100	3.94	82	3.23	1,59	3.49

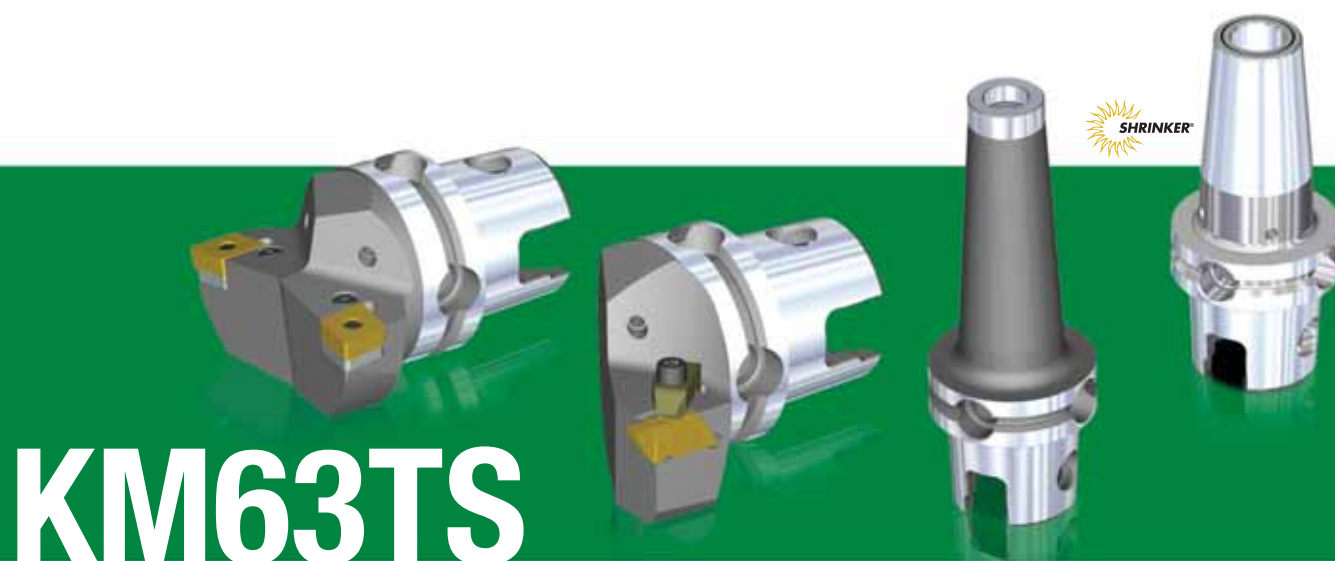


■ BN • Blank

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
3851267	KM50TSBN73135M	73	2.874	135	5.315	32-38 HRC	4,15	9.16
3851268	KM50TSBN75062M	75	2.953	62	2.441	32-38 HRC	1,84	4.06
3851266	KM50TSBN105062M	105	4.134	62	2.441	32-38 HRC	3,15	6.95

KM™ Quick Change Clamping System • **KM63TS™ Series**

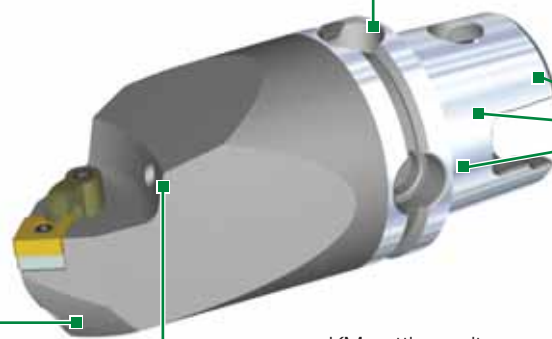
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM63TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.

KM manufactured from high-strength tool steel.



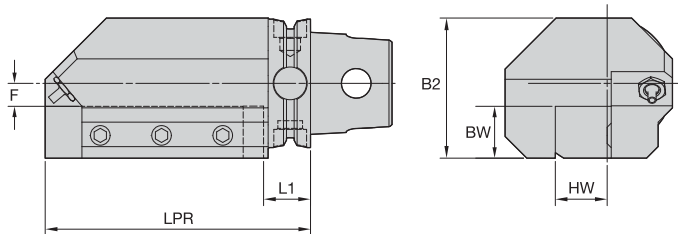
KM cutting units are equipped to use high-pressure coolant nozzles.

The KM flange is designed to provide ATC capability and to enable use of an RFID chip.

The KM System's superior rigidity is gained by the three points of contact the system develops when clamped.



KM63TS Adapters



■ STAR/L • Metric



order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	kg
	right hand								
2255545	KM63TSSTAR2525M	68	25	11	25	25	130	PMT04526 COOLANT NOZZLE SPRAY	3,83
	left hand								
2255544	KM63TSSTAL2525M	68	25	11	25	25	130	PMT04526 COOLANT NOZZLE SPRAY	3,83

■ STAR/L • Inch



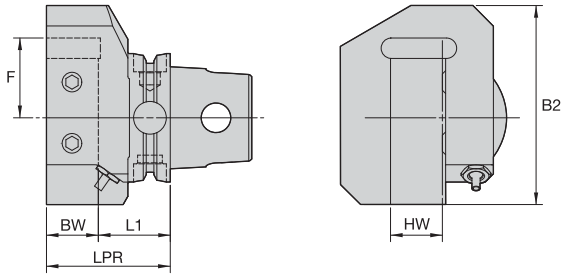
order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	lbs
	right hand								
2384740	KM63TSSTAR16	2.703	1.000	.443	1.000	.906	5.118	PMT04526 COOLANT NOZZLE SPRAY	8.46
	left hand								
2384741	KM63TSSTAL16	2.703	1.000	.443	1.000	.906	5.118	PMT04526 COOLANT NOZZLE SPRAY	8.46

KM63TS™ Adapters

ETAR/L Single Square Shank Adapters



KM63TS Adapters



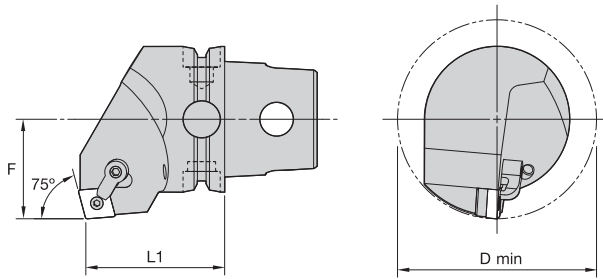
■ ETAR/L • Metric

order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	kg
	right hand								
2255547	KM63TSETAR2525M	98	25	37,5	25	35	60	PMT04526 COOLANT NOZZLE SPRAY	2,06
	left hand								
2255546	KM63TSETAL2525M	98	25	37,5	25	35	60	PMT04526 COOLANT NOZZLE SPRAY	2,06

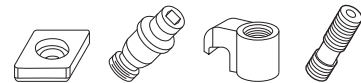
■ ETAR/L • Inch



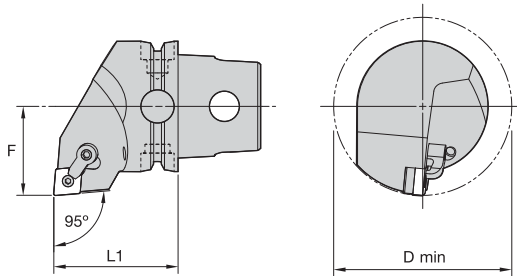
order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	lbs
	right hand								
2384742	KM63TSETAR16	3.839	1.000	1.539	1.000	1.388	2.388	PMT08420 COOLANT NOZZLE SPRAY	4.58
	left hand								
2384743	KM63TSETAL16	3.839	1.000	1.539	1.000	1.388	2.388	PMT08420 COOLANT NOZZLE SPRAY	4.58



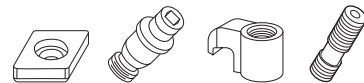
■ MCKN 75°



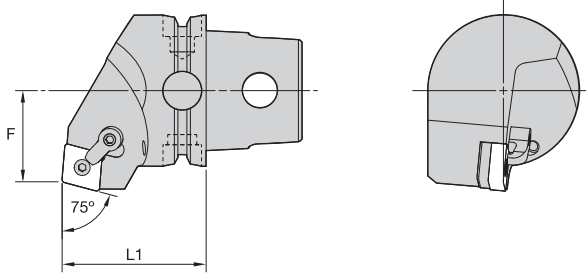
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2265024	KM63TSMCKNR12	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,28	2.83
2265026	KM63TSMCKNR16	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,34	2.95
2265028	KM63TSMCKNR19	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,34	2.95
left hand														
2265025	KM63TSMCKNL12	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,28	2.83
2265027	KM63TSMCKNL16	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,34	2.95
2265029	KM63TSMCKNL19	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,34	2.95



■ MCLN 95°



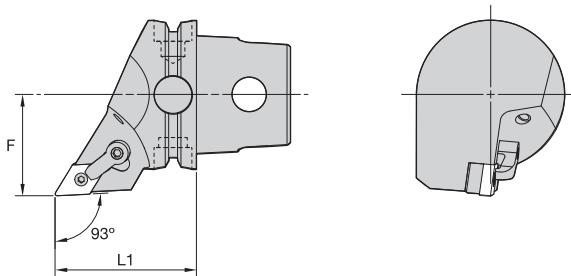
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2265030	KM63TSMCLNR12	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,19	2.62
2265032	KM63TSMCLNR16	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.62
2265274	KM63TSMCLNR19	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,18	2.61
left hand														
2265031	KM63TSMCLNL12	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,19	2.62
2265273	KM63TSMCLNL16	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.62
2265275	KM63TSMCLNL19	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,18	2.61



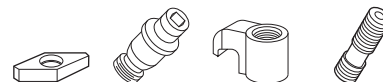
■ MCRN 75°



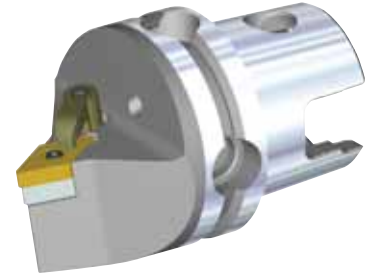
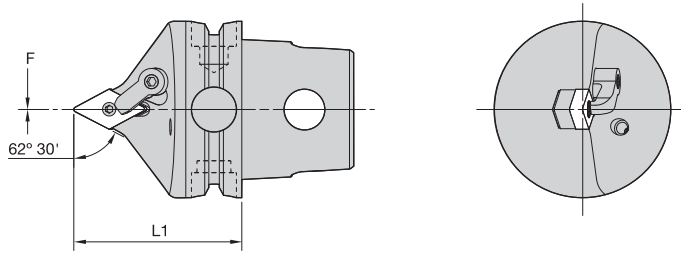
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
2265276	KM63TSMCRNR16	60	2.362	38	1.496	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.63
2265278	KM63TSMCRNR19	60	2.362	38	1.496	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,19	2.62
left hand												
2265277	KM63TSMCRNL16	60	2.362	38	1.496	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.63
2265279	KM63TSMCRNL19	60	2.362	38	1.496	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,19	2.62



■ MDJN 93°

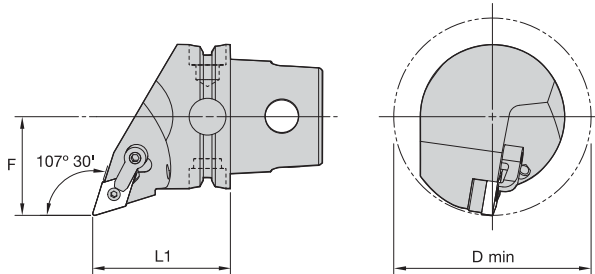


order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
2397712	KM63TSMDJNR1504	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,00	2.200
2265280	KM63TSMDJNR1506	60	2.362	43	1.693	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,99	2.190
left hand												
2397713	KM63TSMDJNL1504	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,00	2.200
2265281	KM63TSMDJNL1506	60	2.362	43	1.693	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,99	2.190



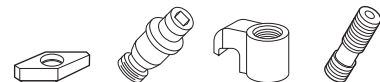
■ MDPN 62° 30'

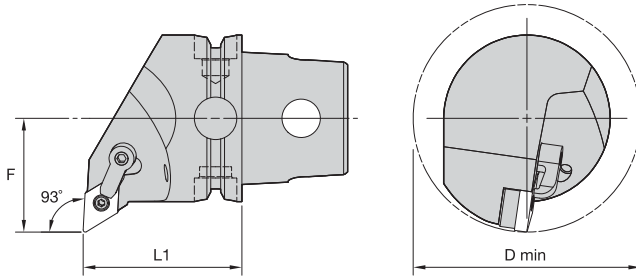
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
2397714	KM63TSMDPNN1504	60	2.362	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	0,92	2.02
2265282	KM63TSMDPNN1506	60	2.362	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,92	2.01



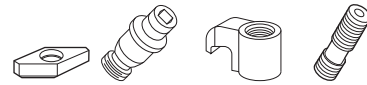
■ MDQN 107° 30'

order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
2397715	KM63TSMQNR1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.36
2265283	KM63TSMQNR1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,07	2.35
2397716	KM63TSMQNL1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46	CKM23	STCM11	1,07	2.36
2265284	KM63TSMQNL1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,07	2.35

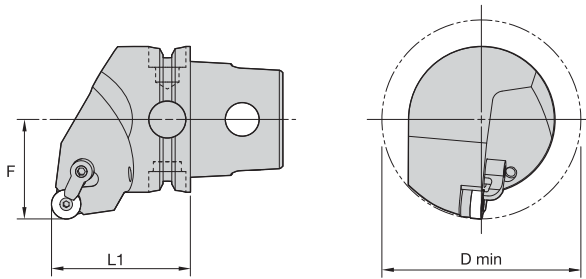




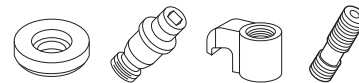
MDUN 93°



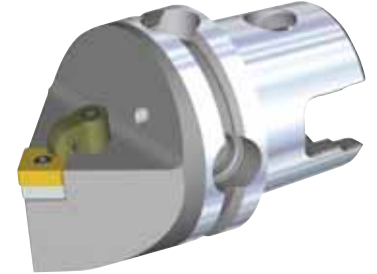
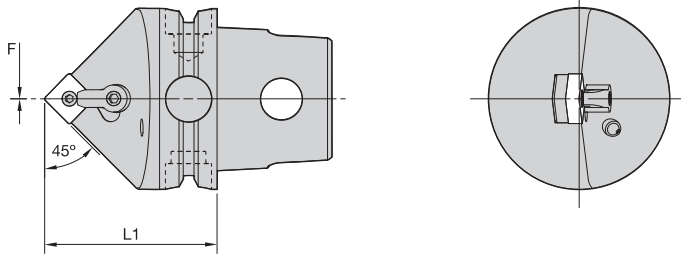
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2397717	KM63TSM DUNR1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,17	2.58
2265285	KM63TSM DUNR1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,17	2.58
left hand														
2397718	KM63TSM DUNL1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,17	2.58
2265286	KM63TSM DUNL1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,17	2.57



MRGN 0°



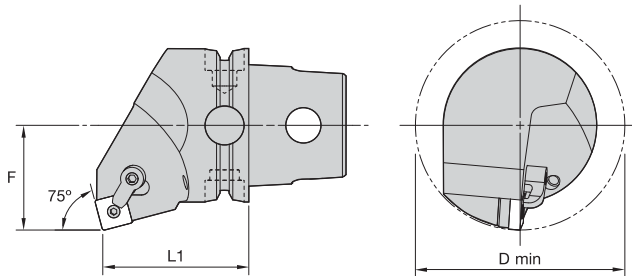
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2265287	KM63TSM RGNR12	60	2.362	43	1.693	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20	STCM11	1,21	2.66
left hand														
2265288	KM63TSM RGNL12	60	2.362	43	1.693	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20	STCM11	1,21	2.66



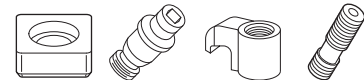
■ MSDN 45°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
2265289	KM63TSMDSNN12	60	2.362	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	0,99	2.18
2265290	KM63TSMDSNN15	60	2.362	0	.000	SN..150612/SN..543	ISSN533	KLM58	CKM20	STCM11	0,99	2.18
2265291	KM63TSMDSNN19	60	2.362	0	.000	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	0,97	2.14



■ MSKN 75°



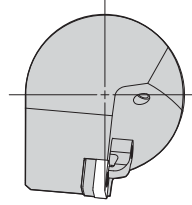
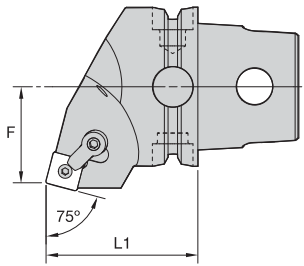
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
		right hand												
2265292	KM63TSM SKNR12	60	2.362	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,27	2.81
2265294	KM63TSM SKNR19	60	2.362	43	1.693	86	3.386	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,35	2.97
		left hand												
2265293	KM63TSM SKNL12	60	2.362	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,27	2.81
2265295	KM63TSM SKNL19	60	2.362	43	1.693	86	3.386	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,35	2.97

KM63TS™ Cutting Units

M-Clamping



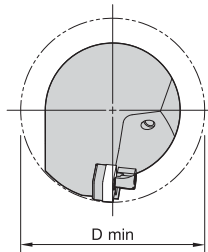
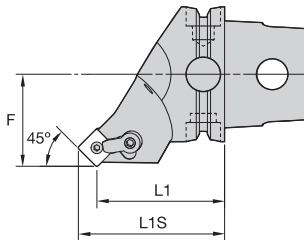
KM63TS Cutting Units



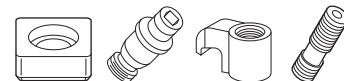
■ MSRN 75°



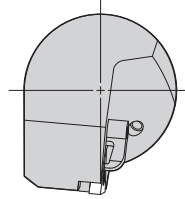
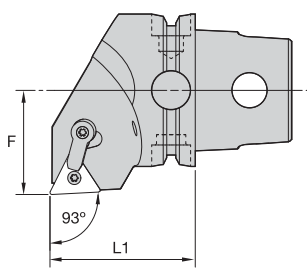
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		mm	in	mm	in							
right hand												
2265296	KM63TSMRNR12	60	2.362	38	1.496	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,18	2.61
2265298	KM63TSMRNR19	60	2.362	38	1.496	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,15	2.53
left hand												
2265297	KM63TSMRNL12	60	2.362	38	1.496	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,19	2.61
2265299	KM63TSMRNL19	60	2.362	38	1.496	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,15	2.53



■ MSSN 45°



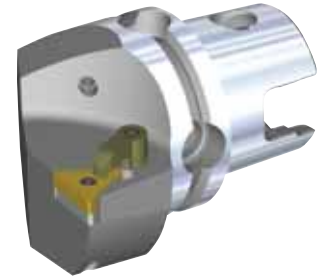
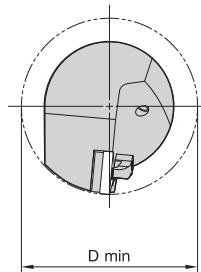
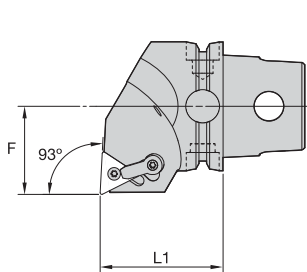
order number	catalog number	mm	in	L1		L1S		F		D min	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
				mm	in	mm	in	mm	in									mm	in
right hand																	
2265300	KM63TSMSSNR12	60	2.362	68,3	2.690	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,11	2.45	
2265302	KM63TSMSSNR15	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20	STCM11	1,10	2.42	
2265304	KM63TSMSSNR19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,14	2.51	
left hand																	
2265301	KM63TSMSSNL12	60	2.362	68,3	2.690	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,11	2.45	
2265303	KM63TSMSSNL15	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20	STCM11	1,10	2.42	
2265305	KM63TSMSSNL19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,15	2.53	



■ MTJN 93°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
2265306	KM63TSMTJNR22	60	2.362	43	1.693	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,23	2.72
	left hand											
2265307	KM63TSMTJNL22	60	2.362	43	1.693	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,23	2.72



■ MTUN 93°



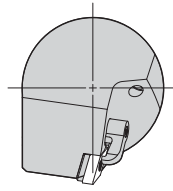
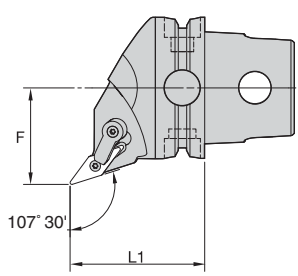
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
2265308	KM63TSMTUNR22	60	2.362	43	1.693	86	3.386	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,27	2.79
	left hand													
2265309	KM63TSMTUNL22	60	2.362	43	1.693	86	3.386	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,27	2.79

KM63TS™ Cutting Units

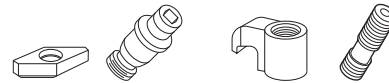
M-Clamping



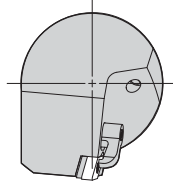
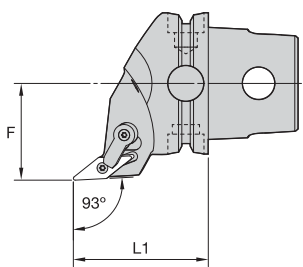
KM63TS Cutting Units



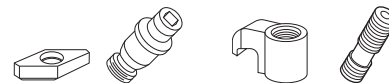
■ MVHN 107° 30'



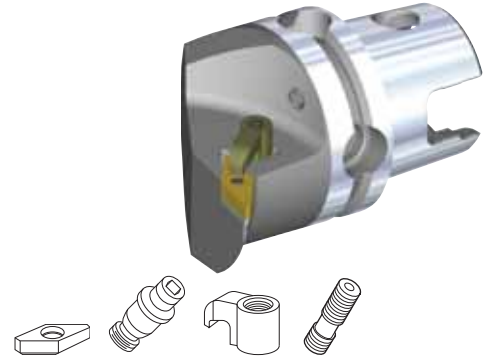
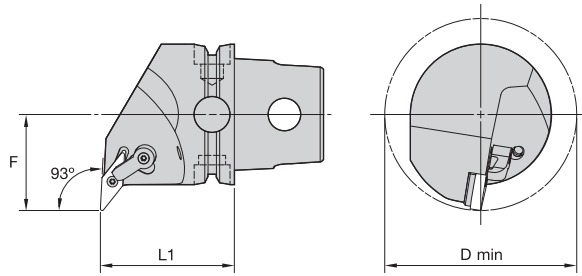
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		mm	in	mm	in							
	right hand											
2265310	KM63TSMVHNR16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,07	2.36
	left hand											
2265311	KM63TSMVHNL16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,07	2.36



■ MVJN 93°

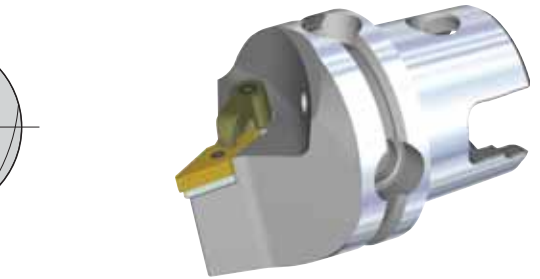
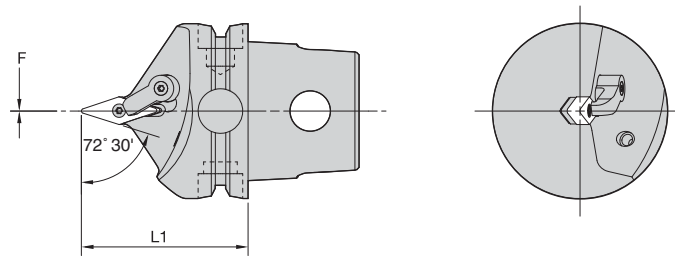


order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
2265312	KM63TSMVJNR16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,00	2.21
	left hand											
2265313	KM63TSMVJNL16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,00	2.21



■ MVUN 93°

order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
2265314	KM63TSMVUNR16	60	2.362	43	1.693	86	3.386	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,17	2.58	
		left hand													
2265315	KM63TSMVUNL16	60	2.362	43	1.693	86	3.386	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,17	2.59	



■ MVVN 72° 30'

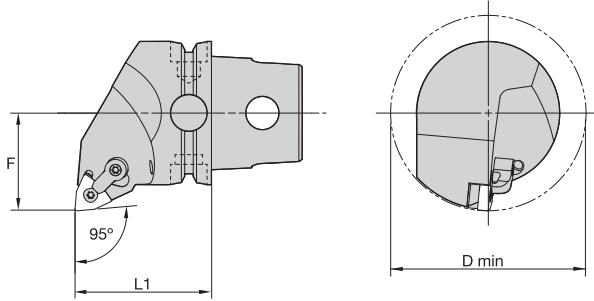
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		mm	in	mm	in							
2265316	KM63TSMVNN16	60	2.362	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	0,86	1.90

KM63TS™ Cutting Units

M-Clamping • M-Clamping Centerline



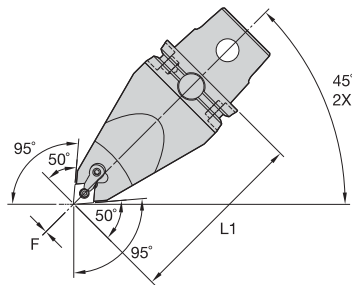
KM63TS Cutting Units



MWLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
2265317	KM63TSMWLN08	60	2.362	43	1.693	86	3.386	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,20	2.65	
		left hand													
2265318	KM63TSMWLN08	60	2.362	43	1.693	86	3.386	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,20	2.65	



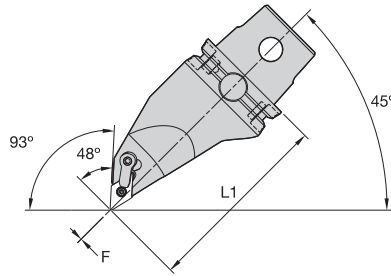
MCMN 50° • 95° Application • Centerline



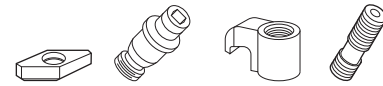
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3487474	KM63TSMCMNN12115	115	4.528	0	.000	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,01	4.42



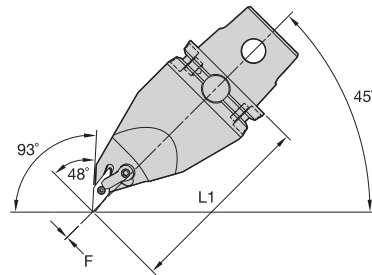
KM63TS Cutting Units



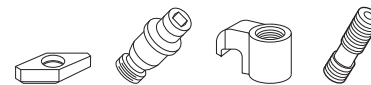
■ MDMN 48° • 93° Application • Centerline



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3487478	KM63TSMDMNR1504115	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,84	4.05
3487479	KM63TSMDMNR1506115	115	4.528	0	.000	DN..150608/DN..442	IDSN442	KLM46L	CKM23	STCM11	1,83	4.04
	left hand											
3487475	KM63TSMDMNL1504115	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,84	4.05
3487476	KM63TSMDMNL1506115	115	4.528	0	.000	DN..150608/DN..442	IDSN442	KLM46L	CKM23	STCM11	1,83	4.04



■ MVMN 48° • 93° Application • Centerline



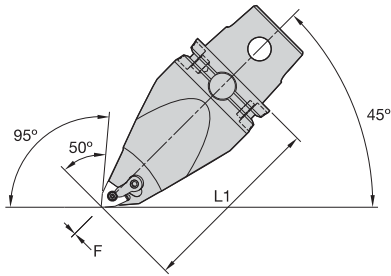
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		mm	in	mm	in							
	right hand											
3487480	KM63TSMVMNR16115	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,93	4.26
	left hand											
3487477	KM63TSMVMNL16115	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,93	4.26

KM63TS™ Cutting Units

M-Clamping Centerline • P-Clamping



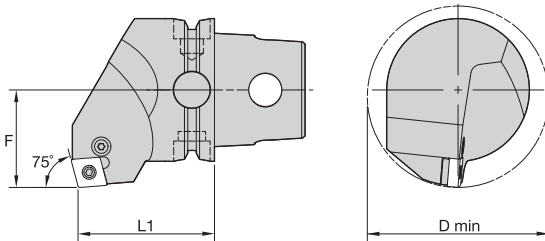
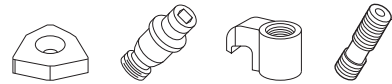
KM63TS Cutting Units



Left-Hand Tool

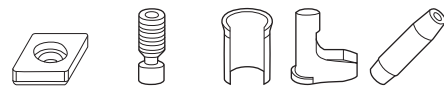
■ MWMN 50° • 95° Application • Centerline

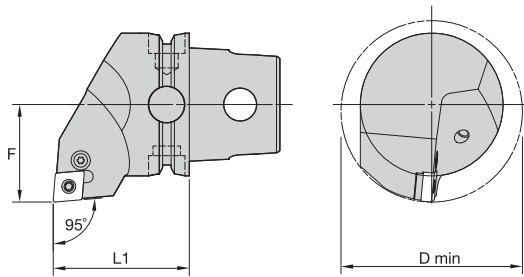
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		mm	in	mm	in							
3487604	right hand											
	KM63TSMWMNR08115	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,98	4.37
3487603	left hand											
	KM63TSMWMNL08115	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,98	4.37



■ PCKN 75°

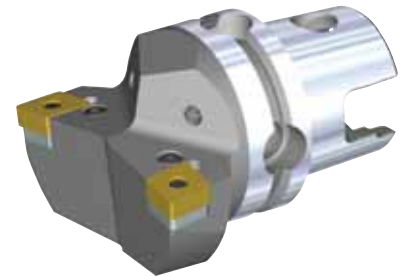
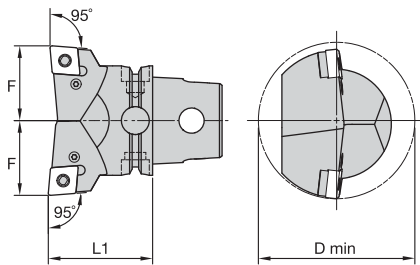
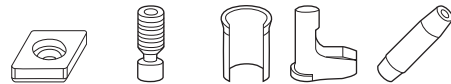
order number	catalog number	L1		F		D min	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in									
right hand														
2407450	KM63TSPCKNR12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,29 2.84
2407452	KM63TSPCKNR16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,32 2.91
2407954	KM63TSPCKNR19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.023	515.022	1,34 2.95
left hand														
2407451	KM63TSPCKNL12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,29 2.84
2407953	KM63TSPCKNL16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,32 2.91
2407955	KM63TSPCKNL19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	1,34 2.95





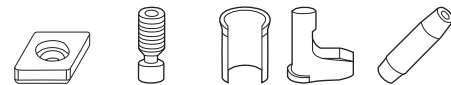
■ PCLN 95°

order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2257149	KM63TSPCLNR12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,21	2.66
2407957	KM63TSPCLNR16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,23	2.71
2407959	KM63TSPCLNR19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	1,23	2.71
left hand															
2407956	KM63TSPCLNL12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,21	2.66
2407958	KM63TSPCLNL16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,23	2.71
2407960	KM63TSPCLNL19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	1,23	2.71



■ PCLN-2W 95°

order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2408003	KM63TSPCLNR162W	60	2.362	43	1.693	90	3.543	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,35	2.97
left hand															
2408004	KM63TSPCLNL162W	60	2.362	43	1.693	90	3.543	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,35	2.98

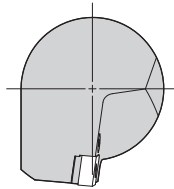
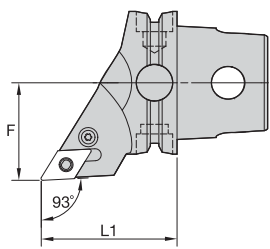


KM63TS™ Cutting Units

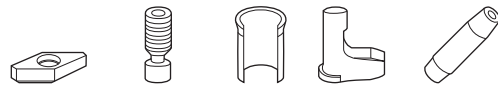
P-Clamping



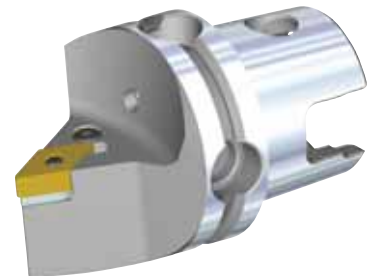
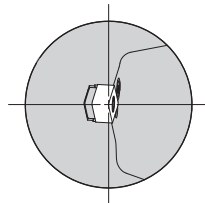
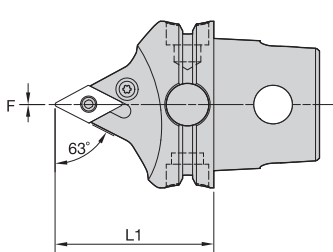
KM63TS Cutting Units



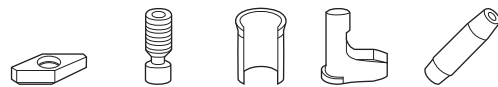
■ PDJN 93°



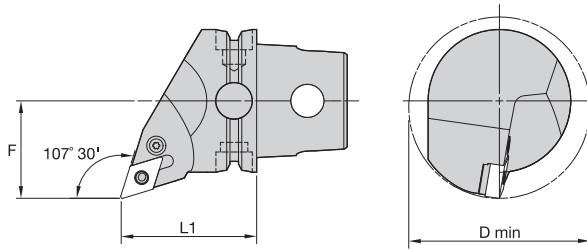
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
2407969	KM63TSPDJNR11	60	2.362	43	1.693	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,95	2.10
2407971	KM63TSPDJNR15	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,94	2.08
left hand													
2407970	KM63TSPDJNL11	60	2.362	43	1.693	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,97	2.14
2407972	KM63TSPDJNL15	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,94	2.08



■ PDNN 63°

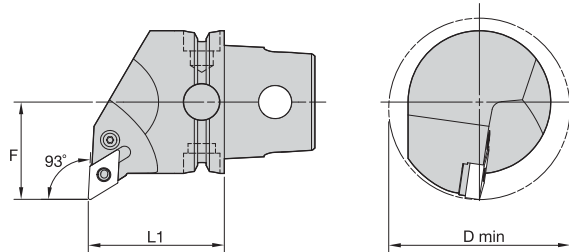
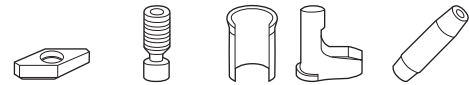


order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
2407973	KM63TSPDNNR11	60	2.362	0	.000	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,91	2.01
2407975	KM63TSPDNNR15	60	2.362	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,84	1.86
left hand													
2407974	KM63TSPDNNL11	60	2.362	0	.000	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,91	2.01
2407976	KM63TSPDNNL15	60	2.362	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,85	1.86



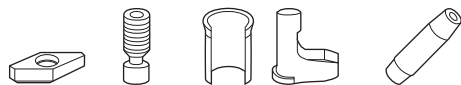
■ PDQN 107° 30'

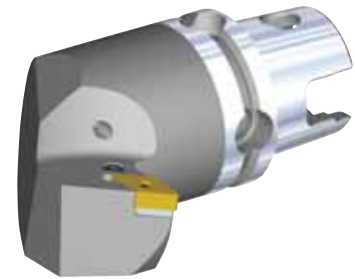
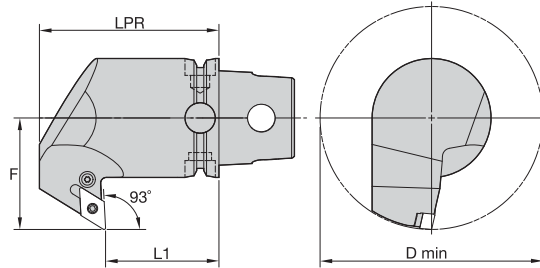
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2407977	KM63TSPDQNR11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,11	2.45
2407979	KM63TSPDQNR15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,08	2.38
left hand															
2407978	KM63TSPDQNL11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,11	2.45
2407980	KM63TSPDQNL15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,08	2.38



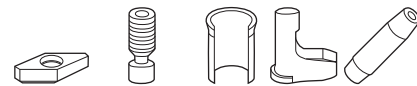
■ PDUN 93°

order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2407981	KM63TSPDUNR11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,19	2.62
2407983	KM63TSPDUNR15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,23	2.71
left hand															
2407982	KM63TSPDUNL11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,19	2.63
2407984	KM63TSPDUNL15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,23	2.71

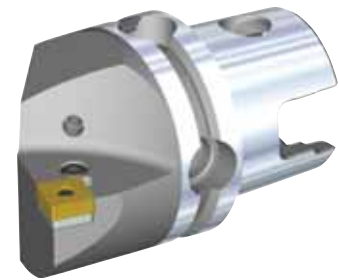
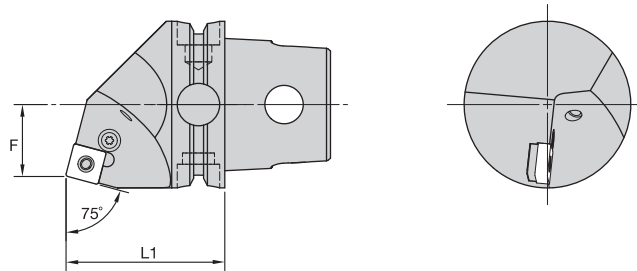




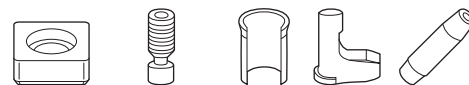
■ PDXN 93°



order number	catalog number	L1		LPR		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
		right hand															
2407992	KM63TSPDXNR15	60	2.362	95	3.740	59	2.323	118	4.646	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	2,21	4.85
		left hand															
2407993	KM63TSPDXNL15	60	2.362	95	3.740	59	2.323	118	4.646	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	2,21	4.85



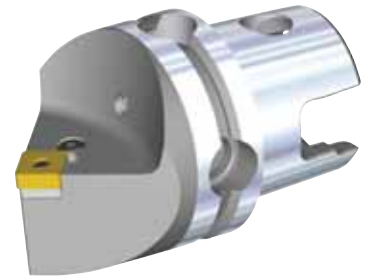
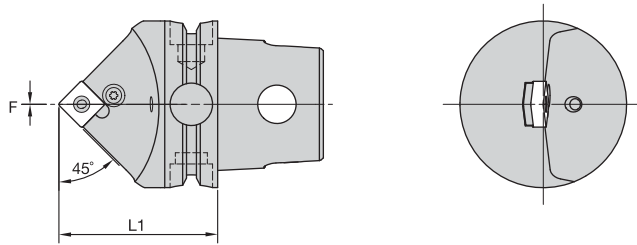
■ PSBN 75°



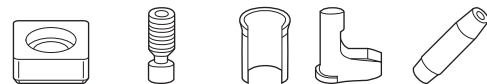
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
		right hand											
2407994	KM63TSPSBNR12	60	2.362	27	1.063	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,15	2.54
2407996	KM63TSPSBNR15	60	2.362	27	1.063	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,11	2.45
2407998	KM63TSPSBNR19	60	2.362	27	1.063	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,10	2.42
		left hand											
2407995	KM63TSPSBNL12	60	2.362	27	1.063	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,10	2.42
2407997	KM63TSPSBNL15	60	2.362	27	1.063	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,10	2.42
2407999	KM63TSPSBNL19	60	2.362	27	1.063	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,10	2.42



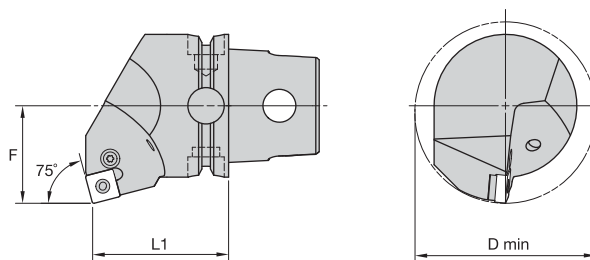
KM63TS Cutting Units



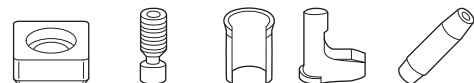
■ PSDN 45°



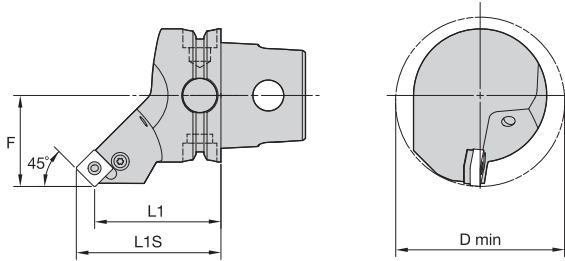
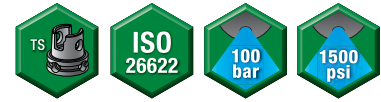
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
2408000	KM63TSPSDNN12	60	2.362	0	.000	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,98	2.16
2408001	KM63TSPSDNN15	60	2.362	0	.000	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,01	2.23
2408002	KM63TSPSDNN19	60	2.362	0	.000	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	0,94	2.06



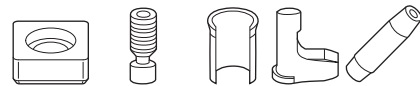
■ PSKN 75°



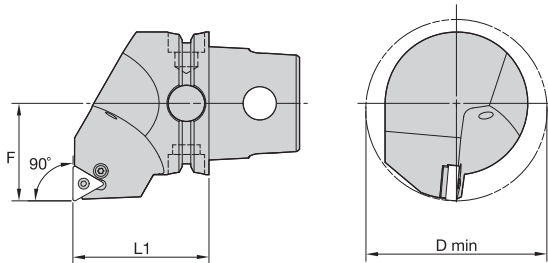
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2408005	KM63TSPSKNR12	60	2.362	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,36	3.01
2408007	KM63TSPSKNR15	60	2.362	43	1.693	80	3.150	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,39	3.06
2408009	KM63TSPSKNR19	60	2.362	43	1.693	80	3.150	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,34	2.95
left hand															
2408006	KM63TSPSKNL12	60	2.362	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,36	3.00
2408008	KM63TSPSKNL15	60	2.362	43	1.693	80	3.150	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,39	3.06
2408010	KM63TSPSKNL19	60	2.362	43	1.693	80	3.150	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,34	2.95



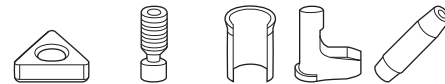
■ PSSN 45°



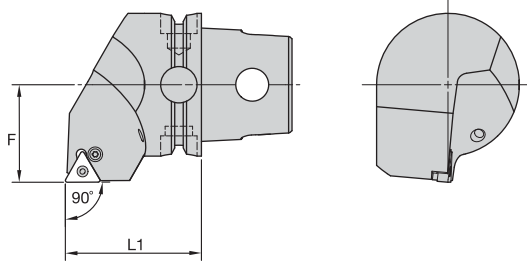
order number	catalog number	L1		L1S		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
right hand																	
2408011	KM63TSPSSNR12	60	2.362	68,3	2.690	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,06	2.33
2408013	KM63TSPSSNR15	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,05	2.32
2408015	KM63TSPSSNR19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,13	2.50
left hand																	
2408012	KM63TSPSSNL12	60	2.362	68,3	2.690	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,06	2.33
2408016	KM63TSPSSNL19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,13	2.50



■ PTFN 90°



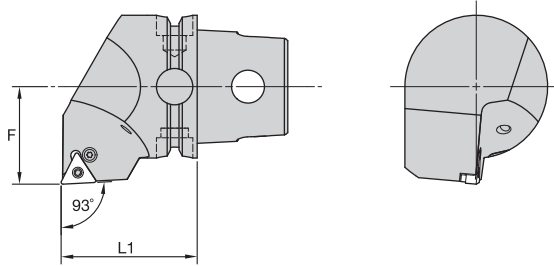
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
2408017	KM63TSPTFN16	60	2.362	43	1.693	80	3.150	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,26	2.77
left hand															
2408018	KM63TSPTFNL16	60	2.362	43	1.693	80	3.150	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,30	2.86
2408022	KM63TSPTFNL27	60	2.362	43	1.693	80	3.150	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,27	2.81



■ PTGN 90°



order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
2408023	KM63TSPTGNR16	60	2.362	43	1.693	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,30	2.87
2408025	KM63TSPTGNR22	60	2.362	43	1.693	TN..220408/TN..432	512.023	514.123	513.023	511.023	515.018	1,27	2.80
2408027	KM63TSPTGNR27	60	2.362	43	1.693	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,27	2.80
left hand													
2408024	KM63TSPTGNL16	60	2.362	43	1.693	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,28	2.82
2408026	KM63TSPTGNL22	60	2.362	43	1.693	TN..220408/TN..432	512.013	514.123	513.023	511.023	515.018	1,28	2.82
2408028	KM63TSPTGNL27	60	2.362	43	1.693	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,27	2.80



■ PTJN 93°



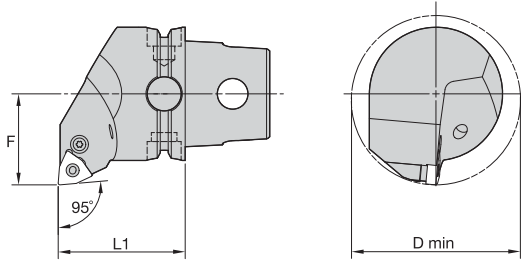
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
2408029	KM63TSPTJNR16	60	2.362	43	1.693	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,33	2.92
2408031	KM63TSPTJNR22	60	2.362	43	1.693	TN..220408/TN..432	512.023	514.123	513.023	511.023	515.018	1,30	2.86
2408033	KM63TSPTJNR27	60	2.362	43	1.693	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,26	2.71
left hand													
2408030	KM63TSPTJNL16	60	2.362	43	1.693	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,22	2.68
2408032	KM63TSPTJNL22	60	2.362	43	1.693	TN..220408/TN..432	512.023	514.123	513.023	511.023	515.018	1,30	2.86
2408034	KM63TSPTJNL27	60	2.362	43	1.693	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,26	2.71

KM63TS™ Cutting Units

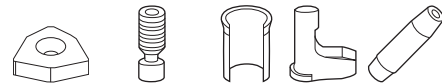
P-Clamping • S-Clamping



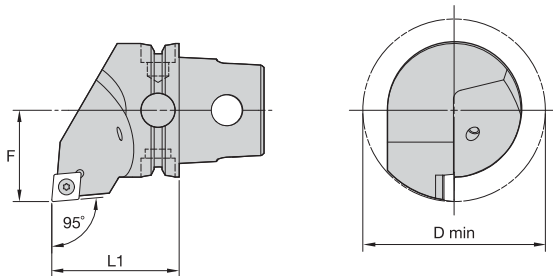
KM63TS Cutting Units



■ PWLN 95°



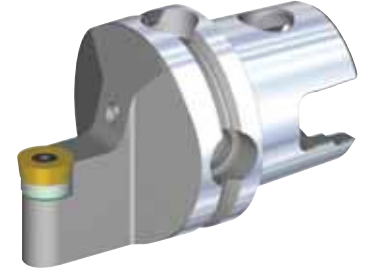
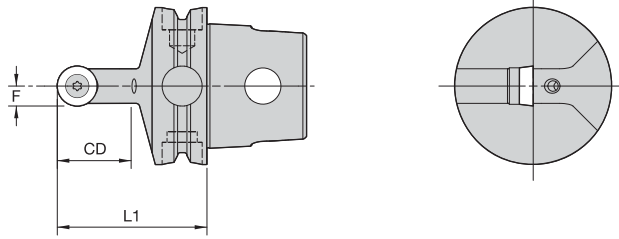
order number	catalog number	L1		F		D min		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
		right hand													
2408035	KM63TSPWLNRO6	60	2.362	43	1.693	80	3.150	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	1,33	2.94
2408037	KM63TSPWLNRO8	60	2.362	43	1.693	80	3.150	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	1,24	2.74
		left hand													
2408036	KM63TSPWLNLO6	60	2.362	43	1.693	80	3.150	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	1,33	2.94
2408038	KM63TSPWLNLO8	60	2.362	43	1.693	80	3.150	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	1,24	2.74



■ SCLC 95°

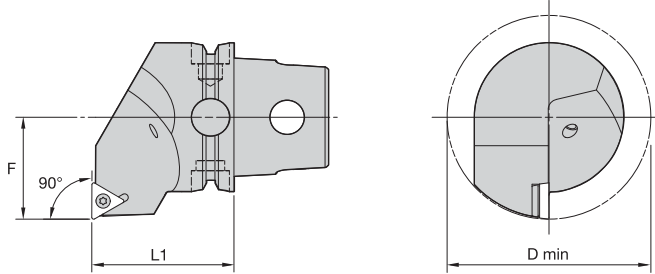


order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
		right hand											
2414906	KM63TSSCLCR12	60	2.362	43	1.693	86	3.386	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,14	2.52
		left hand											
2414907	KM63TSSCLCL12	60	2.362	43	1.693	86	3.386	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,14	2.52



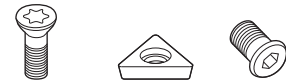
■ SRDC 0°

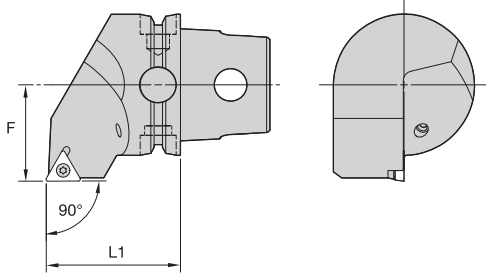
order number	catalog number	L1		F		CD		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
2414896	KM63TSSRDCN16	60	2.362	8	.315	33	1.299	RC..1605M0	MS1160	SKRN160400	SRS5	0,84	1.84



■ STFC 90°

order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in						
2414899	right hand KM63TSSSTFCR16	60	2.362	43	1.693	86	3.386	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,23	2.72
2414900	left hand KM63TSSSTFCL16	60	2.362	43	1.693	86	3.386	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,23	2.72

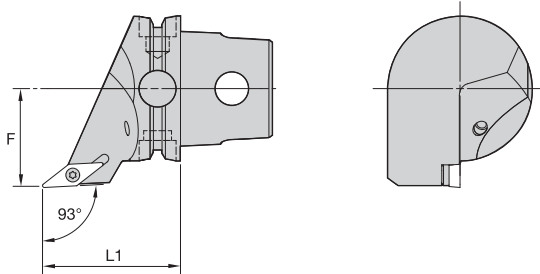




■ STGC 90°



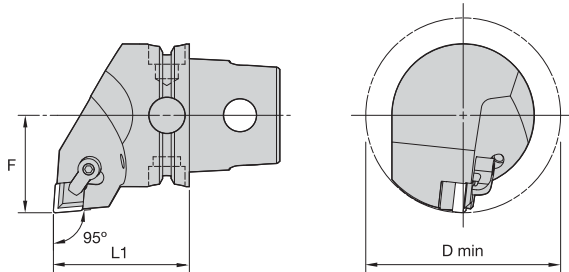
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
2414903	KM63TSSSTGCR16	60	2.362	43	1.693	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,22	2.69
	left hand										
2414904	KM63TSSSTGCL16	60	2.362	43	1.693	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,22	2.69



■ SVJB 93°



order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
	right hand										
2414905	KM63TSSVJBR16	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,92	2.02
	left hand										
2257151	KM63TSSVJBL16	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,92	2.02

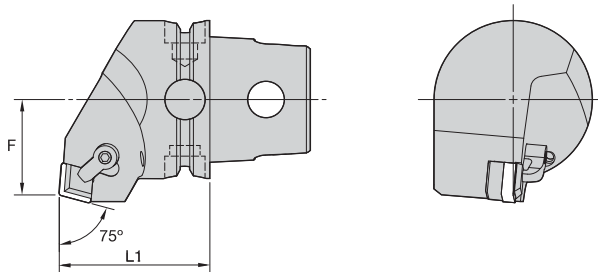


■ CCLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3065821	KM63TSCCLNR12	60	2.362	43	1.693	86	3.386	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,23	2.70	
3065883	KM63TSCCLNR16	60	2.362	43	1.693	86	3.386	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,21	2.68	
		left hand													
3065820	KM63TSCCLNL12	60	2.362	43	1.693	86	3.386	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,23	2.71	
3065822	KM63TSCCLNL16	60	2.362	43	1.693	86	3.386	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,21	2.68	

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



■ CCRN 75°



order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs	
		mm	in	mm	in								
		right hand											
3065884	KM63TSCCRNR12	60	2.362	38	1.496	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,22	2.70	
		left hand											
3065885	KM63TSCCRNL12	60	2.362	38	1.496	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,22	2.70	
3065886	KM63TSCCRNL16	60	2.362	38	1.496	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,22	2.69	

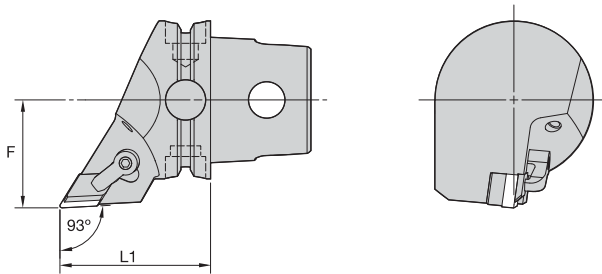
NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

KM63TS™ Cutting Units

C-Clamping



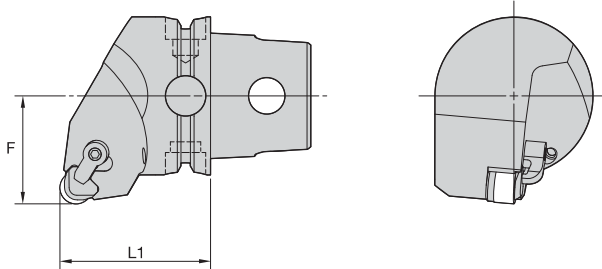
KM63TS Cutting Units



■ CDJN 93°

order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3065887	KM63TSCDJNR1504	60	2.362	43	1.693	DN..150408/DN.432	IDSN442	KMS4	CKM23	STCM11	1,01	2.22
	left hand											
3065888	KM63TSCDJNL1504	60	2.362	43	1.693	DN..150408/DN.432	IDSN442	KMS4	CKM23	STCM11	1,01	2.22

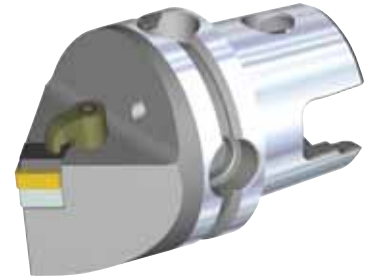
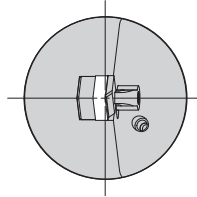
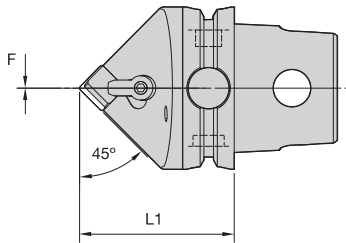
NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



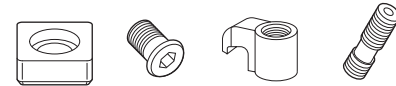
■ CRGN 0°

order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3065900	KM63TSCRGNR12	60	2.362	43	1.693	RN..1207/RN.45	IRSN42	KMS4	CKM20	STCM11	1,23	2.72
	left hand											
3065899	KM63TSCRGNL12	60	2.362	43	1.693	RN..1207/RN.45	IRSN42	KMS4	CKM20	STCM11	1,23	2.72

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

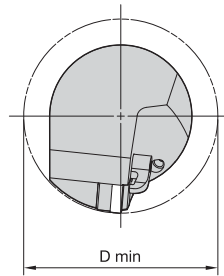
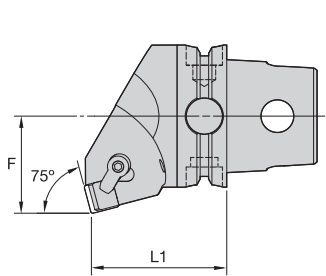


■ CSDN 45°

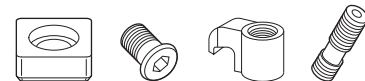


order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	left hand											
3065889	KM63TSCSDNN12	60	2.362	0	.000	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,01	2.23
3065890	KM63TSCSDNN15	60	2.362	0	.000	SN..150612/SN.543	ISSN533	KMS5	CKM20	STCM11	1,01	2.22

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



■ CSKN 75°



order number	catalog number	L1		F		D min		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
3065895	KM63TSCSKNR12	60	2.362	43	1.693	86	3.386	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,32	2.91
	left hand													
3065896	KM63TSCSKNL12	60	2.362	43	1.693	86	3.386	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,32	2.91

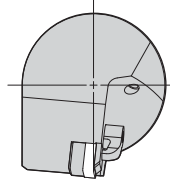
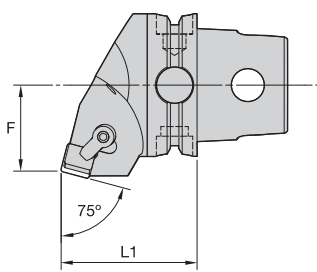
NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

KM63TS™ Cutting Units

C-Clamping



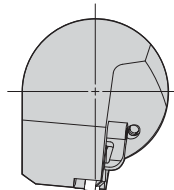
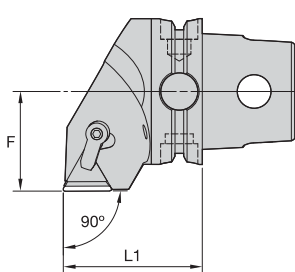
KM63TS Cutting Units



■ CSRN 75°

order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3065891	KM63TSCSRNR12	60	2.362	38	1.496	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,20	2.64
3065893	KM63TSCSRNR15	60	2.362	38	1.496	SN..150612/SN.543	ISSN533	KMS5	CKM20	STCM11	1,19	2.63
left hand												
3065892	KM63TSCSRNL12	60	2.362	38	1.496	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,20	2.64
3065894	KM63TSCSRNL15	60	2.362	38	1.496	SN..150612/SN.543	ISSN533	KMS5	CKM20	STCM11	1,19	2.63

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



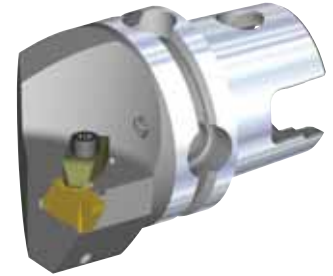
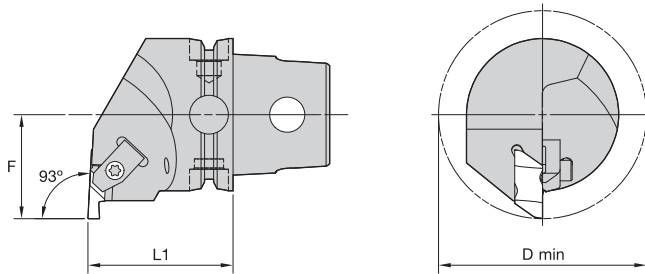
■ CTGN 90°

order number	catalog number	L1		F		gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3065897	KM63TCTGNR22	60	2.362	43	1.693	TN..220408/TN.432	ITSN433	KMS4	CKM23	STCM11	1,25	2.75
left hand												
3065898	KM63TCTGNL22	60	2.362	43	1.693	TN..220408/TN.432	ITSN433	KMS4	CKM23	STCM11	1,24	2.73

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

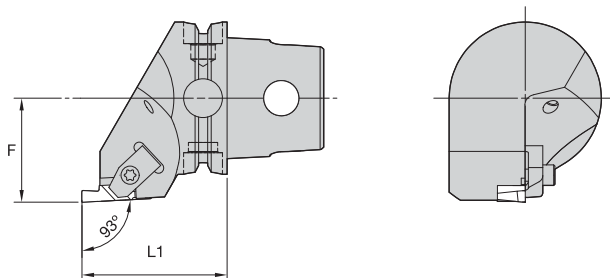


KM63TS Cutting Units



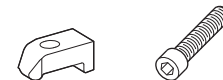
■ NE 93°

order number	catalog number	L1		F		D min		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in					
right hand												
2265406	KM63TSNER3	60	2.362	43	1.693	86	3.386	NG3L	CM73	MS1489	1,19	2.63
2265408	KM63TSNER4	60	2.362	43	1.693	86	3.386	NG4L	CM73	MS1489	1,21	2.66
2265410	KM63TSNER5	60	2.362	43	1.693	86	3.386	NG5L	CM81	MS1490	1,15	2.55
left hand												
2265407	KM63TSNEL3	60	2.362	43	1.693	86	3.386	NG3R	CM72	MS1489	1,19	2.63
2265409	KM63TSNEL4	60	2.362	43	1.693	86	3.386	NG4R	CM72	MS1489	1,21	2.66
2265411	KM63TSNEL5	60	2.362	43	1.693	86	3.386	NG5R	CM80	MS1490	1,18	2.60



■ NS 93°

order number	catalog number	L1		F		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in					
right hand										
2265412	KM63TSNSR3	60	2.362	43	1.693	NG3R	CM72	MS1489	1,02	2.26
2265414	KM63TSNSR4	60	2.362	43	1.693	NG4R	CM72	MS1489	1,06	2.34
left hand										
2265413	KM63TSNSL3	60	2.362	43	1.693	NG3L	CM73	MS1489	1,02	2.26
2265415	KM63TSNSL4	60	2.362	43	1.693	NG4L	CM73	MS1489	1,06	2.34

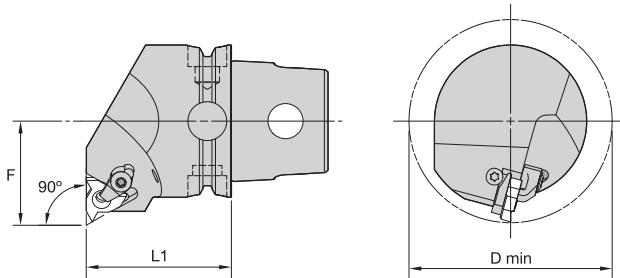


KM63TS™ Cutting Units

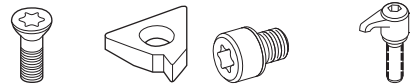
Laydown Threading



KM63TS Cutting Units

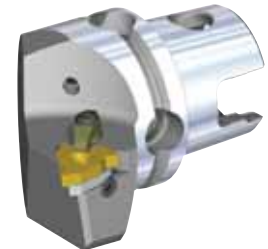
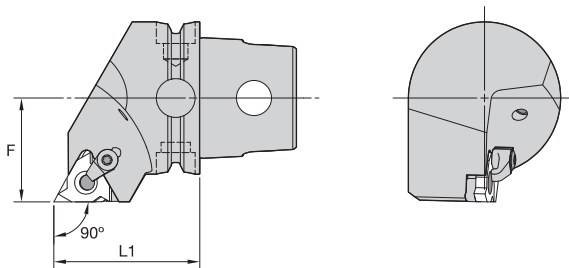


■ LSE-N 90° • Internal Only

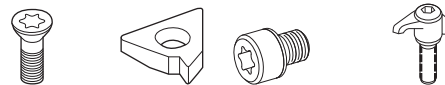


order number	catalog number	L1		F		D min		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2265416	KM63TSLSER16N	60	2.362	43	1.693	86	3.386	LT16NR	SSA3T	SMY13	SSY3T	CKC3	1,34	2.96
2265418	KM63TSLSER22N	60	2.362	43	1.693	86	3.386	LT22NR	SSA4T	SMY14	SSY4T	CKC4	1,32	2.92
3959387	KM63TSLSER27N	60	2.362	43	1.693	86	3.386	LT27NR	SSA5T	SMY15	SSY5T	CKC5	1,38	3.05
left hand														
2265417	KM63TSLSEL16N	60	2.362	43	1.693	86	3.386	LT16NL	SSA3T	SMYE3	SSY3T	CKC3	1,34	2.96
2265419	KM63TSLSEL22N	60	2.362	43	1.693	86	3.386	LT22NL	SSA4T	SMYE4	SSY4T	CKC4	1,32	2.92
3959386	KM63TSLSEL27N	60	2.362	43	1.693	86	3.386	LT27NL	SSA5T	SMYE5	SSY5T	CKC5	1,36	3.00

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



■ LSS 90°



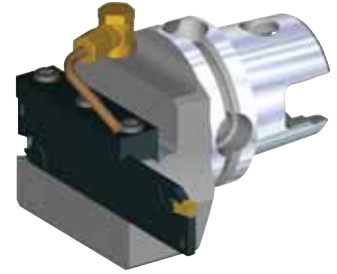
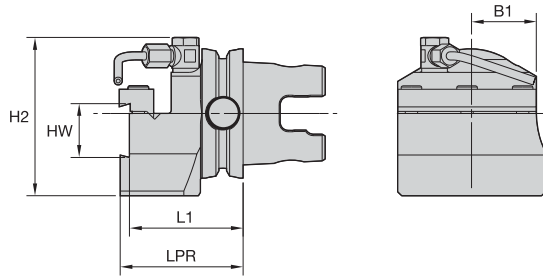
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
		mm	in	mm	in							
right hand												
2265420	KM63TSLSSR16	60	2.362	43	1.693	LT16ER	SSA3T	SMYE3	SSY3T	CKC3	1,21	2.68
2265422	KM63TSLSSR22	60	2.362	43	1.693	LT22ER	SSA4T	SMYE4	SSY4T	CKC4	1,20	2.64
3959389	KM63TSLSSR27	60	2.362	43	1.693	LT27ER	SSA5T	SMYE5	SSY5T	CKC5	1,19	2.61
left hand												
2265421	KM63TSLSSL16	60	2.362	43	1.693	LT16EL	SSA3T	SMY13	SSY3T	CKC3	1,21	2.66
2265423	KM63TSLSSL22	60	2.362	43	1.693	LT22EL	SSA4T	SMY14	SSY4T	CKC4	1,20	2.64
3959388	KM63TSLSSL27	60	2.362	43	1.693	LT27EL	SSA5T	SMY15	SSY5T	CKC5	1,19	2.62

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.









KM63TS Cutting Units



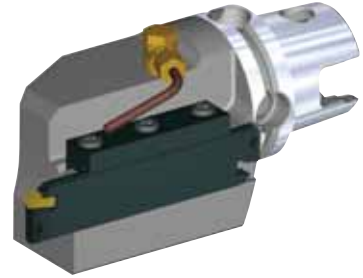
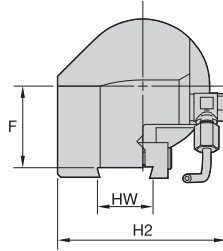
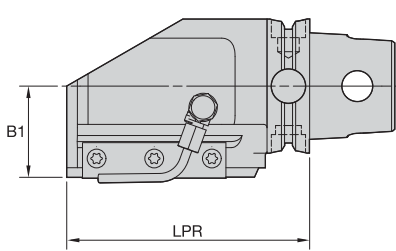
■ BE • End Mount

order number	catalog number	L1		LPR		H2		HW		B1		cartridge size	cartridge 1	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in				
2265372	right hand KM63TSBER4	55,3	2.177	60	2.35	63	2.48	26	1.02	32	1.24	26	A2BNSN26...	1,68	3.71
2265393	left hand KM63TSBEL4	55,3	2.177	60	2.35	63	2.48	26	1.02	32	1.24	26	A2BNSN26...	1,68	3.71

■ Spare Parts

catalog number				
	clamp	clamp screw	coolant tube	coolant swivel base
right hand KM63TSBER4	CGS4	MS1595	12649910900	12649910800
left hand KM63TSBEL4	CGS4	MS1595	12649910900	12649910800





NOTE: For blades, see the WIDIA Turning (A-09-02078) catalog.



■ **BS • Side Mount**

order number	catalog number	F		LPR		H2		HW		B1		cartridge size	cartridge 1	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in				
	right hand														
2265394	KM63TSBSR4	38,3	1.508	114	4.49	79	3.11	26	1.02	43	1.69	26	A2BNSN26...	3,00	6.62
2265396	KM63TSBSR5	37,3	1.469	135	5.30	84	3.31	32	1.26	43	1.69	32	A2BNSN32...	3,73	8.23
	left hand														
2265395	KM63TSBSL4	38,3	1.508	114	4.49	79	3.11	26	1.02	43	1.69	26	A2BNSN26...	3,00	6.62
2265397	KM63TSBSL5	37,3	1.469	135	5.30	84	3.31	32	1.26	43	1.69	32	A2BNSN32...	3,73	8.23

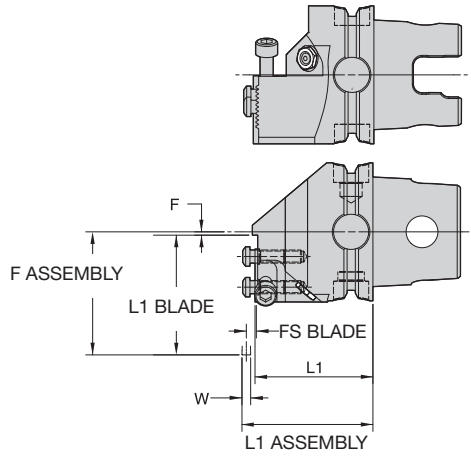
■ **Spare Parts**

catalog number				
	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
KM63TSBSR4	CGS4	MS1595	12649910900	12649910800
KM63TSBSR5	CGS5	MS1595	12649910900	12649910800
left hand				
KM63TSBSL4	CGS4	MS1595	12649910900	12649910800
KM63TSBSL5	CGS5	MS1595	12649910900	12649910800

NOTE: For blades, see the WIDIA Turning (A-09-02078) catalog.



KM63TS Cutting Units



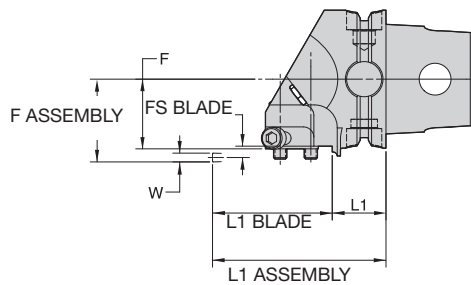
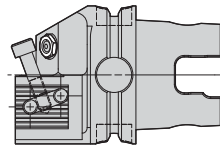
F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm



■ WGME

order number	catalog number	L1		F		button-head cap screw	nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in					
right hand										
3949903	KM63TSWGME55M	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,16	2.57
left hand										
3949904	KM63TSWGME55M	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,16	2.57

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



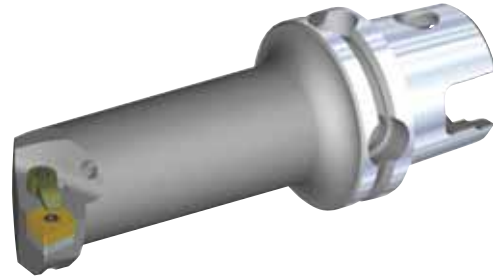
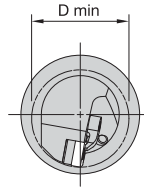
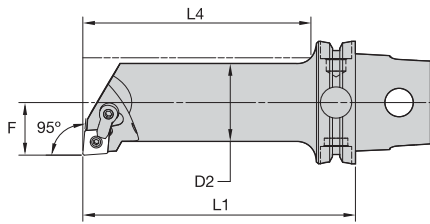
F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE



■ WGMS

order number	catalog number	L1		F		nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in				
right hand									
3949851	KM63TSWGMSR55M	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	1,12	2.46
left hand									
3949852	KM63TSWGMSL55M	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	1,12	2.46

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.



KM63TS Internal Cutting Units





■ MCLN 95°

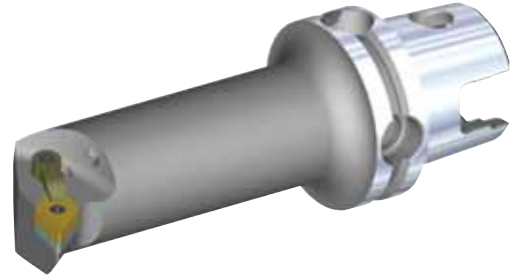
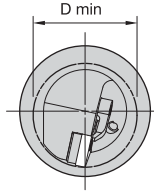
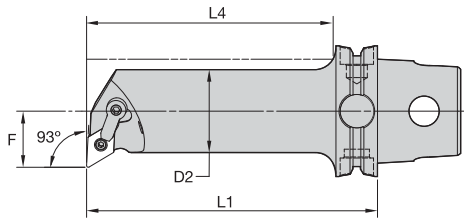
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
2265329	KM63TSS25FMCLNR12	25	.98	32	1.26	17	.669	50	1.99	80	3.150	CN..120408/CN..432	0,90	1.99
2265327	KM63TSS25KMCLNR12	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,14	2.52
2265343	KM63TSS32GMCLNR12	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	CN..120408/CN..432	1,05	2.32
2265331	KM63TSS32LMCLNR12	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,37	3.01
2265347	KM63TSS40HMCLNR12	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	CN..120408/CN..432	1,30	2.87
2265345	KM63TSS40LMCLNR12	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,69	3.72
2265351	KM63TSS50KMCLNR12	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	CN..120408/CN..432	1,99	4.40
2265349	KM63TSS50PMCLNR12	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,68	5.91
left hand														
2265330	KM63TSS25FMCLNL12	25	.98	32	1.26	17	.669	50	1.99	80	3.150	CN..120408/CN..432	0,90	1.99
2265328	KM63TSS25KMCLNL12	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,14	2.52
2265344	KM63TSS32GMCLNL12	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	CN..120408/CN..432	1,06	2.34
2265332	KM63TSS32LMCLNL12	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,37	3.01
2265348	KM63TSS40HMCLNL12	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	CN..120408/CN..432	1,33	2.93
2265346	KM63TSS40LMCLNL12	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,69	3.72
2265352	KM63TSS50KMCLNL12	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	CN..120408/CN..432	2,01	4.43
2265350	KM63TSS50PMCLNL12	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,68	5.91

(continued)

(MCLN 95° continued)

■ Spare Parts

catalog number	 shim	 lock pin	 clamp	 clamp screw
right hand				
KM63TSS25FMCLNR12	—	KLM43	CKM20LP	STCM11
KM63TSS25KMCLNR12	—	KLM43	CKM20LP	STCM11
KM63TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS32LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40HMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50KMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50PMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
left hand				
KM63TSS25FMCLNL12	—	KLM43	CKM20LP	STCM11
KM63TSS25KMCLNL12	—	KLM43	CKM20LP	STCM11
KM63TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS32LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40HMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50KMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50PMCLNL12	ICSN432	KLM46	CKM20LP	STCM11



KM63TS Internal Cutting Units





■ MDUN 93°

order number	catalog number	D2		D min		F		L4		L1		gage insert		kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in				
		right hand													
2265355	KM63TSS25FMDUNR15	25	.98	32	1.26	17	.669	45	1.99	80	3.150	DN..150408/DN..432	0,95	2.09	
2265353	KM63TSS25KMDUNR15	25	.98	32	1.26	17	.669	88	3.47	125	4.921	DN..150408/DN..432	1,13	2.50	
2265359	KM63TSS32GMDUNR15	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	DN..150408/DN..432	1,05	2.30	
2265357	KM63TSS32LMDUNR15	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150408/DN..432	1,36	2.99	
2265363	KM63TSS40HMDUNR15	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	DN..150408/DN..432	1,31	2.89	
2265361	KM63TSS40LMDUNR15	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	DN..150408/DN..432	1,69	3.73	
2265367	KM63TSS50KMDUNR15	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	DN..150408/DN..432	1,97	4.34	
2265365	KM63TSS50PMDUNR15	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150408/DN..432	2,63	5.80	
		left hand													
2265356	KM63TSS25FMDUNL15	25	.98	32	1.26	17	.669	45	1.99	80	3.150	DN..150408/DN..432	0,94	2.08	
2265354	KM63TSS25KMDUNL15	25	.98	32	1.26	17	.669	88	3.47	125	4.921	DN..150408/DN..432	1,13	2.50	
2265360	KM63TSS32GMDUNL15	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	DN..150408/DN..432	1,05	2.30	
2265358	KM63TSS32LMDUNL15	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150408/DN..432	1,36	2.99	
2265364	KM63TSS40HMDUNL15	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	DN..150408/DN..432	1,32	2.90	
2265362	KM63TSS40LMDUNL15	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	DN..150408/DN..432	1,70	3.74	
2265368	KM63TSS50KMDUNL15	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	DN..150408/DN..432	1,97	4.34	
2265366	KM63TSS50PMDUNL15	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150408/DN..432	2,63	5.80	

(continued)

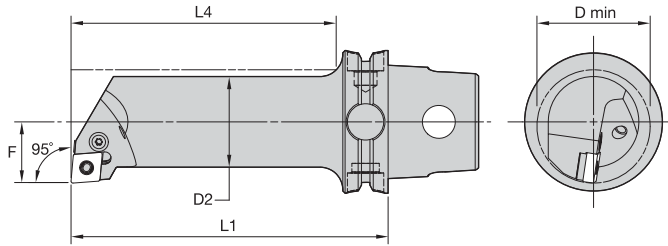
(MDUN 93° continued)

■ Spare Parts

catalog number	 shim	 lock pin	 clamp	 clamp screw
right hand				
KM63TSS25FMDUNR15	—	KLM43	CKM20LP	STCM11
KM63TSS25KMDUNR15	—	KLM43	CKM20LP	STCM11
KM63TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS32LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40HMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50KMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50PMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM63TSS25FMDUNL15	—	KLM43	CKM20LP	STCM11
KM63TSS25KMDUNL15	—	KLM43	CKM20LP	STCM11
KM63TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS32LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40HMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50KMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50PMDUNL15	IDSN432	KLM46	CKM23LP	STCM11

KM63TS™ Internal Cutting Units

P-Clamping



KM63TS Internal Cutting Units

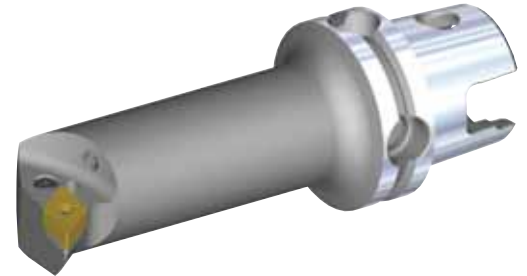
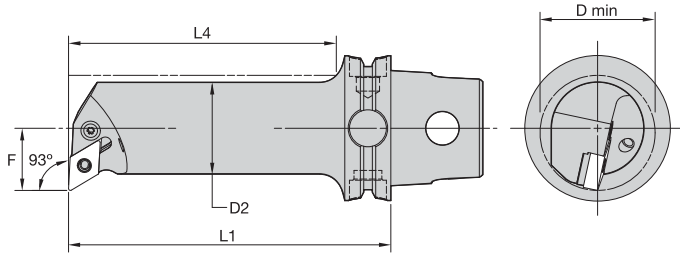
■ PCLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
2407961	KM63TSS25KPDUNR11	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,11	2.45
2407963	KM63TSS32LPCLNR12	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,36	3.00
2407965	KM63TSS40LPCLNR12	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,68	3.70
2407967	KM63TSS50PPCLNR12	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,67	5.89
left hand														
2407962	KM63TSS25KPDUNL11	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,13	2.50
2407964	KM63TSS32LPCLNL12	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,36	3.00
2407966	KM63TSS32LPDUNR15	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,68	3.70
2407968	KM63TSS32LPDUNL15	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,67	5.89

■ Spare Parts



catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM63TSS32LPCLNR12	512.112	514.123	513.023	511.023	515.018
KM63TSS50PPCLNR12	512.112	514.123	513.023	511.023	515.018
KM63TSS25KPDUNR11	—	514.122	—	511.022	—
KM63TSS40LPCLNR12	512.112	514.123	513.023	511.023	515.018
left hand					
KM63TSS32LPCLNL12	512.112	514.123	513.023	511.023	515.018
KM63TSS25KPDUNL11	—	514.122	—	511.022	—
KM63TSS32LPDUNR15	512.112	514.123	513.023	511.023	515.018
KM63TSS32LPDUNL15	512.112	514.123	513.023	511.023	515.018


KM63TS Internal Cutting Units

■ PDUN 93°

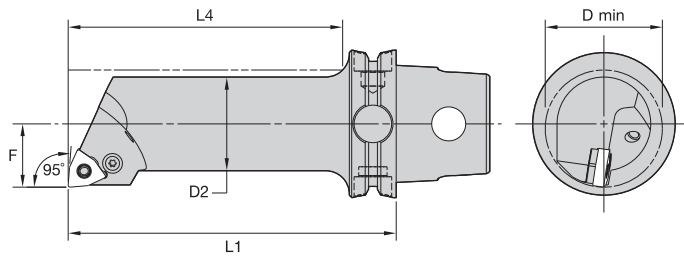
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
right hand														
2407985	KM63TSS25KPDUNR11	25	.98	32	1.26	17	.669	89	3.49	125	4.921	DN..110408/DN..332	1,06	2.340
2407986	KM63TSS32LPDUNR15	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150608/DN..442	1,35	2.980
2407988	KM63TSS40LPDUNR15	40	1.57	50	1.97	27	1.063	117	4.62	140	5.512	DN..150608/DN..442	1,70	3.750
2407990	KM63TSS50PPDUNR15	50	1.97	63	2.48	35	1.378	149	5.87	170	6.693	DN..150608/DN..442	2,73	6.030
left hand														
2257147	KM63TSS25KPDUNL11	25	.98	32	1.26	17	.669	89	3.49	125	4.921	DN..110408/DN..332	1,06	2.340
2407987	KM63TSS32LPDUNL15	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150608/DN..442	1,35	2.970
2407989	KM63TSS40LPDUNL15	40	1.57	50	1.97	27	1.063	113	4.46	140	5.512	DN..150608/DN..442	1,70	3.750
2407991	KM63TSS50PPDUNL15	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150608/DN..442	2,73	6.030

■ Spare Parts


catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM63TSS25KPDUNR11	—	514.112	—	511.015	—
KM63TSS32LPDUNR15	512.153	514.128	513.023	511.024	515.018
KM63TSS40LPDUNR15	512.153	514.128	513.023	511.024	515.018
KM63TSS50PPDUNR15	512.153	514.128	513.023	511.024	515.018
left hand					
KM63TSS25KPDUNL11	—	514.112	—	511.015	—
KM63TSS32LPDUNL15	512.153	514.128	513.023	511.024	515.018
KM63TSS40LPDUNL15	512.153	514.128	513.023	511.024	515.018
KM63TSS50PPDUNL15	512.153	514.128	513.023	511.024	515.018

KM63TS™ Internal Cutting Units

P-Clamping

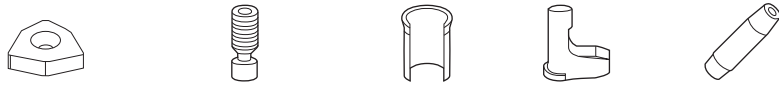


KM63TS Internal Cutting Units

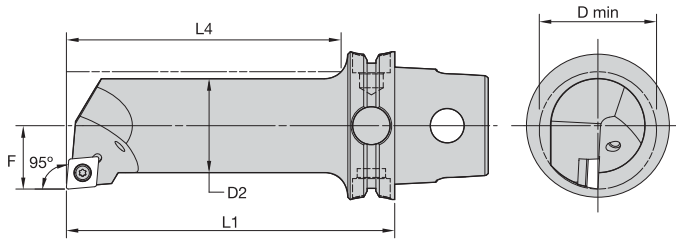
■ PWLN 95°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in				
		right hand													
2408039	KM63TSS25KPWLNRO8	25	.98	32	1.26	17	.669	88	3.47	125	4.921	WN..080408/WN..432	1,14	2.52	
2408041	KM63TSS32LPWLNRO8	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	WN..080408/WN..432	1,36	2.99	
2408043	KM63TSS40LPWLNRO8	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	WN..080408/WN..432	1,67	3.67	
2408045	KM63TSS50PPWLNRO8	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	WN..080408/WN..432	2,62	5.77	
		left hand													
2408040	KM63TSS25KPWLNLO8	25	.98	32	1.26	17	.669	88	3.47	125	4.921	WN..080408/WN..432	1,13	2.48	
2408042	KM63TSS32LPWLNLO8	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	WN..080408/WN..432	1,36	2.99	
2408044	KM63TSS40LPWLNLO8	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	WN..080408/WN..432	1,67	3.67	
2408046	KM63TSS50PPWLNLO8	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	WN..080408/WN..432	2,61	5.75	

■ Spare Parts



catalog number	shim	lever lock screw	shim pin	toggle lever	punch
	right hand				
KM63TSS25KPWLNRO8	—	514.122	—	511.022	—
KM63TSS32LPWLNRO8	512.135	514.123	513.023	511.023	515.018
KM63TSS40LPWLNRO8	512.135	514.123	513.023	511.023	515.018
KM63TSS50PPWLNRO8	512.135	514.123	513.023	511.023	515.018
	left hand				
KM63TSS25KPWLNLO8	—	514.122	—	511.022	—
KM63TSS32LPWLNLO8	512.135	514.123	513.023	511.023	515.018
KM63TSS40LPWLNLO8	512.135	514.123	513.023	511.023	515.018
KM63TSS50PPWLNLO8	512.135	514.123	513.023	511.023	515.018



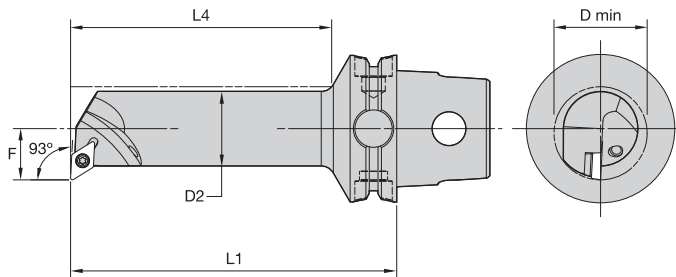
KM63TS Internal Cutting Units



■ SCLC 95°



order number	catalog number	D2		D min		F		L4		L1		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in						
		right hand															
2414908	KM63TSS40LSCLCR12	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,71	3.76
		left hand															
2414909	KM63TSS40LSCLCL12	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,70	3.76



■ SDUC 93°



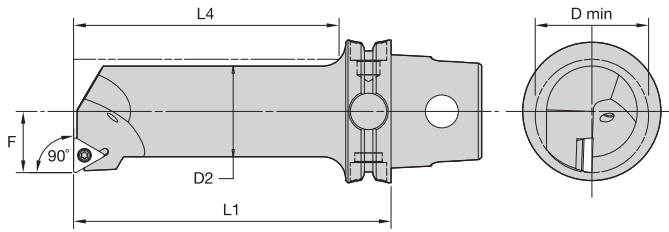
order number	catalog number	D2		D min		F		L4		L1		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in						
		right hand															
2414894	KM63TSS32LSDUCR11	32	1.26	40	1.57	22	.866	112	4.418	140	5.512	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	1,35	2.98
		left hand															
2414895	KM63TSS32LSDUCL11	32	1.26	40	1.57	22	.866	112	4.418	140	5.512	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	1,35	2.98

KM63TS™ Internal Cutting Units

S-Clamping • TopThread™ and TopGroove™



KM63TS Internal Cutting Units



■ STFC 90°

order number	catalog number	D2		D min		F		L4		L1		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in						
		<div style="display: flex; justify-content: space-around; align-items: center;"> </div>															
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■ NE 90° • Steel

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in				
		<div style="display: flex; justify-content: space-around; align-items: center;"> </div>													
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■ Spare Parts

catalog number	clamp	clamp screw
right hand KM63TSS32LNER3	CM73	MS1489
left hand KM63TSS32LNEL3	CM72	MS1489

Common Challenges in Internal Machining

Internal machining operations are very sensitive to chatter and vibrations.

Common challenges include:

- Unfavorable geometric circumstances.
- Machining at extended length-to-diameter ratios.

Additionally, internal machining offers little space for a stable tool and has restrictions for coolant supply and chip removal. These factors can lead to chattering, poor surface finish, noisy vibrations, and workpieces that are out of tolerance. WIDIA™ solves these problems with our portfolio of Tunable Boring Bars.

WIDIA Tunable Tooling

WIDIA Tunable Boring Bars are manufactured with an internal dampening package designed to eliminate chatter in deep-hole boring applications. We manufacture standard tunable bars and have extensive capabilities to design and produce almost any style of tunable product, including boring bars, extensions, holders, rotating adapters, and modular sections.



Advantages of WIDIA Tunable Tooling

The features of the WIDIA proprietary Tunable Boring Bar system provide significant advantages:

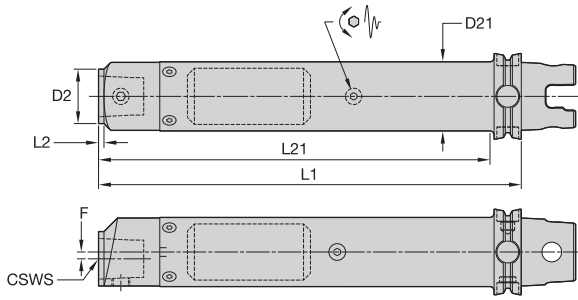
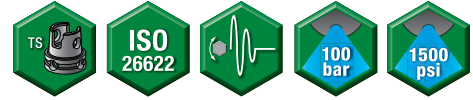
- **Optimal rigidity**
Improved surface quality and close tolerances due to vibration-free machining.
- **Increased productivity**
Larger depth of cut and better chip removal by up to 10:1 (steel) and 15:1 (carbide) length-to-diameter ratio.
- **Machining without chatter or vibration**
Less noise exposure and improved machining results.
- **Tunable damping mechanism**
Bar can be tuned on the machine, and tool can be adjusted to account for different vibration behavior.

KM63TS™ Shank Tools

Tunable Bar with KM Quick Change Connection



KM63TS Shank Tools



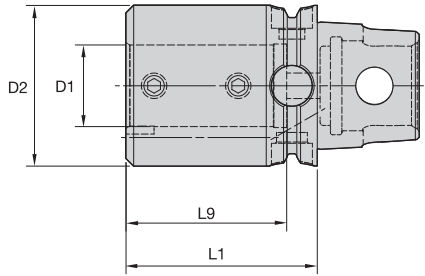
■ TTB • KM Tunable Bar • KM™

order number	catalog number	CSWS system size	D2		D21		F		L1		L2		L21	
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
3901267	KM63TSD40TTB15KM40	KM40	40,00	1.575	63,50	2.500	11,75	.463	386,92	15.233	4,00	.157	386,92	15.233
3901269	KM63TSD32TTB16KM40	KM40	40,00	1.575	50,00	1.969	5,00	.197	412,32	16.233	4,00	.157	392,32	15.446
3901268	KM63TSD28TTB14KM40	KM40	40,00	1.575	44,45	1.750	0,00	.000	361,52	14.233	4,00	.157	341,52	13.446
3901270	KM63TSD40TTB20KM40	KM40	40,00	1.575	63,50	2.500	11,75	.463	513,92	20.233	4,00	.157	513,92	20.233
3901266	KM63TSD32TTB12KM40	KM40	40,00	1.575	50,00	1.969	5,00	.197	310,71	12.233	4,00	.157	290,71	11.445
3901265	KM63TSD24TTB9KM40	KM40	40,00	1.575	38,10	1.500	0,00	.000	234,55	9.234	214,55	8.447	—	—

NOTE: For technical information, refer to page K66.



KM63TS Shank Tools


■ BA • Boring Bar Adapter • Internal and External Coolant • Metric


order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
2269898	KM63TSBA10055M	10	40	55	48	MS1211	4mm	15	0,98
2269899	KM63TSBA12060M	12	40	60	52	MS1211	4mm	15	1,01
2269900	KM63TSBA16065M	16	40	65	55	MS1212	5mm	25	1,02
2269901	KM63TSBA20070M	20	40	70	58	MS1212	5mm	25	0,99
2269902	KM63TSBA25070M	25	50	70	58	MS1212	5mm	25	1,17
2269903	KM63TSBA32075M	32	63	75	63	MS1205	5mm	25	1,60
2255549	KM63TSBA40105M	40	70	105	75	MS1935	6mm	45	2,43

■ BA • Boring Bar Adapter • Internal and External Coolant • Inch


order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
2269893	KM63TSBA10256	5/8	1.58	2.559	2.17	S862	3/16	25	2.22
2269895	KM63TSBA16276	1	1.97	2.756	2.28	S862	3/16	25	2.54
2269891	KM63TSBA06217	3/8	1.58	2.165	1.89	S843	1/8	8	2.15
2269892	KM63TSBA08236	1/2	1.58	2.362	2.05	S852	5/32	15	2.21
2269894	KM63TSBA12276	3/4	1.58	2.756	2.28	S862	3/16	25	2.23
2269896	KM63TSBA20295	1 1/4	2.48	2.953	2.48	S863	3/16	25	3.41
2269897	KM63TSBA24413	1 1/2	2.76	4.134	2.95	S884	1/4	60	5.45

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.

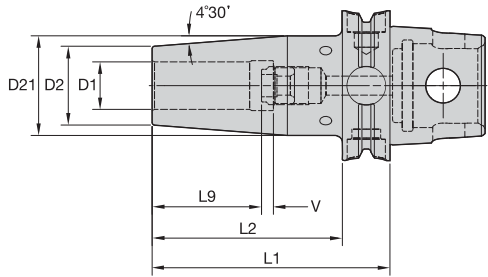
KM63TS™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)



KM63TS Shank Tools

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



■ HPV TT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3869194	KM63TSHPVTT06080M	6	21	27	80	60	26	10	TTSS05014M	2,5mm	0,83
3869195	KM63TSHPVTT08080M	8	21	27	80	60	26	10	TTSS06014M	3mm	0,83
3869196	KM63TSHPVTT10090M	10	24	32	90	70	31	10	TTSS08014M	4mm	0,95
3869197	KM63TSHPVTT12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,93
3869198	KM63TSHPVTT14100M	14	27	34	100	80	36	10	TTSS10014M	5mm	1,05
3869199	KM63TSHPVTT16100M	16	27	34	100	80	39	10	TTSS12014M	6mm	1,03
3869200	KM63TSHPVTT18100M	18	33	42	100	80	39	10	TTSS12014M	6mm	1,24
3869201	KM63TSHPVTT20100M	20	33	42	100	80	41	10	TTSS16014M	8mm	1,21
3869202	KM63TSHPVTT25120M	25	44	53	120	100	47	10	TTSS16014M	8mm	1,92
3869203	KM63TSHPVTT32120M	32	44	53	120	100	51	10	TTSS16014M	8mm	1,76

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ HPV TT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3869253	KM63TSHPVTT025315	1/4	.827	1.059	3.150	2.362	1.024	.394	TTSS05014M	2,5mm	1.84
3869254	KM63TSHPVTT031315	5/16	.827	1.059	3.150	2.362	1.024	.394	TTSS06014M	3mm	1.82
3869255	KM63TSHPVTT038335	3/8	.945	1.256	3.347	2.559	1.221	.394	TTSS08014M	4mm	2.02
3869256	KM63TSHPVTT044354	7/16	.945	1.256	3.543	2.756	1.417	.394	TTSS10014M	5mm	2.06
3869257	KM63TSHPVTT050354	1/2	.945	1.256	3.543	2.756	1.417	.394	TTSS10014M	5mm	2.04
3869258	KM63TSHPVTT056354	9/16	1.063	1.335	3.543	2.756	1.417	.394	TTSS10014M	5mm	2.16
3869259	KM63TSHPVTT062374	5/8	1.063	1.335	3.740	2.953	1.535	.394	TTSS12014M	6mm	2.19
3869260	KM63TSHPVTT068374	11/16	1.299	1.650	3.740	2.953	1.535	.394	TTSS12014M	6mm	2.63
3869261	KM63TSHPVTT075394	3/4	1.299	1.650	3.937	3.150	1.614	.394	TTSS16014M	8mm	2.68
3869262	KM63TSHPVTT088394	7/8	1.299	1.650	3.937	3.150	1.614	.394	TTSS16014M	8mm	2.59
3869263	KM63TSHPVTT100453	1	1.732	2.083	4.528	3.740	1.850	.394	TTSS16014M	8mm	4.03
3869264	KM63TSHPVTT125472	1 1/4	1.732	2.083	4.724	3.937	2.008	.394	TTSS16014M	8mm	3.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Shrink Fit accessories, see page J2.
 Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
 Order number is MS1276PKG and must be ordered separately.

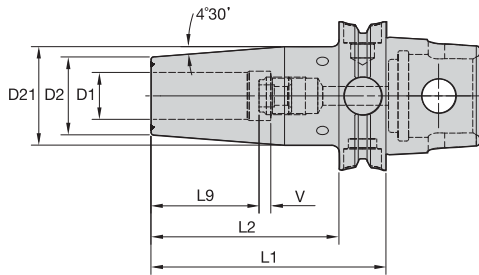
KM63TS™ Shank Tools

Shrink Fit Toolholders High Torque (HT)



KM63TS Shank Tools

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000 -0,016



■ HPV TT HT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3869209	KM63TSHPVTTHT12090M	12	24	1	90	70	36	10	TTSS10014M	5mm	0,93
3869210	KM63TSHPVTTHT14100M	14	27	1	100	80	36	10	TTSS10014M	5mm	1,05
3869211	KM63TSHPVTTHT16100M	16	27	1	100	80	39	10	TTSS12014M	6mm	1,03
3869212	KM63TSHPVTTHT18100M	18	33	2	100	80	39	10	TTSS12014M	6mm	1,24
3869213	KM63TSHPVTTHT20100M	20	33	2	100	80	41	10	TTSS16014M	8mm	1,21
3869214	KM63TSHPVTTHT25120M	25	44	2	120	100	47	10	TTSS16014M	8mm	1,92
3869215	KM63TSHPVTTHT32120M	32	44	2	120	100	51	10	TTSS16014M	8mm	1,76

(continued)

(HPV TT HT continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ HPV TT HT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3869234	KM63TSHPVTTHT050354	1/2	.945	1.256	3.543	2.756	1.417	.394	TTSS10014M	5mm	2.04
3869235	KM63TSHPVTTHT056354	9/16	1.063	1.335	3.543	2.756	1.417	.394	TTSS10014M	5mm	2.16
3869236	KM63TSHPVTTHT062374	5/8	1.063	1.335	3.740	2.953	1.535	.394	TTSS12014M	6mm	2.19
3869237	KM63TSHPVTTHT068374	11/16	1.299	1.650	3.740	2.953	1.535	.394	TTSS12014M	6mm	2.63
3869238	KM63TSHPVTTHT075394	3/4	1.299	1.650	3.937	3.150	1.614	.394	TTSS16014M	8mm	2.68
3869239	KM63TSHPVTTHT088394	7/8	1.299	1.650	3.937	3.150	1.614	.394	TTSS16014M	8mm	2.59
3869240	KM63TSHPVTTHT100453	1	1.732	2.083	4.528	3.740	1.850	.394	TTSS16014M	8mm	4.03
3869241	KM63TSHPVTTHT125472	1 1/4	1.732	2.083	4.724	3.937	2.008	.394	TTSS16014M	8mm	3.88

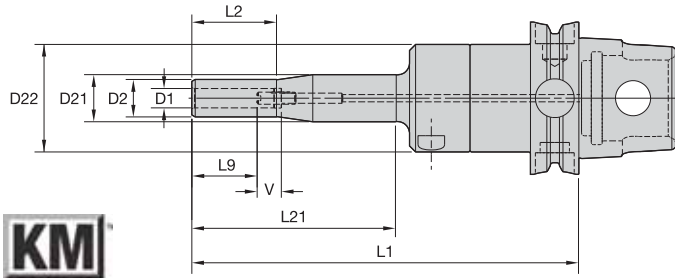
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.

KM63TS™ Shank Tools

Hydraulic Chucks Slim Line



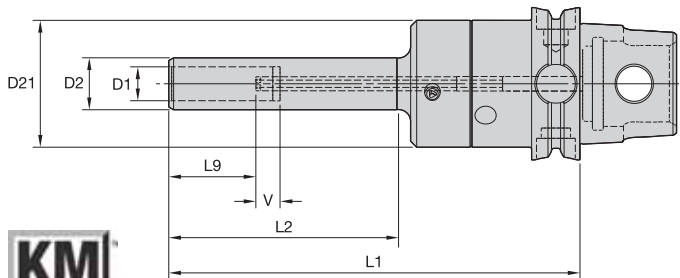
KM63TS Shank Tools



■ HCSLT • Metric



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
3055503	KM63TSHCSLT06160M	6	14	20	44	160	35	85	27	10	170.135	5 mm	170.002	2.5 mm	1,36
3055504	KM63TSHCSLT08160M	8	16	20	44	160	35	85	27	10	170.135	5 mm	170.002	2.5 mm	1,37
3055505	KM63TSHCSLT10160M	10	18	44	—	160	85	140	31	10	170.135	5 mm	170.003	3 mm	1,35



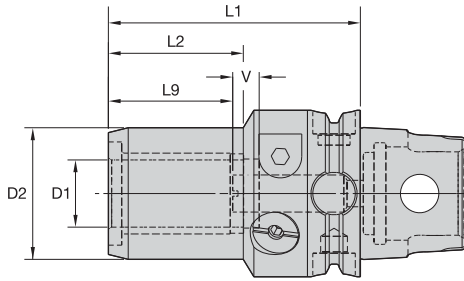
■ HCSL • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3055506	KM63TSHCSL12170M	12	20	44	170	95	36	10	170.135	5mm	170.002	2,5mm	1,40
3055507	KM63TSHCSL14170M	14	22	52	170	95	36	10	170.135	5mm	170.002	2,5mm	1,66
3055508	KM63TSHCSL16170M	16	24	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,67
3055509	KM63TSHCSL18170M	18	26	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,71
3055510	KM63TSHCSL20170M	20	28	52	170	95	41	10	170.135	5mm	170.002	2,5mm	1,75

NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.





■ HC • Metric



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
2388650	KM63TSHC06070M	6	26	70	33	27	10	170.135	5mm	170.002	2,5mm	1,08
2388651	KM63TSHC08070M	8	28	70	33	27	10	170.135	5mm	170.002	2,5mm	1,10
2388652	KM63TSHC10075M	10	30	75	36	31	10	170.135	5mm	170.002	2,5mm	1,17
2388653	KM63TSHC12080M	12	32	80	41	36	10	170.135	5mm	170.002	2,5mm	1,21
2388654	KM63TSHC14080M	14	34	80	43	36	10	170.135	5mm	170.003	2,5mm	1,18
2388655	KM63TSHC16080M	16	38	80	48	39	10	170.135	5mm	170.003	3mm	1,17
2388656	KM63TSHC18080M	18	40	80	47	39	10	170.135	5mm	170.003	3mm	1,19
2388657	KM63TSHC20085M	20	42	85	48	41	10	170.135	5mm	170.003	3mm	1,32
2388658	KM63TSHC25095M	25	50	95	51	47	10	170.136	6mm	170.004	4mm	1,64
2388659	KM63TSHC32100M	32	60	100	59	51	10	170.136	6mm	170.004	4mm	1,92

■ HC • Inch



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
2388643	KM63TSHC025288	1/4	1.01	2.875	1.30	1.06	.39	170.135	5mm	170.002	2,5mm	2.53
2388644	KM63TSHC038300	3/8	1.17	3.000	1.42	1.22	.39	170.135	5mm	170.002	2,5mm	2.64
2388645	KM63TSHC050325	1/2	1.24	3.250	1.61	1.42	.39	170.135	5mm	170.002	2,5mm	2.79
2388646	KM63TSHC062325	5/8	1.48	3.250	1.87	1.54	.39	170.135	5mm	170.003	3mm	2.71
2388647	KM63TSHC075338	3/4	1.64	3.375	1.89	1.61	.39	170.135	5mm	170.003	3mm	2.97
2388648	KM63TSHC100375	1	1.96	3.750	2.01	1.85	.39	170.136	6mm	170.004	4mm	3.61
2388649	KM63TSHC125400	1 1/4	2.35	4.000	2.32	2.01	.39	170.136	6mm	170.004	4mm	4.33

NOTE: Do not overtorque clamp screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Reduction sleeves are available and must be ordered separately; see page I2.

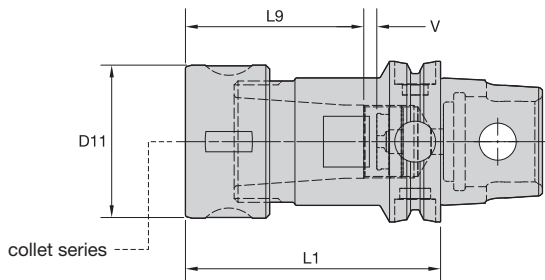
KM63TS™ Shank Tools

TG Single-Angle Collet Chucks



KM63TS Shank Tools

- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
2384711	KM63TSTG100100M	TG100	60	2.36	100	3.937	69,0	2.72	9	.36	1,54	3.40

■ Spare Parts



catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM63TSTG100100M	LNA100M	HSW58M	203	150	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

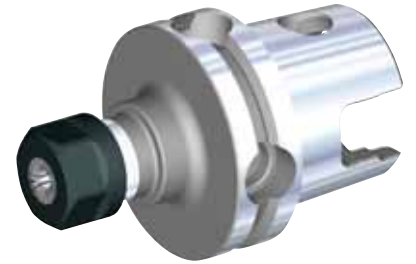
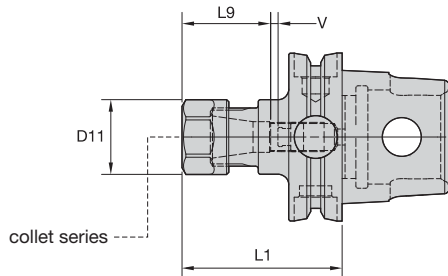
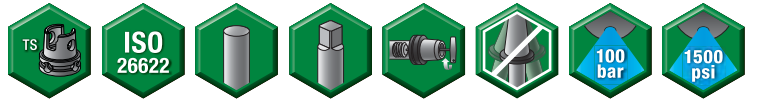
Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

- Grip (2:1 advantage).



KM63TS Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41

■ Collet Chuck • Hex Nut

order number	catalog number	collet series	D11		L1		L9		V		locknut	OEW	stop screw	counterbore collet torque		straight collet torque		kg	lbs
			mm	in	mm	in	mm	in	mm	in				Nm	ft. lbs.	Nm	ft. lbs.		
2255039	KM63TSER16060M	ER16	28	1.10	60	2.362	32	1.26	13	.51	LNHSER16M	OEW25M	SS044038G	40	30	56	42	0,73	1.61
2255041	KM63TSER16120M	ER16	28	1.10	120	4.724	32	1.26	48	1.89	LNHSER16M	OEW25M	SS044038G	40	30	56	42	0,98	2.17

(continued)

KM63TS™ Shank Tools

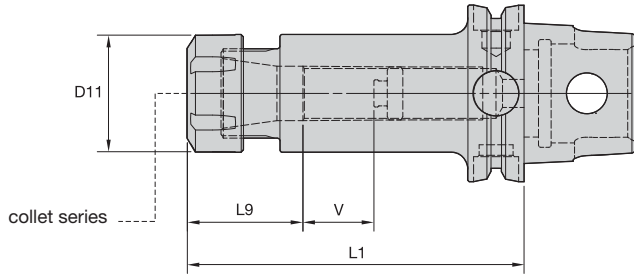
ER Single-Angle Collet Chucks



(Collet Chuck continued)



KM63TS Shank Tools

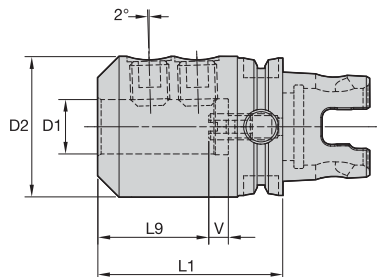
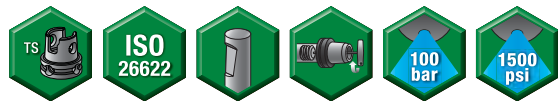


ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	stop screw	Nm ft. lbs. kg lbs			
			mm	in	mm	in	mm	in	mm	in							
2255042	KM63TSER25065M	ER25	42	1.65	65	2.559	40,0	1.57	—	—	LNSER25M	ER25WM	—	104	77	0,88	1.93
2255053	KM63TSER25120M	ER25	42	1.65	120	4.724	40,0	1.57	47	1.85	LNSER25M	ER25WM	SS075041G	104	77	1,37	3.03
2255551	KM63TSER32065M	ER32	50	1.97	65	2.559	46,0	1.81	—	—	LNSER32M	ER32WM	—	136	100	0,94	2.08
2253812	KM63TSER32120M	ER32	50	1.97	120	4.724	46,0	1.81	34	1.34	LNSER32M	ER32WM	SS094041G	136	100	1,64	3.62
2255056	KM63TSER40065M	ER40	63	2.48	65	2.559	52,0	2.05	—	—	LNSER40M	ER40WM	—	176	130	1,04	2.30

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.



KM63TS Shank Tools



■ WN • Whistle Notch Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2253809	KM63TSWN20080M	20	52	80	45	10	SS03M026	8mm	95	571.063	5mm	1,41
2253810	KM63TSWN25085M	25	65	85	50	10	SS03M027	10mm	135	571.069	6mm	1,95
2253905	KM63TSWN32095M	32	72	95	54	10	SS03M029	10mm	160	571.069	6mm	2,46

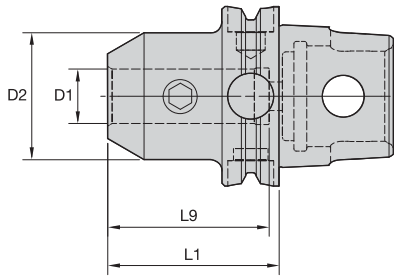
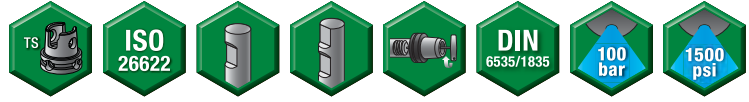
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.

KM63TS™ Shank Tools

EM End Mill Adapters



KM63TS Shank Tools



EM • Metric



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
2253910	KM63TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,91
2253676	KM63TSEM16060M	16	48	60	53	SS03M025	6mm	50	1,05
2269911	KM63TSEM20060M	20	52	60	55	SS03M026	8mm	95	1,10
2258495	KM63TSEM25080M	25	65	80	60	SS03M027	10mm	135	1,82
2255038	KM63TSEM32090M	32	72	90	65	SS03M029	10mm	160	2,31
2269912	KM63TSEM40095M	40	80	95	75	SS03M029	10mm	160	2,74

EM • Inch

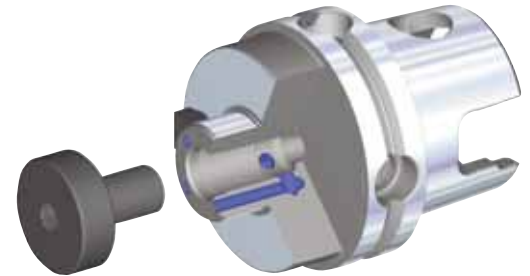
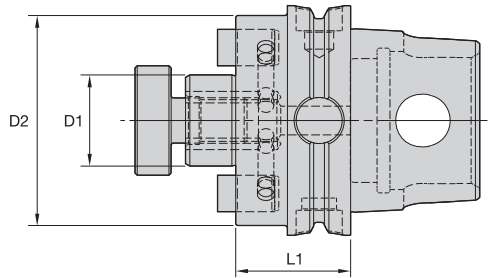


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2269904	KM63TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.76
2269905	KM63TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	2.04
2269906	KM63TSEM075236	3/4	1.75	2.362	2.22	ELS062050PKG	5/16	70	2.07
2269907	KM63TSEM088236	7/8	2.00	2.362	2.22	ELS062050PKG	5/16	70	2.28
2269908	KM63TSEM100315	1	2.00	3.150	2.46	ELS075056PKG	3/8	110	2.80
2269909	KM63TSEM125354	1 1/4	2.50	3.543	2.51	ELS075062PKG	3/8	110	4.13
2269910	KM63TSEM150374	1 1/2	2.75	3.740	2.93	ELS075069PKG	3/8	110	4.68

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.



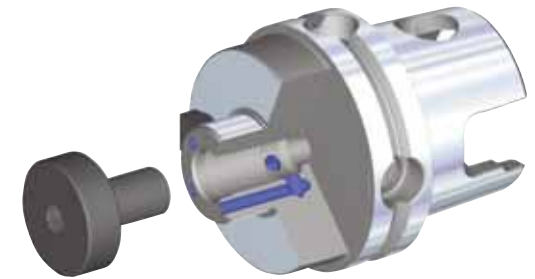
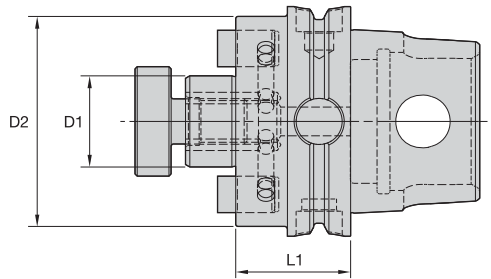
KM63TS Shank Tools



■ SMC • Metric



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950894	KM63TSSMC22028M	22	49	28	MS1234	KDK22M	8mm	0,81
3950895	KM63TSSMC27032M	27	60	32	KLSS27M	KDK27M	10mm	1,02
3950896	KM63TSSMC32040M	32	78	40	KLSS32M	KDK32M	14mm	1,56
3950897	KM63TSSMC40045M	40	89	45	KLSS40M	KDK40M	17mm	2,10



■ SMC • Inch



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950864	KM63TSSMC050102	1/2	1.44	1.024	KLS05	KDK04	3/16	1.53
3950866	KM63TSSM2C075126	3/4	1.46	1.260	KLS07	—	1/4	1.77
3950865	KM63TSSMC075126	3/4	1.75	1.260	KLS07	KDK05	1/4	1.84
3950868	KM63TSSM2C100126	1	2.19	1.260	KLS10	KDK06	5/16	2.10
3950867	KM63TSSMC100126	1	2.75	1.260	KLS10	KDK06	5/16	2.35
3950869	KM63TSSMC125157	1 1/4	2.88	1.575	KLS12	KDK08	5/16	3.19
3950870	KM63TSSMC150177	1 1/2	3.81	1.772	KLS15	KDK10	3/8	4.86

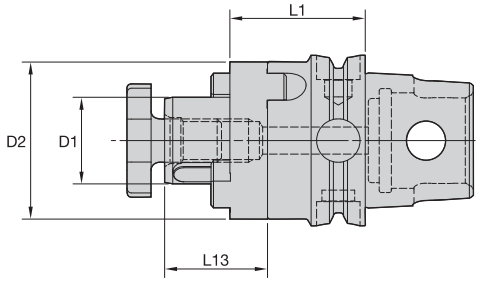
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.

KM63TS™ Shank Tools

CS Combi-Type Shell Mill Adapters • Top Cut Plus™ and Top Cut Drill™ Adapters



KM63TS Shank Tools

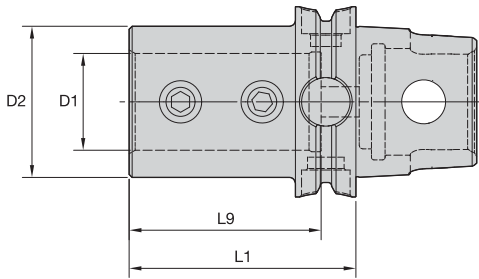


■ CS • Metric



order number	catalog number	D1	D2	L1	L13	lock screw	combi driver	combi drive key	kg
2384735	KM63TSCS27040M	27	48	40	21	KLS27MPKG	CDR27M	CDK27M	1,03
2384736	KM63TSCS32050M	32	58	50	24	KLS32M	CDR32M	CDK32M	1,43
2384737	KM63TSCS40050M	40	70	50	27	KLS40M	CDR40M	CDK40M	1,87

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.



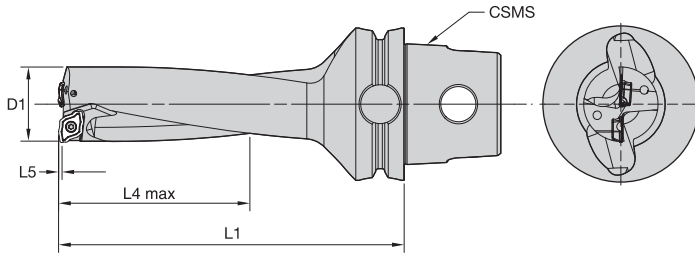
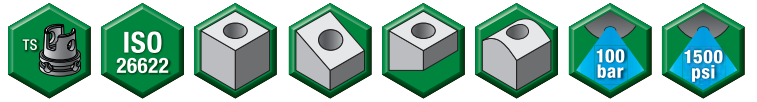
■ DAT • Metric



order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3959949	KM63TSDAT2575M	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	1,06
3959950	KM63TSDAT32075M	32	50	75	64	12166903700	6mm	40	12166903900	6mm	40	1,06
3959951	KM63TSDAT40095M	40	60	95	74	12166903800	8mm	50	12166904000	8mm	50	1,53

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.
Cone point screw to be tightened first.





KM63TS Shank Tools

■ 3 x D • Metric


order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898417	KM63TSTCP350R3M	KM63TS	35,0	154,0	105,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898418	KM63TSTCP360R3M	KM63TS	36,0	157,0	108,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898419	KM63TSTCP370R3M	KM63TS	37,0	161,0	111,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898420	KM63TSTCP380R3M	KM63TS	38,0	165,0	114,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898421	KM63TSTCP390R3M	KM63TS	39,0	169,0	117,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898423	KM63TSTCP400R3M	KM63TS	40,0	172,0	120,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898424	KM63TSTCP410R3M	KM63TS	41,0	176,0	123,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898425	KM63TSTCP420R3M	KM63TS	42,0	180,0	126,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898426	KM63TSTCP430R3M	KM63TS	43,0	184,0	129,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898427	KM63TSTCP440R3M	KM63TS	44,0	187,0	132,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898428	KM63TSTCP450R3M	KM63TS	45,0	191,0	135,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898429	KM63TSTCP460R3M	KM63TS	46,0	195,0	138,0	1,48	XOMT160508	12148007200	12148082400	T20
3898430	KM63TSTCP470R3M	KM63TS	47,0	199,0	141,0	1,48	XOMT160508	12148007200	12148007500	T20
3898431	KM63TSTCP480R3M	KM63TS	48,0	202,0	144,0	1,48	XOMT160508	12148007200	12148007500	T20
3898432	KM63TSTCP490R3M	KM63TS	49,0	206,0	147,0	1,48	XOMT160508	12148007200	12148007500	T20
3898433	KM63TSTCP500R3M	KM63TS	50,0	210,0	150,0	1,48	XOMT160508	12148007200	12148007500	T20

■ 3 x D • Inch


order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898457	KM63TSTCP1250R3	KM63TS	1.250	5.625	3.750	.028	XOMT09T306	12148067200	12148086600	T8
3898458	KM63TSTCP1313R3	KM63TS	1.313	5.750	3.939	.028	XOMT09T306	12148067200	12148086600	T8
3898459	KM63TSTCP1375R3	KM63TS	1.375	6.125	4.125	.028	XOMT09T306	12148067200	12148086600	T8
3898460	KM63TSTCP1438R3	KM63TS	1.438	6.375	4.314	.038	XOMT12T308	12148055800	12148082400	T15
3898461	KM63TSTCP1500R3	KM63TS	1.500	6.500	4.500	.038	XOMT12T308	12148055800	12148082400	T15
3898462	KM63TSTCP1563R3	KM63TS	1.563	6.750	4.689	.038	XOMT12T308	12148055800	12148082400	T15
3898463	KM63TSTCP1625R3	KM63TS	1.625	7.000	4.875	.038	XOMT12T308	12148055800	12148082400	T15
3898464	KM63TSTCP1688R3	KM63TS	1.688	7.250	5.064	.038	XOMT12T308	12148055800	12148082400	T15
3898465	KM63TSTCP1750R3	KM63TS	1.750	7.500	5.250	.038	XOMT12T308	12148055800	12148082400	T15
3898466	KM63TSTCP1875R3	KM63TS	1.875	8.000	5.625	.058	XOMT160508	12148007200	12148007500	T20
3898467	KM63TSTCP1938R3	KM63TS	1.938	8.250	5.814	.058	XOMT160508	12148007200	12148007500	T20
3898468	KM63TSTCP2000R3	KM63TS	2.000	8.375	6.000	.058	XOMT160508	12148007200	12148007500	T20

NOTE: Drill shipped with insert screws and Torx wrench.
See the WIDIA Indexable Milling and Holemaking (A-09-02081) catalog.



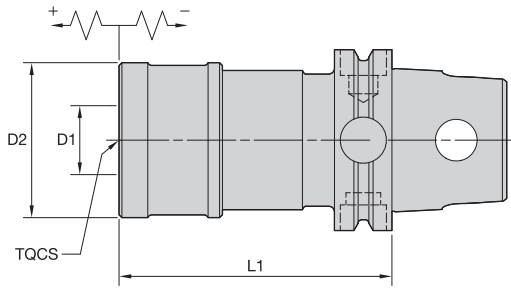
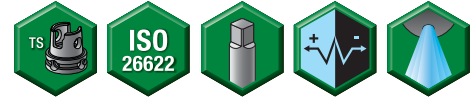
WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM63TS™ Shank Tools

TC Tap Chucks • S-Extensions



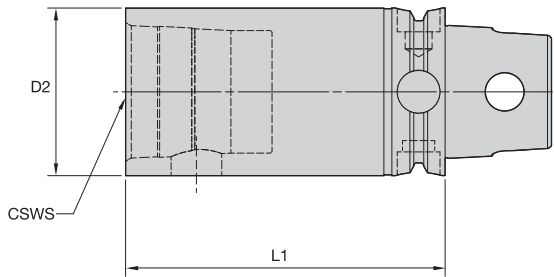
KM63TS Shank Tools



TC • Tension and Compression

order number	catalog number	TQCS adapter size	D1		D2		L1		kg	lbs
			mm	in	mm	in	mm	in		
1126271	KM63TSTC2095M	2	31	1.220	53	2.090	95	3.740	0,96	2.12
1126272	KM63TSTC3147M	3	48	1.890	78	3.070	147	5.790	1,97	4.34

NOTE: Quick-change tap adapters available and must be ordered separately; see page I76.



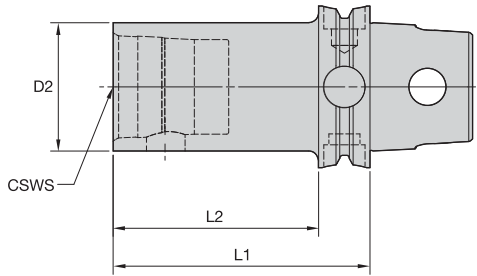
S • KM™ Extension



order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in						
2253808	KM63TSS63080M	KM63	63	2.480	80	3.150	12mm	47-54	35-40	KM63PKG3S	1,69	3.73
2397720	KM63TSS63120M	KM63	63	2.480	120	4.724	12mm	47-54	35-40	KM63PKG3S	2,63	5.81



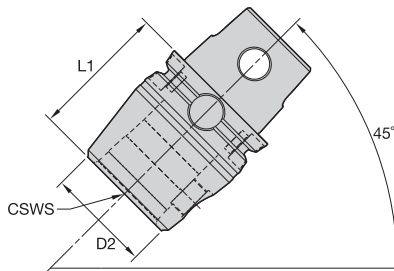
KM63TS Shank Tools



■ S • KM Reducer



order number	catalog number	CSWS system size	D2		L1		L2		wrench size actuation screw	Nm ft. lbs.		spare parts package	kg	lbs
			mm	in	mm	in	mm	in						
2397719	KM63TSS32070M	KM32	32	1.258	70	2.756	50	1.969	5mm	8-11	6-8	KM32PKG3S	0,90	1.97
2253907	KM63TSS40080M	KM40	40	1.573	80	3.150	60	2.362	6mm	12-16	9-12	KM40PKG3S	1,12	2.47
2253906	KM63TSS50100M	KM50	50	1.967	100	3.937	80	3.150	10mm	27-34	20-25	KM50PKG3S	1,63	3.58



■ S • KM Reducer • Centerline



order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw	Nm ft. lbs.		spare parts package	kg	lbs
			mm	in	mm	in						
3503748	KM63TSS50065M	KM50	50	1.967	65	2.559	10mm	27-34	20-25	KM50PKG3L	1,37	3.02

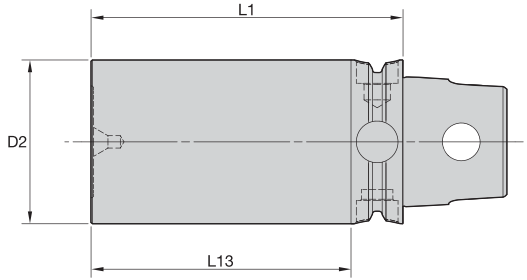
NOTE: Designed for centerline KM cutting units.

KM63TS™ Shank Tools

Gage Bars • Blanks

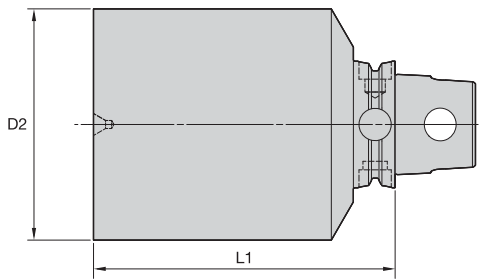


KM63TS Shank Tools



■ GB • Gage Bar

order number	catalog number	D2		L1		L13		kg	lbs
		mm	in	mm	in	mm	in		
3959981	KM40TSGB40080M	40	1.58	80	3.15	68	2.68	0,81	1.79



■ BN • Blank

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
2397722	KM63TSBN65200M	65	2.559	200	7.874	32-38 HRC	5,30	11.68
2397721	KM63TSBN115150M	115	4.528	150	5.906	32-38 HRC	10,89	24.01

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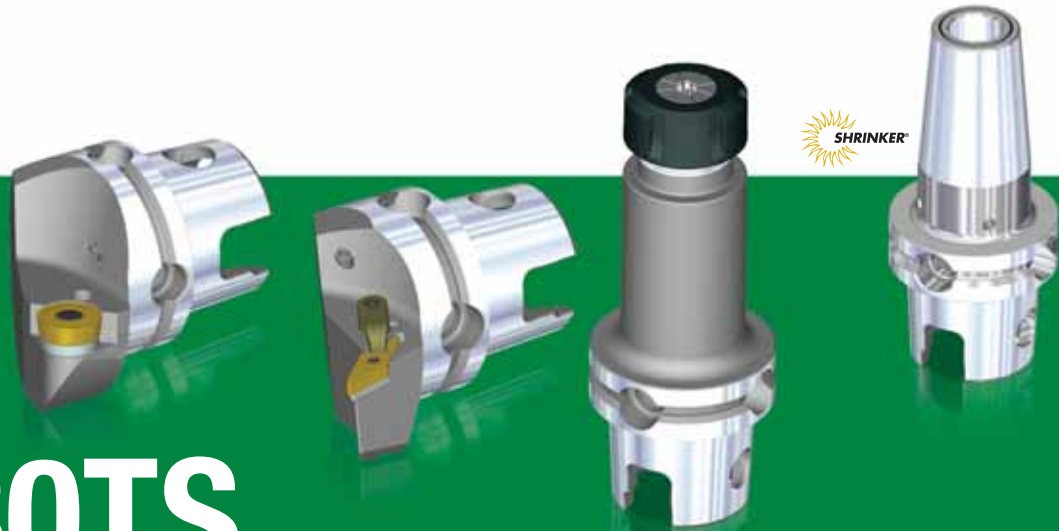
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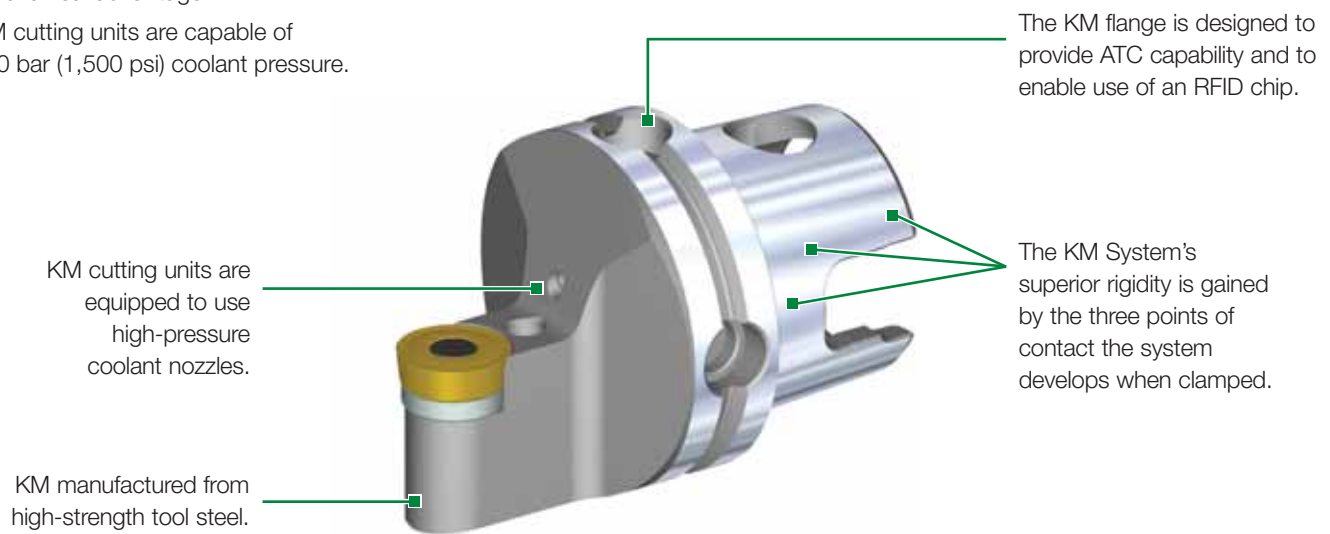
KM™ Quick Change Clamping System • **KM80TS™ Series**

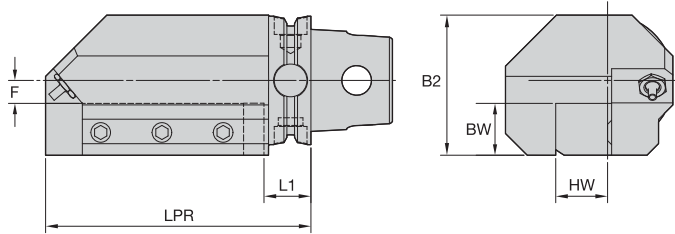
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM80TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.





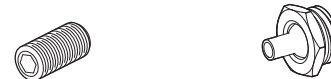
KM80TS Adapters

■ STA • Metric



order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	Nm	kg
right hand											
3670073	KM80TSSTAR2525M	99	25	33	25	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,48
3670074	KM80TSSTAR3232M	98	32	25	32	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,95
left hand											
3670059	KM80TSSTAL2525M	99	25	33	25	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,48
3670060	KM80TSSTAL3232M	98	32	25	32	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,95

■ STA • Inch



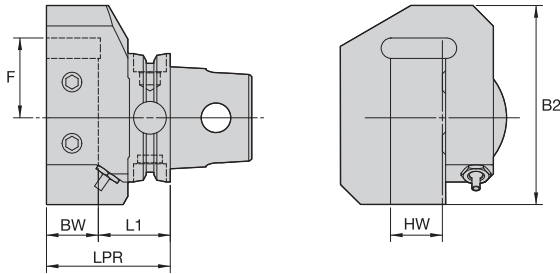
order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	ft. lbs.	lbs
right hand											
3670061	KM80TSSTAR20	3.904	1.250	1.059	1.250	1.693	5.906	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.70
3670062	KM80TSSTAR24	3.654	1.500	.559	1.500	1.480	6.693	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	21.37
left hand											
3670057	KM80TSSTAL20	3.904	1.250	1.059	1.250	1.693	5.906	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.70
3670058	KM80TSSTAL24	3.654	1.500	.559	1.500	1.480	6.693	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	21.37

KM80TS™ Adapters

ETA Single Square Shank Adapters



KM80TS Adapters



■ ETA • Metric

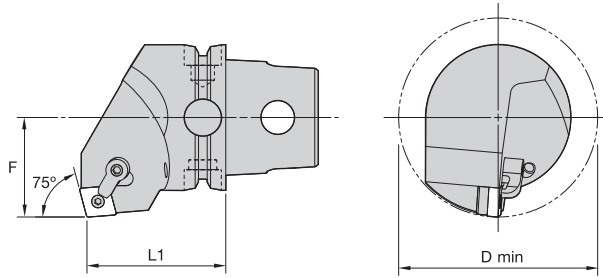


order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	Nm	kg
right hand											
3670108	KM80TSETAR2525M	96	25	-37,5	25	48	73	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,51
3670109	KM80TSETAR3232M	111	32	-55,0	32	45	77	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	4,53
left hand											
3670103	KM80TSETAL2525M	96	25	-37,5	25	48	73	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,51
3670104	KM80TSETAL3232M	111	32	-55,0	32	45	77	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	4,53

■ ETA • Inch



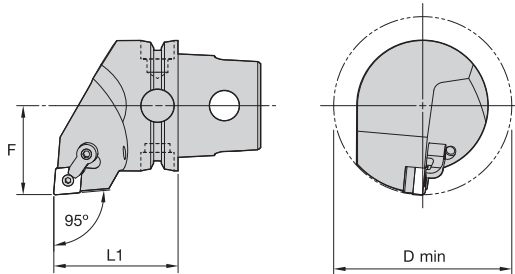
order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	ft. lbs.	lbs
right hand											
3670105	KM80TSETAR16	3.780	1.000	-1.539	1.000	1.900	2.900	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.78
3670106	KM80TSETAR20	4.370	1.250	-2.244	1.250	1.846	3.096	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.28
3670107	KM80TSETAR24	4.370	1.500	-2.244	1.500	1.937	3.437	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.82
left hand											
3670078	KM80TSETAL16	3.780	1.000	-1.539	1.000	1.900	2.900	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.78
3670080	KM80TSETAL20	4.370	1.250	-2.244	1.250	1.846	3.096	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.28
3670082	KM80TSETAL24	4.370	1.500	-2.244	1.500	1.937	3.437	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.83



■ MCKN 75°



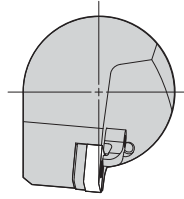
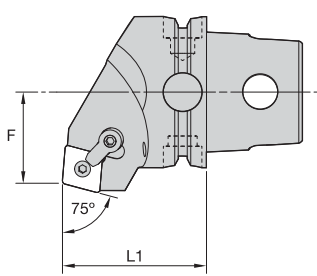
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3662524	KM80TSMCKNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,39	5.28
left hand														
3662523	KM80TSMCKNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,39	5.28



■ MCLN 95°



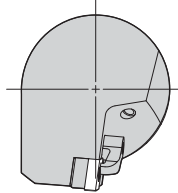
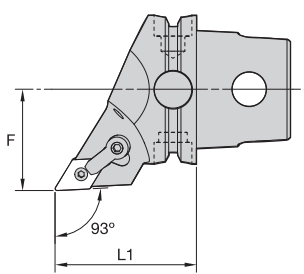
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3662529	KM80TSMCLNR12	70	2.756	53	2.087	106	4.173	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,21	4.87
3662530	KM80TSMCLNR16	70	2.756	53	2.087	106	4.173	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,20	4.86
3662531	KM80TSMCLNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,20	4.85
3662532	KM80TSMCLNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,21	4.86
left hand														
3662525	KM80TSMCLNL12	70	2.756	53	2.087	106	4.173	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,21	4.87
3662526	KM80TSMCLNL16	70	2.756	53	2.087	106	4.173	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,20	4.86
3662527	KM80TSMCLNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,20	4.85
3662528	KM80TSMCLNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,21	4.86



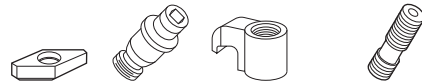
MCRN 75°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3662536	KM80TSMCRNR16	70	2.756	48	1.890	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,27	5.00
3662537	KM80TSMCRNR19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,26	4.99
3662538	KM80TSMCRNR25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,25	4.97
left hand												
3662533	KM80TSMCRNL16	70	2.756	48	1.890	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,27	5.00
3662534	KM80TSMCRNL19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,26	4.99
3662535	KM80TSMCRNL25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,25	4.97



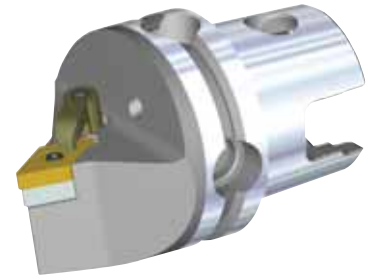
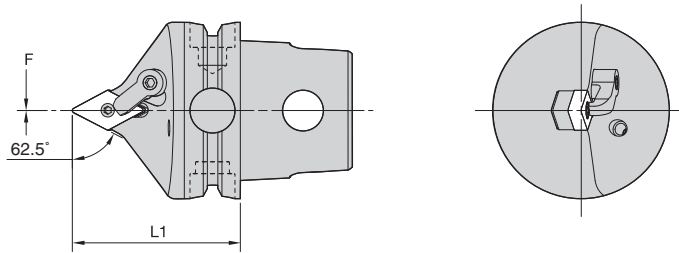
MDJN 93°



order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3662542	KM80TSMDJNR1504	70	2.756	53	2.087	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,85	4.07
3662564	KM80TSMDJNR1506	70	2.756	53	2.087	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,84	4.06
left hand												
3662541	KM80TSMDJNL1504	70	2.756	53	2.087	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,85	4.07
3662563	KM80TSMDJNL1506	70	2.756	53	2.087	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,84	4.06

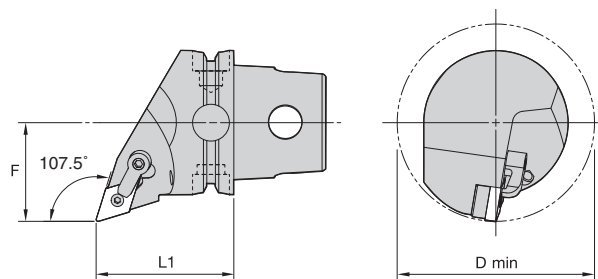


KM80TS Cutting Units



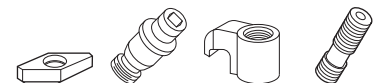
■ MDPN 62.5°

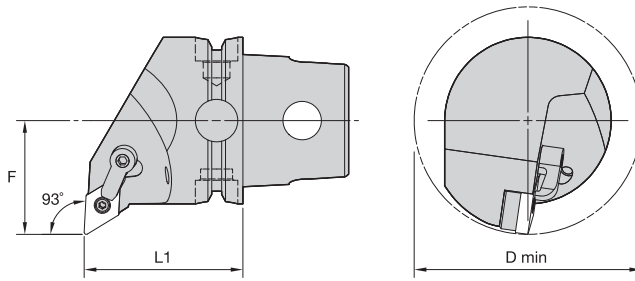
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3662565	KM80TSMDPNN1504	70	2.756	0	.000	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,73	3.81
3662566	KM80TSMDPNN1506	70	2.756	0	.000	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,72	3.80



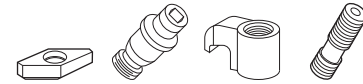
■ MDQN 107.5°

order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
3662568	KM80TSMDQNR1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,01	4.44
3662570	KM80TSMDQNR1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,01	4.43
3662567	KM80TSMDQNL1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,01	4.44
3662569	KM80TSMDQNL1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,01	4.43

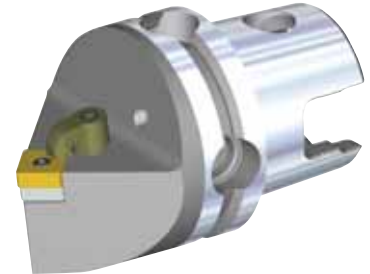
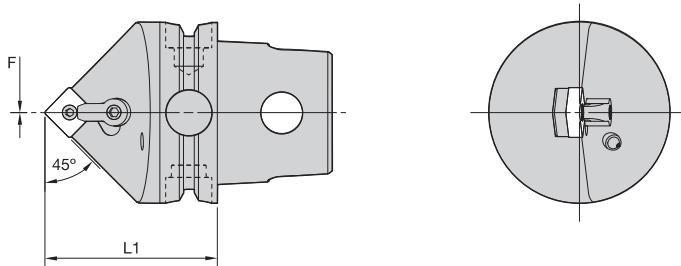




MDUN 93°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3662572	KM80TSM DUNR1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,28	5.02
3662574	KM80TSM DUNR1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,27	5.01
left hand														
3662571	KM80TSM DUNL1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,27	5.02
3662573	KM80TSM DUNL1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,27	5.01



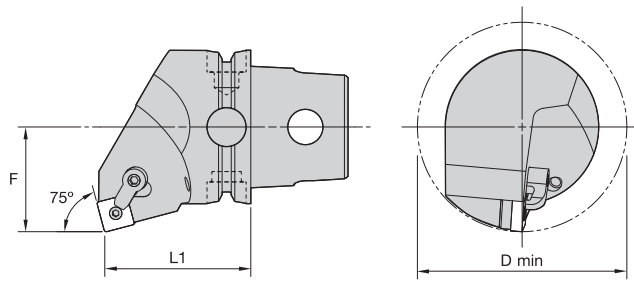
MSDN 45°



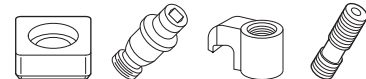
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3662577	KM80TSM SDNN19	70	2.756	0	.000	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	1,85	4.08
3662578	KM80TSM SDNN25	70	2.756	0	.000	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	1,76	3.88



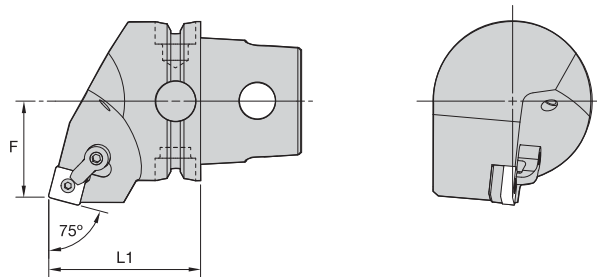
KM80TS Cutting Units



■ MSKN 75°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
3662581	KM80TSMKSNR19	70	2.756	53	2.087	106	4.17	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,37	5.23
3662582	KM80TSMKSNR25	70	2.756	53	2.087	106	4.17	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.45
left hand														
3662579	KM80TSMKSNL19	70	2.756	53	2.087	106	4.17	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,37	5.23
3662580	KM80TSMKSNL25	70	2.756	53	2.087	106	4.17	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.45



■ MSRN 75°



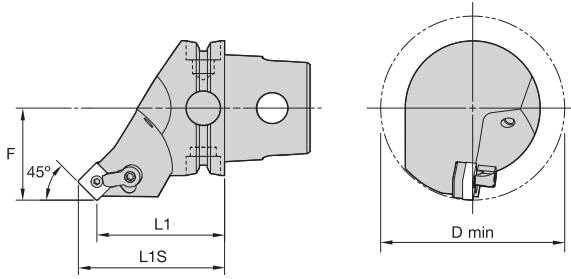
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
right hand												
3662585	KM80TMSRNR19	70	2.756	48	1.890	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,12	4.67
3662586	KM80TMSRNR25	70	2.756	48	1.890	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,19	4.82
left hand												
3662583	KM80TMSRNL19	70	2.756	48	1.890	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,12	4.67
3662584	KM80TMSRNL25	70	2.756	48	1.890	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,19	4.82

KM80TS™ Cutting Units

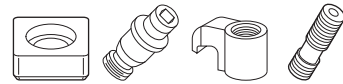
M-Clamping



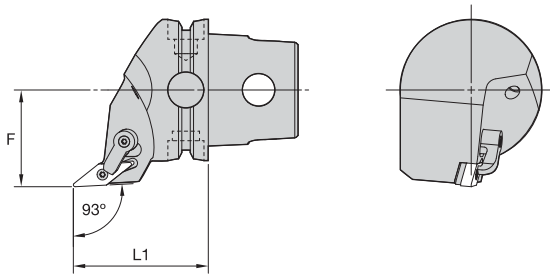
KM80TS Cutting Units



■ MSSN 45°



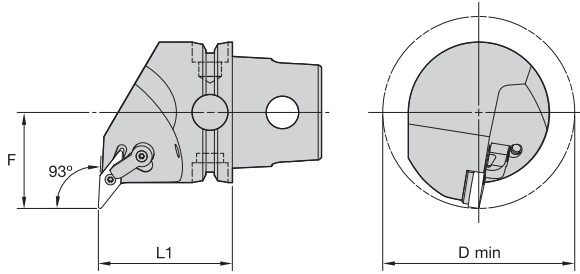
order number	catalog number	L1		L1S		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in	mm	in							
		right hand														
3662588	KM80TSMSSNR25	70	2.756	86	3.386	53	2.09	150	5.906	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,18	4.81
		left hand														
3662587	KM80TSMSSNL25	70	2.756	86	3.386	53	2.09	150	5.906	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,18	4.81



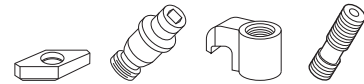
■ MVJN 93°



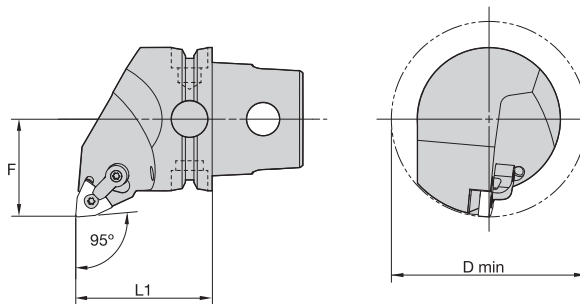
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
		right hand										
3662562	KM80TSMVJNR16	70	2.756	53	2.087	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	1,79	3.94
		left hand										
3662561	KM80TSMVJNL16	70	2.756	53	2.087	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	1,79	3.94



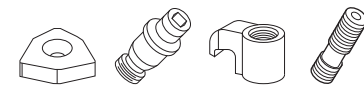
■ MVUN 93°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3662594	KM80TSMVUNR16	70	2.756	53	2.087	106	4.173	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	2,11	4.64	
		left hand													
3662593	KM80TSMVUNL16	70	2.756	53	2.087	106	4.173	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	2,11	4.64	



■ MWLN 95°



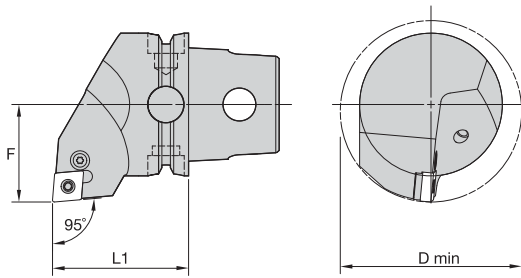
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
3662596	KM80TSMWLNRO8	70	2.756	53	2.087	106	4.173	WN..080408/WN.432	IWSN433	KLM46	CKM20	STCM11	2,15	4.74	
		left hand													
3662595	KM80TSMWLNLO8	70	2.756	53	2.087	106	4.173	WN..080408/WN.432	IWSN433	KLM46	CKM20	STCM11	2,15	4.74	

KM80TS™ Cutting Units

P-Clamping



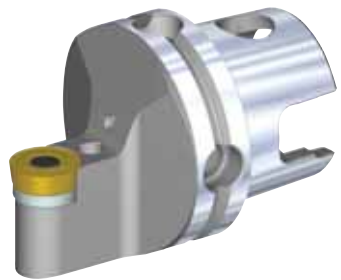
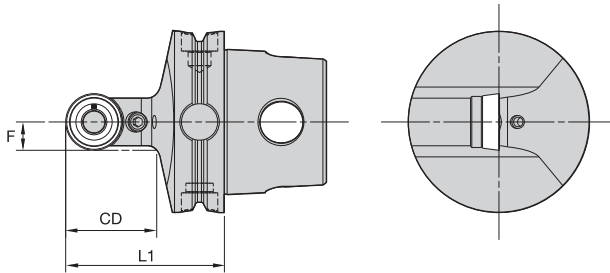
KM80TS Cutting Units



■ PCLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in								
right hand															
3662602	KM80TSPCLNR12	70	2.756	53	2.087	100	3.937	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	2,19	4.82
3662603	KM80TSPCLNR16	70	2.756	53	2.087	100	3.937	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	2,18	4.81
3662604	KM80TSPCLNR19	70	2.756	53	2.087	100	3.937	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	2,17	4.79
left hand															
3662605	KM80TSPCLNR25	70	2.756	53	2.087	100	3.937	CN..250924/CN..866	512.024	12148562500	513.038	511.038	515.028	2,15	4.74
3662598	KM80TSPCLNL12	70	2.756	53	2.087	100	3.937	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	2,19	4.82
3662599	KM80TSPCLNL16	70	2.756	53	2.087	100	3.937	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	2,18	4.81
3662600	KM80TSPCLNL19	70	2.756	53	2.087	100	3.937	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	2,17	4.79
3662601	KM80TSPCLNL25	70	2.756	53	2.087	100	3.937	CN..250924/CN..866	512.024	12148562500	513.038	511.038	515.028	2,15	4.74

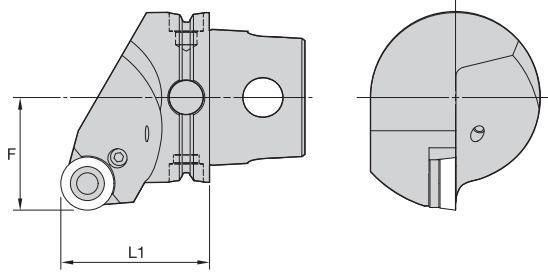


■ PRDC 90°



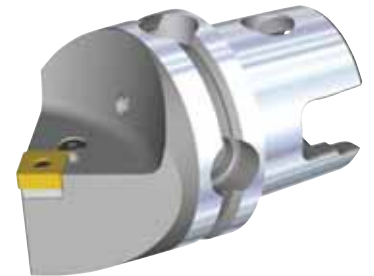
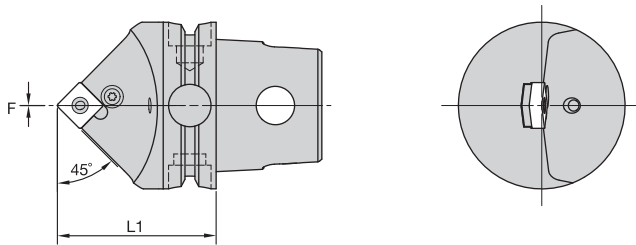
order number	catalog number	L1		F		CD		gage insert	shim	clamp screw	clamp stud	kg	lbs
		mm	in	mm	in	mm	in						
left hand													
3662606	KM80TSPRDCN20	70	2.756	10	.394	40	1.581	RCMT2006M0	169.333	121.820	119.073	1,48	3.26
3662607	KM80TSPRDCN25	70	2.756	13	.492	40	1.581	RCMX2507M0RP	169.337	121.820	118.404	1,55	3.42





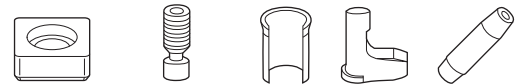
■ PRGC 0°

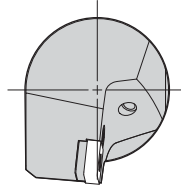
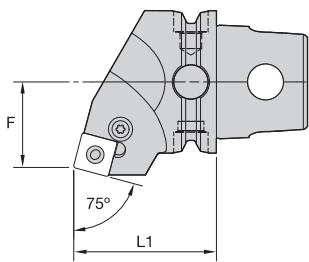
order number	catalog number	L1		F		gage insert	shim	clamp screw	clamp stud	kg	lbs
		mm	in	mm	in						
	right hand										
3662625	KM80TSPRGCR25	70	2.756	53	2.087	RC..2507M0	169.337	121.820	118.404	2,02	4.46
3662626	KM80TSPRGCR32	80	3.150	53	2.087	RC..320900	169.339	121.030	118.604	2,63	5.79
	left hand										
3662623	KM80TSPRGCL25	70	2.756	53	2.087	RC..2507M0	169.337	121.820	118.404	2,02	4.45
3662624	KM80TSPRGCL32	80	3.150	53	2.087	RC..320900	169.339	121.030	118.604	2,63	5.79



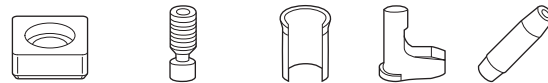
■ PSDN 45°

order number	catalog number	L1		F		gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
	left hand												
3662627	KM80TSPSDNN19	70	2.756	0	.000	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,76	3.87
3662628	KM80TSPSDNN25	70	2.756	0	.000	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	1,75	3.85

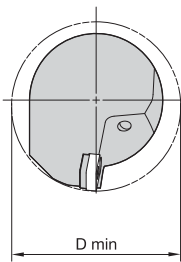
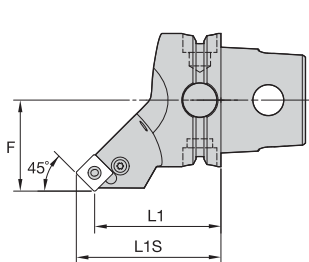




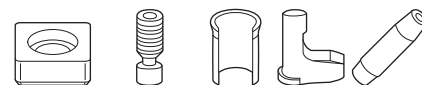
■ PSRN 75°



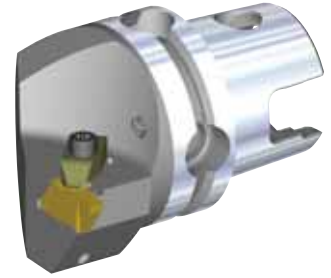
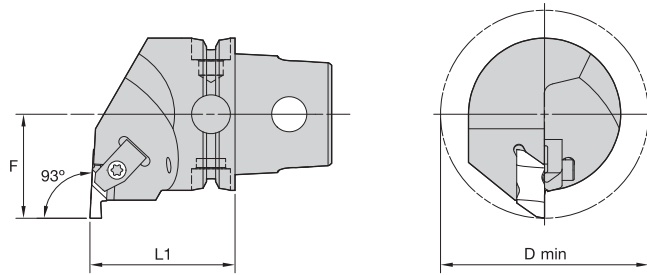
order number	catalog number	L1		F		gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
right hand													
3662631	KM80TSPSRNR19	70	2.756	48	1.890	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,11	4.66
3662632	KM80TSPSRNR25	70	2.756	48	1.890	SN..250724/SN..-856	512.092	514.138	513.038	511.038	515.028	2,13	4.69
left hand													
3662629	KM80TSPSRNL19	70	2.756	48	1.890	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,07	4.56
3662630	KM80TSPSRNL25	70	2.756	48	1.890	SN..250724/SN..-856	512.092	514.138	513.038	511.038	515.028	2,13	4.69



■ PSSN 45°

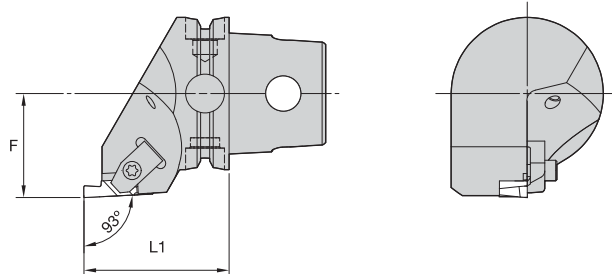


order number	catalog number	L1		L1S		F		D min		gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in	mm	in	mm	in								
right hand																	
3662636	KM80TSPSSNR19	70	2.756	82,49	3.248	53	2.087	100	3.94	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,00	4.41
3662637	KM80TSPSSNR25	70	2.756	85,98	3.385	53	2.087	150	5.91	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	2,13	4.70
left hand																	
3662633	KM80TSPSSNL19	70	2.756	82,49	3.248	53	2.087	100	3.94	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,94	4.29
3662634	KM80TSPSSNL25	70	2.756	86,00	3.386	53	2.087	150	5.91	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	2,09	4.61



■ NE 93° • Metric

order number	catalog number	L1		F		D min		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in					
right hand												
3665054	KM80TSNER3	70	2.756	53	2.087	106	4.173	NG3L	CM73	MS1489	2,14	4.72
3665056	KM80TSNER4	70	2.756	53	2.087	106	4.173	NG4L	CM73	MS1489	2,18	4.81
3665058	KM80TSNER5	70	2.756	53	2.087	106	4.173	NG5L	CM81	MS1490	2,28	5.02
3665060	KM80TSNER6	70	2.756	53	2.087	106	4.173	NG6L	CM121	MS1489	2,28	5.02
left hand												
3665053	KM80TSNEL3	70	2.756	53	2.087	106	4.173	NG3R	CM72	MS1489	2,14	4.72
3665055	KM80TSNEL4	70	2.756	53	2.087	106	4.173	NG4R	CM72	MS1489	2,18	4.81
3665057	KM80TSNEL5	70	2.756	53	2.087	106	4.173	NG5R	CM80	MS1490	2,28	5.02
3665059	KM80TSNEL6	70	2.756	53	2.087	106	4.173	NG6R	CM120	MS1489	2,18	4.80



■ NS 93° • Metric

order number	catalog number	L1		F		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in					
right hand										
3668864	KM80TSNSR3	70	2.756	53	2.087	NG3R	CM72	MS1489	1,96	4.32
3668866	KM80TSNSR4	70	2.756	53	2.087	NG4R	CM72	MS1489	1,94	4.28
3668868	KM80TSNSR5	80	3.150	53	2.087	NG5R	CM80	MS1490	2,25	4.95
left hand										
3668863	KM80TSNSL3	70	2.756	53	2.086	NG3L	CM73	MS1489	1,96	4.32
3668865	KM80TSNSL4	70	2.756	53	2.087	NG4L	CM73	MS1489	1,97	4.35
3668867	KM80TSNSL5	80	3.150	53	2.087	NG5L	CM81	MS1490	2,27	5.01

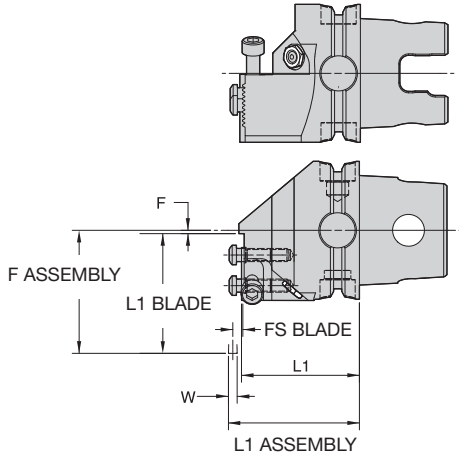


KM80TS™ Cutting Units

WMT™ SLS Grooving and Cut-Off



KM80TS Cutting Units

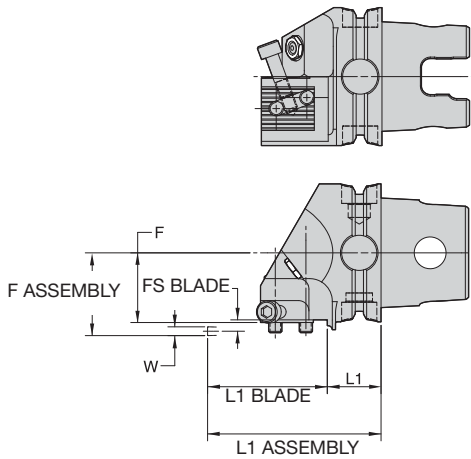


F ASSEMBLY = L1 BLADE — F
L1 ASSEMBLY = W/2 + L1 + FS BLADE — 0,787mm

WGME

order number	catalog number	L1		F		button-head cap screw	nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in					
3949924	right hand	53,79	2.118	9,52	.375	606256	PMT08430	MS337	1,92	4.24
	KM80TSWGMR55M									
3949925	left hand	53,79	2.118	9,52	.375	606256	PMT08430	MS337	1,92	4.24
	KM80TSWGMEL55M									

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



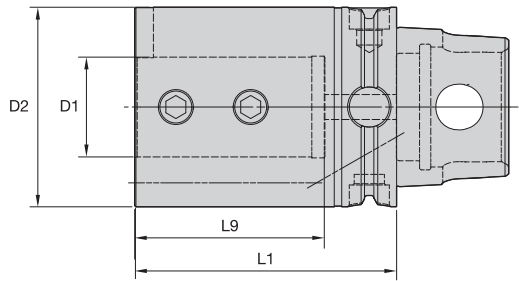
F ASSEMBLY = W/2 + F + FS BLADE — 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

WGMS

order number	catalog number	L1		F		nozzle	socket-head cap screw	kg	lbs
		mm	in	mm	in				
3949662	right hand	24,52	.965	40,79	1.606	PMT08430	MS1132PKG	1,90	4.19
	KM80TSWGMSR55M								
3949923	left hand	24,52	.965	40,79	1.606	PMT08430	MS1132PKG	1,90	4.19
	KM80TSWGMSL55M								

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.





KM80TS Cutting Units



■ BA • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	Nm	kg
3670392	KM80TSBA25075M	25	65	75	58	MS1561	PWZ1012	5mm	35	2,23
3670423	KM80TSBA32075M	32	72	75	63	190.228	PWZ1012	—	55	2,36
3670424	KM80TSBA40105M	40	80	105	76	MS1947	PWZ1012	8mm	125	3,55



■ BA • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
3670350	KM80TSBA100276	1	2.559	2.756	2.244	MS1561	PWZ1012	5mm	25	4.63
3670351	KM80TSBA125295	1 1/4	2.835	2.953	2.480	MS1561	PWZ1012	5mm	25	5.21
3670352	KM80TSBA150413	1 1/2	3.150	4.134	2.953	MS1947	PWZ1012	8mm	90	7.99
3670363	KM80TSBA200512	2	3.543	5.118	3.976	MS1947	PWZ1012	8mm	90	10.56



NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 For boring bar reducers, see page A286.

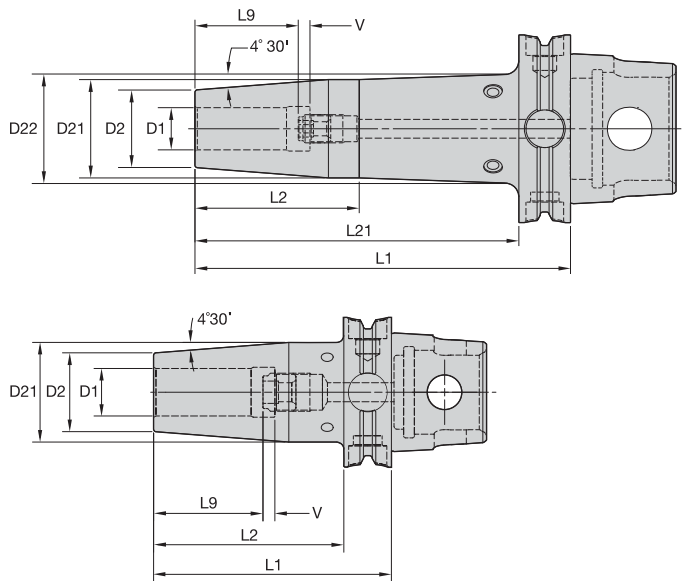
KM80TS™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)



KM80TS Shank Tools

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ HPV TT • Metric



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3681408	KM80TSHPVTT10090M	10	24	32	—	90	68	—	31	10	TTSS08014M	4mm	1,44	3.16
3681409	KM80TSHPVTT10170M	10	24	32	38	170	63	148	31	10	TTSS08014M	4mm	2,03	4.48
3681410	KM80TSHPVTT12095M	12	24	32	—	95	73	—	36	10	TTSS10014M	5mm	1,45	3.19
3681411	KM80TSHPVTT12160M	12	24	32	37	160	63	138	36	10	TTSS10014M	5mm	1,93	4.26
3681412	KM80TSHPVTT14095M	14	27	34	—	95	73	—	36	10	TTSS10014M	5mm	1,51	3.32
3682733	KM80TSHPVTT16100M	16	27	34	—	100	78	—	39	10	TTSS12014M	6mm	1,51	3.34
3682734	KM80TSHPVTT18100M	18	33	42	—	100	78	—	39	10	TTSS12014M	6mm	1,72	3.80
3682735	KM80TSHPVTT18160M	18	33	42	47	160	70	138	39	10	TTSS12014M	6mm	2,44	5.37
3682736	KM80TSHPVTT20105M	20	33	42	—	105	83	—	41	10	TTSS16014M	8mm	1,74	3.83
3682737	KM80TSHPVTT25115M	25	44	53	—	115	93	—	47	10	TTSS16014M	8mm	2,31	5.09
3682738	KM80TSHPVTT32120M	32	44	53	—	120	98	—	51	10	TTSS16014M	8mm	2,23	4.91
3682739	KM80TSHPVTT40130M	40	60	70	—	130	108	—	51	10	TTSS20014M	10mm	3,42	7.55
3682740	KM80TSHPVTT50140M	50	69	79	—	140	118	—	56	10	TTSS20014M	10mm	4,23	9.34

(continued)

(HPV TT continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

■ HPV TT • Inch



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3683469	KM80TSHPVTT031335	5/16	.827	1.059	—	3.346	2.480	—	1.024	.394	TTSS06014M	3mm	1,34	2.96
3683470	KM80TSHPVTT038630	3/8	.945	1.256	1.462	6.299	2.480	5.433	1.220	.394	TTSS08014M	4mm	1,95	4.30
3683471	KM80TSHPVTT044374	7/16	.945	1.256	—	3.740	2.874	—	1.417	.394	TTSS10014M	5mm	1,45	3.21
3683038	KM80TSHPVTT050374	1/2	.945	1.256	—	3.740	2.874	—	1.417	.394	TTSS10014M	5mm	1,44	3.18
3683039	KM80TSHPVTT056374	9/16	1.063	1.335	—	3.740	2.874	—	1.417	.394	TTSS10014M	5mm	1,50	3.31
3683040	KM80TSHPVTT062394	5/8	1.063	1.335	—	3.937	3.071	—	1.535	.394	TTSS12014M	6mm	1,52	3.34
3683041	KM80TSHPVTT062850	5/8	1.063	1.335	1.695	8.500	2.480	7.638	1.535	.394	TTSS12014M	6mm	2,56	5.65
3683042	KM80TSHPVTT075413	3/4	1.299	1.650	—	4.134	3.267	—	1.614	.394	TTSS16014M	8mm	1,75	3.86
3683463	KM80TSHPVTT075630	3/4	1.299	1.650	1.837	6.299	2.756	5.433	1.614	.394	TTSS16014M	8mm	2,40	5.28
3683464	KM80TSHPVTT088413	7/8	1.299	1.650	—	4.134	3.268	—	1.614	.394	TTSS16014M	8mm	1,71	3.77
3683465	KM80TSHPVTT100453	1	1.732	2.083	—	4.528	3.662	—	1.850	.394	TTSS16014M	8mm	2,30	5.07
3683466	KM80TSHPVTT125472	1 1/4	1.732	2.083	—	4.724	3.858	—	2.008	.394	TTSS16014M	8mm	2,23	4.92
3683467	KM80TSHPVTT150512	1 1/2	2.362	2.752	—	5.118	4.252	—	2.008	.394	TTSS20014M	10mm	3,49	7.70
3683468	KM80TSHPVTT200551	2	2.717	3.106	—	5.512	4.646	—	2.205	.394	TTSS20014M	10mm	4,22	9.30

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6-1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

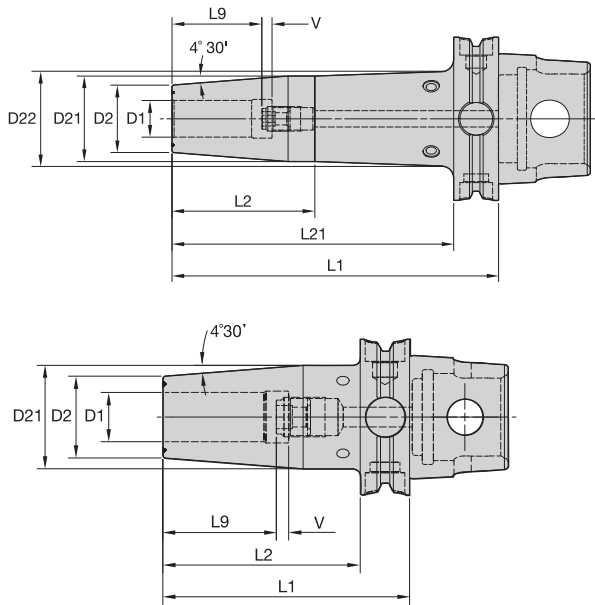
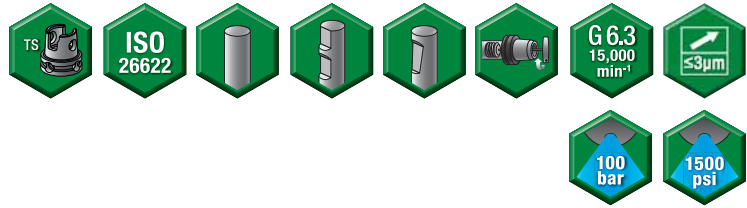
KM80TS™ Shank Tools

Shrink Fit Toolholders High Torque (HT)



KM80TS Shank Tools

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/ -0,011
20 & 25	h6	0,000/ -0,013
32	h6	0,000/ -0,016

■ HPV TT HT • Metric



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3682747	KM80TSHPVTTHT12095M	12	24	32	—	95	73	—	36	10	TTSS10014M	5mm	1,45	3.19
3682748	KM80TSHPVTTHT12160M	12	24	32	37	160	63	138	36	10	TTSS10014M	5mm	1,92	4.22
3682749	KM80TSHPVTTHT14095M	14	27	34	—	95	73	—	36	10	TTSS10014M	5mm	1,51	3.32
3682750	KM80TSHPVTTHT16100M	16	27	34	—	100	78	—	39	10	TTSS12014M	6mm	1,51	3.34
3682751	KM80TSHPVTTHT18100M	18	33	42	—	100	78	—	39	10	TTSS12014M	6mm	1,72	3.80
3682752	KM80TSHPVTTHT18160M	18	33	42	47	160	70	138	39	10	TTSS12014M	6mm	2,44	5.37
3682773	KM80TSHPVTTHT20105M	20	33	42	—	105	83	—	41	10	TTSS16014M	8mm	1,74	3.83
3682774	KM80TSHPVTTHT25115M	25	44	53	—	115	93	—	47	10	TTSS16014M	8mm	2,31	5.09
3682775	KM80TSHPVTTHT32120M	32	44	53	—	120	98	—	51	10	TTSS16014M	8mm	2,23	4.91

(continued)

(HPV TT HT continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

■ HPV TT HT • Inch



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3684074	KM80TSHPVTTHT050374	1/2	.945	1.256	—	3.740	2.874	—	1.417	.394	TTSS10014M	5mm	1,44	3.18
3684075	KM80TSHPVTTHT056374	9/16	1.063	1.335	—	3.740	2.874	—	1.417	.394	TTSS10014M	5mm	1,50	3.31
3684076	KM80TSHPVTTHT062394	5/8	1.063	1.335	—	3.937	3.071	—	1.535	.394	TTSS12014M	6mm	1,52	3.34
3684077	KM80TSHPVTTHT062850	5/8	1.063	1.335	1.695	8.500	2.480	7.638	1.535	.394	TTSS12014M	6mm	2,56	5.65
3684078	KM80TSHPVTTHT075413	3/4	1.299	1.650	—	4.134	3.268	—	1.614	.394	TTSS16014M	8mm	1,75	3.86
3684079	KM80TSHPVTTHT075630	3/4	1.299	1.650	1.837	6.299	2.756	5.433	1.614	.394	TTSS16014M	8mm	2,41	5.32
3684080	KM80TSHPVTTHT088413	7/8	1.299	1.650	—	4.134	3.268	—	1.614	.394	TTSS16014M	8mm	1,71	3.77
3684081	KM80TSHPVTTHT100453	1	1.732	2.083	—	4.528	3.662	—	1.850	.394	TTSS16014M	8mm	2,30	5.07
3684082	KM80TSHPVTTHT125472	1 1/4	1.732	2.083	—	4.724	3.858	—	2.008	.394	TTSS16014M	8mm	2,23	4.92

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

KM80TS™ Shank Tools

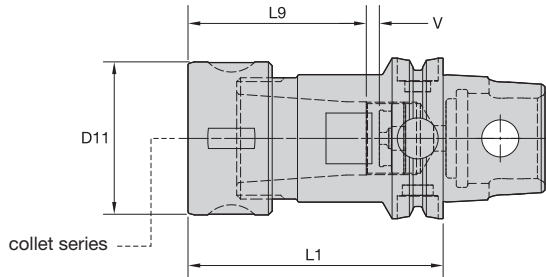
TG Collet Chucks



- Tremendous Grip (3:1 advantage).



KM80TS Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

■ TG

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3670114	KM80TSTG075160M	TG75	50	1.969	160	6.299	53	2.087	47	1.850	2,89	6.37
3670115	KM80TSTG100100M	TG100	60	2.362	100	3.937	71	2.795	—	—	2,29	5.04
3670116	KM80TSTG150125M	TG150	85	3.346	125	4.921	83	3.268	—	—	4,28	9.43

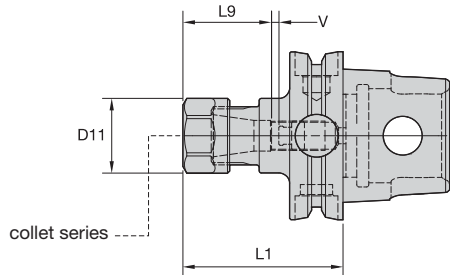
■ Spare Parts



catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw	Nm	ft. lbs.
KM80TSTG075160M	LNA075M	HSW45M	108	80	SS081041G	4mm & 5/32	108 - 136	80 - 100
KM80TSTG100100M	LNA100M	HSW58M	163	120	—	—	163 - 203	120 - 150
KM80TSTG150125M	LNA150M	HSW80M	217	160	—	—	217 - 271	160 - 200

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.

- Grip (2:1 advantage).



KM80TS Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER20	0,5	13,0	.02	.50

■ ER • Hex Nut

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3683339	KM80TSER20100M	ER20	34	1.339	100	3.937	36	1.417	43	1.693	1,49	3.29

■ Spare Parts

catalog number	hex locknut	OEW	stop screw	counterbore collet torque		straight collet torque	
				Nm	ft. lbs.	Nm	ft. lbs.
KM80TSER20100M	LNHSER20M	OEW30M	SS056041G	32	24	80	59

(continued)

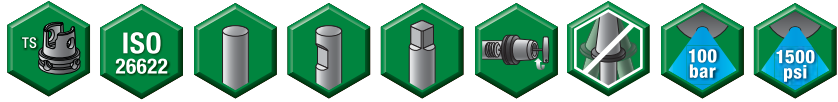
KM80TS™ Shank Tools

ER Collet Chucks

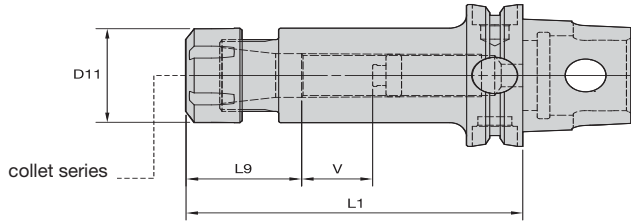


(ER continued)

- Grip (2:1 advantage).



KM80TS Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ ER • Round Nut

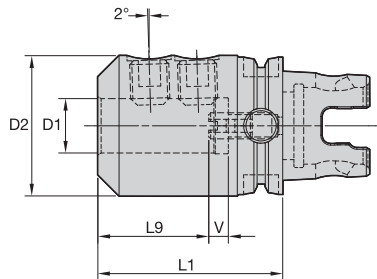
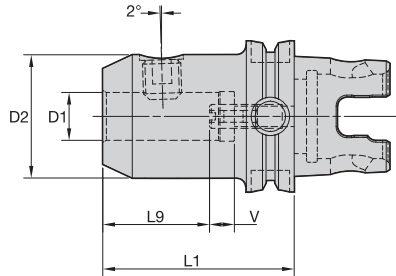
order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3683341	KM80TSER25100M	ER25	42	1.654	100	3.937	40	1.575	37	1.457	1,67	3.67
3683342	KM80TSER32065M	ER32	50	1.969	65	2.559	47	1.862	—	—	1,42	3.13
3683354	KM80TSER32100M	ER32	50	1.969	100	3.937	46	1.811	28	1.102	1,85	4.08
3683353	KM80TSER40090M	ER40	63	2.480	90	3.543	70	2.768	—	—	2,06	4.53
3683355	KM80TSER40140M	ER40	63	2.480	140	5.512	52	2.047	48	1.890	3,12	6.87

■ Spare Parts



catalog number	locknut	wrench	stop screw	Nm	ft. lbs.
KM80TSER25100M	LNSER25M	ER25WM	SS075041G	104	77
KM80TSER32065M	LNSER32M	ER32WM	—	136	100
KM80TSER32100M	LNSER32M	ER32WM	SS094041G	136	100
KM80TSER40090M	LNSER40M	ER40WM	—	176	130
KM80TSER40140M	LNSER40M	ER40WM	SS112041G	176	130

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.



KM80TS Shank Tools



■ WN • Metric



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
3670133	KM80TSWN12075M	12	42	75	40	10	SS03M023	6mm	35	571.074	5mm	1,61
3670134	KM80TSWN20085M	20	52	85	45	10	SS03M026	8mm	95	571.076	6mm	1,96
3670135	KM80TSWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.077	6mm	2,78
3670136	KM80TSWN32105M	32	72	105	54	10	SS03M029	10mm	160	571.077	6mm	3,22

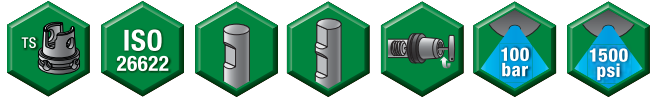
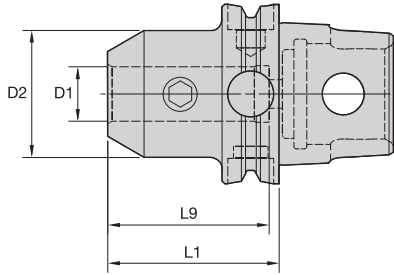
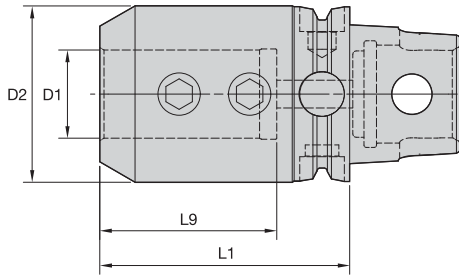
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.

KM80TS™ Shank Tools

End Mill Adapters



KM80TS Shank Tools



EM • Metric



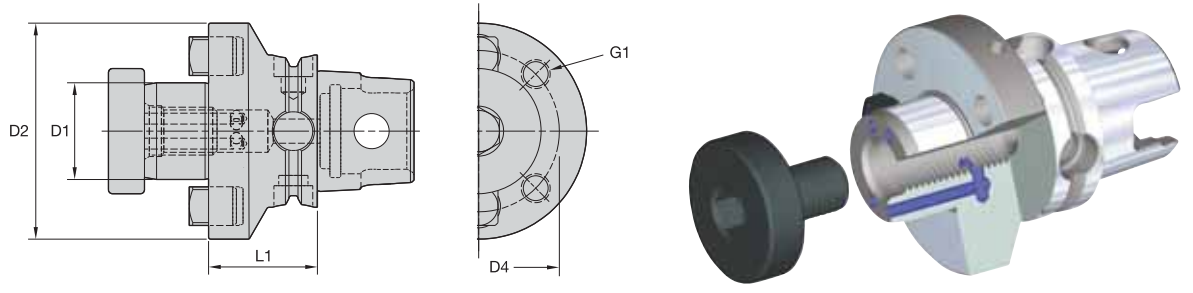
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3683878	KM80TSEM12070M	12	42	70	50	SS03M023	6mm	35	1,55
3683879	KM80TSEM14070M	14	44	70	50	SS03M023	6mm	35	1,59
3683880	KM80TSEM16070M	16	48	70	53	SS03M025	6mm	50	1,67
3683881	KM80TSEM18070M	18	50	70	53	SS03M025	6mm	50	1,70
3683882	KM80TSEM20070M	20	52	70	55	SS03M026	8mm	95	1,73
3683903	KM80TSEM25090M	25	65	90	60	SS03M027	10mm	135	2,53
3683904	KM80TSEM32090M	32	72	90	65	SS03M029	10mm	160	2,76
3683905	KM80TSEM40100M	40	90	100	75	SS03M032	10mm	160	4,09

EM • Inch



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3670301	KM80TSEM050354	1/2	1.375	3.543	1.974	ELS044038PKG	7/32	20	3.39
3670343	KM80TSEM062354	5/8	1.625	3.543	2.094	ELS056050PKG	1/4	40	3.76
3670344	KM80TSEM075354	3/4	1.750	3.543	2.224	ELS062050PKG	5/16	70	3.90
3670345	KM80TSEM088354	7/8	2.000	3.543	2.224	ELS062050PKG	5/16	70	4.34
3670346	KM80TSEM100354	1	2.000	3.543	2.559	ELS075056PKG	3/8	110	4.13
3670347	KM80TSEM125354	1 1/4	2.500	3.543	2.509	ELS075056PKG	3/8	110	5.10
3670348	KM80TSEM150382	1 1/2	2.750	3.819	2.931	ELS075056PKG	3/8	110	5.74
3670349	KM80TSEM200492	2	3.750	4.921	3.533	ELS100088PKG	1/2	150	11.57

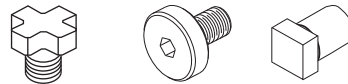
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.



KM80TS Shank Tools

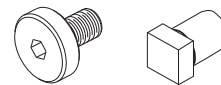


■ SMC • Metric



order number	catalog number	D1	D2	D4	G1	L1	lock screw	lock screw	drive key	wrench size lock screw	kg
3683472	KM80TSSMC27050M	27	60	—	—	50	—	KLSS27M	KDK27M	10mm	1,86
3683483	KM80TSSMC32060M	32	78	—	—	60	—	KLSS32M	KDK32M	14mm	2,62
3683484	KM80TSSMC32100M	32	78	—	—	100	—	KLSS32M	KDK32M	14mm	3,79
3683485	KM80TSSMC40060M	40	89	67	M12X1.75	60	—	KLSS40M	KDK40M	17mm	3,21
3683486	KM80TSSMC40100M	40	89	67	M12X1.75	100	—	KLSS40M	KDK40M	17mm	4,56
3683487	KM80TSSMC50070M	50	98	—	—	70	KLS50M	—	KDK40M	—	4,26
3683488	KM80TSSMC60070M	60	129	102	M16X2.0	70	—	—	KDK60M	—	5,81

■ SMC • Inch



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3670508	KM80TSSMC100158	1	2.752	—	—	1.575	KLS10	KDK06	5/16	3.88
3670509	KM80TSSMC125158	1 1/4	2.878	—	—	1.575	KLS12	KDK08	5/16	4.19
3670510	KM80TSSMC125394	1 1/4	2.878	—	—	3.937	KLS12	KDK08	5/16	8.45
3670511	KM80TSSMC150158	1 1/2	3.386	—	—	1.575	KLS15	KDK10	3/8	5.00
3670512	KM80TSSMC200216	2	4.882	4.000	5/8 - 11	2.165	KLS20	KDK12	9/16	9.48
3670533	KM80TSSMC250225	2 1/2	4.882	4.000	5/8 - 11	2.250	—	KDK16	—	10.74
3670534	KM80TSSMC250450	2 1/2	4.882	4.000	5/8 - 11	4.500	—	KDK16	—	22.55

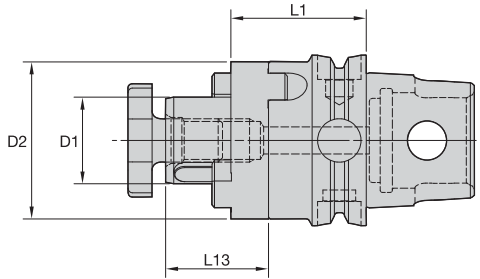
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.

KM80TS™ Shank Tools

CS Combi-Type Shell Mill Adapters • Top Cut Plus™ Adapters



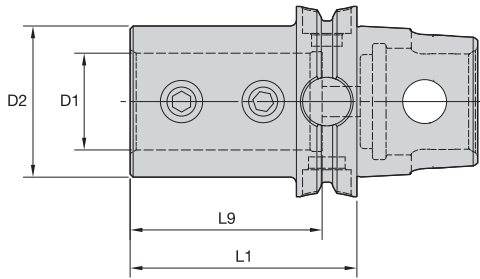
KM80TS Shank Tools



■ CS • Metric



order number	catalog number	D1	D2	L1	L13	lock screw	Nm	combi driver	combi drive key	kg
3735656	KM80TSCS32050M	32	58	50	38	KLS32M	95	CDR32M	CDK32M	1,89
3735658	KM80TSCS40060M	40	70	60	41	KLS40M	100	CDR40M	CDK40M	2,62



■ DAT • Metric



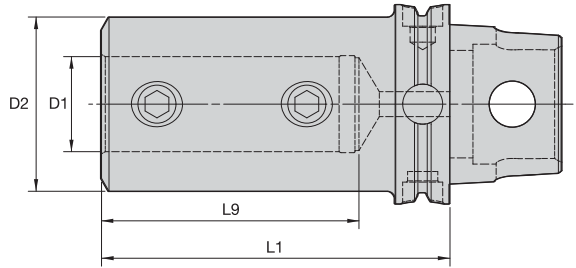
order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3904031	KM80TSDAT2575M	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	1,54
3904032	KM80TSDAT3275M	32	50	75	64	12166903700	6mm	40	12166903900	6mm	40	1,52
3904054	KM80TSDAT4085M	40	60	85	74	12166903800	8mm	50	12166904000	8mm	50	1,77

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamping screw.
 Clamp screw wrench is not included.





KM80TS Shank Tools



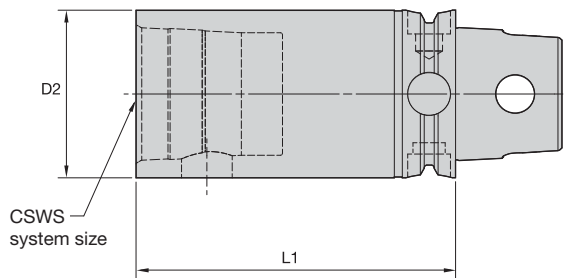
■ SSF • Inch



order number	catalog number	D1	D2	L1	L9	flat point socket set screw	ft. lbs.	lbs
3683935	KM80TSSSF075350	3/4	1.750	3.500	2.311	ELS062050PKG	70	3.94
3683936	KM80TSSSF100450	1	2.000	4.500	3.307	—	110	4.91
3683937	KM80TSSSF125500	1 1/4	2.500	5.000	3.563	ELS075056PKG	110	6.88
3683938	KM80TSSSF150550	1 1/2	2.750	5.500	4.063	ELS075056PKG	110	8.08
3683939	KM80TSSSF200650	2	3.750	6.500	4.311	ELS100088PKG	150	15.88



WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.



■ S • KM™ Extension



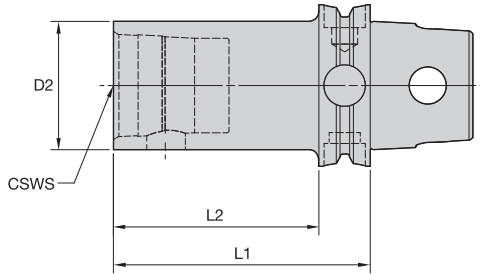
order number	catalog number	CSWS system size	D2		L1		spare parts package	Nm	ft. lbs.	kg	lbs
			mm	in	mm	in					
3668965	KM80TSS80120M	KM80	80	3.150	120	4.724	KM80PKG3S	78-84	58-64	4,23	9.32
3668967	KM80TSS80160M	KM80	80	3.150	160	6.299	KM80PKG3S	78-84	58-64	5,76	12.71

KM80TS™ Shank Tools

KM™ Reducers • KM Offset Reducers

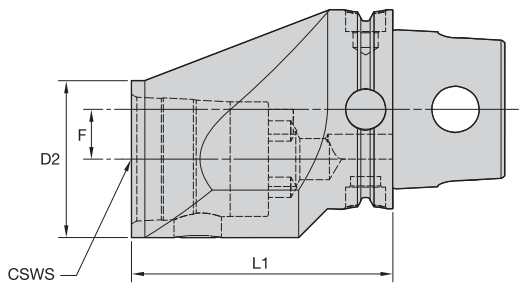


KM80TS Shank Tools



■ S • KM Reducer

order number	catalog number	CSWS system size	D2		L1		L2		spare parts package	wrench size			
			mm	in	mm	in	mm	in		Nm	ft. lbs.	kg	lbs
3668961	KM80TSS40060M	KM40	40	1.575	60	2.362	38	1.496	KM40PKG3S	12-16	9-12	1,41	3.10
3668963	KM80TSS50080M	KM50	50	1.969	80	3.150	58	2.283	KM50PKG3S	27-34	20-25	1,81	3.99
3668964	KM80TSS63080M	KM63	63	2.480	80	3.150	58	2.283	KM63PKG3S	47-54	35-40	2,14	4.71

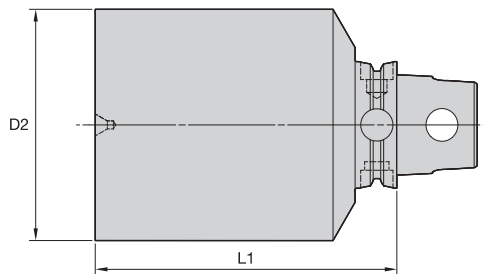


■ ES • KM Offset Reducer

order number	catalog number	CSWS system size	D2		L1		F		spare parts package	wrench size actuation screw	wrench size			
			mm	in	mm	in	mm	in			Nm	ft. lbs.	kg	lbs
3734754	right hand	KM63	63	2.4803	105	4.134	20	.787	KM63PKG3S	12mm	47-54	35-40	3,81	8.40
	KM80TSESR63105M													
3734753	left hand	KM63	63	2.4803	105	4.134	20	.787	KM63PKG3S	12mm	47-54	35-40	3,81	8.40
	KM80TSESL63105M													



- Machinable front 32–38 HRC.



KM80TS Shank Tools

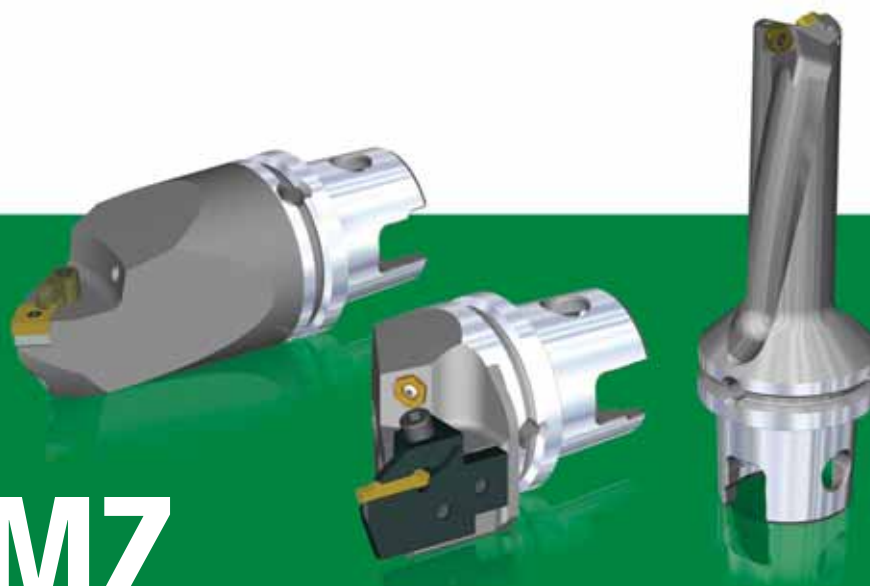


■ BN

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
3653264	KM80TSBN125075M	125	4.921	75	2.953	32–38 HRC	6,17	13.60
3653265	KM80TSBN140130M	140	5.512	130	5.118	32–38 HRC	14,08	31.04
3653266	KM80TSBN150160M	150	5.906	160	6.299	32–38 HRC	20,13	44.39
3653267	KM80TSBN150250M	150	5.906	250	9.843	32–38 HRC	32,59	71.85
3653268	KM80TSBN175175M	175	6.890	175	6.890	32–38 HRC	29,56	65.17

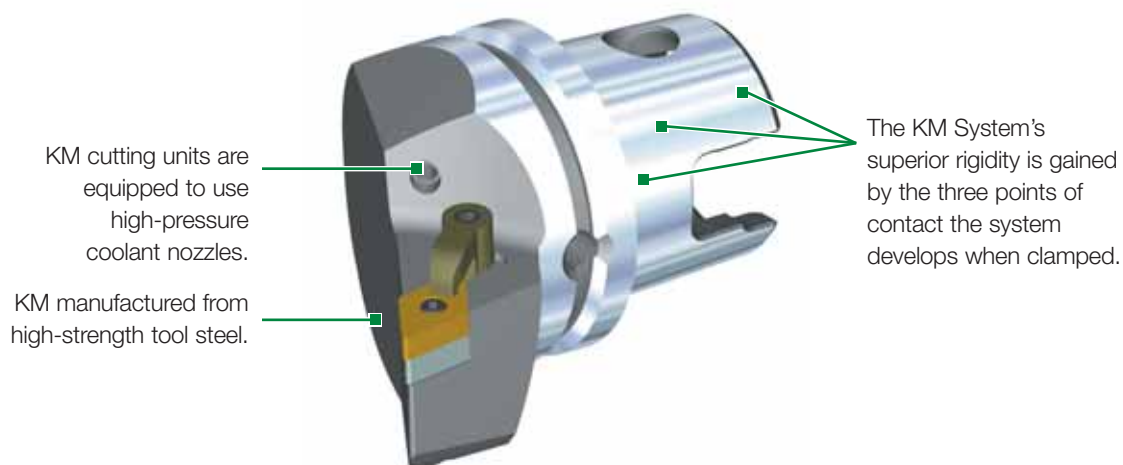
KM™ Quick Change Clamping System • **KM63XMZ™ Series**

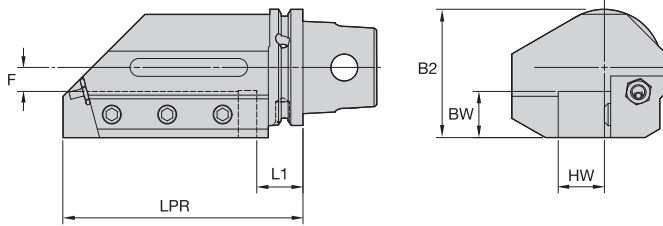
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM63XMZ

- KM63XMZ is designed to be used on Mazak® Mark IV Series and I- and J-Series INTEGREGX® Machines.
- KM63XMZ is your solution for multitasking.





KM63XMZ Cutting Units



■ STA • Straight Side Mount • Metric



order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	Nm	kg
1855652	KM63XMZSTALF2020Y	25	100	10	20	20	62	MS2049	PMT04526 COOLANT NOZZLE SPRAY	35	2,46
1506498	KM63XMZSTALF2525Y	25	130	13	25	25	70	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,54
1850241	KM63XMZSTAR2020Y	25	100	10	20	20	62	MS2049	PMT04526 COOLANT NOZZLE SPRAY	35	2,43
1514567	KM63XMZSTAR2525Y	25	130	13	25	25	70	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,58

■ STA • Straight Side Mount • Inch



order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
1855684	KM63XMZSTALF12Y	.921	3.937	.378	.750	.750	2.421	MS2049	PMT04526 COOLANT NOZZLE SPRAY	26	5.38
1516687	KM63XMZSTALF16Y	.906	5.118	.522	1.000	1.000	2.762	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.83
1855683	KM63XMZSTAR12Y	.921	3.937	.378	.750	.750	2.421	MS2049	PMT04526 COOLANT NOZZLE SPRAY	26	5.32
1516683	KM63XMZSTAR16Y	.906	5.118	.522	1.000	1.000	2.762	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.92

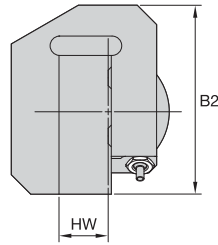
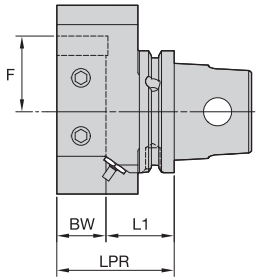
NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.

KM63XMZ™ Cutting Units

Single Square Shank Adapters



KM63XMZ Cutting Units



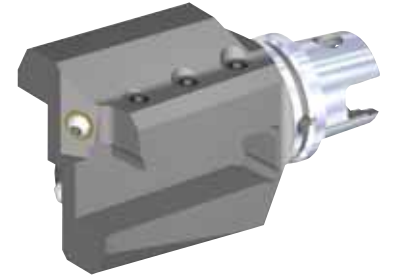
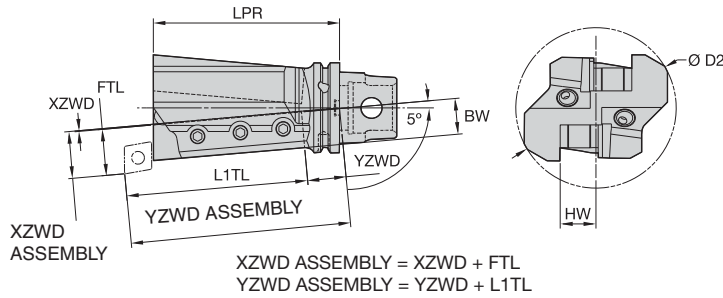
■ ETA • Straight End Mount • Inch

order number	catalog number	L1	LPR	F	HW	BW	B2	ft. lbs.	lbs
3103491	right hand KM63XMZETAR16Y	1.388	2.388	-1.539	1.000	1.000	3.839	40	4.97
3103492	left hand KM63XMZETALF16Y	1.388	2.388	-1.539	1.000	1.000	3.839	40	4.85

■ Spare Parts

catalog number	cup point socket set screw	nozzle
right hand KM63XMZETAR16Y	DWG 249618-23R05	PMT04526 COOLANT NOZZLE SPRAY
left hand KM63XMZETALF16Y	DWG 249618-23R05	PMT04526 COOLANT NOZZLE SPRAY

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.

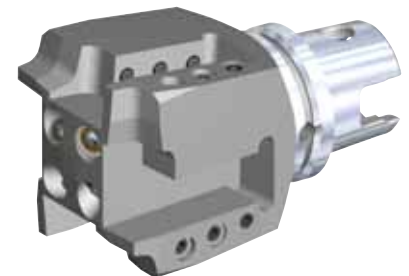
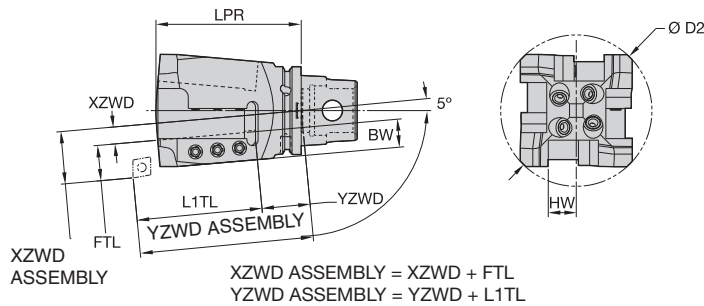


■ STA • 2x Straight Side Mount • Metric



order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	Nm	nozzle	kg
1847363	right hand KM63XMZ2XSTAR2525Y	112	130	1	28	25	25	MS1430	55	PWZ1012	3,85
1868533	left hand KM63XMZ2XSTALF2525Y	112	130	1	28	25	25	MS1430	55	PWZ1012	3,85

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

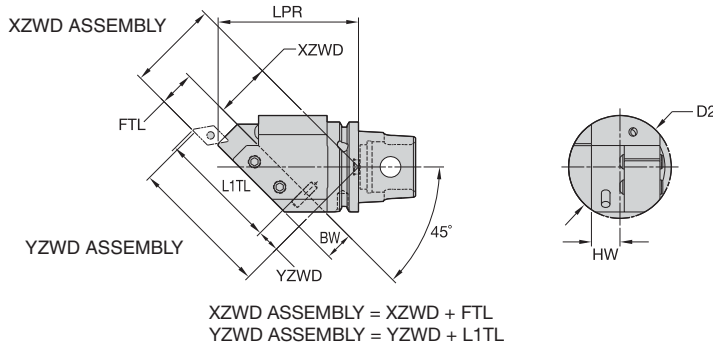


■ STA • 4x Straight Side Mount • Metric



order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	Nm	nozzle	kg
1725301	KM63XMZ4XSTAR2020Y	108	104	12	34	20	20	121.830	18	PWZ1008	2,92

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



■ 45TA • 45° Mount • Metric

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	nozzle	Nm	kg
1855665	KM63XMZ45TAR2020Y right hand	72	99	39	16	20	20	MS2049	PWZ1012	25	2,01
1855669	KM63XMZ45TALF2020Y left hand	72	99	39	16	20	20	MS2049	PWZ1012	25	2,01

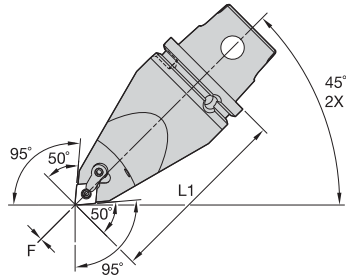
■ 45TA • 45° Mount • Inch

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	nozzle	ft. lbs.	lbs
1855685	KM63XMZ45TAR12Y right hand	2.835	3.887	1.518	.451	.750	.750	MS2049	PWZ1012	18	4.38
1855686	KM63XMZ45TALF12Y left hand	2.835	3.887	1.518	.451	.750	.750	MS2049	PWZ1012	18	4.38

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

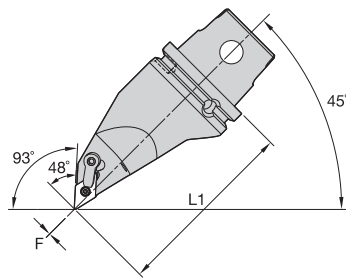
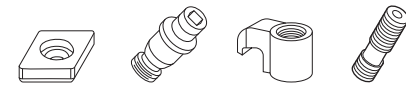


KM63XMZ Cutting Units



■ MCMN 50° • 95° Application • Centerline

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3180556	KM63XMZMCMNNF12115Y	115	4.528	0	.000	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,07	4.57

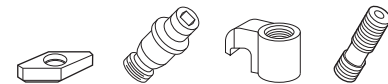


Left-Hand Tool



■ MDMN 48° • 93° Application • Centerline

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
3487461	KM63XMZMDMNR1504115Y	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,88	4.14
3487462	KM63XMZMDMNR1506115Y	115	4.528	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,88	4.13
3487458	KM63XMZMDMNLF1504115Y	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,87	4.11
3487459	KM63XMZMDMNLF1506115Y	115	4.528	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,86	4.10

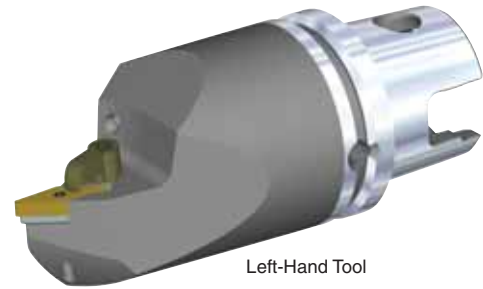
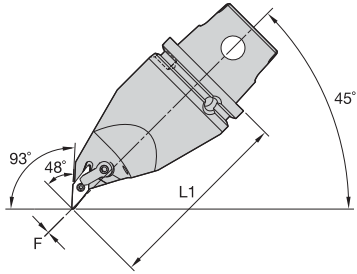


KM63XMZ™ Cutting Units

M-Clamping Centerline

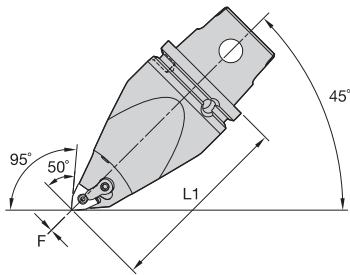
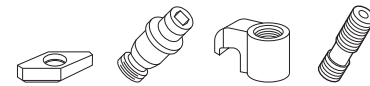


KM63XMZ Cutting Units



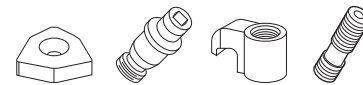
■ MVMN 48° • 93° Application • Centerline

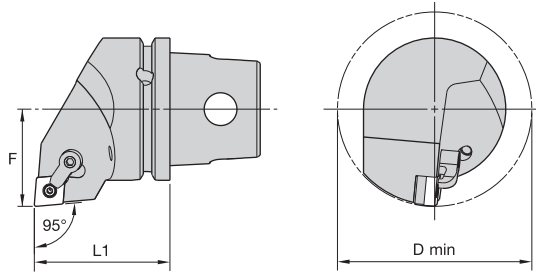
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3487473	KM63XMZMVMNR16115Y	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,97	4.35
	left hand											
3487460	KM63XMZMVMNLF16115Y	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,97	4.35



■ MWMN 50° • 95° Application • Centerline

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3487572	KM63XMZMWMNR08115Y	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	2,03	4.47
	left hand											
3487571	KM63XMZMWMNLF08115Y	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	2,02	4.46

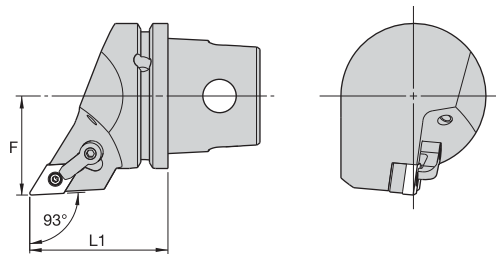




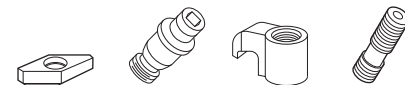
■ MCLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs	
		mm	in	mm	in	mm	in								
		right hand													
1551813	KM63XMZMCLNR12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,24	2.73	
1603738	KM63XMZMCLNR16Y	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,24	2.74	
		left hand													
3103485	KM63XMZMCLNLF12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,24	2.73	
3103486	KM63XMZMCLNLF16Y	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,24	2.74	



■ MDJN 93°



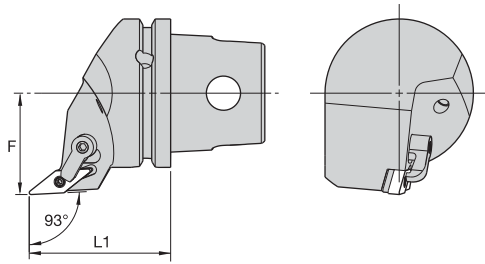
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
		right hand										
3103487	KM63XMZMDJNR1504Y	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.360
		left hand										
3103488	KM63XMZMDJNLF1504Y	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.360

KM63XMZ™ Cutting Units

M-Clamping • P-Clamping

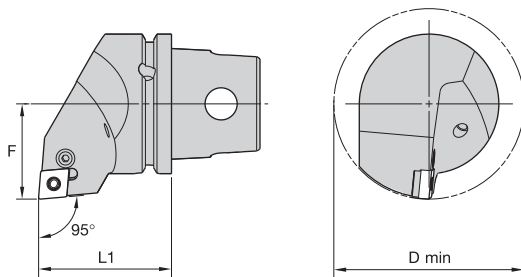
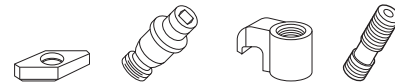


KM63XMZ Cutting Units



■ MVJN 93°

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
3103489	KM63XMZMVJNR16Y	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,05	2.32
	left hand											
3103490	KM63XMZMVJNLF16Y	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,05	2.32



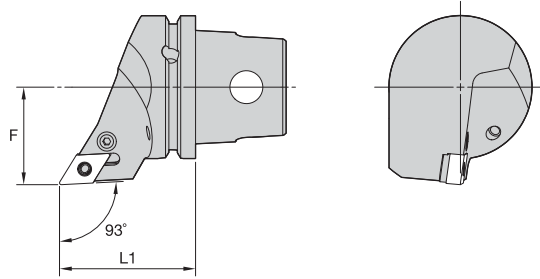
■ PCLN 95°

order number	catalog number	L1		F		D min	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs	
		mm	in	mm	in										mm	in
	right hand														
2231263	KM63XMZPCLNR12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	512.112	514.023	513.023	511.023	515.018	1,23	2.71
	left hand														
2231264	KM63XMZPCLNLF12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	512.112	514.023	513.023	511.023	515.018	1,23	2.71

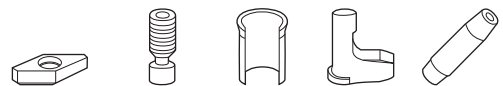




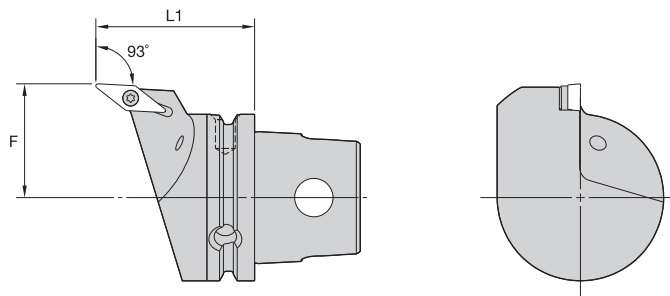
KM63XMZ Cutting Units



■ PDJN 93°



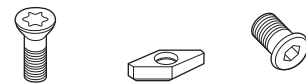
order number	catalog number	L1		F		gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
		mm	in	mm	in								
2231265	KM63XMZPDJNR15Y	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.028	513.023	511.024	515.018	1,04	2.29



Left-Hand Tool



■ SVJB 93°



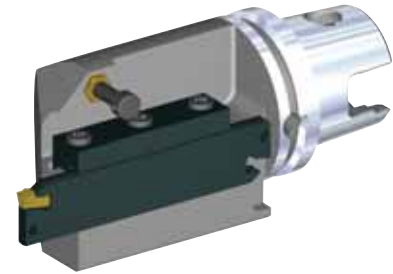
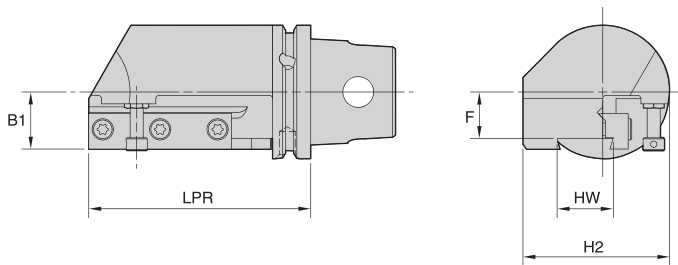
order number	catalog number	L1		F		gage insert	insert screw	shim	shim screw	kg	lbs
		mm	in	mm	in						
2231270	KM63XMZSVJBLF16Y	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	1,07	2.35

KM63XMZ™ Cutting Units

ProGroove™ • WMT™ SLS Grooving and Cut-Off



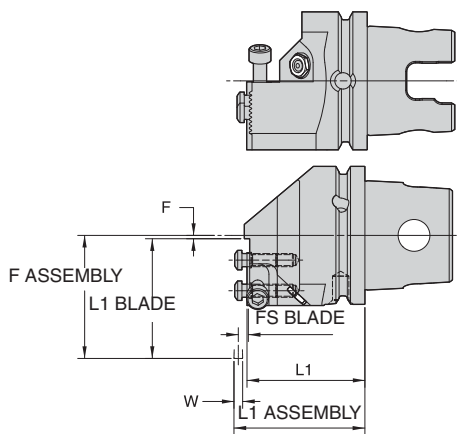
KM63XMZ Cutting Units



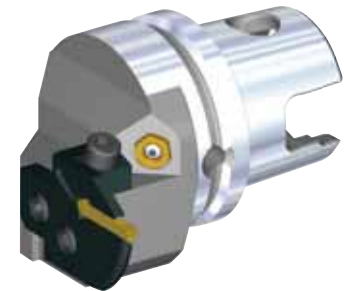
■ BS • Side Mount

order number	catalog number	F		LPR		H2		HW		B1		cartridge size	cartridge 1	clamp	coolant screw	kg lbs	
		mm	in	mm	in	mm	in	mm	in	mm	in						
1982386	KM63XMZBSR4Y	21,9	.863	105	4.12	69	2.72	26	1.02	38	1.48	26	A2BNSN26...	CGS4	MS1595	2,27	5.00
1831638	KM63XMZBSR5Y	39,9	1.572	124	4.87	71	2.81	32	1.26	40	1.57	32	A2BNSN32...	CGS5	MS1595	3,64	8.04
1982387	KM63XMZBSLF4Y	21,9	.863	105	4.12	69	2.72	26	1.02	38	1.48	26	A2BNSN26...	CGS4	MS1595	2,31	5.10
1831634	KM63XMZBSLF5Y	39,9	1.572	124	4.87	71	2.81	32	1.26	40	1.57	32	A2BNSN32...	CGS5	MS1595	3,63	7.99

NOTE: Blades must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



F ASSEMBLY = L1 BLADE + F
 L1 ASSEMBLY = W/2 + L1 + FS BLADE + L1 — 0,787mm

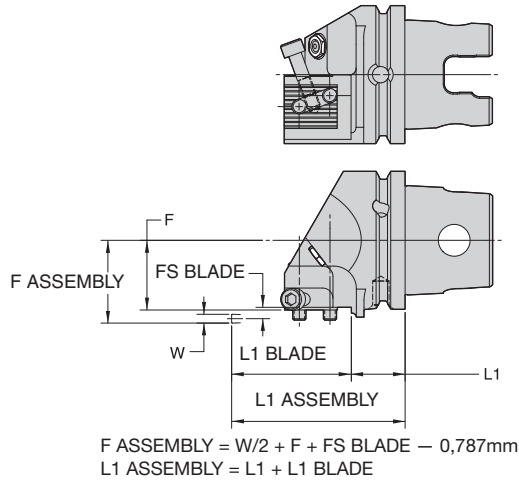


■ WGME

order number	catalog number	L1		F		button-head cap screw	nozzle	socket-head cap screw	kg lbs	
		mm	in	mm	in					
3949660	KM63XMZWGMER55MY	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,24	2.73
3949661	KM63XMZWGMELF55MY	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,24	2.73

NOTE: For SLS cartridges and WMT insert, see WIDIA Turning (A-09-02078) catalog.
 Right-hand cutting units use left-hand cartridges.





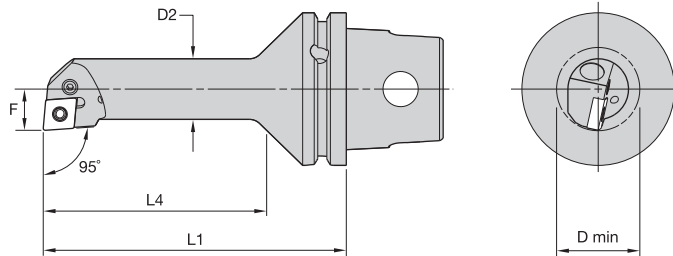
KM63XMZ Cutting Units • Internal Cutting Units



■ WGMS

order number	catalog number	L1		F		nozzle	socket-head cap screw	socket-head cap screw	kg	lbs
		mm	in	mm	in					
3949658	right hand	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	MS337	1,17	2.58
	KM63XMZWGMSR55MY									
3949659	left hand	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	MS337	1,17	2.58
	KM63XMZWGMSLF55MY									

NOTE: For SLS cartridges and WMT insert, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.



■ PCLN 95°

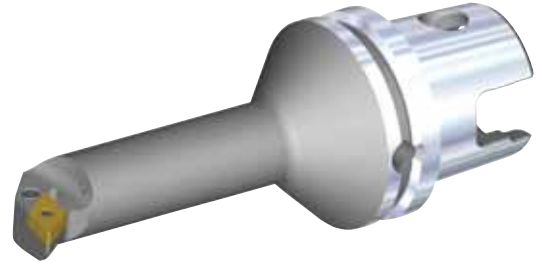
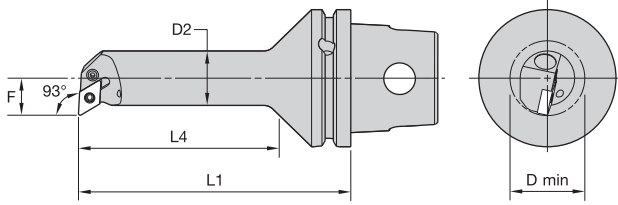
order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
2231271	right hand	25	.98	32	1.26	17	.669	88	3.45	125	4.921	CN..120408/CN..432	1,17	2.57
	KM63XMZS25KPCLNR12Y													
2231272	left hand	25	.98	32	1.26	17	.669	88	3.45	125	4.921	CN..120408/CN..432	1,17	2.57
	KM63XMZS25KPCLNLF12Y													

■ Spare Parts

catalog number	lever screw	toggle lever
right hand KM63XMZS25KPCLNR12Y	514.022	511.022
left hand KM63XMZS25KPCLNLF12Y	514.022	511.022

KM63XMZ™ Internal Cutting Units

P-Clamping



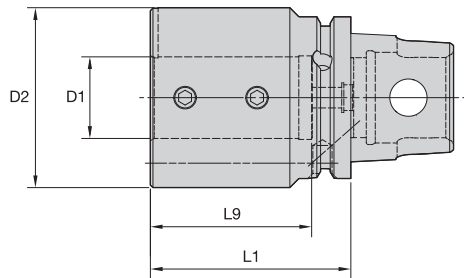
■ PDUN 93°

order number	catalog number	D2		D min		F		L4		L1		gage insert	kg	lbs
		mm	in	mm	in	mm	in	mm	in	mm	in			
2231273	right hand	25	.98	32	1.26	17	.669	88	3.45	125	4.921	DN..110408/DN..332	1,15	2.530
	KM63XMZS25KPDUNR11Y													
2231274	left hand	25	.98	32	1.26	17	.669	88	3.45	125	4.921	DN..110408/DN..332	1,15	2.530
	KM63XMZS25KPDUNLF11Y													

■ Spare Parts

catalog number	lever screw	toggle lever
right hand		
KM63XMZS25KPDUNR11Y	514.012	511.015
left hand		
KM63XMZS25KPDUNLF11Y	514.012	511.015

KM63XMZ Internal Cutting Units



KM63XMZ Adapters

■ BA • Boring Bar Adapter • Internal and External Coolant • Metric



order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	Nm	kg
1855688	KM63XMZBA3278Y	32	70	78	63	MS1561	PWZ1012	5mm	25	2
1510611	KM63XMZBA40105Y	40	80	105	76	MS1858	PWZ1012	6mm	45	3

■ BA • Boring Bar Adapter • Internal and External Coolant • Inch



order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
1855692	KM63XMZBA125307Y	1 1/4	2.76	3.071	2.48	MS1561	PWZ1012	5mm	18	4
1516678	KM63XMZBA150413Y	1 1/2	3.15	4.134	2.99	MS1858	PWZ1012	6mm	33	7
1831641	KM63XMZBA200512Y	2	3.54	5.118	3.98	MS1858	PWZ1012	6mm	33	9

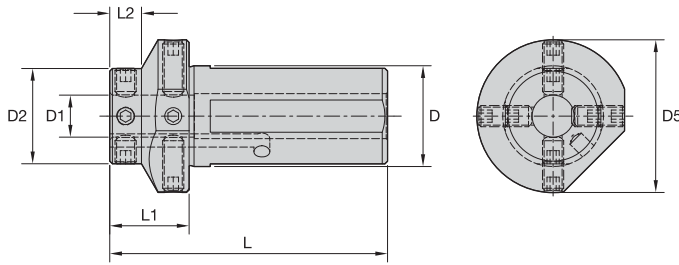
NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 For boring bar reducers, see page A286.

KM63XMZ™ Adapters

Boring Bar Reducers



KM63XMZ Adapters



■ BR • Boring Bar Reducer • Metric



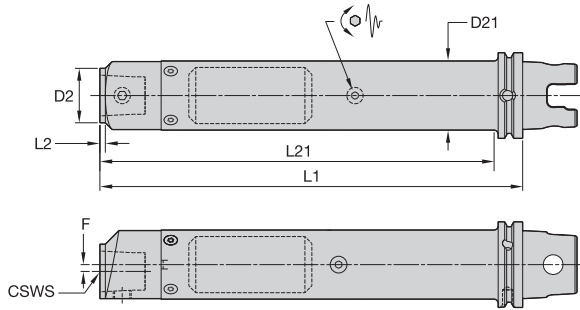
order number	catalog number	D	D1	D2	D5	L	L1	L2	flat point socket set screw	wrench size clamp screw	Nm	kg
1521853	KM63XMZBR4008Y	40	8	36	58	105	30	12	—	3mm	7	1,07
1521854	KM63XMZBR4010Y	40	10	36	58	105	30	12	—	3mm	7	1,04
1521857	KM63XMZBR4012Y	40	12	36	58	105	30	12	MS1109	4mm	15	0,93
1521859	KM63XMZBR4016Y	40	16	36	58	105	30	12	MS1109	4mm	15	0,85
1521860	KM63XMZBR4020Y	40	20	58	58	105	30	30	MS1878	4mm	15	0,62
1521858	KM63XMZBR4025Y	40	25	54	54	105	30	30	MS1878	4mm	15	1,03
1521856	KM63XMZBR4032Y	40	32	54	54	105	30	30	MS1878	4mm	15	0,99

■ BR • Boring Bar Reducer • Inch



order number	catalog number	D	D1	D2	D5	L	L1	L2	flat point socket set screw	wrench size clamp screw	ft. lbs.	lbs
1566093	KM63XMZBR150031Y	1.50	5/16	1.42	2.27	4.13	1.181	.472	—	3mm	5	2.21
1566078	KM63XMZBR150038Y	1.50	3/8	1.42	2.27	4.13	1.181	.472	—	3mm	5	2.14
1566079	KM63XMZBR150050Y	1.50	1/2	1.42	2.27	4.13	1.181	.472	MS1109	4mm	11	2.03
1566080	KM63XMZBR150062Y	1.50	5/8	1.42	2.27	4.13	1.181	.472	MS1109	4mm	11	1.90
1566211	KM63XMZBR150075Y	1.50	3/4	2.27	2.27	4.13	1.181	1.181	MS1878	4mm	11	2.13
1566212	KM63XMZBR150100Y	1.50	1	2.27	2.27	4.13	1.181	1.181	MS1878	4mm	11	1.73
1566213	KM63XMZBR150125Y	1.50	1 1/4	2.27	2.27	4.13	1.181	1.181	MS-1879	4mm	11	1.21

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.



KM63XMZ Shank Tools



■ TTB • KM Tunable Bar • KM

order number	catalog number	CSWS system size	D2		D21		F		L1		L2		L21	
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
3901271	KM63XMZD24TTB9KM40	KM40	38,10	1.500	—	—	0,00	.000	234,55	9.234	216,55	8.526	—	—
3901274	KM63XMZD28TTB14KM40	KM40	44,45	1.750	—	—	0,00	.000	361,52	14.233	4,00	.157	341,52	13.446
3901272	KM63XMZD32TTB12KM40	KM40	50,00	1.969	—	—	5,00	.197	310,71	12.233	4,00	.157	290,71	11.445
3901275	KM63XMZD32TTB16KM40	KM40	50,00	1.969	—	—	5,00	.197	412,32	16.233	4,00	.157	392,32	15.446
3901273	KM63XMZD40TTB15KM40	KM40	63,50	2.500	—	—	11,75	.463	386,92	15.233	4,00	.157	368,92	14.524
3901276	KM63XMZD40TTB20KM40	KM40	63,50	2.500	—	—	11,75	.463	513,92	20.233	4,00	.157	495,92	19.524

NOTE: Tunable technical section, see page K66.

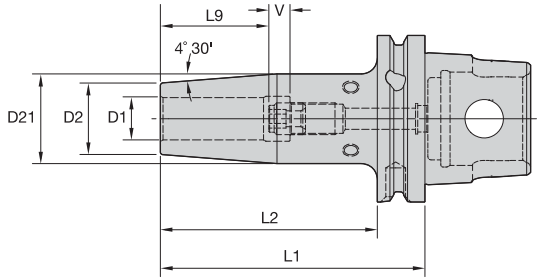
KM63XMZ™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)



KM63XMZ Shank Tools

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
4	h4	0,000/-0,004
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016



■ HPV TT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661833	KM63XMZHPVTT04080MY	4	9		80	52	15	10	TTSS05014M	2,5mm	0,74
3661823	KM63XMZHPVTT06080MY	6	21	1	80	62	26	10	TTSS05014M	2,5mm	0,85
3661824	KM63XMZHPVTT08080MY	8	21	1	80	62	26	10	TTSS06014M	3mm	0,84
3661825	KM63XMZHPVTT10090MY	10	24	1	90	72	31	10	TTSS08014M	4mm	0,97
3661826	KM63XMZHPVTT12090MY	12	24	1	90	72	36	10	TTSS10014M	5mm	0,95
3661827	KM63XMZHPVTT14100MY	14	27	1	100	82	36	10	TTSS10014M	5mm	1,08
3661828	KM63XMZHPVTT16100MY	16	27	1	100	82	39	10	TTSS12014M	6mm	1,05
3661829	KM63XMZHPVTT18100MY	18	33	2	100	82	39	10	TTSS12014M	6mm	1,27
3661830	KM63XMZHPVTT20100MY	20	33	2	100	82	41	10	TTSS16014M	8mm	1,24
3661831	KM63XMZHPVTT25120MY	25	44	2	120	102	47	10	TTSS16014M	8mm	1,96
3661832	KM63XMZHPVTT32120MY	32	44	2	120	102	51	10	TTSS16014M	8mm	1,79

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

KM63XMZ Shank Tools

■ HPV TT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3858932	KM63XMZHPVTT025315Y	1/4	.827	1.059	3.150	2.441	1.024	.394	TTSS05014M	2,5mm	1.85
3858943	KM63XMZHPVTT031315Y	5/16	.827	1.059	3.150	2.441	1.024	.394	TTSS06014M	3mm	1.84
3858944	KM63XMZHPVTT038335Y	3/8	.945	1.256	3.347	2.638	1.221	.394	TTSS08014M	4mm	2.05
3858945	KM63XMZHPVTT044354Y	7/16	.945	1.256	3.543	2.835	1.417	.394	TTSS10014M	5mm	2.09
3858946	KM63XMZHPVTT050354Y	1/2	.945	1.256	3.543	2.835	1.417	.394	TTSS10014M	5mm	2.06
3858947	KM63XMZHPVTT056354Y	9/16	1.063	1.335	3.543	2.835	1.417	.394	TTSS10014M	5mm	2.19
3858948	KM63XMZHPVTT062374Y	5/8	1.063	1.335	3.740	3.032	1.535	.394	TTSS12014M	6mm	2.22
3858949	KM63XMZHPVTT068374Y	11/16	1.299	1.650	3.740	3.032	1.535	.394	TTSS12014M	6mm	2.68
3858950	KM63XMZHPVTT075394Y	3/4	1.299	1.650	3.937	3.228	1.614	.394	TTSS16014M	8mm	2.73
3858951	KM63XMZHPVTT088394Y	7/8	1.299	1.650	3.937	3.228	1.614	.394	TTSS16014M	8mm	2.64
3858952	KM63XMZHPVTT100453Y	1	1.732	2.083	4.528	3.819	1.850	.394	TTSS16014M	8mm	4.10
3858953	KM63XMZHPVTT125472Y	1 1/4	1.732	2.083	4.724	4.016	2.008	.394	TTSS16014M	8mm	3.96

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

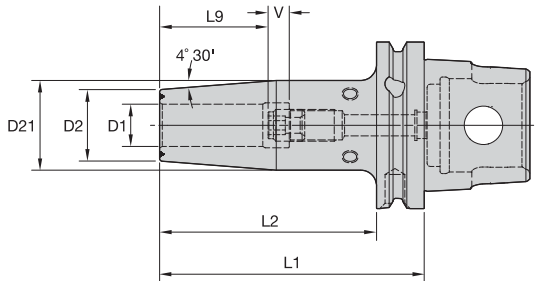
KM63XMZ™ Shank Tools

Shrink Fit Toolholders High Torque (HT)



KM63XMZ Shank Tools

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

■ HPV TT HT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661834	KM63XMZHPVTTHT12090MY	12	24	1	90	72	36	10	TTSS10014M	5mm	0,95
3661835	KM63XMZHPVTTHT14100MY	14	27	1	100	82	36	10	TTSS10014M	5mm	1,08
3661836	KM63XMZHPVTTHT16100MY	16	27	1	100	82	39	10	TTSS12014M	6mm	1,05
3661837	KM63XMZHPVTTHT18100MY	18	33	2	100	82	39	10	TTSS12014M	6mm	1,27
3661838	KM63XMZHPVTTHT20100MY	20	33	2	100	82	41	10	TTSS16014M	8mm	1,24
3661839	KM63XMZHPVTTHT25120MY	25	44	2	120	102	47	10	TTSS16014M	8mm	1,96
3661840	KM63XMZHPVTTHT32120MY	32	44	2	120	102	51	10	TTSS16014M	8mm	1,79

(continued)

(HPV TT HT continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-0.0004
3/4, 7/8, 1, & 1-1/4	.0000/-0.0005

■ HPV TT HT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3858954	KM63XMZHPVTTHT050354Y	1/2	.94	1.26	3.543	2.83	1.42	.39	TTSS10014M	5mm	2.06
3858955	KM63XMZHPVTTHT056354Y	9/16	1.06	1.33	3.543	2.83	1.42	.39	TTSS10014M	5mm	2.19
3858956	KM63XMZHPVTTHT062374Y	5/8	1.06	1.33	3.740	3.03	1.54	.39	TTSS12014M	6mm	2.22
3858957	KM63XMZHPVTTHT068374Y	11/16	1.30	1.65	3.740	3.03	1.54	.39	TTSS12014M	6mm	2.68
3858958	KM63XMZHPVTTHT075394Y	3/4	1.30	1.65	3.937	3.23	1.61	.39	TTSS16014M	8mm	2.73
3858959	KM63XMZHPVTTHT088394Y	7/8	1.30	1.65	3.937	3.23	1.61	.39	TTSS16014M	8mm	2.64
3858960	KM63XMZHPVTTHT100453Y	1	1.73	2.08	4.528	3.82	1.85	.39	TTSS16014M	8mm	4.10
3858961	KM63XMZHPVTTHT125472Y	1 1/4	1.73	2.08	4.724	4.02	2.01	.39	TTSS16014M	8mm	3.96

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

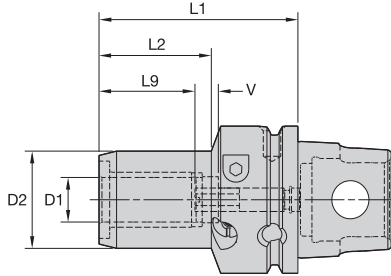
Optional M6-1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

KM63XMZ™ Shank Tools

Hydraulic Chucks Standard Line



KM63XMZ Shank Tools



■ HC • Metric

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
1514516	KM63XMZHC2085Y	20	42	85	48	41	10	170.135	5mm	170.003	3mm	1,36
1514517	KM63XMZHC32100Y	32	60	100	59	51	10	170.136	6mm	170.004	4mm	1,97

■ HC • Inch

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
1514514	KM63XMZHC075335Y	3/4	1.64	3.347	1.89	1.61	.39	170.135	5mm	170.003	3mm	3.04
1514515	KM63XMZHC125394Y	1 1/4	2.35	3.937	2.32	2.01	.39	170.136	6mm	170.004	4mm	4.39

NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Reduction sleeves are available and must be ordered separately; see page I7.

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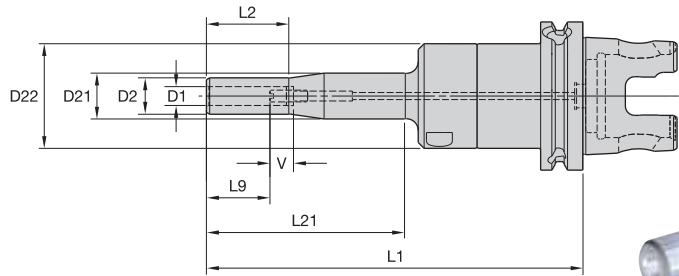
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KM63XMZ™ Shank Tools

Hydraulic Chucks Slim Line



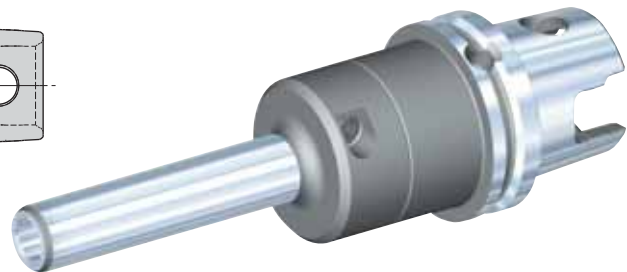
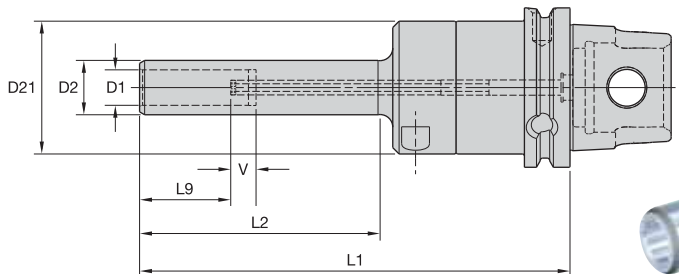
KM63XMZ Shank Tools



■ HCSLT • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
3055511	KM63XMZHCSLT06160MY	6	14	20	44	160	35	85	27	10	170.135	5mm	170.002	2,5mm	1,38
3055512	KM63XMZHCSLT08160MY	8	16	20	44	160	35	85	27	10	170.135	5mm	170.002	2,5mm	1,39
3055513	KM63XMZHCSLT10160MY	10	18	44	—	160	85	142	31	10	170.135	5mm	170.003	3mm	1,37

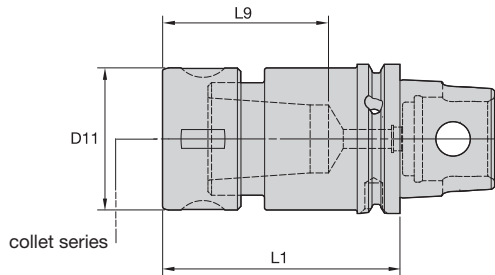
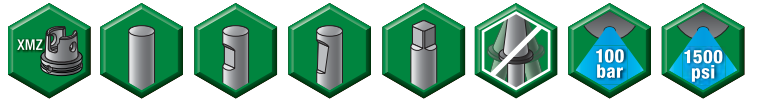
NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Reduction sleeves are available and must be ordered separately; see page I2.



■ HCSL • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3055514	KM63XMZHCSL12170MY	12	20	44	170	95	36	10	170.135	5mm	170.002	2,5mm	1,41
3055515	KM63XMZHCSL14170MY	14	22	52	170	95	36	10	170.135	5mm	170.002	2,5mm	1,69
3055516	KM63XMZHCSL16170MY	16	24	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,70
3055517	KM63XMZHCSL18170MY	18	26	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,75
3055518	KM63XMZHCSL20170MY	20	28	52	170	95	41	10	170.135	5mm	170.002	2,5mm	1,78

- Tremendous grip (3:1 advantage).



KM63XMZ Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

■ TG Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		kg	lbs
			mm	in	mm	in	mm	in		
1566225	KM63XMZTG05050Y	TG50	38	1.50	50	1.969	42,0	1.65	0,74	1.63
1516675	KM63XMZTG07575Y	TG75	50	1.97	75	2.953	54,0	2.13	1,30	2.88
1516677	KM63XMZTG100100Y	TG100	60	2.36	100	3.937	70,0	2.72	1,87	4.12

■ Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.
KM63XMZTG05050Y	LNA050M	HSW34M	55 - 68	40 - 50
KM63XMZTG07575Y	LNA075M	HSW45M	108 - 136	80 - 100
KM63XMZTG100100Y	LNA100M	HSW58M	163 - 203	120 - 150

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

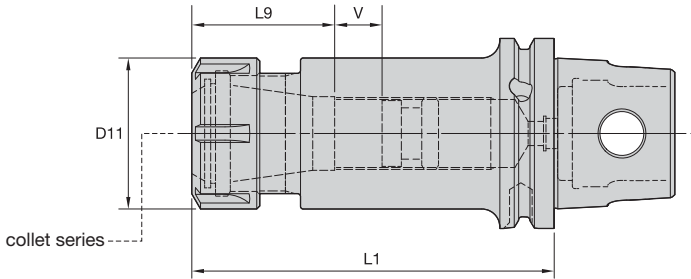
TG tap collets, see page I10.

KM63XMZ™ Shank Tools

ER Single-Angle Collet Chucks



KM63XMZ Shank Tools



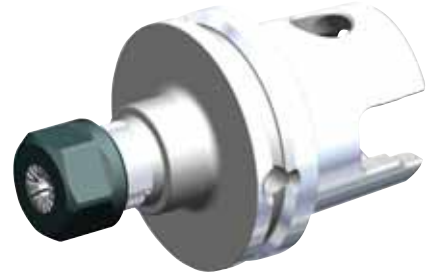
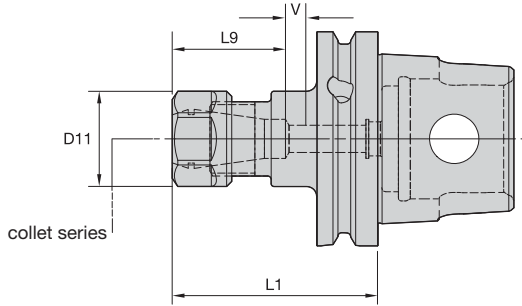
ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER11	0,5	7,0	.02	.28
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ER Collet Chuck • Round Nut

order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	stop screw	Nm ft. lbs. kg lbs			
			mm	in	mm	in	mm	in	mm	in							
1826965	KM63XMZER1160Y	ER11	16	.63	60	2.362	24,0	.94	—	—	LER11M	ER11WEM	—	16	12	0,71	1.56
1822413	KM63XMZER1190Y	ER11	16	.63	90	3.543	24,0	.94	—	—	LER11M	ER11WEM	—	16	12	0,82	1.81
1504983	KM63XMZER2560Y	ER25	42	1.65	60	2.362	40,0	1.57	—	—	LNSER25M	ER25WM	—	104	77	0,85	1.88
1714892	KM63XMZER25120Y	ER25	42	1.65	120	4.724	40,0	1.57	40	1.57	LNSER25M	ER25WM	SS075041G	104	77	1,41	3.11
1516809	KM63XMZER3260Y	ER32	50	1.97	60	2.362	47,0	1.83	—	—	LNSER32M	ER32WM	—	136	100	0,91	2.00
1798651	KM63XMZER32120Y	ER32	50	1.97	120	4.724	46,0	1.81	34	1.34	LNSER32M	ER32WM	SS094041G	136	100	1,69	3.72
1714893	KM63XMZER4090Y	ER40	63	2.48	90	3.543	70,3	2.77	—	—	LNSER40M	ER40WM	—	176	130	1,65	3.64

(continued)

(ER Collet Chuck continued)



KM63XMZ Shank Tools

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41



■ ER Collet Chuck • Hex Nut

order number	catalog number	collet series	D11		L1		L9		V		locknut	wrench	stop screw				
			mm	in	mm	in	mm	in	mm	in			Nm	ft. lbs.	kg	lbs	
1532048	KM63XMZER16120Y	ER16	28	1.10	120	4.724	32	1.26	48	1.89	LNHSER16M	OEW25M	SS044038G	56	42	1,00	2.21
1516808	KM63XMZER1660Y	ER16	28	1.10	60	2.362	32	1.26	9	.35	LNHSER16M	OEW25M	SS044038G	56	42	0,74	1.63

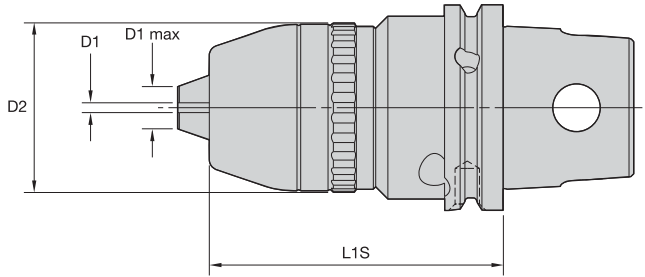
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.

KM63XMZ™ Shank Tools

Drill Chucks • Whistle Notch™ Adapters



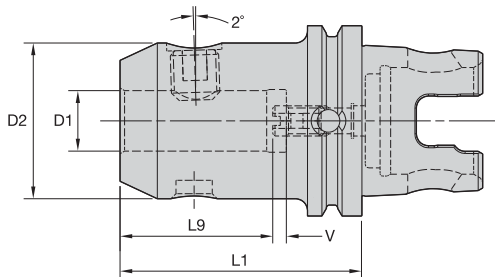
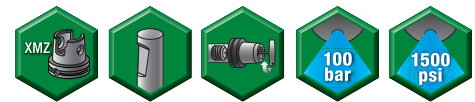
KM63XMZ Shank Tools



■ RDC • Drill Chuck

order number	catalog number	D1		D1 max		D2		L1S	
		mm	in	mm	in	mm	in	mm	in
1921511	KM63XMZRDC1390Y	1	.031	13	.500	50	1.949	90,0	3.543
3049855	KM63XMZRDC1690Y	3	.125	16	.625	52	2.047	90,0	3.543

NOTE: Activation size is 6mm.
Activation wrench included.
Wrench reorder number is 170.136.



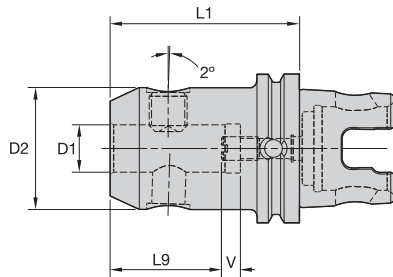
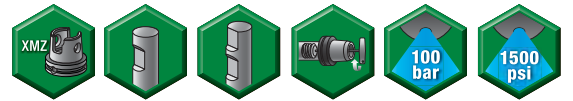
■ WN • Whistle Notch Adapter



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1982384	KM63XMZW0660Y	6	25	60	30	8	SS03M012	3mm	7	571.060	2,5mm	0,76
1831642	KM63XMZW0865Y	8	28	65	30	8	SS03M014	4mm	15	571.067	3mm	0,82
1831703	KM63XMZW1070Y	10	35	70	35	7	SS03M018	5mm	25	571.068	4mm	0,96
1831704	KM63XMZW1275Y	12	42	75	40	7	SS03M023	6mm	35	571.074	5mm	1,15
1831705	KM63XMZW1475Y	14	44	75	40	7	SS03M023	6mm	35	571.074	5mm	1,19
1831706	KM63XMZW1680Y	16	48	80	43	7	SS03M025	6mm	50	571.074	5mm	1,37
1982385	KM63XMZW1880Y	18	50	80	43	7	SS03M025	6mm	50	571.074	5mm	1,41
1714887	KM63XMZW2080Y	20	52	80	45	7	SS03M026	8mm	95	571.074	5mm	1,45
1714888	KM63XMZW2585Y	25	65	85	50	8	SS03M027	10mm	135	571.074	5mm	2,01
1714889	KM63XMZW3295Y	32	72	95	54	10	SS03M029	10mm	160	571.075	6mm	2,54

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.





KM63XMZ Shank Tools

■ WN/EM • Whistle Notch and End Mill Adapter


order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2231550	KM63XMZWNE0680Y	6	25	80	32	8	SS03M012	3mm	7	571.060	2,5mm	0,88
2231551	KM63XMZWNE0880Y	8	28	80	32	8	SS03M014	4mm	15	571.067	3mm	0,94
2231552	KM63XMZWNE1080Y	10	35	80	37	8	SS03M018	5mm	25	571.068	4mm	1,07
2231593	KM63XMZWNE1280Y	12	42	80	42	8	SS03M023	6mm	35	571.074	5mm	1,24
2231594	KM63XMZWNE1480Y	14	44	80	42	8	SS03M023	6mm	35	571.074	5mm	1,29
2231595	KM63XMZWNE1680Y	16	48	80	45	8	SS03M025	6mm	50	571.074	5mm	1,39
2231596	KM63XMZWNE1880Y	18	50	80	45	8	SS03M025	6mm	50	571.074	5mm	1,44
2231597	KM63XMZWNE2080Y	20	52	80	47	8	SS03M026	8mm	95	571.074	5mm	1,49
2231598	KM63XMZWNE2580Y	25	65	80	52	8	SS03M027	10mm	135	571.074	5mm	1,85
2231599	KM63XMZWNE3280Y	32	72	80	56	8	SS03M029	10mm	160	571.074	5mm	2,10
2231600	KM63XMZWNE4095Y	40	80	95	67	8	SS03M029	10mm	160	571.074	5mm	2,75

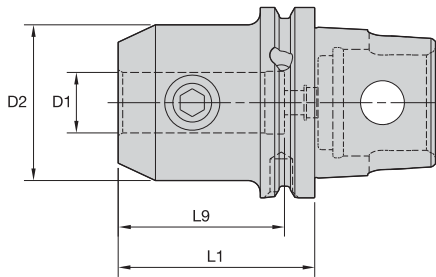
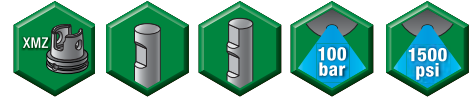
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw and stop screw wrenches are not included.

KM63XMZ™ Shank Tools

EM End Mill Adapters



KM63XMZ Shank Tools



EM • Metric



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1621006	KM63XMZEM06100Y	6	25	100	40	SS03M012	3mm	7	0,98
1621010	KM63XMZEM08100Y	8	28	100	40	SS03M014	4mm	15	1,05
1621054	KM63XMZEM10100Y	10	35	100	45	SS03M018	5mm	25	1,22
1510191	KM63XMZEM1255Y	12	42	55	50	SS03M023	6mm	35	0,94
1511879	KM63XMZEM1660Y	16	48	60	53	SS03M025	6mm	50	1,09
1844636	KM63XMZEM1860Y	18	50	60	53	SS03M025	6mm	50	1,12
1511880	KM63XMZEM2065Y	20	52	65	55	SS03M026	8mm	95	1,21
1512091	KM63XMZEM2580Y	25	65	80	60	SS03M027	10mm	135	1,88
1714890	KM63XMZEM3290Y	32	72	90	65	SS03M029	10mm	160	2,38

EM • Inch

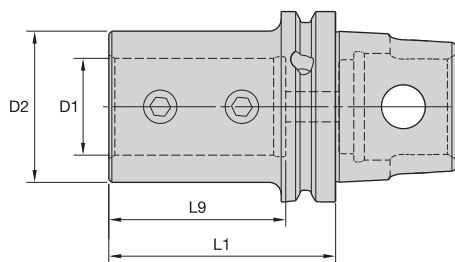


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1723304	KM63XMZEM050216Y	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.80
1516667	KM63XMZEM062236Y	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	2.07
1516669	KM63XMZEM075256Y	3/4	1.75	2.559	2.22	ELS062050PKG	5/16	70	2.25
1516672	KM63XMZEM100315Y	1	2.00	3.150	2.46	ELS075056PKG	3/8	110	2.87
1516673	KM63XMZEM125335Y	1 1/4	2.50	3.346	2.51	ELS075062PKG	3/8	110	3.97
1831838	KM63XMZEM200492Y	2	3.75	4.921	3.53	ELS100088PKG	1/2	150	10.47

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.



KM63XMZ Shank Tools

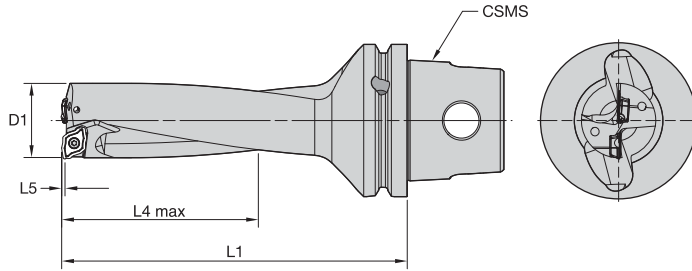
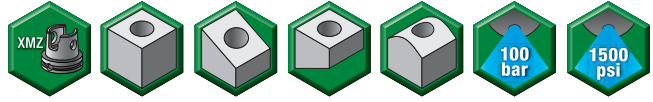


■ DAT • Metric



order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
2231624	KM63XMZDAT2575Y	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	1,10
2231625	KM63XMZDAT3275Y	32	50	75	64	12166903700	6mm	40	12166903900	6mm	40	1,11
2231626	KM63XMZDAT4090Y	40	60	90	74	12166903800	8mm	50	12166904000	8mm	50	1,48

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.
Cone point screw to be tightened first.



■ TCP 3 x D • Metric



order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898401	KM63XMZTCP350R3YM	KM63XMZ	35,0	154,0	105,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898402	KM63XMZTCP360R3YM	KM63XMZ	36,0	157,0	108,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898403	KM63XMZTCP370R3YM	KM63XMZ	37,0	161,0	111,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898404	KM63XMZTCP380R3YM	KM63XMZ	38,0	165,0	114,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898405	KM63XMZTCP390R3YM	KM63XMZ	39,0	169,0	117,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898406	KM63XMZTCP400R3YM	KM63XMZ	40,0	172,0	120,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898407	KM63XMZTCP410R3YM	KM63XMZ	41,0	176,0	123,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898408	KM63XMZTCP420R3YM	KM63XMZ	42,0	180,0	126,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898409	KM63XMZTCP430R3YM	KM63XMZ	43,0	184,0	129,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898410	KM63XMZTCP440R3YM	KM63XMZ	44,0	190,0	132,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898411	KM63XMZTCP450R3YM	KM63XMZ	45,0	191,0	135,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898412	KM63XMZTCP460R3YM	KM63XMZ	46,0	195,0	138,0	1,48	XOMT160508	12148007200	12148007500	T20
3898413	KM63XMZTCP470R3YM	KM63XMZ	47,0	199,0	141,0	1,48	XOMT160508	12148007200	12148007500	T20
3898414	KM63XMZTCP480R3YM	KM63XMZ	48,0	202,0	144,0	1,48	XOMT160508	12148007200	12148007500	T20
3898415	KM63XMZTCP490R3YM	KM63XMZ	49,0	206,0	147,0	1,48	XOMT160508	12148007200	12148007500	T20
3898416	KM63XMZTCP500R3YM	KM63XMZ	50,0	210,0	150,0	1,48	XOMT160508	12148007200	12148007500	T20

NOTE: Drill shipped with insert screws and Torx wrench.
See WIDIA Indexable Milling and Holemaking (A-09-02081) catalog for inserts.

(continued)

(TCP 3 x D continued)

■ TCP 3 x D • Inch


order number	catalog number	CSMS system size	CSMS				gage insert	insert screw	Torx driver	Torx size
			D1	L1	L4 max	L5				
3898445	KM63XMZTCP1250R3Y	KM63XMZ	1.250	5.625	3.750	.028	XOMT09T306	12148067200	12148086600	T8
3898446	KM63XMZTCP1313R3Y	KM63XMZ	1.313	5.750	3.939	.028	XOMT09T306	12148067200	12148086600	T8
3898447	KM63XMZTCP1375R3Y	KM63XMZ	1.375	6.125	4.125	.028	XOMT09T306	12148067200	12148086600	T8
3898448	KM63XMZTCP1438R3Y	KM63XMZ	1.438	6.375	4.314	.038	XOMT12T308	12148055800	12148082400	T15
3898449	KM63XMZTCP1500R3Y	KM63XMZ	1.500	6.500	4.500	.038	XOMT12T308	12148055800	12148082400	T15
3898450	KM63XMZTCP1563R3Y	KM63XMZ	1.563	6.750	4.689	.038	XOMT12T308	12148055800	12148082400	T15
3898451	KM63XMZTCP1625R3Y	KM63XMZ	1.625	7.000	4.875	.038	XOMT12T308	12148055800	12148082400	T15
3898452	KM63XMZTCP1688R3Y	KM63XMZ	1.688	7.250	5.064	.038	XOMT12T308	12148055800	12148082400	T15
3898453	KM63XMZTCP1750R3Y	KM63XMZ	1.750	7.500	5.250	.038	XOMT12T308	12148055800	12148082400	T15
3898454	KM63XMZTCP1875R3Y	KM63XMZ	1.875	8.000	5.625	.058	XOMT160508	12148007200	12148007500	T20
3898455	KM63XMZTCP1938R3Y	KM63XMZ	1.938	8.250	5.814	.058	XOMT160508	12148067200	12148007500	T20
3898456	KM63XMZTCP2000R3Y	KM63XMZ	2.000	8.375	6.000	.058	XOMT160508	12148067200	12148007500	T20


WARNING

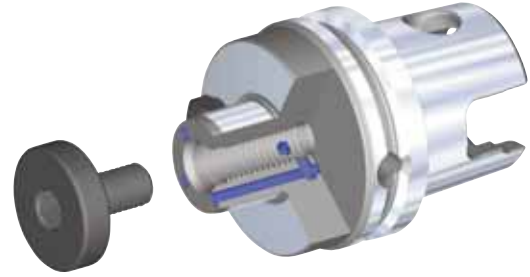
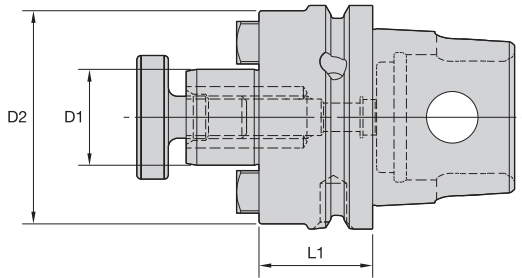
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM63XMZ™ Shank Tools

SMC Shell Mill Adapters with Through Coolant



KM63XMZ Shank Tools



■ SMC • Metric

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950758	KM63XMZSMC16028MY	16	44	28	MS1294	KDK16M	6mm	0,78
3950759	KM63XMZSMC22028MY	22	49	28	MS1234	KDK22M	8mm	0,84
3950760	KM63XMZSMC27032MY	27	60	32	KLSS27M	KDK27M	10mm	1,05
3950761	KM63XMZSMC32040MY	32	78	40	KLSS32M	KDK32M	14mm	1,60

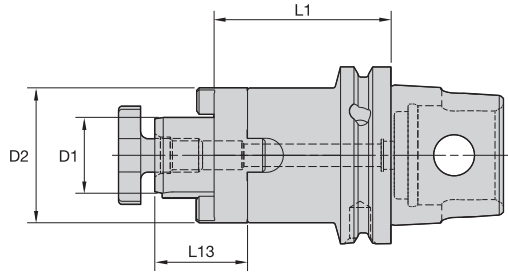
■ SMC • Inch

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950898	KM63XMZSMC050102Y	1/2	1.44	1.024	KLS05	KDK04	3/16	1.56
3950900	KM63XMZSM2C075102Y	3/4	1.46	1.024	KLS07	—	1/4	1.63
3950899	KM63XMZSMC075102Y	3/4	1.75	1.024	KLS07	KDK05	3/16	1.70
3950902	KM63XMZSM2C100126Y	1	2.19	1.260	KLS10	KDK06	5/16	2.19
3950901	KM63XMZSMC100126Y	1	2.75	1.260	KLS10	KDK06	5/16	2.49
3950903	KM63XMZSMC125157Y	1 1/4	2.88	1.575	KLS12	KDK08	5/16	3.35
3950904	KM63XMZSMC150177Y	1 1/2	3.69	1.770	KLS15	KDK10	3/8	5.11

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.



KM63XMZ Shank Tools

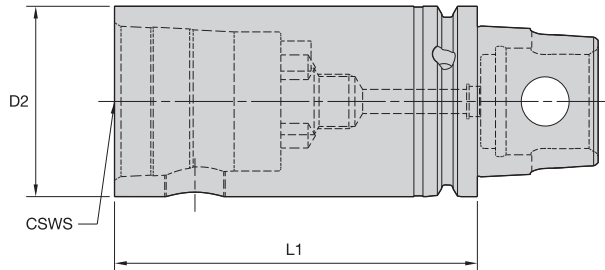


■ CS • Metric



order number	catalog number	D1	D2	L1	L13	lock screw	lock screw	wrench size lock screw	wrench	kg
2231604	KM63XMZCS1663Y	16	32	63	17	MS1294	—	6mm	—	0,98
2231606	KM63XMZCS22110Y	22	50	110	19	MS1234	—	8mm	—	2,29
2231601	KM63XMZCS2228Y	22	50	28	19	MS1234	—	8mm	—	1,87
2231605	KM63XMZCS2263Y	22	50	63	19	MS1234	—	8mm	—	0,88
2231608	KM63XMZCS27110Y	27	63	110	21	—	KLS27M	—	SMW27M	1,70
2231602	KM63XMZCS2732Y	27	63	32	21	—	KLS27M	—	SMW27M	2,98
2231607	KM63XMZCS2763Y	27	63	63	21	—	KLS27M	—	SMW27M	3,46
2231610	KM63XMZCS32110Y	32	78	110	24	—	KLS32M	—	SMW32M	2,20
2231603	KM63XMZCS3240Y	32	78	40	24	—	KLS32M	—	SMW32M	1,10
2231609	KM63XMZCS3263Y	32	78	63	24	—	KLS32M	—	SMW32M	1,42

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.



■ S • KM Extensions



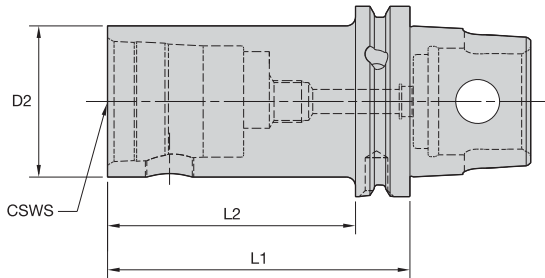
order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw			spare parts package		kg	lbs
			mm	in	mm	in	Nm	ft. lbs.	mm	in			
1319536	KM63XMZS6380Y	KM63	63	2.480	80	3.150	12mm	47-54	35-40	KM63PKG3S	1,73	3.81	
1511923	KM63XMZS63120Y	KM63	63	2.480	120	4.724	12mm	47-54	35-40	KM63PKG3S	2,68	5.92	

KM63XMZ™ Adapters

KM™ Reducers

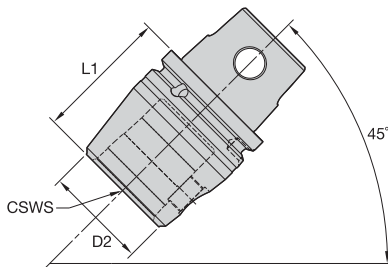


KM63XMZ Adapters



■ S • KM Reducer

order number	catalog number	CSWS system size	D2		L1		L2		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in	mm	in						
1512243	KM63XMZS3270Y	KM32	32	1.260	70	2.756	46	1.811	5mm	8-11	6-8	KM32PKG3S	0,91	2.00
1511925	KM63XMZS4080Y	KM40	40	1.575	80	3.150	59	2.323	6mm	12-16	9-12	KM40PKG3S	1,14	2.51
1831639	KM63XMZS5058Y	KM50	50	1.969	58	2.299	36	1.417	10mm	27-34	20-25	KM50PKG3S	0,87	1.91
1509861	KM63XMZS50100Y	KM50	50	1.969	100	3.937	79	3.110	10mm	27-34	20-25	KM50PKG3S	1,67	3.68



■ S • KM Reducer • Centerline

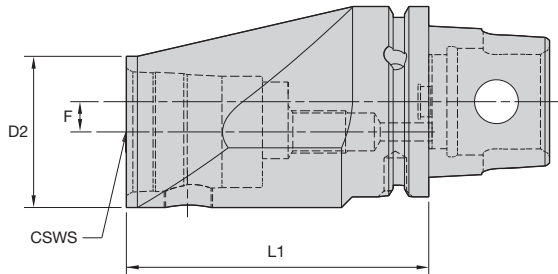
order number	catalog number	CSWS system size	D2		L1		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in						
3306139	KM63XMZS5065Y	KM50	50	1.969	65	2.559	10mm	27-34	20-25	KM50PKG3L	1,42	3.13



NOTE: Designed for centerline KM cutting units.



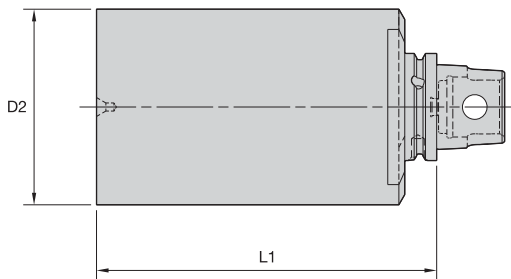
KM63XMZ Adapters



■ ES • KM Offset Reducer



order number	catalog number	CSWS system size	D2		L1		F		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in	mm	in						
1831587	KM63XMZES40110Y	KM40	40	1.575	110	4.331	18	.709	6mm	12-16	9-12	KM40PKG3S	2,38	5.25
1516814	KM63XMZES50100Y	KM50	50	1.969	100	3.937	10	.394	10mm	27-34	20-25	KM50PKG3S	2,21	4.87

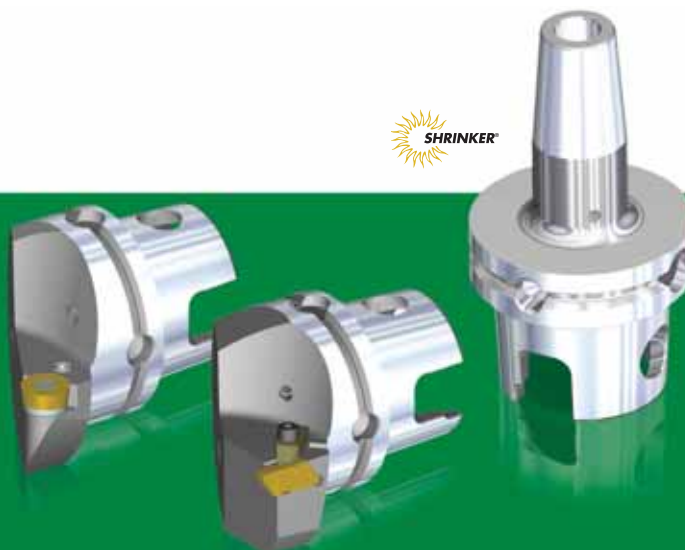


■ BN • Blank

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
1831586	KM63XMZBN115200Y	115	4.528	200	7.874	32-38 RW C	15,21	33.54

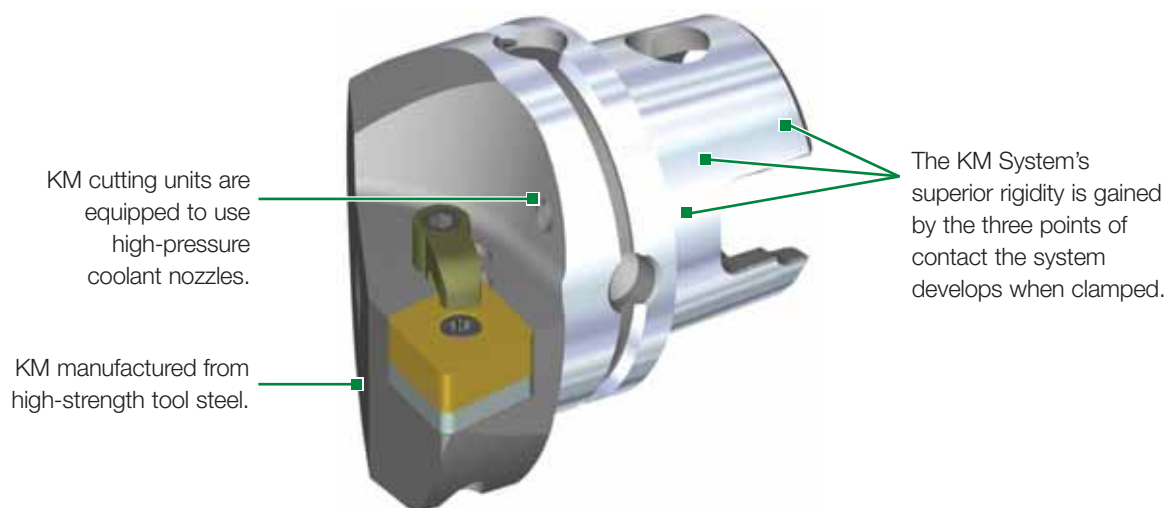
KM™ Quick Change Clamping System • **KM80ATC™ Series**

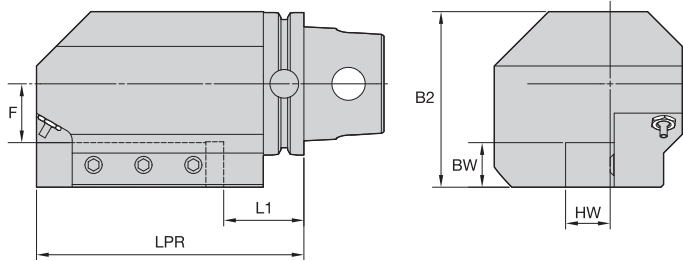
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM80ATC

- KM80ATC is designed to be used on MAG Corporation VTL machines.
- KM80ATC is your solution for multitasking.





KM80ATC Adapters



■ STA • Straight Side Mount • Metric



order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	Nm	kg
right hand											
3545087	KM80ATCSTAR2525	45	150	33	25	25	99	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,51
3545089	KM80ATCSTAR3232	45	150	25	32	32	98	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,98
left hand											
3545088	KM80ATCSTAL2525	45	150	33	25	25	99	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,51
3545090	KM80ATCSTAL3232	45	150	25	32	32	98	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,98

■ STA • Straight Side Mount • Inch



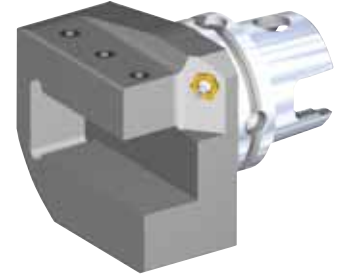
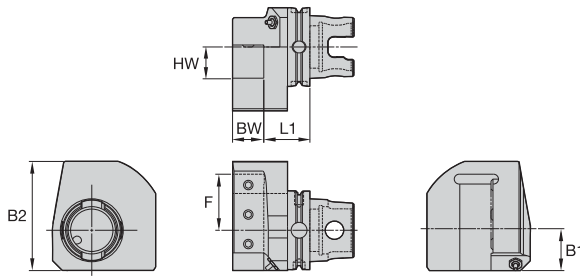
order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
right hand											
3480215	KM80ATCSTAR20	1.693	5.906	1.059	1.250	1.250	3.904	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.17
2601528	KM80ATCSTAR24	1.480	6.693	.559	1.500	1.500	3.654	MS1954	PMT04526 COOLANT NOZZLE SPRAY	90	21.44
left hand											
2628561	KM80ATCSTAL20	1.693	5.906	1.059	1.250	1.250	3.904	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.14
2601530	KM80ATCSTAL24	1.480	6.693	.559	1.500	1.500	3.654	MS1954	PMT04526 COOLANT NOZZLE SPRAY	90	21.44

KM80ATC™ Adapters

Single Square Shank Adapters • M-Clamping



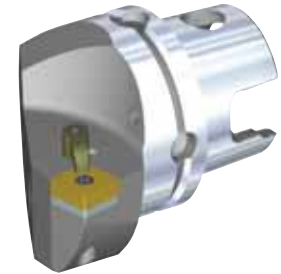
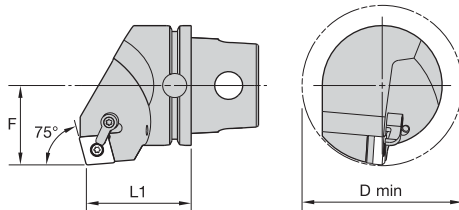
KM80ATC Adapters



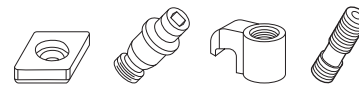
■ ETA • Straight End Mount • Inch



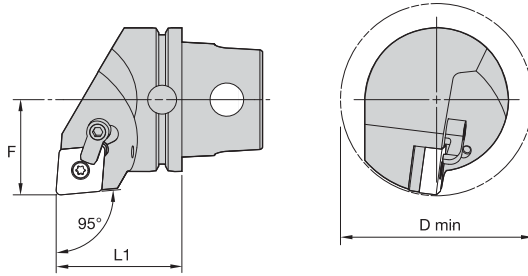
order number	catalog number	L1	B1	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
2203618	KM80ATCETAR20	1.846	1.614	2.244	1.25	1.25	4	DWG MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.32
	left hand										
2203619	KM80ATCETAL20	1.846	1.614	2.244	1.25	1.25	4	DWG MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.32



■ MCKN 75°



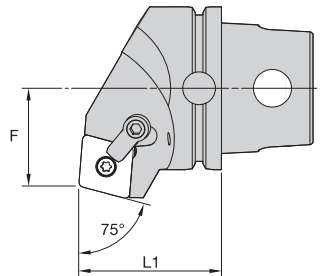
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
2036393	KM80ATCMCKNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,40	5.30
3758113	KM80ATCMCKNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,54	5.61
	left hand													
1961291	KM80ATCMCKNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,41	5.30
3684524	KM80ATCMCKNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,54	5.61



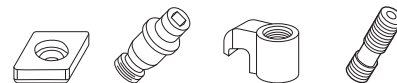
■ MCLN 95°



order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
right hand														
2036373	KM80ATCMCLNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,19	4.83
2036374	KM80ATCMCLNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,20	4.84
left hand														
1958408	KM80ATCMCLNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,19	4.83
1958411	KM80ATCMCLNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,20	4.84



■ MCRN 75°



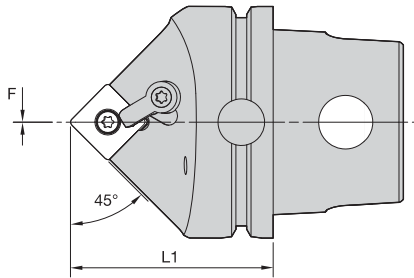
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		mm	in	mm	in							
right hand												
2036375	KM80ATCMCRNR19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,29	5.06
2036376	KM80ATCMCRNR25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,31	5.09
left hand												
1960916	KM80ATCMCRNL19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,29	5.06
2033887	KM80ATCMCRNL25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,31	5.09

KM80ATC™ Cutting Units

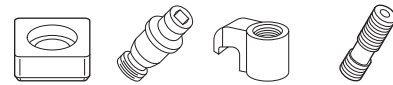
M-Clamping



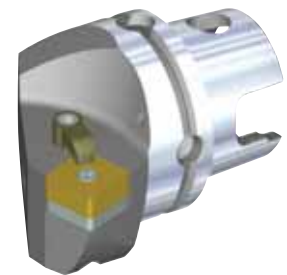
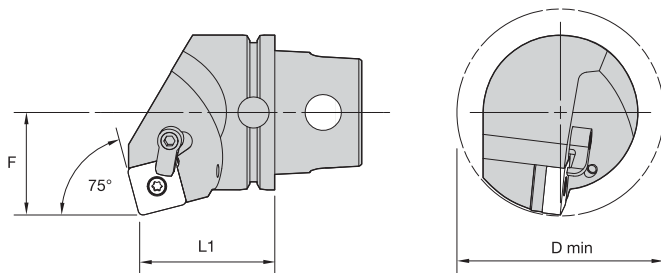
KM80ATC Cutting Units



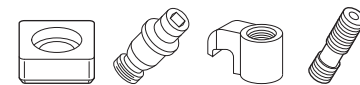
MSDN 45°



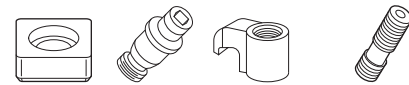
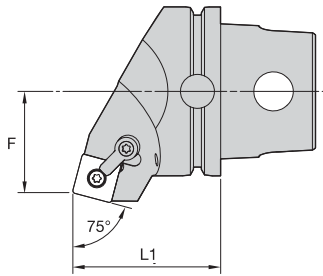
order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
2036383	KM80ATCMSDNN19	70	2.756	0	.000	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	1,88	4.14
2036384	KM80ATCMSDNN25	70	2.756	0	.000	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	1,79	3.95



MSKN 75°

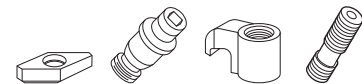
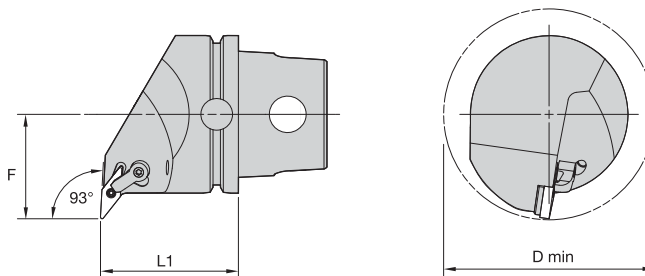


order number	catalog number	L1		F		D min	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in								
2036385	KM80ATCMSKNR19	70	2.756	53	2.087	106 4.173	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,52	5.55
2036387	KM80ATCMSKNR25	70	2.756	53	2.087	106 4.173	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.44
2036386	KM80ATCMSKNL19	70	2.756	53	2.087	106 4.173	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,52	5.55
1960917	KM80ATCMSKNL25	70	2.756	53	2.087	106 4.173	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,53	5.57



■ MSRN 75°

order number	catalog number	L1		F		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in							
	right hand											
2036388	KM80ATCMSRNR19	70	2.756	48	1.890	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,11	4.66
2036390	KM80ATCMSRNR25	70	2.756	48	1.890	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,08	4.59
	left hand											
2036389	KM80ATCMSRNL19	70	2.756	48	1.890	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,11	4.66
1961718	KM80ATCMSRNL25	70	2.756	48	1.890	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,08	4.59



■ MVUN 93°

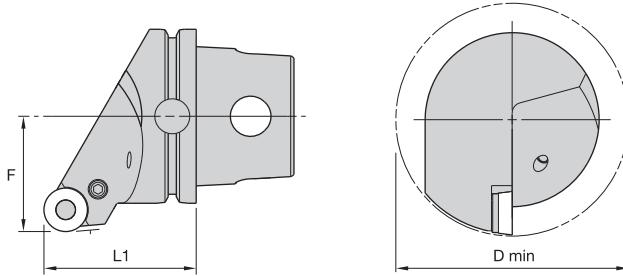
order number	catalog number	L1		F		D min		gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in							
	right hand													
2036391	KM80ATCMVUNR16	70	2.756	53	2.087	106	4.173	VN..160408/VN..332	IVSN322	KLM34L	CKM22	STCM20	2,23	4.92
	left hand													
1961335	KM80ATCMVUNL16	70	2.756	53	2.087	106	4.173	VN..160408/VN..332	IVSN322	KLM34L	CKM22	STCM20	2,23	4.92

KM80ATC™ Cutting Units

P-Clamping



KM80ATC Cutting Units



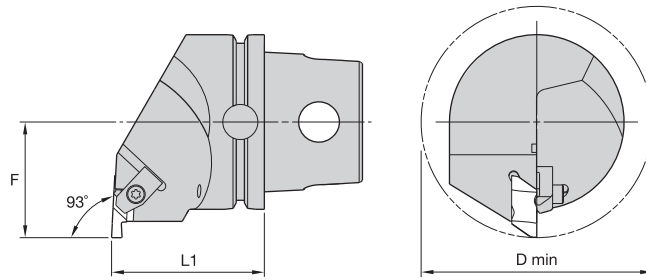
■ PRGC 0°



order number	catalog number	L1		F		D min		gage insert	shim	clamp screw	clamp stud	kg	lbs
		mm	in	mm	in	mm	in						
1961340	KM80ATCPRGCL20	70	2.756	53	2.087	106	4.173	RC..2006M0	169.333	121.820	119.073	1,87	4.12
3897198	KM80ATCPRGCL25	70	2.756	53	2.087	—	—	RC..2507M0..	169.337	121.820	118.404	2,08	4.58
3897200	KM80ATCPRGCL32	80	3.150	53	2.087	—	—	RC..3209M0..	169.339	121.030	118.604	2,66	5.86
2203621	KM80ATCPRGCR20	70	2.756	53	2.087	106	4.173	RC..2006M0	169.333	121.820	119.073	1,87	4.12
3897199	KM80ATCPRGCR25	70	2.756	53	2.087	—	—	RC..2507M0..	169.337	121.820	118.404	2,08	4.58
3897201	KM80ATCPRGCR32	80	3.150	53	2.087	—	—	RC..3209M0..	169.339	121.030	118.604	2,66	5.86

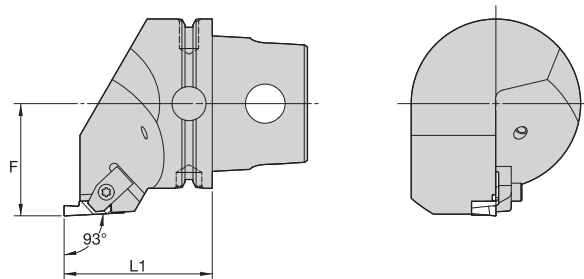
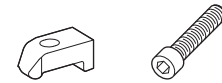


KM80ATC Cutting Units



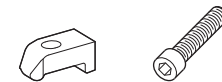
■ NE 93°

order number	catalog number	L1		F		D min		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in	mm	in					
right hand												
2036394	KM80ATCNER3	70	2.756	53	2.087	106	4.173	NG3L	CM73	MS2091	2,12	4.67
2036395	KM80ATCNER4	70	2.756	53	2.087	106	4.173	NG4L	CM73	MS2091	2,19	4.83
2036396	KM80ATCNER5	70	2.756	53	2.087	106	4.173	NG5L	CM81	MS1490	2,26	4.99
2036397	KM80ATCNER6	70	2.756	53	2.087	106	4.173	NG6L	CM121	MS2091	2,15	4.74
left hand												
1961333	KM80ATCNEL3	70	2.756	53	2.087	106	4.173	NG3R	CM72	MS2091	2,12	4.67
1960915	KM80ATCNEL4	70	2.756	53	2.087	106	4.173	NG4R	CM72	MS2091	2,19	4.83
2036400	KM80ATCNEL5	70	2.756	53	2.087	106	4.173	NG5R	CM80	MS1490	2,26	4.99
2036398	KM80ATCNEL6	70	2.756	53	2.087	106	4.173	NG6R	CM120	MS2091	2,15	4.74



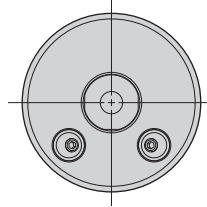
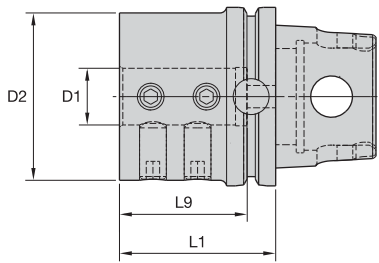
■ NS 93°

order number	catalog number	L1		F		gage insert	clamp	clamp screw	kg	lbs
		mm	in	mm	in					
right hand										
3330949	KM80ATCNSR3	70	2.756	53	2.087	NG3R	CM72	MS1489	2,16	4.77
2203622	KM80ATCNSR4	70	2.756	53	2.087	NG4R	CM72	MS2091	2,17	4.77
left hand										
2398753	KM80ATCNL3	70	2.756	53	2.087	NG3L	CM73	MS1489	2,16	4.77
2044321	KM80ATCNL4	70	2.756	53	2.087	NG4L	CM73	MS2091	2,17	4.77

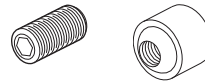




KM80ATC Shank Tools

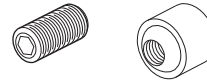


■ BA • Boring Bar Adapter • Internal and External Coolant • Metric



order number	catalog number	D1	D2	L1	L9	lock screw	nozzle	wrench size clamp screw	Nm	kg
3896952	KM80ATCBA40105M	40	80	105	76	MS1947	PWZ1012	8mm	125	3,58
3897203	KM80ATCBA50130M	50	90	130	95	MS1947	PWZ1012	8mm	125	4,96

■ BA • Boring Bar Adapter • Internal and External Coolant • Inch



order number	catalog number	D1	D2	L1	L9	lock screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
2024399	KM80ATCBA100276	1	2.95	2.756	2.24	—	PWZ1012	6mm	30	5.57
2024400	KM80ATCBA125295	1 1/4	3.15	2.953	2.48	—	PWZ1012	6mm	30	6.11
2024401	KM80ATCBA150413	1 1/2	3.15	4.134	2.99	MS1947	PWZ1012	8mm	90	8.04
2024402	KM80ATCBA200512	2	3.54	5.118	3.98	MS1947	PWZ1012	8mm	90	10.57

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 For boring bar reducers, see page A286.

WIN WITH WIDIA™



WIDIA-CIRCLE™ Small-Hole Tooling Series

The WIDIA™ line of small-hole boring tools is an excellent, economical choice for a wide range of applications. Our solid carbide bars provide exceptional machining versatility and rupture strength. Indexable inserts are available in both steel and carbide shanks.

A/B Series

- Unique locking system enables quick, accurate insert changes.

Quadralock™

- V-slots and limit-stop bolts for increased indexability.

Micro Boring Bars

- Free cutting action, better surface finishes, and greater chip evacuation.

Solid Carbide Bars

- Accurate, quick-change tooling and toolholders are ideal for small parts machining applications.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

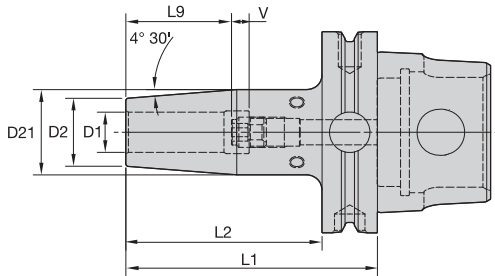
KM80ATC™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)



KM80ATC Shank Tools

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ HPV TT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661841	KM80ATCHPVTT10090M	10	24	32	90	68	31	10	TTSS08014M	4mm	1,47
3661842	KM80ATCHPVTT10170M	10	24	32	170	63	31	10	TTSS08014M	4mm	2,02
3662743	KM80ATCHPVTT12095M	12	24	32	95	73	36	10	TTSS10014M	5mm	1,48
3662744	KM80ATCHPVTT12160M	12	24	32	160	63	36	10	TTSS10014M	5mm	1,93
3662745	KM80ATCHPVTT14095M	14	27	34	95	73	36	10	TTSS10014M	5mm	1,54
3662746	KM80ATCHPVTT16100M	16	27	34	100	78	39	10	TTSS12014M	6mm	1,55
3662747	KM80ATCHPVTT18100M	18	33	42	100	78	39	10	TTSS12014M	6mm	1,75
3662748	KM80ATCHPVTT18160M	18	33	42	160	70	39	10	TTSS12014M	6mm	2,45
3662749	KM80ATCHPVTT20105M	20	33	42	105	83	41	10	TTSS16014M	8mm	1,77
3662750	KM80ATCHPVTT25115M	25	44	53	115	93	47	10	TTSS16014M	8mm	2,34
3662751	KM80ATCHPVTT32120M	32	44	53	120	98	51	10	TTSS16014M	8mm	2,26
3662752	KM80ATCHPVTT40130M	40	60	61	130	108	51	10	TTSS20014M	10mm	3,47
3662753	KM80ATCHPVTT50140M	50	69	79	140	118	56	10	TTSS20014M	10mm	4,28

(continued)

(HPV TT continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

■ HPV TT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3599309	KM80ATCHPVTT031335	5/16	.83	1.06	3.347	2.48	1.02	.39	TTSS06014M	3mm	3.03
3599310	KM80ATCHPVTT038630	3/8	.95	1.26	6.299	2.48	1.22	.39	TTSS08014M	4mm	4.29
3599311	KM80ATCHPVTT044374	7/16	.95	1.26	3.740	2.87	1.42	.39	TTSS10014M	5mm	3.28
3599304	KM80ATCHPVTT050374	1/2	.95	1.26	3.740	2.87	1.42	.39	TTSS10014M	5mm	3.25
3594191	KM80ATCHPVTT056374	9/16	1.06	1.34	3.740	2.87	1.42	.39	TTSS10014M	5mm	3.38
3599305	KM80ATCHPVTT062394	5/8	1.06	1.34	3.937	3.07	1.54	.39	TTSS12014M	6mm	3.41
3594317	KM80ATCHPVTT062850	5/8	1.06	1.34	8.500	2.48	1.54	.39	TTSS12014M	6mm	5.65
3594316	KM80ATCHPVTT075413	3/4	1.30	1.65	4.134	3.27	1.61	.39	TTSS16014M	6mm	3.93
3599306	KM80ATCHPVTT075630	3/4	1.30	1.65	6.299	2.76	1.61	.39	TTSS16014M	8mm	5.35
3599307	KM80ATCHPVTT088413	7/8	1.30	1.65	4.134	3.27	1.61	.39	TTSS16014M	8mm	3.84
3594315	KM80ATCHPVTT100453	1	1.73	2.08	4.528	3.66	1.85	.39	TTSS16014M	8mm	5.14
3594313	KM80ATCHPVTT125472	1 1/4	1.73	2.08	4.724	3.86	2.01	.39	TTSS16014M	8mm	4.99
3594314	KM80ATCHPVTT150512	1 1/2	2.36	2.75	5.118	4.25	2.01	.39	TTSS20014M	10mm	7.78
3599308	KM80ATCHPVTT200551	2	2.72	3.11	5.512	4.65	2.20	.39	TTSS20014M	10mm	9.37

*NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.*

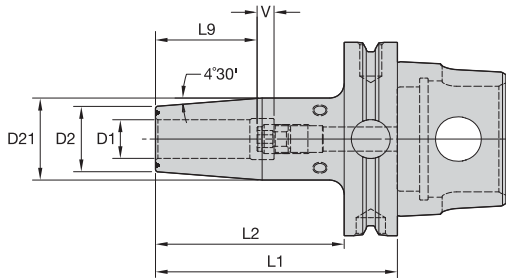
KM80ATC™ Shank Tools

Shrink Fit Toolholders High Torque (HT)



KM80ATC Shank Tools

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016



■ HPV TT HT • Metric



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3662754	KM80ATCHPVTTHT12095M	12	24	32	95	73	36	10	TTSS10014M	5mm	1,48
3662755	KM80ATCHPVTTHT12160M	12	24	32	160	63	36	10	TTSS10014M	5mm	1,96
3662756	KM80ATCHPVTTHT14095M	14	27	34	95	73	36	10	TTSS10014M	5mm	1,54
3662757	KM80ATCHPVTTHT16100M	16	27	34	100	78	39	10	TTSS12014M	6mm	1,55
3662758	KM80ATCHPVTTHT18100M	18	33	42	100	78	39	10	TTSS12014M	6mm	1,75
3662759	KM80ATCHPVTTHT18160M	18	33	42	160	70	39	10	TTSS12014M	6mm	2,45
3662760	KM80ATCHPVTTHT20105M	20	33	42	105	83	41	10	TTSS16014M	8mm	1,77
3662761	KM80ATCHPVTTHT25115M	25	44	53	115	93	47	10	TTSS16014M	8mm	2,34
3662762	KM80ATCHPVTTHT32120M	32	44	53	120	98	51	10	TTSS16014M	8mm	2,26

(continued)

(HPV TT HT continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

■ HPV TT HT • Inch



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3598813	KM80ATCHPVTTHT050374	1/2	.95	1.26	3.740	2.87	1.42	.39	TTSS10014M	5mm	3.25
3598814	KM80ATCHPVTTHT056374	9/16	1.06	1.34	3.740	2.87	1.42	.39	TTSS10014M	5mm	3.38
3598815	KM80ATCHPVTTHT062394	5/8	1.06	1.34	3.937	3.07	1.54	.39	TTSS12014M	6mm	3.41
3598816	KM80ATCHPVTTHT062850	5/8	1.06	1.34	8.500	2.48	1.54	.39	TTSS12014M	6mm	5.65
3598817	KM80ATCHPVTTHT075413	3/4	1.30	1.65	4.134	3.27	1.61	.39	TTSS16014M	8mm	3.93
3598818	KM80ATCHPVTTHT075630	3/4	1.30	1.65	6.299	2.76	1.61	.39	TTSS16014M	8mm	5.35
3598819	KM80ATCHPVTTHT088413	7/8	1.30	1.65	4.134	3.27	1.61	.39	TTSS16014M	8mm	3.84
3598820	KM80ATCHPVTTHT100453	1	1.73	2.08	4.528	3.66	1.85	.39	TTSS16014M	8mm	5.14
3598821	KM80ATCHPVTTHT125472	1 1/4	1.73	2.08	4.724	3.86	2.01	.39	TTSS16014M	8mm	4.99

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Shrink Fit accessories, see page J2.
 Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
 Order number is MS1276PKG and must be ordered separately.

KM80ATC™ Shank Tools

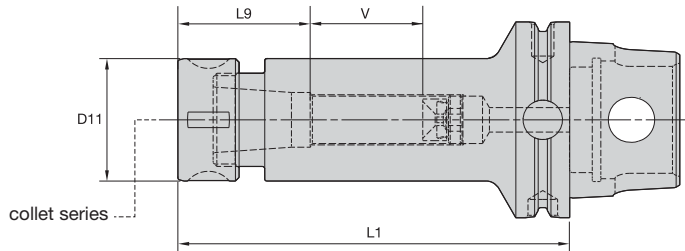
TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



KM80ATC Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

■ TG • Single-Angle Collet Chucks

order number	catalog number	collet series	D11		L1		L9		V		kg	lbs
			mm	in	mm	in	mm	in	mm	in		
3138953	KM80ATCTG075160	TG75	50	1.97	160	6.299	53	2.09	47	1.85	2,96	6.52
2022194	KM80ATCTG100394	TG100	60	2.36	100	3.937	70	2.75	—	—	2,32	5.11
2022195	KM80ATCTG150492	TG150	85	3.35	125	4.921	83	3.27	—	—	4,31	9.50

■ Spare Parts

catalog number	locknut	wrench	stop screw	wrench size stop screw	coolant cap	Nm	ft. lbs.
KM80ATCTG075160	LNA075M	HSW45M	SS081041G	4mm & 5/32	SSCC081	108-136	80-100
KM80ATCTG100394	LNA100M	HSW58M	—	—	—	163-203	120-150
KM80ATCTG150492	LNA150M	HSW80M	—	—	—	217-271	160-200

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

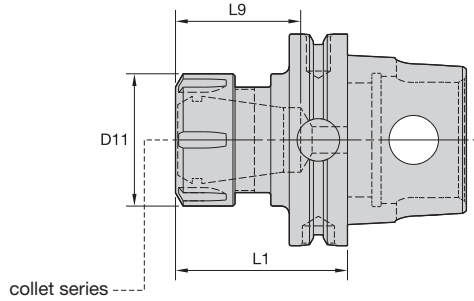
Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

- Grip (2:1 advantage).



KM80ATC Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ ER • Single-Angle Collet Chucks

order number	catalog number	collet series	D11		L1		L9		locknut	wrench	Collet Capacity			
			mm	in	mm	in	mm	in			Nm	ft. lbs.	kg	lbs
1953471	KM80ATCER3265	ER32	50	1.97	65	2.559	46,0	1.81	LNSER32M	ER32WM	136	100	1,45	3.20
2022196	KM80ATCER4090	ER40	50	1.97	90	3.543	70,3	2.77	LNSER40M	ER40WM	176	130	2,09	4.61



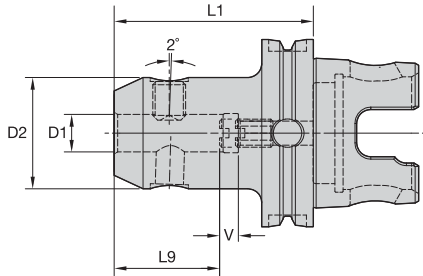
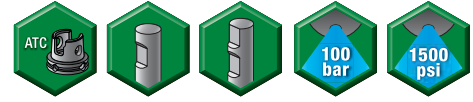
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.

KM80ATC™ Shank Tools



Whistle Notch™/End Mill Combination Adapters



KM80ATC Shank Tools



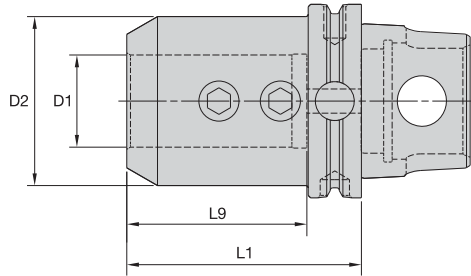
■ WN/EM • Whistle Notch/End Mill Combination Adapter

order number	catalog number	D1	D2	L1	L9	V	 lock screw	wrench size lock screw	 stop screw	stop screw wrench size	Nm	kg
3901247	KM80ATCWEM06065M	6	25	65	30	10	SS03M012	3mm	571.060	2,5mm	7	1,29
3901248	KM80ATCWEM08065M	8	28	65	30	10	SS03M014	4mm	571.067	3mm	15	1,33
3901249	KM80ATCWEM10075M	10	35	75	35	10	SS03M018	5mm	571.068	4mm	25	1,49
3901250	KM80ATCWEM12080M	12	42	80	40	10	SS03M023	6mm	571.074	5mm	35	1,68
3901251	KM80ATCWEM14080M	14	44	80	41	8	SS03M023	6mm	571.074	5mm	35	1,72
3901252	KM80ATCWEM16085M	16	48	85	44	8	SS03M025	6mm	571.075	6mm	50	1,89
3901283	KM80ATCWEM18085M	18	50	85	43	10	SS03M025	6mm	571.075	6mm	50	1,94
3901284	KM80ATCWEM20085M	20	52	85	45	10	SS03M026	8mm	571.076	6mm	95	1,98
3901285	KM80ATCWEM25100M	25	65	100	50	10	SS03M027	10mm	571.077	6mm	135	2,76
3901286	KM80ATCWEM32105M	32	72	105	55	10	SS03M029	10mm	571.077	6mm	160	3,18
3901287	KM80ATCWEM40115M	40	90	115	65	10	SS03M029	10mm	571.077	6mm	160	4,71

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw and stop screw wrenches are not included.



KM80ATC Shank Tools

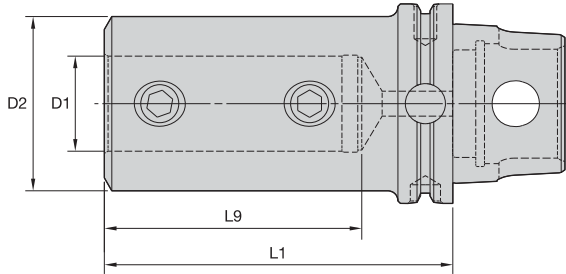


■ EM • Inch



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2022197	KM80ATCEM100354	1	2.00	3.543	2.46	ELS075056PKG	3/8	110	4.26
2022198	KM80ATCEM125354	1 1/4	2.50	3.543	2.51	ELS075062PKG	3/8	110	5.21
1961336	KM80ATCEM150382	1 1/2	2.75	3.819	2.93	ELS075069PKG	3/8	110	5.88
2022199	KM80ATCEM200492	2	3.74	4.921	3.53	ELS100088PKG	1/2	150	11.61

*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.*



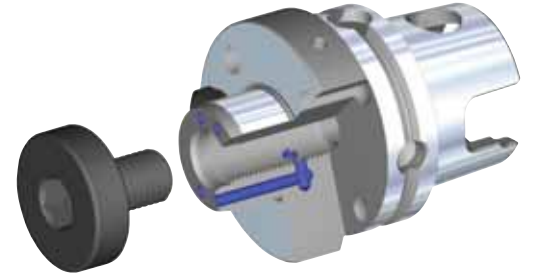
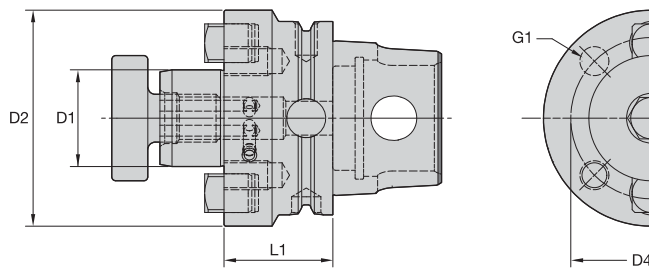
■ SSF • Straight Shank Adapter for Drill Shanks with Flats



order number	catalog number	D1	L1	D2	L9	lock screw	wrench size stop screw	ft. lbs.	lbs
2024413	KM80ATCSSF075350	.750	3.500	3.150	2.250	ELS062050PKG	5/16	70	4.02
2024414	KM80ATCSSF100450	1.000	4.500	3.150	3.250	—	3/8	110	4.99
2024415	KM80ATCSSF125500	1.250	5.000	3.150	3.500	ELS075056PKG	3/8	110	6.96
2024416	KM80ATCSSF150550	1.500	5.500	3.150	4.000	ELS075056PKG	3/8	110	8.18
2024417	KM80ATCSSF200650	2.000	6.500	3.150	4.250	ELS100088PKG	1/8	150	15.93

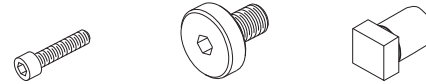


WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.



KM80ATC Shank Tools

■ SMC • Metric



order number	catalog number	D1	D2	D4	G1	L1	socket-head cap screw	lock screw	drive key	wrench size lock screw	kg
3897160	KM80ATCSMC22040M	22	49	—	—	40	MS1234	—	KDK22M	8mm	1,52
3897161	KM80ATCSMC27040M	27	60	—	—	40	—	KLSS27M	KDK27M	10mm	1,70
3897162	KM80ATCSMC32040M	32	78	—	—	40	—	KLSS32M	KDK32M	12mm	2,02
3897193	KM80ATCSMC40045M	40	89	67	M12 X 1.75	45	—	KLSS40M	KDK40M	12mm	2,55
3897194	KM80ATCSMC50055M	50	98	—	—	55	—	KLS50M	—	—	3,60
3897195	KM80ATCSMC60060M	60	129	102	M16 X 2.0	60	—	—	KDK60M	—	5,28

■ SMC • Inch



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3955375	KM80ATCSM2C100158	1	2.19	—	—	1.575	KLS10	KDK06	5/16	3.52
3955376	KM80ATCSMC125158	1 1/4	2.88	—	—	1.575	KLS12	KDK08	5/16	4.26
3955377	KM80ATCSMC125394	1 1/4	2.88	—	—	3.937	KLS12	KDK08	5/16	8.49
3955378	KM80ATCSMC150158	1 1/2	3.81	—	—	1.575	KLS15	KDK10	3/8	5.46
3955379	KM80ATCSMC200216	2	4.88	4.000	.625-11 UNC	2.165	KLS20	KDK12	9/16	9.55
3955380	KM80ATCSMC250225	2 1/2	4.88	4.000	.625-11 UNC	2.250	—	KDK16	9/16	10.82
3955381	KM80ATCSMC250450	2 1/2	4.88	4.000	.625-11 UNC	4.500	—	KDK16	9/16	14.77

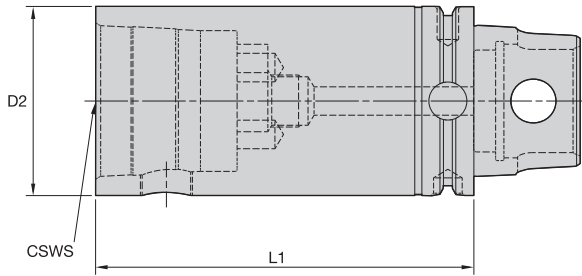
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.

KM80ATC™ Shank Tools

KM™ Extensions • Reducers



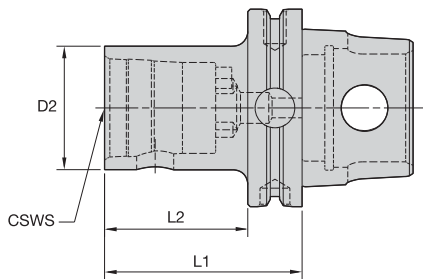
KM80ATC Shank Tools



■ S • KM Extension



order number	catalog number	CSWS system size	D2		L1		wrench size			spare parts package	kg	lbs
			mm	in	mm	in	actuation screw	Nm	ft. lbs.			
2024394	KM80ATCS80120	KM80	80	3.150	120	4.724	14mm	78-84	58-64	KM80PKG3S	4,28	9.43
2024395	KM80ATCS80160	KM80	80	3.150	160	6.299	14mm	78-84	58-64	KM80PKG3S	5,82	12.82



■ S • KM Reducer

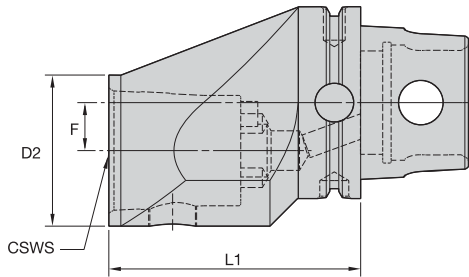


order number	catalog number	CSWS system size	D2		L1		L2		wrench size			spare parts package	kg	lbs
			mm	in	mm	in	mm	in	actuation screw	Nm	ft. lbs.			
2024396	KM80ATCS4060	KM40	40	1.575	60	2.362	38	1.496	6mm	12-16	9-12	KM40PKG3S	1,45	3.20
2024397	KM80ATCS5080	KM50	50	1.969	80	3.150	58	2.284	10mm	27-34	20-25	KM50PKG3S	1,86	4.09
2024398	KM80ATCS6380	KM63	63	2.480	80	3.150	58	2.284	12mm	47-54	35-40	KM63PKG3S	2,18	4.81

NOTE: Designed for centerline KM cutting units.



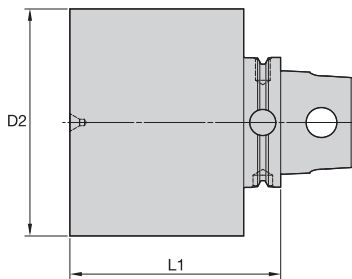
KM80ATC Shank Tools



■ ES • KM Offset Reducer



order number	catalog number	CSWS system size	D2		F		L1		wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
			mm	in	mm	in	mm	in						
2203620	KM80ATCESL63105	KM63	80	3.150	20	.787	105	4.134	12mm	47-54	35-40	KM63PKG3S	3,87	8.50
2048377	KM80ATCESR63105	KM63	80	3.150	20	.787	105	4.134	12mm	47-54	35-40	KM63PKG3S	3,87	8.50



■ BN • Blank

order number	catalog number	D2		L1		hardness range	kg	lbs
		mm	in	mm	in			
2873209	KM80ATCBN125075M	125	4.921	75	2.953	32-38 HRC	6,20	13.68
2879350	KM80ATCBN140130M	140	5.512	130	5.118	32-38 HRC	14,11	31.11

WIN WITH WIDIA™

KM4X™ • The New Choice for Heavy-Duty Milling

KM4X Spindle Interface

KM4X is the latest version of the KM™ spindle interface targeted at heavy-duty machining operations and is a top choice for machining large, structural, tough-to-machine materials, like titanium, for the aerospace industry.

Portfolio

The portfolio consists of rotating adapters and static tooling to support the tough and heavy machining markets. Additional products to include spindle component packages as well as static clamping units to support turning and mill/turn opportunities.





The Latest Innovation in Spindle Interface Technology

- KM4X™ offers the most rigid connection able to withstand extremely high bending due to a combination of high interference and high clamping forces.
- KM4X provides 3x more bending capacity than comparable face contact systems.
- KM™ is the only connection that maintains stiffness at elevated rotational speeds and is suitable for a range of applications from low speeds with high torque to very high spindle speeds.
- KM4X is better balanced between bending and torsion capabilities.
- The ability to retrofit KM4X to an existing machine tool offers the added advantage of increasing throughput.

Design Advantages

- The new screw-on KM4X is designed for high stability.
- Universal design enables old-style tools to be used interchangeably with new styles and many competitor screw-on cutters and extensions.
- Clamping method utilizes face contact to create a rigid connection.

KM4X™

The KM4X 4-ball spindle interface provides 3x more bending capacity than comparable systems. The greater bending capacity enables customers to fully utilize the capabilities of their machine and cutting tools when working with tough materials like titanium or during heavy machining. Increased metal removal rates optimize machine production and decrease overall manufacturing cost.



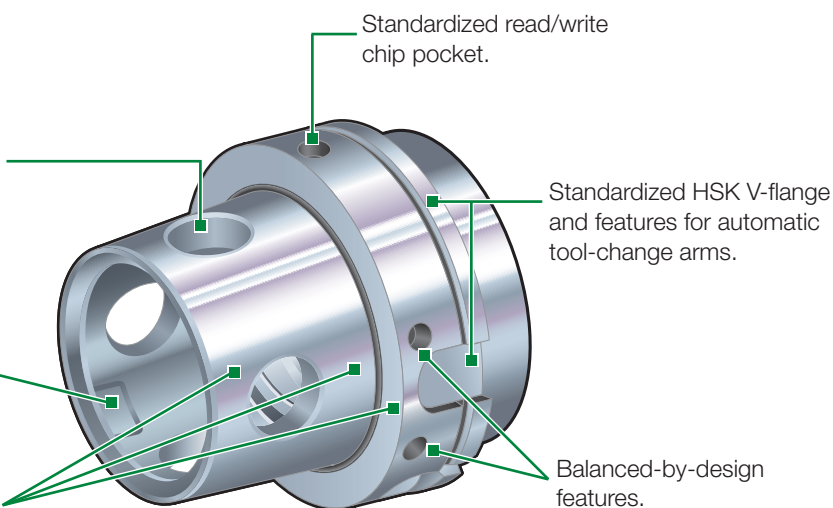
KM4X™

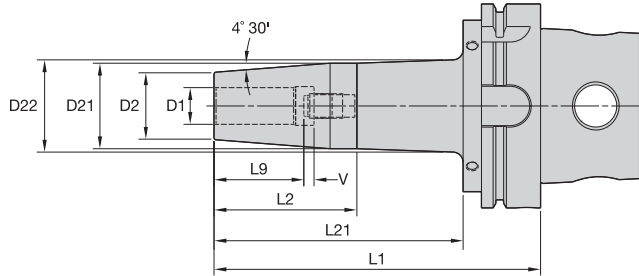
- Heavy-duty, rigid configuration.
- 3x more bending capability.
- Increased metal removal rates.
- Full utilization of machine tools.
- Decreased manufacturing costs.
- Balanced-by-design for higher spindle speeds.

Four locking elements for power, drive, and uniform rigid locking. Provides even distribution of forces.

Systems secondary drive/location and orientation feature.

The KM™ system's superior rigidity and accuracy is gained by optimized interference levels. Three surface areas of contact develop when clamped, resulting in superior performance.





KM4X 100 Shank Tools

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ TT GP HPV MM-KM4X • Metric



order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156046	KM4X100HPVTT06085M	6	21	27	—	85	56	26	—	10	TTSS05014M	2,5mm
4156047	KM4X100HPVTT06160M	6	21	27	32	160	50	26	122	10	TTSS05014M	2,5mm
4156048	KM4X100HPVTT08085M	8	21	27	—	85	56	26	—	10	TTSS06014M	3mm
4156049	KM4X100HPVTT08160M	8	21	27	32	160	50	26	122	10	TTSS06014M	3mm
4156050	KM4X100HPVTT10090M	10	24	32	—	90	61	31	—	10	TTSS08014M	4mm
4156051	KM4X100HPVTT10160M	10	24	32	36	160	63	31	122	10	TTSS08014M	4mm
4156052	KM4X100HPVTT12095M	12	24	32	—	95	66	36	—	10	TTSS10014M	5mm
4156113	KM4X100HPVTT12160M	12	24	32	36	160	63	36	122	10	TTSS10014M	5mm
4156114	KM4X100HPVTT14095M	14	27	34	—	95	66	36	—	10	TTSS10014M	5mm
4156115	KM4X100HPVTT14160M	14	27	34	38	160	57	36	122	10	TTSS10014M	5mm
4156116	KM4X100HPVTT16100M	16	27	34	—	100	71	39	—	10	TTSS12014M	6mm
4156117	KM4X100HPVTT16160M	16	27	34	38	160	57	39	122	10	TTSS12014M	6mm
4156118	KM4X100HPVTT18100M	18	33	42	—	100	71	39	—	10	TTSS12014M	6mm
4156119	KM4X100HPVTT18160M	18	33	42	46	160	69	39	122	10	TTSS12014M	6mm
4156120	KM4X100HPVTT20105M	20	33	42	—	105	76	41	—	10	TTSS16014M	8mm
4156121	KM4X100HPVTT20160M	20	33	42	46	160	69	41	122	10	TTSS16014M	8mm
4156122	KM4X100HPVTT25115M	25	44	53	—	115	86	47	—	10	TTSS16014M	8mm
4156123	KM4X100HPVTT25160M	25	44	53	57	160	69	47	122	10	TTSS16014M	8mm
4156124	KM4X100HPVTT32120M	32	44	53	—	120	91	51	—	10	TTSS16014M	8mm
4156125	KM4X100HPVTT32160M	32	44	53	57	160	69	51	122	10	TTSS16014M	8mm

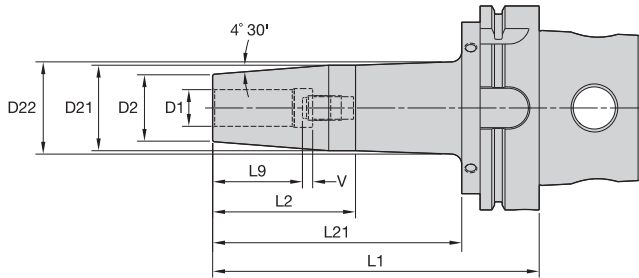
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.

KM4X™ 100 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



KM4X 100 Shank Tools



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/- .0005

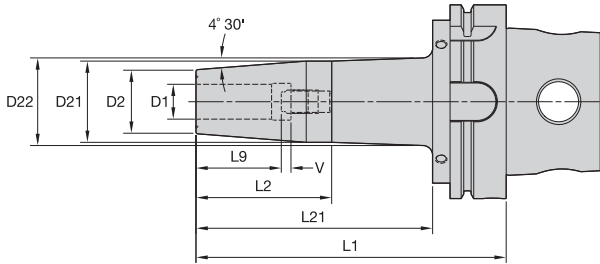
■ TT GP HPV IN-KM4X • Inch



order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4155746	KM4X100HPVTT025335	1/4	0.83	1.06	—	3.35	2.21	1.02	—	0.39	TTSS05014M	2,5mm
4155747	KM4X100HPVTT025630	1/4	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	TTSS05014M	2,5mm
4155748	KM4X100HPVTT031335	5/16	0.83	1.06	—	3.35	2.21	1.02	—	0.39	TTSS06014M	3mm
4155749	KM4X100HPVTT031630	5/16	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	TTSS06014M	3mm
4155750	KM4X100HPVTT038354	3/8	0.95	1.24	—	3.54	2.40	1.22	—	0.39	TTSS08014M	4mm
4155751	KM4X100HPVTT038630	3/8	0.95	1.26	1.42	6.30	2.48	1.22	4.81	0.39	TTSS08014M	4mm
4155752	KM4X100HPVTT050374	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	TTSS10014M	5mm
4156153	KM4X100HPVTT050630	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	TTSS10014M	5mm
4156154	KM4X100HPVTT062394	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	TTSS12014M	6mm
4156155	KM4X100HPVTT062630	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	TTSS12014M	6mm
4156156	KM4X100HPVTT075413	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156157	KM4X100HPVTT075630	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156158	KM4X100HPVTT088413	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156159	KM4X100HPVTT088630	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156160	KM4X100HPVTT100453	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	TTSS16014M	8mm
4156161	KM4X100HPVTT100630	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	TTSS16014M	8mm
4156162	KM4X100HPVTT125472	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	TTSS16014M	8mm
4156163	KM4X100HPVTT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	TTSS16014M	8mm
4156164	KM4X100HPVTT150531	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	TTSS20014M	10mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.





- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face.
- 10 kW power or greater Shrink Fit device must be used.

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-0.0005

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ TT HT HPV MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw
4156182	KM4X100HPVTHT12095M	12	24	31,9	95	66	36	10	TTSS10014M	5mm
4156193	KM4X100HPVTHT14095M	14	27	33,9	95	66	36	10	TTSS10014M	5mm
4156194	KM4X100HPVTHT16100M	16	27	33,9	100	71	39	10	TTSS12014M	6mm
4156195	KM4X100HPVTHT18100M	18	33	41,9	100	71	39	10	TTSS12014M	6mm
4156196	KM4X100HPVTHT20105M	20	33	41,9	105	76	41	10	TTSS16014M	8mm
4156197	KM4X100HPVTHT25115M	25	44	52,9	115	86	47	10	TTSS16014M	8mm
4156198	KM4X100HPVTHT32120M	32	44	52,9	120	91	51	10	TTSS16014M	8mm

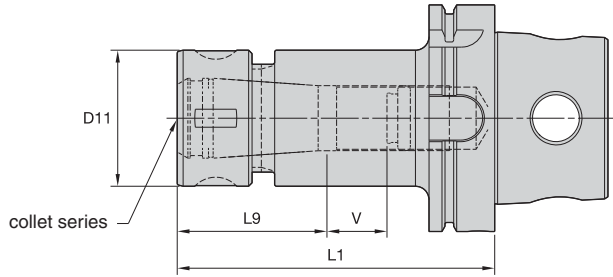


■ TT HT HPV IN-KM4X • Inch

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156166	KM4X100HPVTHT050374	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	TTSS10014M	5mm
4156167	KM4X100HPVTHT050630	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	TTSS10014M	5mm
4156168	KM4X100HPVTHT062394	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	TTSS12014M	6mm
4156169	KM4X100HPVTHT062630	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	TTSS12014M	6mm
4156170	KM4X100HPVTHT075413	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156171	KM4X100HPVTHT075630	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156172	KM4X100HPVTHT088413	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156203	KM4X100HPVTHT088630	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156204	KM4X100HPVTHT100453	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	TTSS16014M	8mm
4156205	KM4X100HPVTHT100630	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	TTSS16014M	8mm
4156206	KM4X100HPVTHT125472	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	TTSS16014M	8mm
4156207	KM4X100HPVTHT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	TTSS16014M	8mm
4156208	KM4X100HPVTHT150531	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	TTSS20014M	10mm






NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.



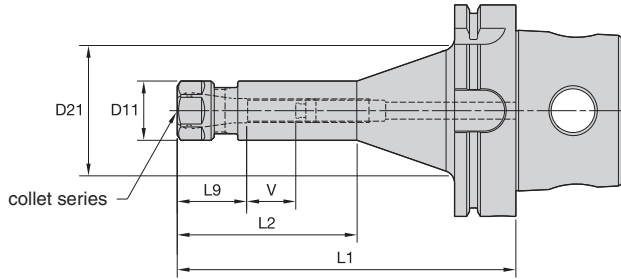
- Tremendous Grip (3:1 advantage).

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

■ TG Round-KM4X

order number	catalog number	collet series	D11	L1	L9	V				wrench size stop screw	
							locknut	locknut wrench	Nm		stop screw
4156445	KM4X100TG050105M	TG50	38	105	42	40	LNA050M	HSW34M	68	SS056041G	4mm & 5/32
4156446	KM4X100TG050160M	TG50	38	160	42	58	LNA050M	HSW34M	68	SS056041G	4mm & 5/32
4156447	KM4X100TG075120M	TG75	50	120	54	46	LNA075M	HSW45M	136	SS081041G	4mm & 5/32
4156448	KM4X100TG100140M	TG100	60	140	70	45	LNA100M	HSW58M	203	SS112041G	4mm & 5/32
4156449	KM4X100TG150165M	TG150	85	165	84	46	LNA150M	HSW80M	271	SS162062G	4mm & 5/32

NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.






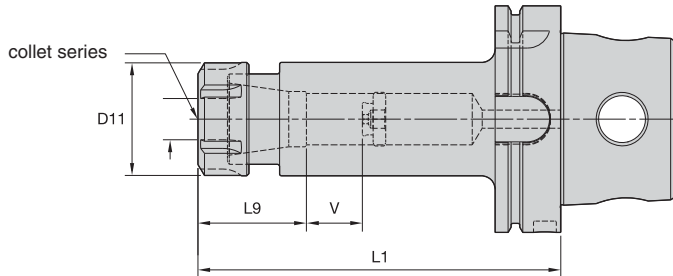
KM4X 100 Shank Tools

- Grip (2:1 advantage).




ER collet series	Collet Capacity		Collet Capacity	
	mm	mm	inch	inch
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ ER Hex-KM4X

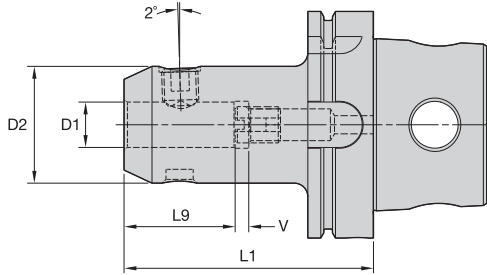
order number	catalog number	collet series	D11	D21	L1	L2	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4159999	KM4X100ER16100M	ER16	28	—	100	—	32	53	 LNHSER16M	 OEW25M	56	 SS044038G	4mm & 5/32
4160000	KM4X100ER16160M	ER16	28	60	160	85	32	68	LNHSER16M	OEW25M	56	SS044038G	4mm & 5/32
4160001	KM4X100ER20100M	ER20	34	—	100	—	36	35	LNHSER20M	OEW30M	80	SS056041G	4mm & 5/32





■ ER Round-KM4X

order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4160002	KM4X100ER25100M	ER25	42	100	40	33	 LNSER25M	 ER25WM	104	 SS075041G	4mm & 5/32
4160043	KM4X100ER32100M	ER32	50	100	45	32	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160044	KM4X100ER32160M	ER32	50	160	45	92	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160045	KM4X100ER40120M	ER40	63	120	52	38	LNSER40M	ER40WM	175	SS112041G	4mm & 5/32

NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque. Supplied with locknut and stop screw. Locknut wrench must be ordered separately.



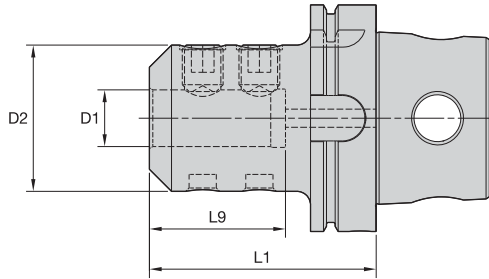
■ WN MM-KM4X • Metric

order number	catalog number	D1	D2	L1	L9	V	 clamp screw	wrench size clamp screw	Nm	 stop screw	wrench size stop screw
4160047	KM4X100WN06090M	6	24,5	90	30	10	SS03M012	3mm	7	571.060	2,5mm
4160048	KM4X100WN08090M	8	27,5	90	30	10	SS03M014	4mm	15	571.067	3mm
4160049	KM4X100WN10090M	10	34,5	90	35	10	SS03M018	5mm	25	571.068	4mm
4160050	KM4X100WN12100M	12	41,5	100	40	10	SS03M023	6mm	35	571.074	5mm
4160051	KM4X100WN14100M	14	43,5	100	40	10	SS03M023	6mm	35	571.074	5mm
4160052	KM4X100WN16100M	16	47,5	100	43	10	SS03M025	6mm	50	571.069	6mm
4160073	KM4X100WN18100M	18	49,5	100	43	10	SS03M025	6mm	50	571.069	6mm
4160074	KM4X100WN20110M	20	51,5	110	45	10	SS03M026	8mm	95	571.076	6mm
4160075	KM4X100WN25120M	25	64,5	120	50	10	SS03M027	10mm	135	571.077	6mm
4160076	KM4X100WN32120M	32	71,5	120	54	10	SS03M029	10mm	160	571.077	6mm

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Clamp screw and stop screw wrenches not included.

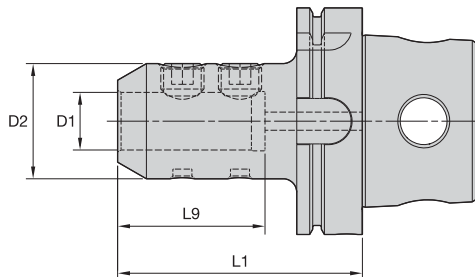


KM4X 100 Shank Tools



■ EM MM-KM4X • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm
4160510	KM4X100EM06080M	6	24,5	80	52	SS03M012	3mm	7
4160511	KM4X100EM08080M	8	27,5	80	52	SS03M014	4mm	15
4160512	KM4X100EM10080M	10	34,5	80	52	SS03M018	5mm	25
4160533	KM4X100EM12080M	12	41,5	80	49	SS03M023	6mm	35
4160534	KM4X100EM14080M	14	43,5	80	49	SS03M023	6mm	35
4160535	KM4X100EM16100M	16	47,5	100	53	SS03M025	6mm	50
4160536	KM4X100EM18100M	18	49,5	100	53	SS03M025	6mm	50
4160537	KM4X100EM20100M	20	51,5	100	55	SS03M026	8mm	95
4160538	KM4X100EM25100M	25	64,5	100	60	SS03M027	10mm	135
4160539	KM4X100EM32100M	32	71,5	100	65	SS03M029	10mm	160
4160540	KM4X100EM40120M	40	89,5	120	75	SS03M032	10mm	160
4160541	KM4X100EM50130M	50	99,5	130	85	SS03M030	12mm	200



■ EM IN-KM4X • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.
4160518	KM4X100EM025300	1/4	1.000	3.000	1.89	ELS025025	1/8	8
4160519	KM4X100EM038300	3/8	1.000	3.000	1.89	ELS038031	3/16	15
4160520	KM4X100EM050325	1/2	1.375	3.250	1.97	ELS044038	7/32	20
4160521	KM4X100EM062375	5/8	1.625	3.750	2.09	ELS056050	1/4	40
4160522	KM4X100EM075375	3/4	1.750	3.750	2.22	ELS062050	5/16	70
4160573	KM4X100EM100425	1	2.000	4.250	2.46	ELS075056	3/8	110
4160574	KM4X100EM125425	1 1/4	2.500	4.250	2.51	ELS075062	3/8	110
4160575	KM4X100EM150450	1 1/2	2.750	4.500	2.93	ELS075069	3/8	110
4160576	KM4X100EM200550	2	3.750	5.500	3.53	ELS100088	1/2	150
4160577	KM4X100EM250575	2 1/2	4.188	5.750	3.63	ELS100088	1/2	150



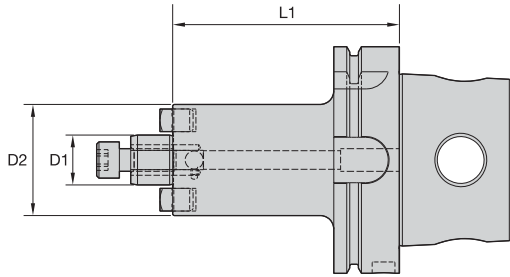
NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.

KM4X™ 100 Shank Tools

Shell Mill Adapters with Through Coolant

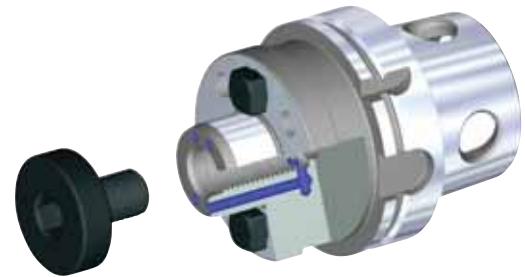
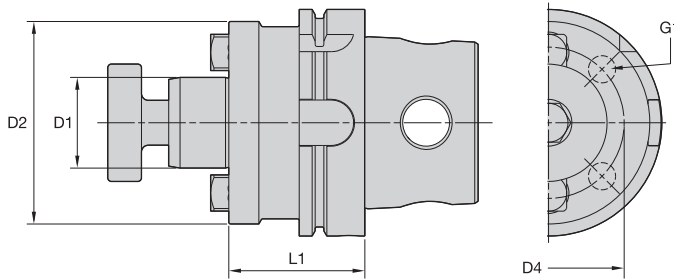


KM4X 100 Shank Tools



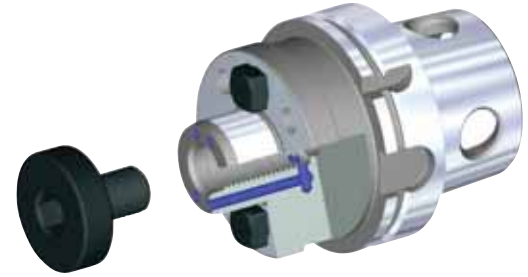
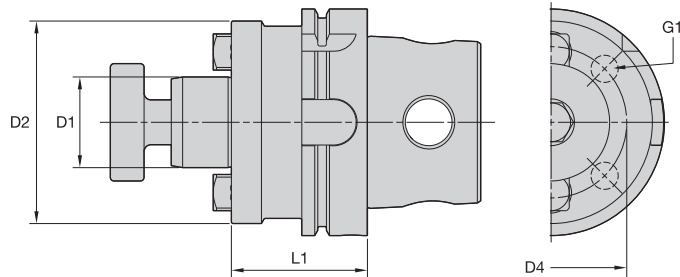
■ SMC CAP MM-KM4X • Metric

order number	catalog number	D1	D2	L1	lock screw	wrench size lock screw
4160335	KM4X100SMC22050M	22	49	50	MS1234	8mm
4160337	KM4X100SMC22100M	22	49	100	MS1234	8mm
4160338	KM4X100SMC22160M	22	49	160	MS1234	8mm



■ SMC Lock MM-KM4X • Metric

order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160340	KM4X100SMC27050M	27	60	—	—	50	KLSS27M	10mm
4160341	KM4X100SMC27100M	27	60	—	—	100	KLSS27M	10mm
4160342	KM4X100SMC27160M	27	60	—	—	160	KLSS27M	10mm
4160343	KM4X100SMC32050M	32	78	—	—	50	KLSS32M	14mm
4160344	KM4X100SMC32100M	32	78	—	—	100	KLSS32M	14mm
4160345	KM4X100SMC32160M	32	78	—	—	160	KLSS32M	14mm
4160346	KM4X100SMC40060M	40	89	67	M12x1,75	60	KLSS40M	17mm
4160347	KM4X100SMC40100M	40	89	67	M12x1,75	100	KLSS40M	17mm
4160348	KM4X100SMC40160M	40	89	67	M12x1,75	160	KLSS40M	17mm
4160350	KM4X100SMC50070M	50	98	—	—	70	KLS50M	SMW50M
4160351	KM4X100SMC50100M	50	98	—	—	100	KLS50M	SMW50M
4160352	KM4X100SMC50160M	50	98	—	—	160	KLS50M	SMW50M
4160353	KM4X100SMC60070M	60	129	102	M16x2,0	70	—	—
4160354	KM4X100SMC60100M	60	129	102	M16x2,0	100	—	—
4160355	KM4X100SMC60160M	60	129	102	M16x2,0	160	—	—



KM4X 100 Shank Tools

■ SMC Lock IN-KM4X • Inch



order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160286	KM4X100SMC075400	3/4	1.75	—	—	4.00	KLS07	1/4
4160287	KM4X100SM2C075400	3/4	1.46	—	—	4.00	KLS07	1/4
4160289	KM4X100SMC075600	3/4	1.75	—	—	6.00	KLS07	1/4
4160290	KM4X100SM2C075600	3/4	1.46	—	—	6.00	KLS07	1/4
4160291	KM4X100SMC100400	1	2.75	—	—	4.00	KLS10	5/16
4160292	KM4X100SM2C100400	1	2.19	—	—	4.00	KLS10	5/16
4160313	KM4X100SMC100600	1	2.75	—	—	6.00	KLS10	5/16
4160314	KM4X100SM2C100600	1	2.19	—	—	6.00	KLS10	5/16
4160315	KM4X100SMC125400	1 1/4	2.88	—	—	4.00	KLS12	5/16
4160316	KM4X100SMC125600	1 1/4	2.88	—	—	6.00	KLS12	5/16
4160317	KM4X100SMC150400	1 1/2	3.81	—	—	4.00	KLS15	3/8
4160318	KM4X100SMC150600	1 1/2	3.81	—	—	6.00	KLS15	3/8
4160319	KM4X100SMC200400	2	4.88	4.00	5/8 - 11	4.00	KLS20	9/16
4160320	KM4X100SMC200600	2	4.88	4.00	5/8 - 11	6.00	KLS20	9/16
4160321	KM4X100SMC250400	2 1/2	4.88	4.00	5/8 - 11	4.00	—	1/2
4160322	KM4X100SMC250600	2 1/2	4.88	4.00	5/8 - 11	6.00	—	1/2

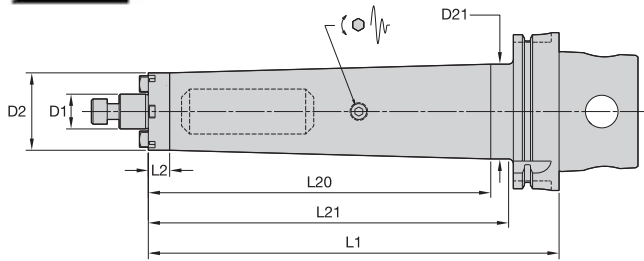
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.

KM4X™ 100 Shank Tools

Tunable Shell Mill Adapters with Through Coolant

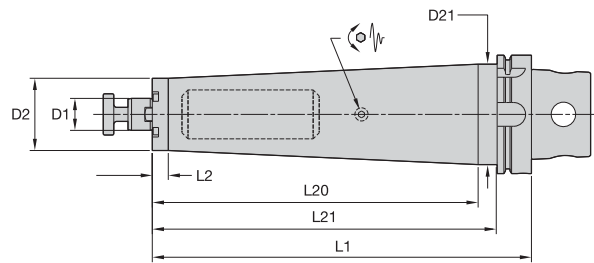


KM4X 100 Shank Tools



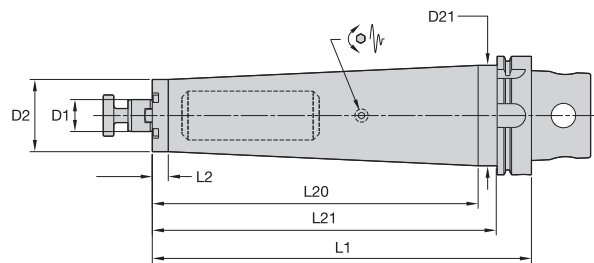
■ SMC TD CAP MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169583	KM4X100TDSMC22260M	22	49	65	260	13,5	215	231	MS-1234	8mm



■ SMC TD Lock MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169584	KM4X100TDSMC27320M	27	61	85	320	13,5	275	291	KLSS27M	10mm
4169585	KM4X100TDSMC32330M	32	78	—	330	299	—	—	KLSS32M	14mm



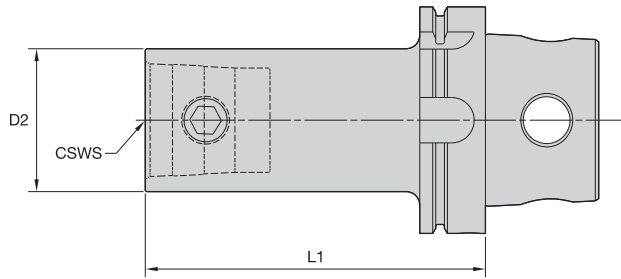
■ SMC TD Lock IN-KM4X • Inch

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	clamp screw	wrench size clamp screw
4169586	KM4X100TDSMC0751050	3/4	1.75	2.56	10.5	.53	8.73	9.24	KLS07	1/4
4169587	KM4X100TDSMC1001250	1	2.75	3.33	12.5	.53	10.73	11.36	KLS10	5/16
4169588	KM4X100TDSMC1251300	1 1/4	2.88	3.33	13	.63	11.23	11.86	KLS12	5/16



NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.





KM4X 100 Shank Tools

■ KM-KM4X

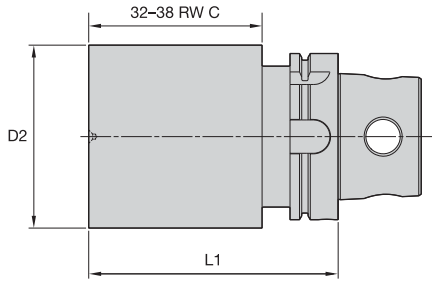
order number	catalog number	CSWS	D2	L1	spare parts package	wrench size actuation screw	Nm
4161856	KM4X100KM32075M	32	32	75	KM32PKGS	5mm	8 - 11
4161858	KM4X100KM40080M	40	40	80	KM40PKGS	6mm	12 - 16
4161859	KM4X100KM40100M	40	40	100	KM40PKGS	6mm	12 - 16
4161860	KM4X100KM40150M	40	40	150	KM40PKGS	6mm	12 - 16
4161861	KM4X100KM50100M	50	50	100	KM50PKGS	10mm	27 - 34
4161862	KM4X100KM50150M	50	50	150	KM50PKGS	10mm	27 - 34
4161863	KM4X100KM50200M	50	50	200	KM50PKGS	10mm	27 - 34
4161864	KM4X100KM63100M	63	63	100	KM63PKGS	12mm	47 - 54
4161865	KM4X100KM63150M	63	63	150	KM63PKGS	12mm	47 - 54
4161866	KM4X100KM63200M	63	63	200	KM63PKGS	12mm	47 - 54
4161867	KM4X100KM80100M	80	80	100	KM80PKGS	14mm	79 - 85
4161868	KM4X100KM80150M	80	80	150	KM80PKGS	14mm	79 - 85
4161869	KM4X100KM80200M	80	80	200	KM80PKGS	14mm	79 - 85

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.

KM4X™ 100 Shank Tools

Bar Blanks • Gage Bars

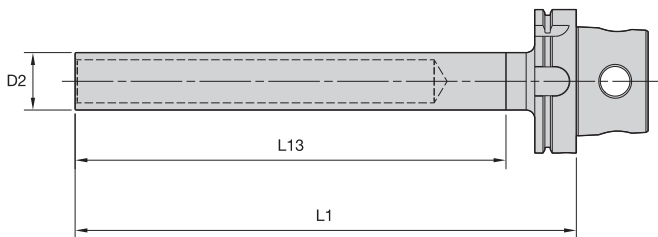
KM4X 100 Shank Tools



- Machinable front 32–38 RW C.

■ BB-KM4X

order number	catalog number	D2	L1
4160571	KM4X100BN080150M	80	150
4160572	KM4X100BN110150M	110	150
4160613	KM4X100BN130200M	130	200



- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.

■ GB-KM4X

order number	catalog number	D2	L1	L13
4160529	KM4X100GB40349M	40	349	330

WIN WITH WIDIA™



KM™ Quick Change

KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

- Uniquely designed to have a high clamping force generated from a minimal amount of input force.
- The extremely rigid locking device reduces vibration between components.
- Reliability to run machines at high maximum speeds without loss of force after continuous use.
- Versatile clamping mechanism is designed to be used on all types of manufacturing equipment.

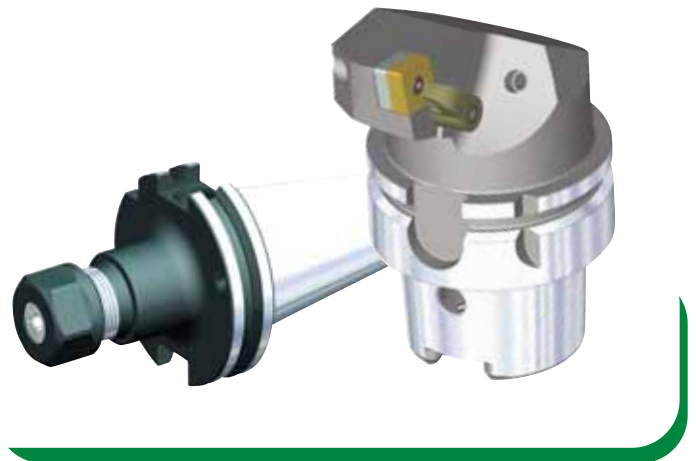
To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 



Erickson™ Shank Tools

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MillingB4–B9
DrillingB10–B13
TappingB14–B16
BoringB17
HSK Shank ToolsB19–B183
BTKV Shank Tools .....	.C1–C37
CVKV Shank Tools .....	.C38–C67
BT Shank Tools .....	.D1–D91
CV Shank Tools .....	.E1–E79
DV Shank Tools .....	.F1–F71
QC Shank Tools .....	.G1–G22
R8 Shank Tools .....	.G24–G27
Straight Shank Tools .....	.H1–H27



The power of the WIDIA™ enterprise

Tooling Systems

WIDIA proudly offers premium quality Erickson™ toolholder products, so you can be sure that you're buying the best the industry has to offer. The entire portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility.

Designed for both manual and automatic tool changing, Erickson interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates.

Machinists have relied on the Erickson name for more than 60 years. With one of the broadest product offerings in the industry, Erickson tools may be used on all types of machine tools and in applications ranging from low-speed, heavy-milling jobs to high-speed operations greater than 20,000 RPMs.

WIDIA Shrink Fit Technology

Heat shrinking is not new technology in the tooling industry, but only recently has it been applied to quick-change toolholding systems. Shrink fitting works by having toolholders with an internal bore that is slightly smaller than the connecting end of a cutting shank.

When the toolholder is heated, the bore expands and the shank is able to slip inside the bore. As the toolholder cools, it shrinks, clamping the two pieces together. This creates evenly distributed pressure with minimal vibration between the toolholder and shank that resembles a monoblock tool.



Advantages of Shrink Fit Tooling

- Evenly distributed pressure 360° along the length of the cutting tool.
- Slim and short toolholder designs can be achieved due to the lack of moveable parts.
- Absolute symmetry of the grip provides the best possible balance for high-speed operations.
- Stronger clamping force than collet or hydraulic chucks.
- Can be repeated thousands of times.
- Capable of greater speeds and feeds.
- Adapts to various shank types.
- Increased productivity.



WIDIA™ Hydraulic Chucks

WIDIA Hydraulic Chucks provide optimum performance when clamping full-cylindrical straight shanks such as solid carbide drills and end mills. Turning a piston pressurizes hydraulic fluid, which expands a thin-walled membrane along the length of the clamping bore. This creates a secure grip that reduces vibration and eliminates microcracking on cutting tools.

All chucks are capable of utilizing reducer sleeves to maximize their versatility. Hydraulic chucks require virtually no maintenance, aside from routinely cleaning the bore and removing any grease.



Slim Line

Slim-shaped hydraulic chucks for universal use with maximum precision.



Standard/HP Line

Prebalanced chucks with an external screw for radial adjustments. This eliminates the need for removing cutting tools to make fine adjustments.



Trend Line

Similar to the Standard Line chucks but with 3/8" radial adjustment of the cutting tool length by use of an axial back-up screw through the chuck bore.



Basic Line

Similar to the Trend Line but with larger body diameters that translate to higher stability and increased torque transmission.

WIDIA Collet Chucks

TG Collet Series

A single-angle collet that grips 1:3 tightening torque versus grip torque without a stop screw.

ER Collet Series

An international standard-style collet that can be used in machining applications such as milling, reaming, tapping, and grinding.

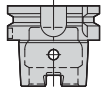
WIDIA Shell Mill Adapters

All units come standard with a new coolant to the cutting edge capability. This improves tool life and chip control. Shell mill adapters are available in extended lengths and a range of small mounting diameters.



Erickson Toolholder Options

HSK40A • HSK50A • HSK63T
HSK63A • HSK80A • HSK100A



HSK32C • HSK40C
HSK50C • HSK63C



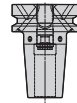
HSK40E • HSK50E



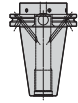
HSK63FP • HSK80FP



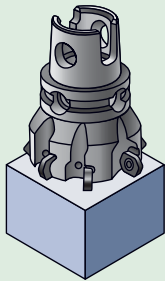
BTKV40 • BTKV50



CVKV40 • CVKV50



Milling



Shrink Fit

	HSK40A	Pages: B26–B29	HSK40E	Pages: B164–B166	BT50	Pages: D62–D65
	HSK50A	Pages: B42–B43	HSK50E	Page: B173	CV40	Pages: E4–E7
	HSK63T	∇	HSK63F	Page: B177	CV50	Pages: E40–E43
	HSK63A	Pages: B62–B66	HSK80F	Page: B181	DV40	Pages: F4–F7
	HSK80A	Pages: B94–B97	BTKV40	Pages: C4–C7	DV50	Pages: F40–F43
	HSK100A	Pages: B112–B115	BTKV50	Pages: C22–C25	QC30	∇
	HSK32C	∇	CVKV40	Pages: C40–C43	QC40	
	HSK40C		CVKV50	Pages: C54–C57	QC50	
	HSK50C		BT30	Pages: D4–D6	R8	
	HSK63C		BT40	Pages: D22–D25	Straight Shanks		Pages: H4–H5

Milling Chucks

	HSK40A	∇	HSK40E	∇	BT50	Page: D71	
	HSK50A		HSK50E		CV40	Page: E15	
	HSK63T		HSK63F		CV50	Page: E51	
	HSK63A	Page: B72	HSK80F		DV40	Page: F13	
	HSK80A	∇	BTKV40		DV50	Page: F48	
	HSK100A	Page: B120	BTKV50		QC30	∇	
	HSK32C	∇	CVKV40		QC40		
	HSK40C		CVKV50		QC50		
	HSK50C		BT30		Page: D8		R8
	HSK63C		BT40		Page: D31		Straight Shanks

TG Collet Chucks

	HSK40A	Page: B34	HSK40E	∇	BT50	Page: D72	
	HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18	
	HSK63T	∇	HSK63F		CV50	Pages: E52–E56	
	HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15	
	HSK80A	Page: B100	BTKV40		Page: C8	DV50	Pages: F49–F50
	HSK100A	Page: B121	BTKV50		Page: C26	QC30	Page: G4
	HSK32C	∇	BTKV40		Page: C45	QC40	Page: G11
	HSK40C		CVKV50		Page: C58	QC50	Page: G19
	HSK50C		BT30		Page: D9	R8	∇
	HSK63C		BT40		Page: D32	Straight Shanks	Pages: H6–H7

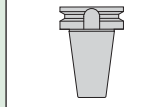
Slim Line Hydraulic

	HSK40A	Pages: B30–B31	HSK40E	∇	BT50	Pages: D66–D67
	HSK50A	∇	HSK50E		CV40	Pages: E8–E9
	HSK63T		HSK63F		CV50	Pages: E44–E45
	HSK63A		Pages: B68–B69		HSK80F	DV40	Pages: F8–F9
	HSK80A	∇	BTKV40		DV50	Pages: F44–F45
	HSK100A	Pages: B116–B117	BTKV50		QC30	∇
	HSK32C	∇	CVKV40		QC40	
	HSK40C	Pages: B144–B145	CVKV50		QC50	
	HSK50C	∇	BT30		R8	
	HSK63C		BT40		Pages: D26–D27		Straight Shanks

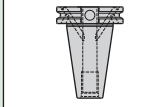
∇ Indicates "Not Available".

(continued)

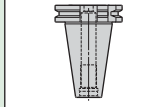
BT30 • BT40 • BT50



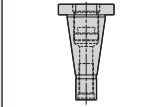
CV40 • CV50



DV40 • DV50



QC30 • QC40 • QC50



R8

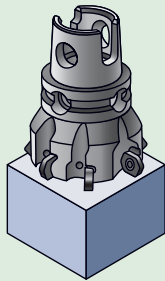


SS







**Erickson
Toolholder
Options**





Milling (continued)



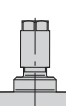



Hydraulic Chucks

	HSK40A	Pages: B32–B33	HSK40E	Page: B167	BT50	Pages: D68–D70
	HSK50A	Page: B44	HSK50E	Page: B174	CV40	Pages: E10–E14
	HSK63T		HSK63F		CV50	Pages: E47–E50
	HSK63A	Pages: B70–B71	HSK80F		DV40	Pages: F10–F12
	HSK80A	Pages: B98–B99	BTKV40		DV50	Pages: F46–F47
	HSK100A	Pages: B118–B119	BTKV50		QC30	
	HSK32C	Page: B139	CVKV40		QC40	
	HSK40C	Page: B146	CVKV50		QC50	
	HSK50C	Pages: B151–B152	BT30		R8	
	HSK63C	Pages: B157–B158	BT40		Pages: D28–D30		Straight Shanks







ER Collet Chucks

	HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
	HSK50A	Pages: B46–B47	HSK50E		CV40	Pages: E19–E21
	HSK63T		HSK63F	Page: B178	CV50	Pages: E57–E59
	HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
	HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
	HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	
	HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
	HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	
	HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
	HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks		Pages: H8–H11

DA Collet Chucks

	HSK40A		HSK40E		BT50	Page: D76
	HSK50A		HSK50E		CV40	Page: E22
	HSK63T		HSK63F		CV50	Page: E60
	HSK63A		HSK80F		DV40	Pages: F20–F23
	HSK80A		BTKV40		DV50	Pages: F54–F55
	HSK100A		BTKV50		QC30	Page: G5
	HSK32C		CVKV40		QC40	Page: G12
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	Page: G26
	HSK63C		BT40		Pages: D36–D37	Straight Shanks	Pages: H12–H22

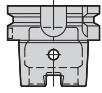
Whistle Notch™ Adapters

	HSK40A	Page: B36	HSK40E		BT50	Pages: D77–D78
	HSK50A		HSK50E		CV40	Pages: E24–E25
	HSK63T		HSK63F		CV50	Pages: E62–E65
	HSK63A	Pages: B76–B77	HSK80F		DV40	Pages: F25–F26
	HSK80A	Page: B104	BTKV40		DV50	Pages: F57–F58
	HSK100A	Pages: B124–B125	BTKV50		QC30	
	HSK32C		CVKV40		QC40	Page: G13
	HSK40C	Page: B148	CVKV50		QC50	
	HSK50C	Page: B154	BT30		R8	
	HSK63C	Page: B160	BT40		Pages: D39–D40		Straight Shanks

 Indicates "Not Available".

Erickson Toolholder Options

HSK40A • HSK50A • HSK63T
HSK63A • HSK80A • HSK100A



HSK32C • HSK40C
HSK50C • HSK63C



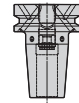
HSK40E • HSK50E



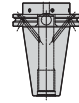
HSK63FP • HSK80FP



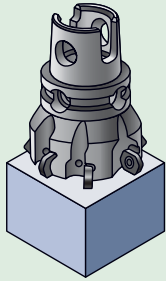
BTKV40 • BTKV50



CVKV40 • CVKV50



Milling (continued)



End Mill Adapters

	HSK40A	Page: B37	HSK40E		BT50	Page: D79
	HSK50A		HSK50E		CV40	Pages: E26–E27
	HSK63T		HSK63F		CV50	Pages: E66–E68
	HSK63A	Page: B78	HSK80F		DV40	Pages: F27–F28
	HSK80A	Page: B105	BTKV40		DV50	Pages: F59–F60
	HSK100A	Page: B126	BTKV50		QC30	Page: G6
	HSK32C		CVKV40		QC40	Page: G14
	HSK40C		CVKV50		QC50	Page: G20
	HSK50C		BT30		R8	Page: G27
	HSK63C		BT40		Straight Shanks	

Shell Mill Adapters

	HSK40A	Page: B38	HSK40E	Page: B169	BT50	Pages: D82–D84
	HSK50A	Page: B48	HSK50E		CV40	Page: E30
	HSK63T		HSK63F	Page: B179	CV50	Pages: E72–E73
	HSK63A	Pages: B82–B83	HSK80F	Page: B183	DV40	Pages: F30–F31
	HSK80A	Pages: B106–B107	BTKV40	Pages: C16–C17	DV50	Pages: F62–F63
	HSK100A	Pages: B130–B131	BTKV50	Pages: C34–C35	QC30	Page: G7
	HSK32C		CVKV40	Page: C50	QC40	Page: G15
	HSK40C		CVKV50	Page: C65	QC50	Page: G21
	HSK50C		BT30	Pages: D16–D17	R8	Page: G27
	HSK63C		BT40	Pages: D48–D50	Straight Shanks	

Tunable Shell Mill Adapters

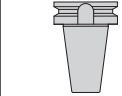
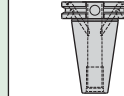
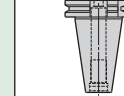
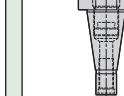
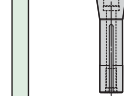
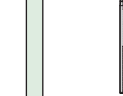
	HSK40A		HSK40E		BT50	Pages: D80–D81
	HSK50A		HSK50E		CV40	Page: E29
	HSK63T		HSK63F		CV50	Page: E71
	HSK63A	Page: B80	HSK80F		DV40	Page: F29
	HSK80A		BTKV40	Page: C14	DV50	Page: F61
	HSK100A	Pages: B128–B129	BTKV50	Page: C32	QC30	
	HSK32C		CVKV40	Page: C49	QC40	
	HSK40C		CVKV50	Page: C64	QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40	Pages: D45–D46	Straight Shanks	

Combi Shell Adapters

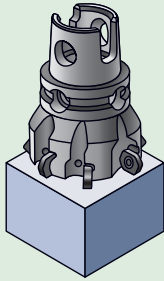
	HSK40A		HSK40E		BT50	Page: D85
	HSK50A		HSK50E		CV40	
	HSK63T		HSK63F		CV50	
	HSK63A	Page: B84	HSK80F		DV40	Page: F32
	HSK80A	Page: B108	BTKV40		DV50	Page: F64
	HSK100A	Page: B132	BTKV50		QC30	
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C			BT40	Page: D51	Straight Shanks

Indicates "Not Available".









(continued)

BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS	Erickson Toolholder Options
						







Milling *(continued)*



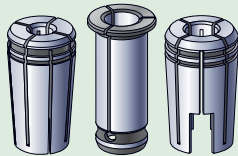
Slotting Cutter Adapters

	HSK40A		HSK40E		BT50	Page: D86	
	HSK50A		HSK50E		CV40	Page: E31	
	HSK63T		HSK63F		CV50	Page: E73	
	HSK63A	Page: B85	HSK80F		DV40		
	HSK80A		BTKV40		DV50		
	HSK100A	Page: B133	BTKV50		QC30		
	HSK32C		CVKV40		QC40		
	HSK40C		CVKV50		QC50		Page: G22
	HSK50C		BT30		R8		
	HSK63C		BT40		Page: D52	Straight Shanks	Page: H27

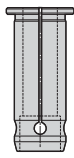
Screw-On Adapters

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	HSK50A	Page: B49	HSK50E	Page: B175	CV40	Page: E32	
	HSK63T		HSK63F		CV50	Page: E74	
	HSK63A	Page: B86	HSK80F		DV40	Page: F33	
	HSK80A		BTKV40		DV50	Page: F65	
	HSK100A	Page: B133	BTKV50		QC30		
	HSK32C		CVKV40		QC40		
	HSK40C		CVKV50		QC50		
	HSK50C		BT30		Page: D18	R8	
	HSK63C		BT40		Page: D53	Straight Shanks	Pages: H23–H26

**Milling
Collets and
Sleeves**

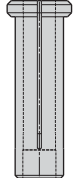


**Milling
Sleeves**



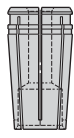
Pages: I8–I9

**Hydraulic
Sleeves**




Pages: I4–I5

TG Collets



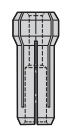
Pages: I14–I48

ER Collets



Pages: I54–I60

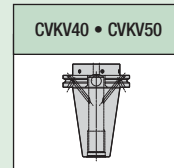
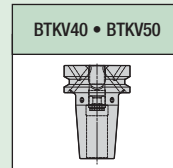
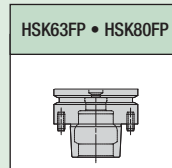
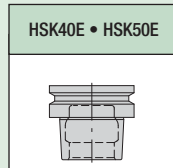
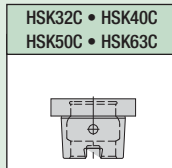
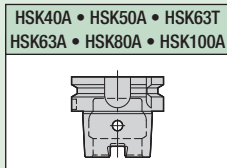
DA Collets



Pages: I65–I75

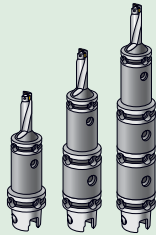
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Erickson Toolholder Options



Modular

KM Modular

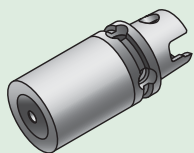


	HSK40A	∇	HSK40E	∇	BT50	Page: D90
	HSK50A		HSK50E		CV40	Page: E36
	HSK63T		Page: B58		HSK63F	CV50	Page: E78
	HSK63A	Page: B89	HSK80F	DV40	Page: F36	
	HSK80A	∇	BTKV40	Page: C18	DV50	Page: F69
	HSK100A	Page: B136	BTKV50	Page: C36	QC30	∇
	HSK32C	∇	CVKV40	Page: C51	QC40	
	HSK40C		CVKV50	Page: C66	QC50	
	HSK50C		BT30	Page: D18	R8	
	HSK63C		BT40	Page: D58	Straight Shanks	

HSK Modular

	HSK40A	∇	HSK40E	∇	BT50	Page: D91
	HSK50A		HSK50E		CV40	Page: E37
	HSK63T		Page: B89		HSK63F	CV50	Page: E79
	HSK63A	Page: B89	HSK80F	DV40	Page: F37	
	HSK80A	∇	BTKV40	Page: C19	DV50	Page: F70
	HSK100A	Page: B136	BTKV50	Page: C37	QC30	∇
	HSK32C	∇	CVKV40	Page: C51	QC40	
	HSK40C	Page: B148	CVKV50	Page: C67	QC50	
	HSK50C	∇	BT30	∇	R8	
	HSK63C	∇	BT40	Page: D59	Straight Shanks	

Auxiliary



Blanks

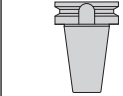
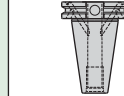
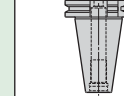
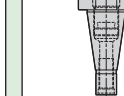
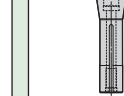
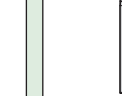
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	HSK50A	Page: B49	HSK50E	∇	CV40	Page: E37
	HSK63T	Page: B57	HSK63F		CV50	Page: E79
	HSK63A	Page: B90	HSK80F		DV40	Page: F37
	HSK80A	Page: B109	BTKV40	Page: C19	DV50	Page: F71
	HSK100A	Page: B137	BTKV50	Page: C37	QC30	∇
	HSK32C	Page: B140	CVKV40	Page: C51	QC40	
	HSK40C	Page: B149	CVKV50	Page: C67	QC50	
	HSK50C	Page: B154	BT30	∇	R8	
	HSK63C	Page: B161	BT40	Page: D59	Straight Shanks	

Plugs

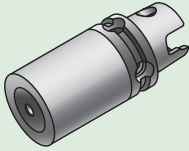
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	HSK63A	Page: J30	HSK80F	DV40		
	HSK80A	∇	BTKV40	DV50		
	HSK100A	Page: J30	BTKV50	QC30		
	HSK32C	∇	CVKV40	QC40		
	HSK40C		CVKV50	QC50		
	HSK50C		BT30	R8		
	HSK63C		BT40	Straight Shanks		

∇ Indicates "Not Available".

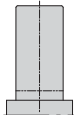





(continued)

BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS	Erickson Toolholder Options
						

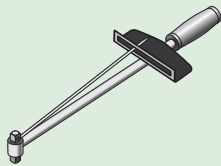
Auxilliary (continued)



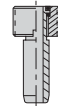


Gage Bars

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	HSK63T		HSK63F		CV50	
	HSK63A	Page: B90	HSK80F		DV40	
	HSK80A		BTKV40		DV50	
	HSK100A	Page: B137	BTKV50		QC30	
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	





Accessories




Coolant Units

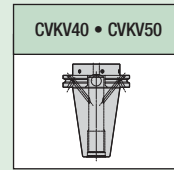
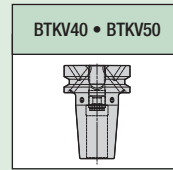
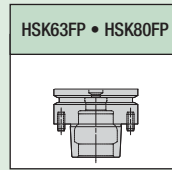
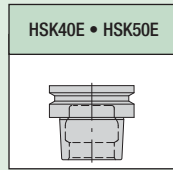
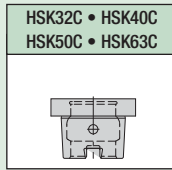
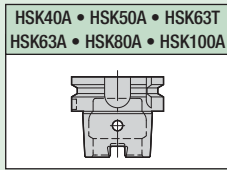
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	HSK50A	Page: J32	HSK50E	Page: J32	CV40	
	HSK63T	Page: J32	HSK63F	Page: J32	CV50	
	HSK63A	Page: J32	HSK80F	Page: J32	DV40	
	HSK80A	Page: J32	BTKV40		DV50	
	HSK100A	Page: J32	BTKV50		QC30	
	HSK32C	Page: J32	CVKV40		QC40	
	HSK40C	Page: J32	CVKV50		QC50	
	HSK50C	Page: J32	BT30	R8		
	HSK63C	Page: J32	BT40	Straight Shanks		

Retention Knobs

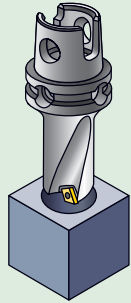
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	HSK63T		HSK63F		CV50	Pages: J34–J38
	HSK63A		HSK80F		DV40	Pages: J34–J38
	HSK80A		BTKV40		DV50	Pages: J34–J38
	HSK100A		BTKV50		QC30	
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	

 Indicates "Not Available".

Erickson Toolholder Options



Drilling



Shrink Fit

	HSK40A	Pages: B26–B29	HSK40E	Pages: B164–B166	BT50	Pages: D62–D65
	HSK50A	Pages: B42–B43	HSK50E	Page: B173	CV40	Pages: E4–E7
	HSK63T	∇	HSK63F	Page: B177	CV50	Pages: E40–E43
	HSK63A	Pages: B62–B66	HSK80F	Page: B181	DV40	Pages: F4–F7
	HSK80A	Pages: B94–B97	BTKV40	Pages: C4–C7	DV50	Pages: F40–F43
	HSK100A	Pages: B112–B115	BTKV50	Pages: C22–C25	QC30	∇
	HSK32C	∇	CVKV40	Pages: C40–C43	QC40	
	HSK40C		CVKV50	Pages: C54–C57	QC50	
	HSK50C		BT30	Pages: D4–D6	R8	
	HSK63C		BT40	Pages: D22–D25	Straight Shanks		Pages: H4–H5

Slim Line Hydraulic

	HSK40A	Pages: B30–B31	HSK40E	∇	BT50	Pages: D66–D67
	HSK50A	∇	HSK50E		CV40	Pages: E8–E9
	HSK63T		HSK63F		CV50	Pages: E44–E45
	HSK63A	Pages: B68–B69	HSK80F		DV40	Pages: F8–F9
	HSK80A	∇	BTKV40		DV50	Pages: F44–F45
	HSK100A	Pages: B116–B117	BTKV50		QC30	∇
	HSK32C	∇	CVKV40		QC40	
	HSK40C	Pages: B144–B145	CVKV50		QC50	
	HSK50C	∇	BT30		R8	
	HSK63C		BT40		Pages: D26–D27		Straight Shanks

Hydraulic Chucks

	HSK40A	Pages: B32–B33	HSK40E	Page: B167	BT50	Pages: D68–D70	
	HSK50A	Page: B44	HSK50E	Page: B174	CV40	Pages: E10–E14	
	HSK63T	∇	HSK63F	∇	CV50	Pages: E47–E50	
	HSK63A	Pages: B70–B71	HSK80F		DV40	Pages: F10–F12	
	HSK80A	Pages: B98–B99	BTKV40		DV50	Pages: F46–F47	
	HSK100A	Pages: B118–B119	BTKV50		QC30	∇	
	HSK32C	Page: B139	CVKV40		QC40		
	HSK40C	Page: B146	CVKV50		QC50		
	HSK50C	Pages: B151–B152	BT30		Page: D7		R8
	HSK63C	Pages: B157–B158	BT40		Pages: D28–D30		Straight Shanks

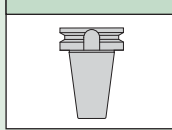
Milling Chucks

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	HSK63T		HSK63F		CV50	Page: E51	
	HSK63A	Page: B72	HSK80F		DV40	Page: F13	
	HSK80A	∇	BTKV40		DV50	Page: F48	
	HSK100A	Page: B120	BTKV50		QC30	∇	
	HSK32C	∇	CVKV40		QC40		
	HSK40C		CVKV50		QC50		
	HSK50C		BT30		Page: D8		R8
	HSK63C		BT40		Page: D31		Straight Shanks

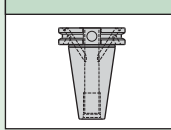
∇ Indicates "Not Available".

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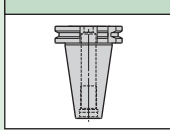
BT30 • BT40 • BT50



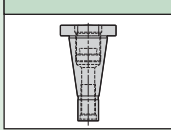
CV40 • CV50



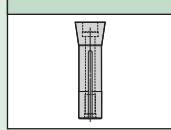
DV40 • DV50



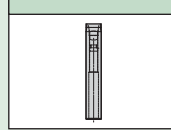
QC30 • QC40 • QC50



R8

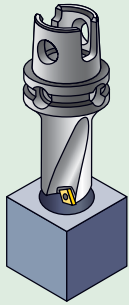


SS

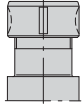






**Erickson
Toolholder
Options**

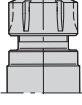



Drilling (continued)



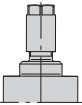



TG Collet Chucks

	HSK40A	Page: B34	HSK40E		BT50	Page: D72	
	HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18	
	HSK63T		HSK63F		CV50	Pages: E52–E56	
	HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15	
	HSK80A	Page: B100	BTKV40		DV50	Pages: F49–F50	
	HSK100A	Page: B121	BTKV50		QC30	Page: G4	
	HSK32C		CVKV40		QC40	Page: G11	
	HSK40C		CVKV50		QC50	Page: G19	
	HSK50C		BT30		R8		
	HSK63C		BT40		Page: D32	Straight Shanks	Pages: H6–H7

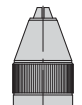





ER Collet Chucks

	HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
	HSK50A	Pages: B46–B47	HSK50E		CV40	Pages: E19–E21
	HSK63T		HSK63F	Page: B178	CV50	Pages: E57–E59
	HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
	HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
	HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	
	HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
	HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	
	HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
	HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks		Pages: H8–H11

DA Collet Chucks

	HSK40A		HSK40E		BT50	Page: D76	
	HSK50A		HSK50E		CV40	Page: E22	
	HSK63T		HSK63F		CV50	Page: E60	
	HSK63A		HSK80F		DV40	Pages: F20–F23	
	HSK80A		BTKV40		DV50	Pages: F54–F55	
	HSK100A		BTKV50		QC30	Page: G5	
	HSK32C		CVKV40		QC40	Page: G12	
	HSK40C		CVKV50		QC50		
	HSK50C		BT30		Page: D12–D13	R8	Page: G26
	HSK63C		BT40		Pages: D36–D37	Straight Shanks	Pages: H12–H22

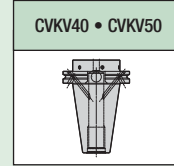
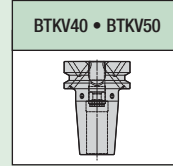
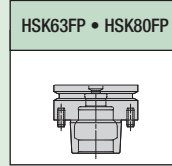
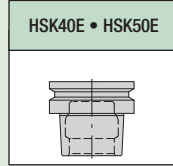
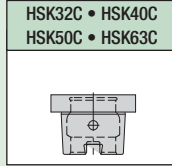
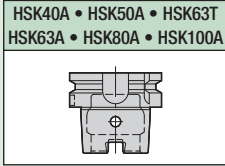
Drill Chucks

	HSK40A		HSK40E		BT50	Page: D76		
	HSK50A		HSK50E		CV40	Page: E23		
	HSK63T		HSK63F		CV50	Page: E61		
	HSK63A		Page: B76		HSK80F	DV40	Page: F24	
	HSK80A				BTKV40	DV50	Page: F56	
	HSK100A		Page: B124		BTKV50	QC30		
	HSK32C				CVKV40	QC40		
	HSK40C				CVKV50	QC50		
	HSK50C				BT30	Page: D14		R8
	HSK63C				BT40	Page: D38		Straight Shanks

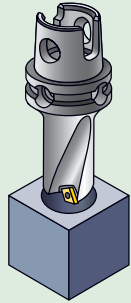
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(continued)

Erickson Toolholder Options



Drilling (continued)



Whistle Notch™ Adapters

	HSK40A	Page: B36	HSK40E		BT50	Pages: D77–D78	
	HSK50A		HSK50E		CV40	Pages: E24–E25	
	HSK63T		HSK63F		CV50	Pages: E62–E65	
	HSK63A	Pages: B76–B77	HSK80F		DV40	Pages: F25–F26	
	HSK80A	Page: B104	BTKV40		DV50	Pages: F57–F58	
	HSK100A	Pages: B124–B125	BTKV50		QC30		
	HSK32C		CVKV40		QC40	Page: G13	
	HSK40C	Page: B148	CVKV50		QC50		
	HSK50C	Page: B154	BT30		R8		
	HSK63C	Page: B160	BT40		Straight Shanks		
					Page: D14		
					Pages: D39–D40		

Straight Shanks

	HSK40A		HSK40E		BT50			
	HSK50A		HSK50E		CV40	Page: E28		
	HSK63T		HSK63F		CV50	Pages: E69–E70		
	HSK63A		Page: B79		HSK80F	DV40		
	HSK80A				BTKV40	DV50		
	HSK100A		Page: B127		BTKV50	QC30		
	HSK32C				CVKV40	QC40		
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	HSK50C				BT30	R8		
	HSK63C				BT40	Straight Shanks		
						Page: D44		







Morse Tapers

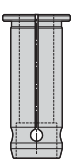
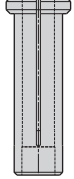
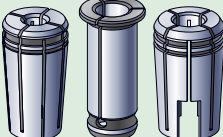




	HSK40A		HSK40E		BT50	Page: D88		
	HSK50A		HSK50E		CV40	Page: E34		
	HSK63T		HSK63F		CV50	Page: E76		
	HSK63A		Page: B87		HSK80F	DV40	Page: F35	
	HSK80A				BTKV40	DV50	Page: F67	
	HSK100A		Page: B134		BTKV50	QC30	Page: G8	
	HSK32C				CVKV40	QC40	Page: G16	
	HSK40C				CVKV50	QC50	Page: G22	
	HSK50C				BT30	R8		
	HSK63C				BT40	Straight Shanks		
						Page: D55		

Jacobs/DIN

	HSK40A		HSK40E		BT50	Page: D88		
	HSK50A		HSK50E		CV40	Page: E35		
	HSK63T		HSK63F		CV50	Page: E77		
	HSK63A		HSK80F		DV40			
	HSK80A		BTKV40		DV50			
	HSK100A		BTKV50		QC30	Page: G9		
	HSK32C		CVKV40		QC40	Page: G17		
	HSK40C		CVKV50		QC50			
	HSK50C		BT30		R8			
	HSK63C		BT40		Straight Shanks			
						Page: D55		

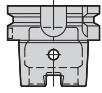
Indicates "Not Available".

BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS	Erickson Toolholder Options
						

Drilling Collets and Sleeves	 <p>Milling Sleeves</p> <p>Pages: 18–19</p>	 <p>Hydraulic Sleeves</p> <p>Pages: 14–15</p>
	 <p>TG Collets</p> <p>Pages: 114–148</p>	 <p>ER Collets</p> <p>Pages: 154–160</p>
 Indicates "Not Available".	 <p>DA Collets</p> <p>Pages: 165–175</p>	

Erickson Toolholder Options

HSK40A • HSK50A • HSK63T
HSK63A • HSK80A • HSK100A



HSK32C • HSK40C
HSK50C • HSK63C



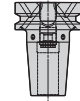
HSK40E • HSK50E



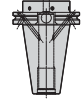
HSK63FP • HSK80FP



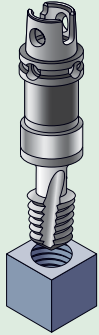
BTKV40 • BTKV50



CVKV40 • CVKV50



Tapping



RC Rapid Change • Tension and Compression

	HSK40A	▽	HSK40E	▽	BT50	Page: D87
	HSK50A		HSK50E		CV40	Page: E33
	HSK63T		HSK63F		CV50	Page: E75
	HSK63A	Page: B87	HSK80F		DV40	Page: F34
	HSK80A	▽	BTKV40		DV50	Page: F66
	HSK100A	Page: B134	BTKV50		QC30	▽
	HSK32C	▽	CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	
			Page: D54			

RC Rapid Change • Solid

	HSK40A	▽	HSK40E	▽	BT50	Page: D87
	HSK50A		HSK50E		CV40	Page: E34
	HSK63T		HSK63F		CV50	Page: E76
	HSK63A		HSK80F		DV40	Page: F34
	HSK80A		BTKV40		DV50	Page: F67
	HSK100A		BTKV50		QC30	▽
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	
			Page: D54			

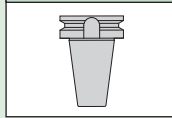
TG Collet Chucks

	HSK40A	Page: B34	HSK40E	▽	BT50	Page: D72	
	HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18	
	HSK63T	▽	HSK63F		CV50	Pages: E52–E56	
	HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15	
	HSK80A	Page: B100	BTKV40		Page: C8	DV50	Pages: F49–F50
	HSK100A	Page: B121	BTKV50		Page: C26	QC30	Page: G4
	HSK32C	▽	CVKV40		Page: C45	QC40	Page: G11
	HSK40C		Page: C58		QC50	Page: G19	
	HSK50C		Page: D9		R8	▽	
	HSK63C		Page: D32		Straight Shanks	Pages: H6–H7	

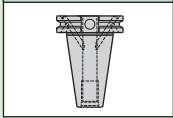
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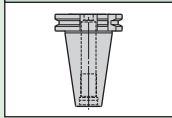
BT30 • BT40 • BT50



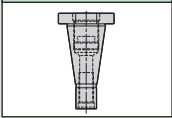
CV40 • CV50



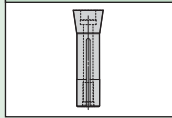
DV40 • DV50



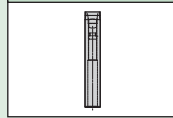
QC30 • QC40 • QC50



R8

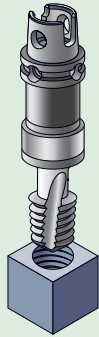


SS

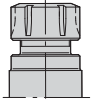





**Erickson
Toolholder
Options**

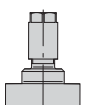



Tapping *(continued)*



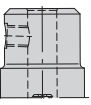



ER Collet Chucks

	HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
	HSK50A	Pages: B46–B47	HSK50E		CV40	Pages: E19–E21
	HSK63T		HSK63F	Page: B178	CV50	Pages: E57–E59
	HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
	HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
	HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	
	HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
	HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	
	HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
	HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks		Pages: H8–H11

DA Collet Chucks

	HSK40A		HSK40E		BT50	Page: D76
	HSK50A		HSK50E		CV40	Page: E22
	HSK63T		HSK63F		CV50	Page: E60
	HSK63A		HSK80F		DV40	Pages: F20–F23
	HSK80A		BTKV40		DV50	Pages: F54–F55
	HSK100A		BTKV50		QC30	Page: G5
	HSK32C		CVKV40		QC40	Page: G12
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	Page: G26
	HSK63C		BT40		Straight Shanks	Pages: H12–H22

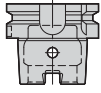
TA Adapters

	HSK40A		HSK40E		BT50	Page: D78
	HSK50A		HSK50E		CV40	Page: E25
	HSK63T		HSK63F		CV50	
	HSK63A		HSK80F		DV40	
	HSK80A		BTKV40		DV50	
	HSK100A		BTKV50		QC30	
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	

 Indicates "Not Available".

**Erickson
Toolholder
Options**

HSK40A • HSK50A • HSK63T
HSK63A • HSK80A • HSK100A



HSK32C • HSK40C
HSK50C • HSK63C



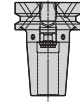
HSK40E • HSK50E



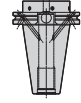
HSK63FP • HSK80FP



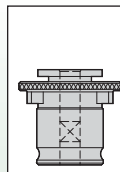
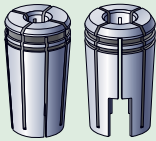
BTKV40 • BTKV50



CVKV40 • CVKV50

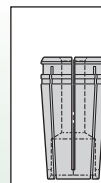


**Tapping
Collets and
Adapters**



**RC Rapid
Change
Adapters**

Pages: 178–181



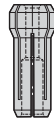
TG Collets

Pages: 114–148



ER Collets

Pages: 154–160

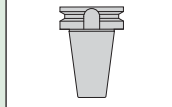


DA Collets

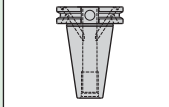
Pages: 165–175

 Indicates "Not Available".

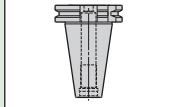
BT30 • BT40 • BT50



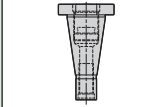
CV40 • CV50



DV40 • DV50



QC30 • QC40 • QC50



R8

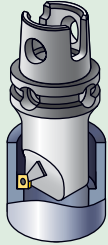


SS

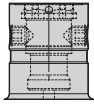







**Erickson
Toolholder
Options**

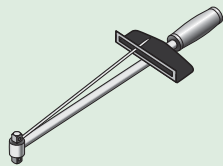
Boring



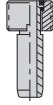


ROTAFLEX™

	HSK40A		HSK40E		BT50	Page: D89	
	HSK50A		HSK50E		CV40	Page: E35	
	HSK63T		HSK63F		CV50	Page: E77	
	HSK63A	Page: B88	HSK80F		DV40	Page: F35	
	HSK80A		BTKV40		DV50	Page: F68	
	HSK100A	Page: B135	BTKV50		QC30		
	HSK32C		CVKV40		QC40		
	HSK40C		CVKV50		QC50		
	HSK50C		BT30		R8		
	HSK63C		BT40		Straight Shanks		
					Page: D56		





Accessories



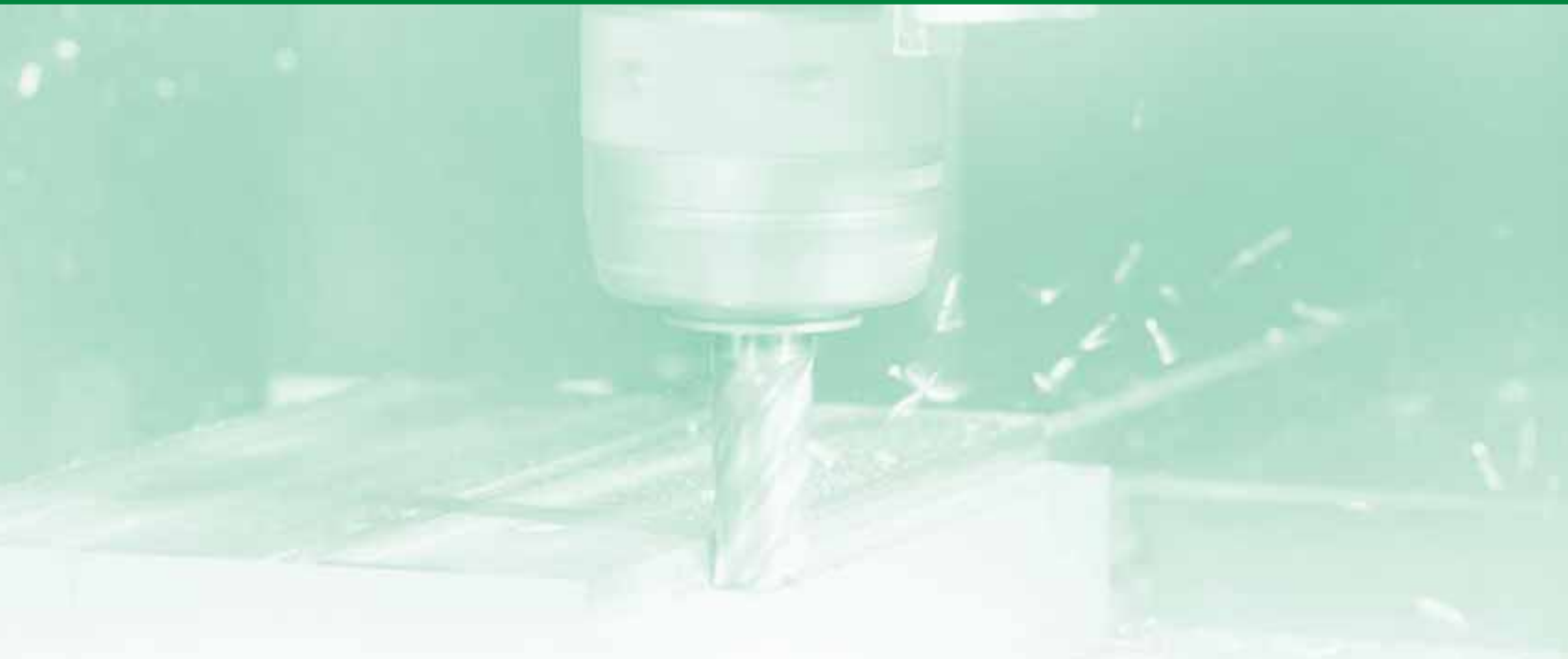
Coolant Units

	HSK40A	Page: J32	HSK40E	Page: J32	BT50	
	HSK50A	Page: J32	HSK50E	Page: J32	CV40	
	HSK63T	Page: J32	HSK63F	Page: J32	CV50	
	HSK63A	Page: J32	HSK80F	Page: J32	DV40	
	HSK80A	Page: J32	BTKV40		DV50	
	HSK100A	Page: J32	BTKV50		QC30	
	HSK32C	Page: J32	CVKV40		QC40	
	HSK40C	Page: J32	CVKV50		QC50	
	HSK50C	Page: J32	BT30		R8	
	HSK63C	Page: J32	BT40	Straight Shanks		

Retention Knobs

	HSK40A		HSK40E		BT50	Pages: J34–J38
	HSK50A		HSK50E		CV40	Pages: J34–J38
	HSK63T		HSK63F		CV50	Pages: J34–J38
	HSK63A		HSK80F		DV40	Pages: J34–J38
	HSK80A		BTKV40		DV50	Pages: J34–J38
	HSK100A		BTKV50		QC30	
	HSK32C		CVKV40		QC40	
	HSK40C		CVKV50		QC50	
	HSK50C		BT30		R8	
	HSK63C		BT40		Straight Shanks	
						Pages: J34–J38

 Indicates "Not Available".



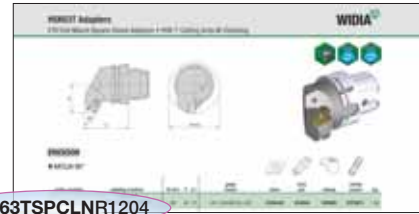
HSK Shank Tools

Catalog Numbering System — External Turning .....	.B20–B23
HSK40A Shank Tools .....	.B24–B39
HSK50A Shank Tools .....	.B40–B49
HSK63T Adapters and Cutting Units .....	.B50–B59
HSK63A Shank Tools .....	.B60–B90
HSK80A Shank Tools .....	.B92–B109
HSK100A Shank Tools .....	.B110–B137
HSK32C Shank Tools .....	.B138–B140
HSK40C Shank Tools .....	.B142–B149
HSK50C Shank Tools .....	.B150–B154
HSK63C Shank Tools .....	.B156–B161
HSK40E Shank Tools .....	.B162–B170
HSK50E Shank Tools .....	.B172–B175
HSK63F (Pin) Shank Tools .....	.B176–B178
HSK63F Shank Tools .....	.B179
HSK80F (Pin) Shank Tools .....	.B180–B183



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63TSPCLNR1204

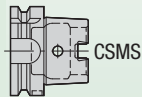
HSK

Shank Style

63

System Size

- 40 = 40mm
- 50 = 50mm
- 63 = 63mm
- 80 = 80mm
- 100 = 100mm



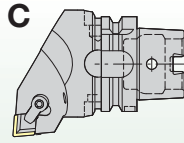
T

Form

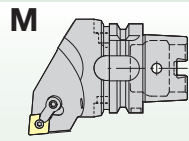
- A = Form A
- B = Form B
- C = Form C
- D = Form D
- E = Form E
- F = Form F
- T = Form T

P

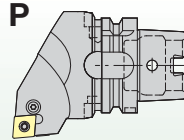
Insert Holding Method



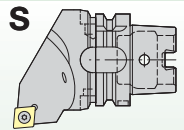
Top clamping by clamping finger for inserts without hole



Top and hole clamping for inserts with hole



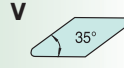
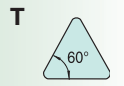
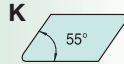
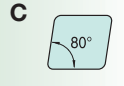
Insert clamping by toggle lever for insert with hole



Center clamping by screw for inserts with hole

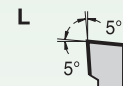
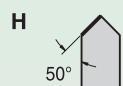
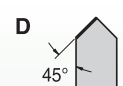
C

Insert Shape



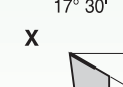
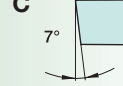
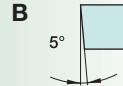
L

Toolholder Style

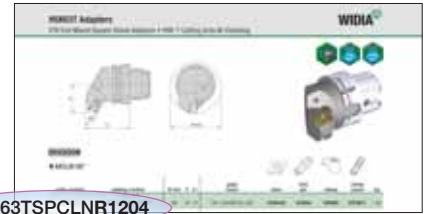


N

Insert Clearance Angle



By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



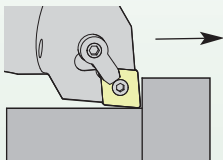
KM63TSPCLNR1204

R

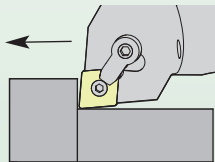
Hand of Tool

- R** = Right hand
- L** = Left hand
- N** = Neutral

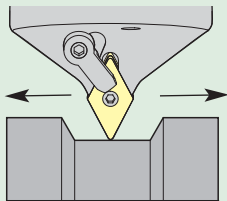
R



L



N



12

Insert Size
Cutting Edge
Length L10

Additional
Information

MX =
Ceramic
inserts

04

Insert
Thickness

- 03** = .125"
- 04** = .188"
- 06** = .250"
- 07** = .312"

Gage
Length

- 30** = 30mm
- 45** = 45mm
- 120** = 120mm

Special
Features

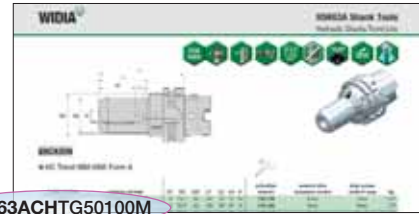
- Y** = Mazak®
Integrex®
- M** = Metric

Metric

IC	C	D	K	R	S	T	V	W
3,97		04		03	03	06		
4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00				08			11	
9,52	09	11	06	09	09	16	16	06
9,52								
10,00				10				
11,11	11	13	07	11	11	19	19	07
12,00				12				
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63ACHTG50100M

HSK

Shank Style

JIS 6339

63

Shank Taper Size

- 25 = 25
- 32 = 32
- 40 = 40
- 50 = 50
- 63 = 63
- 80 = 80
- 100 = 100
- 125 = 125
- 160 = 160

A

Form

DIN Form

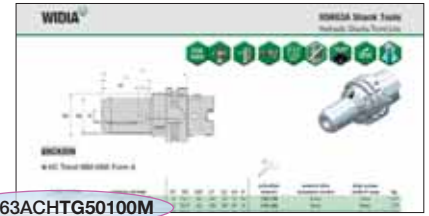
- A = Form A
- B = Form B
- C = Form C
- D = Form D
- E = Form E
- F = Form F

CH

Special Feature (optional)

- CH = Coolant, high pressure
- HPV = High performance and balanceable
- TD = Tunable
- P = Pin style

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63ACHTG50100M

TG

Toolholder Style

50

Toolholder Size

100

Tool Length

M

Identification Values

TG = Collet series xx (50), xxx (100)
EM = I.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075)
SM = O.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075)

(Taper gage line to front of tool)
metric xxx = xxx
inch xxx = x.xx

(blank) = Tool built to inch values
M = Tool built to metric values

- BB** = Bar blank
- CS** = Combination shell mill and slotting cutter adapter
- DA** = Double-angle collet chuck
- DAT** = Top Cut Plus™
- DC** = Drill chuck
- EM** = End mill adapter
- ER** = DIN 6499 single-angle collet chuck
- GB** = Gage bar
- HC** = Hydraulic chuck — Standard Line
- HCB** = Hydraulic chuck — Basic Line
- HCSL** = Hydraulic chuck — Slim Line
- HCSLT** = Hydraulic chuck — Slim Line — Trend
- HCT** = Hydraulic chuck — Trend Line

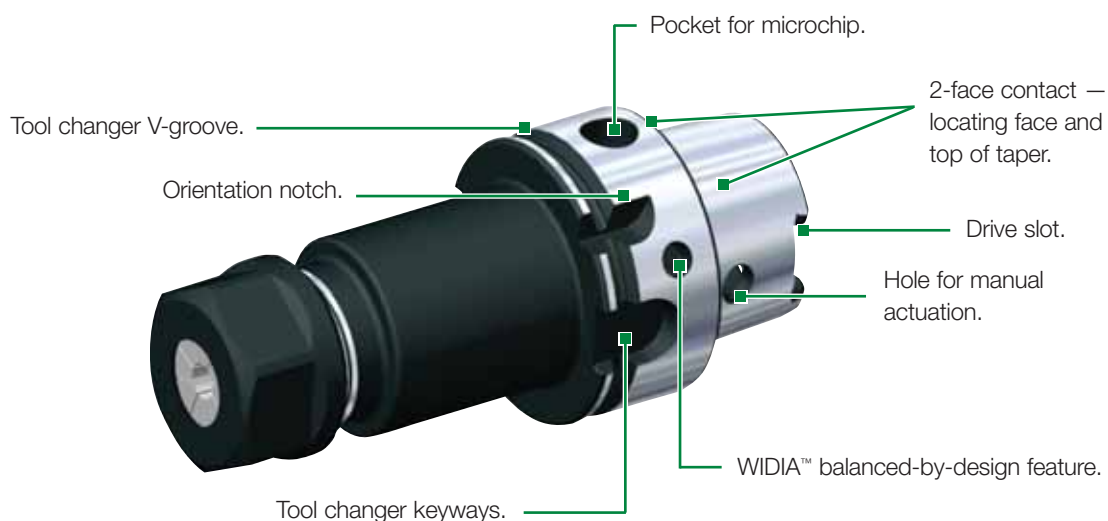
- HPMC** = Bearing milling chuck — high performance
- HSK** = HSK adapter
- JT** = Jacobs taper adapter
- KM** = KM™ adapter
- MT** = Morse taper adapter
- RC** = Rapid Change — T&C tapping adapter chuck
- SA** = Slotting cutter adapter
- RFX** = ROTAFLEX™ boring adapters
- SM2C** = Shell mill adapter with coolant and small diameter
- SMC** = Shell mill adapter with coolant
- SS** = Adapter for straight shanks (drills)

- SSF** = Adapter for straight shanks with flat (drills)
- ST** = Screw-on adapters
- STRC** = Rapid Change — solid tapping adapter chuck
- SWN** = Whistle Notch™ 2° — short — (not to DIN standard)
- TA** = Tap chuck adapter
- TG** = Tremendous Grip single-angle collet chuck
- TT** = Shrink Fit thermo toolholder
- TTHT** = Shrink Fit thermo toolholder — high torque
- WD** = Whistle Notch with drive
- WN** = Whistle Notch (2° metric; 5° inch)

Erickson™ HSK Shank Tooling System • **HSK40A Series**

Erickson HSK Face Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK40A



The HSK40A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.



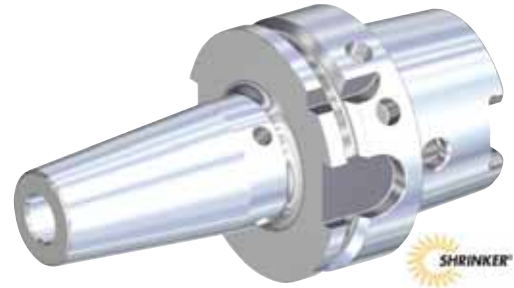
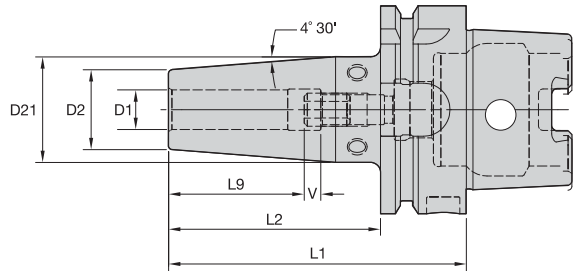
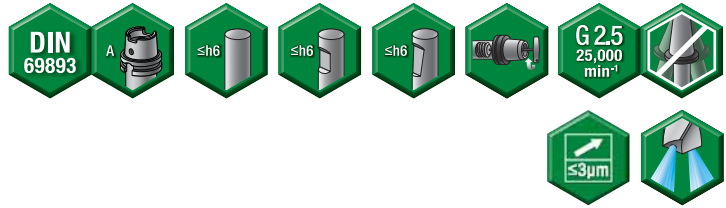
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 30,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK40A Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON

■ TT GP HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3866456	HSK40AHPVTT03060M	3	9	13	60	32	14	10	TTSS05014M	2,5mm	0,26
3866457	HSK40AHPVTT04060M	4	9	13	60	32	15	10	TTSS05014M	2,5mm	0,26
3866458	HSK40AHPVTT05060M	5	9	13	60	32	15	10	TTSS06014M	3mm	0,26
3866459	HSK40AHPVTT06080M	6	21	27	80	60	26	10	TTSS05014M	2,5mm	0,40
3866460	HSK40AHPVTT08080M	8	21	27	80	60	26	10	TTSS06014M	3mm	0,40
3866461	HSK40AHPVTT10080M	10	24	32	80	60	31	10	TTSS08014M	4mm	0,46
3866462	HSK40AHPVTT12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,50
3866563	HSK40AHPVTT14090M	14	27	34	90	70	36	10	TTSS10014M	5mm	0,55
3866564	HSK40AHPVTT16090M	16	27	34	90	70	39	10	TTSS12014M	6mm	0,52
3866565	HSK40AHPVTT18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,70
3866566	HSK40AHPVTT20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,66

(continued)

(TT GP HPV Form A continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
1/2, 9/16, & 5/8	.0000/- .0004
3/4	.0000/- .0005

■ **TT GP HPV In-HSK Form A**



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3864029	HSK40AHPVTT025315	1/4	.83	1.06	3.15	2.36	1.02	.39	TTSS05014M	2,5mm	.89
3864031	HSK40AHPVTT031315	5/16	.83	1.06	3.15	2.36	1.02	.39	TTSS06014M	3mm	.87
3864032	HSK40AHPVTT038315	3/8	.94	1.26	3.15	2.36	1.22	.39	TTSS08014M	4mm	1.01
3864073	HSK40AHPVTT050354	1/2	.94	1.26	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.09
3864074	HSK40AHPVTT056354	9/16	1.06	1.32	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.21
3864075	HSK40AHPVTT062354	5/8	1.06	1.32	3.54	2.76	1.54	.39	TTSS12014M	6mm	1.16
3864076	HSK40AHPVTT075374	3/4	1.30	1.61	3.74	3.74	1.61	.39	TTSS16014M	8mm	1.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6-1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

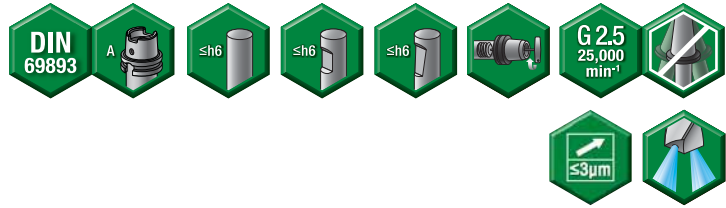
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

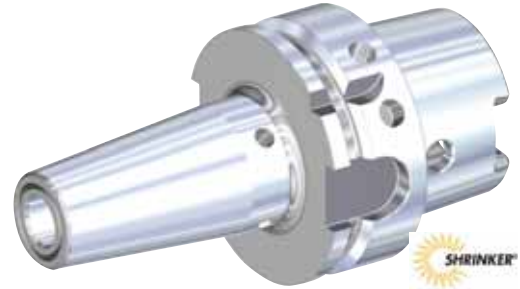
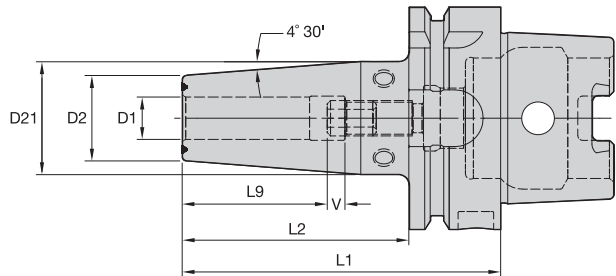
Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



HSK40A Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON™

■ TT HT HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3866982	HSK40AHPVTHT12090M	12	24	32	90	71	36	10	TTSS10014M	5mm	0,50
3867174	HSK40AHPVTHT14090M	14	27	34	90	71	36	10	TTSS10014M	5mm	0,55
3867175	HSK40AHPVTHT16090M	16	27	34	90	71	39	10	TTSS12014M	6mm	0,52
3867176	HSK40AHPVTHT18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,70
3867177	HSK40AHPVTHT20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,66

(continued)

(TT HT HPV Form A continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, & 5/8	.0000/- .0004
3/4	.0000/- .0005

■ **TT HT HPV In-HSK Form A**



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3872696	HSK40AHPVTTH050354	1/2	.94	1.26	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.09
3872697	HSK40AHPVTTH056354	9/16	1.06	1.32	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.21
3872698	HSK40AHPVTTH062354	5/8	1.06	1.32	3.54	2.76	1.54	.39	TTSS12014M	6mm	1.16
3872699	HSK40AHPVTTH075374	3/4	1.30	1.61	3.74	3.74	1.61	.39	TTSS16014M	8mm	1.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

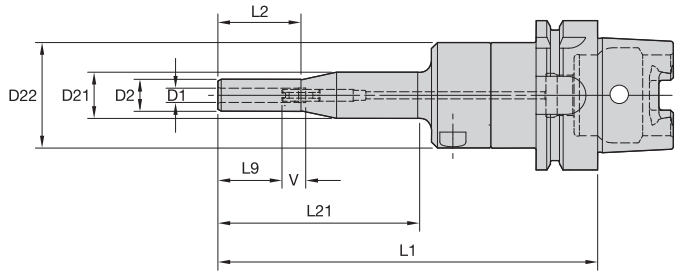
Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

Hydraulic Chucks Slim Line



HSK40A Shank Tools

ERICKSON

■ HC Slim-T MM-HSK Form A

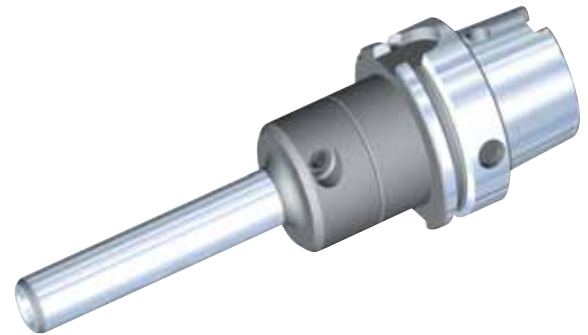
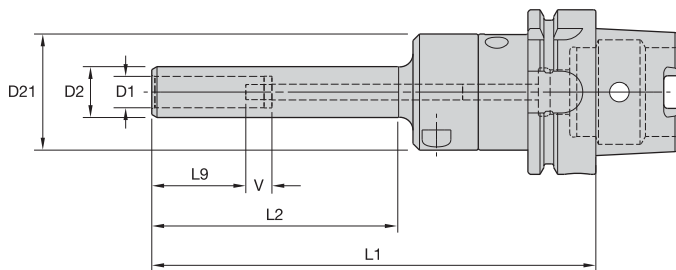
order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3061264	HSK40AHCSLT06160M	6	13,5	19,5	44	160	35	27	85	10	0,81
3061265	HSK40AHCSLT08160M	8	15,5	19,5	44	160	35	27	85	10	0,82

■ Spare Parts

catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK40AHCSLT06160M	170.135	5mm	170.002	2,5mm
HSK40AHCSLT08160M	170.135	5mm	170.002	2,5mm

(continued)

(HC Slim HSK Form A continued)



HSK40A Shank Tools

■ HC Slim MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061266	HSK40AHCSLT10160M	10	17,5	44,5	160	85	31	10	0,81
3061267	HSK40AHCSLT12170M	12	19,5	44,5	170	95	36	10	0,86
3061268	HSK40AHCSLT14170M	14	21,5	52,5	170	95	36	10	1,02
3061269	HSK40AHCSLT16170M	16	23,5	52,5	170	95	39	10	1,05
3061270	HSK40AHCSLT18170M	18	25,5	52,5	170	95	39	10	1,09
3061271	HSK40AHCSLT20170M	20	27,5	52,5	170	95	41	10	1,13

■ Spare Parts

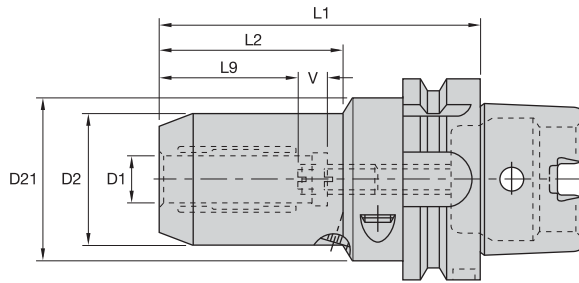


catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK40AHCSLT10160M	170.135	5mm	170.003	3mm
HSK40AHCSLT12170M	170.135	5mm	170.003	3mm
HSK40AHCSLT14170M	170.135	5mm	170.003	3mm
HSK40AHCSLT16170M	170.135	5mm	170.005	5mm
HSK40AHCSLT18170M	170.135	5mm	170.005	5mm
HSK40AHCSLT20170M	170.135	5mm	170.005	5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrenches must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

Hydraulic Chucks Standard HP Line



HSK40A Shank Tools

ERICKSON™

■ HC MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1960118	HSK40AHC06080M	6	25,7	32	80	35	27	10	170.135	5mm	170.002	2,5mm	0,45
1960119	HSK40AHC08080M	8	27,7	32	80	36	27	10	170.254	4mm	170.002	2,5mm	0,47
1960120	HSK40AHC10085M	10	29,7	32	85	40	31	10	170.254	4mm	170.002	2,5mm	0,51
1960121	HSK40AHC12090M	12	31,6	32	90	43	36	10	170.254	4mm	170.002	2,5mm	0,55

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

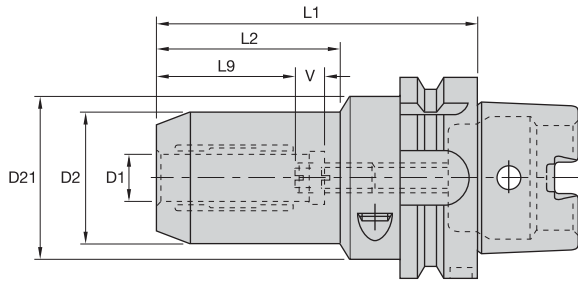
Hydraulic chuck technical section, see page K60.

Supplied with stop screw.

Actuation wrench must be ordered separately.

Reduction sleeves are available and must be ordered separately; see page I2.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK40A Shank Tools

ERICKSON

■ **HC Trend MM-HSK Form A**



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg
2386931	HSK40AHCT14100M	14	33,6	50	100	42	36	10	170.135	5mm	571.063	5mm	0,79
2386932	HSK40AHCT16100M	16	37,6	50	100	47	39	10	170.135	5mm	571.063	5mm	0,84
2387463	HSK40AHCT18100M	18	39,6	50	100	47	39	10	170.135	5mm	571.063	5mm	0,86
2387464	HSK40AHCT20100M	20	41,6	50	100	48	41	10	170.135	5mm	571.063	5mm	0,87

■ **HC Trend In-HSK Form A**



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2233132	HSK40AHCT025315	1/4	1.01	1.25	3.15	1.38	1.46	.39	170.135	5mm	170.003	3mm	.99
2233273	HSK40AHCT038335	3/8	1.17	1.25	3.35	1.57	1.61	.39	170.135	5mm	170.003	3mm	1.13
2233274	HSK40AHCT050354	1/2	1.24	1.25	3.54	1.69	1.81	.39	170.135	5mm	170.003	3mm	1.21
2387465	HSK40AHCT062394	5/8	1.48	1.96	3.94	1.83	1.54	.39	170.135	5mm	—	5mm	1.85
2387466	HSK40AHCT075394	3/4	1.64	1.96	3.94	1.89	1.61	.39	170.135	5mm	—	5mm	1.98

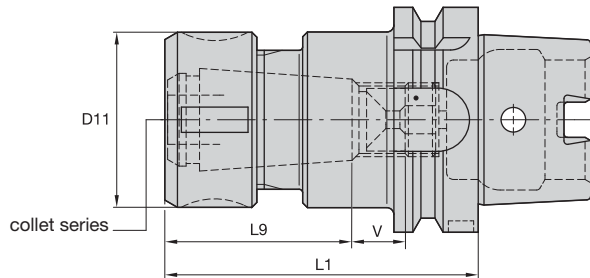
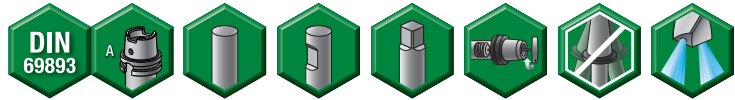
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



HSK40A Shank Tools

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4

ERICKSON™

■ TG Round-HSK Form A



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2455912	HSK40ATG050080M	TG50	38	80	42,0	5	LNA050M	HSW34M	68	SS056041G	4mm & 5/32	0,45
2455993	HSK40ATG075090M	TG75	50	90	54,0	7	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	0,69

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

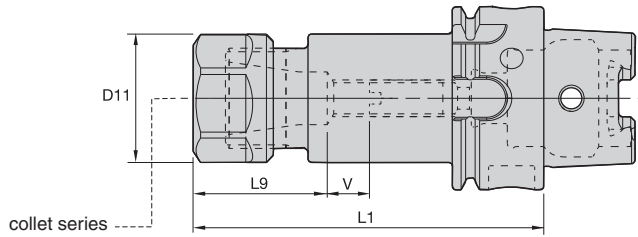
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Grip (2:1 advantage).



HSK40A Shank Tools

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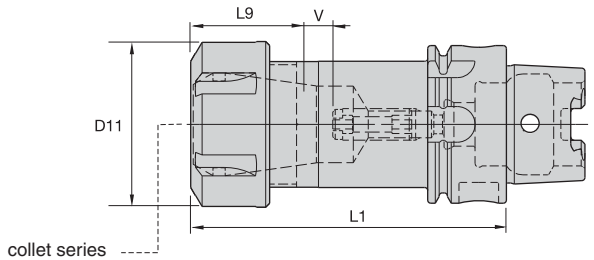
■ ER Hex-HSK Form A

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

order number	catalog number	collet series	D11	L1	L9	V	kg
2260343	HSK40AER16080M	ER16	28	80	27,0	5	0,40

■ Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40AER16080M	LNHSER16M	OEW25M	40	56	571.068	4mm & 5/32



■ ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1833498	HSK40AER25080M	ER25	42	80	31,0	5	0,50
2260344	HSK40AER32090M	ER32	50	90	46,0	5	0,56
2386935	HSK40AER32100M	ER32	50	100	40,0	10	0,69

■ Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40AER25080M	LNSER25M	ER25WM	104	571.062	4mm & 5/32
HSK40AER32090M	LNSER32M	ER32WM	136	571.062	4mm & 5/32
HSK40AER32100M	LNER32M	ER32WM	136	571.062	4mm

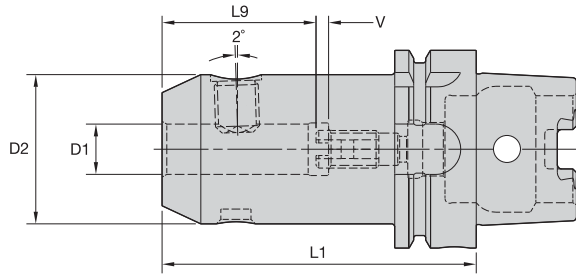
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

Whistle Notch™ Adapters



HSK40A Shank Tools



ERICKSON

■ WN MM-HSK Form A



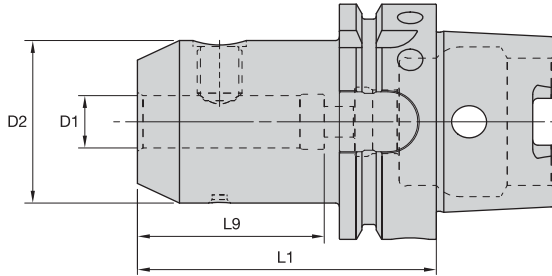
order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2260348	HSK40AWN06080M	6	25	80	30	10	SS03M012	3mm	7	571.060	2,5mm	0,39
2260349	HSK40AWN08080M	8	28	80	30	10	SS03M014	4mm	15	571.067	3mm	0,44
2260350	HSK40AWN10080M	10	34	80	35	10	SS03M018	5mm	25	571.068	4mm	0,56
2260351	HSK40AWN12090M	12	42	90	40	10	SS03M023	6mm	35	571.074	5mm	0,71
2260352	HSK40AWN14090M	14	44	90	40	10	SS03M023	6mm	35	571.074	5mm	0,73
2260353	HSK40AWN16090M	16	48	90	43	10	SS03M025	6mm	50	571.075	6mm	0,79

NOTE: Do not overtighten lock screw; use torque recommendations above.

Supplied with clamp screw and stop screw.

Lock screw or stop screw wrenches are not included.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



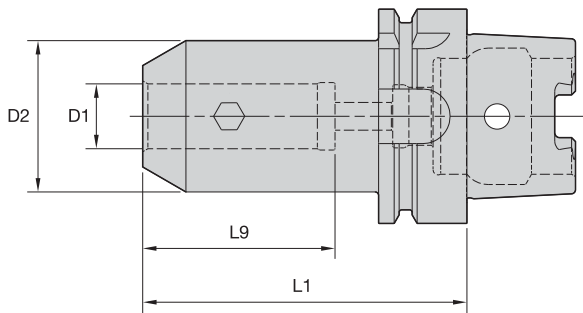
HSK40A Shank Tools

ERICKSON

■ EM MM-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
2260357	HSK40AEM06060M	6	25	60	40	SS03M012	3mm	7	0,31
2260358	HSK40AEM08060M	8	28	60	40	SS03M014	4mm	15	0,35
2260359	HSK40AEM10060M	10	34	60	42	SS03M018	5mm	25	0,42
2260360	HSK40AEM12070M	12	42	70	50	SS03M023	6mm	35	0,57
2260361	HSK40AEM14075M	14	44	75	50	SS03M023	6mm	35	0,63
1852320	HSK40AEM16075M	16	48	75	53	SS03M025	6mm	50	0,69



■ EM IN-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2249258	HSK40AEM025250	1/4	1.00	2.50	1.70	ELS025025PKG	1/8	8	.74
2249259	HSK40AEM038250	3/8	1.00	2.50	1.73	ELS038031PKG	3/16	15	.71
2249260	HSK40AEM050275	1/2	1.33	2.75	1.97	ELS044038PKG	7/32	20	.99
2249261	HSK40AEM062300	5/8	1.63	3.00	2.09	ELS056050PKG	1/4	40	1.27

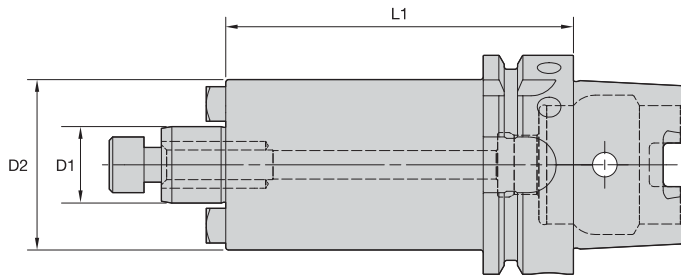
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40A Shank Tools

Shell Mill Adapters with Through Coolant



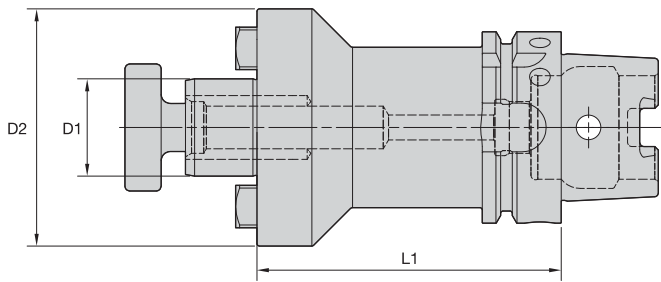
HSK40A Shank Tools



ERICKSON™

■ SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872589	HSK40ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,44
3872588	HSK40ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,49
3872591	HSK40ASM2C22050M	22	42	50	MS1234	—	8mm	0,50
3872590	HSK40ASMC22050M	22	49	50	MS1234	KDK22M	8mm	0,55



■ SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872592	HSK40ASMC27075M	27	60	75	KLSS27M	KDK27M	10mm	1,01



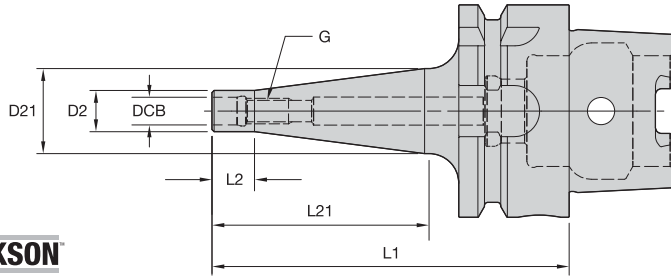
■ SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762350	HSK40ASM2C050200	1/2	1.20	2.00	KLS05	KDK04	3/16	.85
3762349	HSK40ASMC050200	1/2	1.44	2.00	KLS05	KDK04	3/16	.95
3762352	HSK40ASM2C075200	3/4	1.46	2.00	KLS07	—	1/4	1.03
3762351	HSK40ASMC075200	3/4	1.75	2.00	KLS07	KDK05	1/4	1.14
3762404	HSK40ASM2C100200	1	2.19	2.00	KLS10	KDK06	5/16	1.45
3762403	HSK40ASMC100200	1	2.75	2.00	KLS10	KDK06	5/16	1.73



NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.





HSK40A Shank Tools

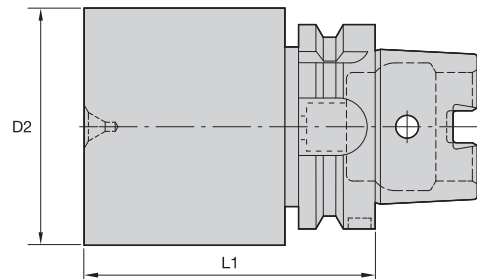
ERICKSON

■ **ST-HSK Form A**

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061374	HSK40AST06053M	6,5	M6	10	—	53	27	—	0,20
4061375	HSK40AST06078M	6,5	M6	10	20	78	10	50	0,26
4061376	HSK40AST06103M	6,5	M6	10	23	103	10	75	0,32
4061377	HSK40AST08053M	8,5	M8	13	15	53	10	25	0,22
4061378	HSK40AST08078M	8,5	M8	13	23	78	10	50	0,30
4061379	HSK40AST08103M	8,5	M8	13	23	103	10	75	0,34
4061380	HSK40AST08128M	8,5	M8	13	25	128	10	100	0,42
4061381	HSK40AST10053M	10,5	M10	18	20	53	10	25	0,25
4061382	HSK40AST10078M	10,5	M10	18	25	78	10	50	0,33
4061423	HSK40AST10103M	10,5	M10	18	28	103	10	75	0,44
4061424	HSK40AST10128M	10,5	M10	18	30	128	10	100	0,55
4061425	HSK40AST12053M	12,5	M12	21	24	53	10	25	0,27
4061426	HSK40AST12078M	12,5	M12	21	24	78	10	50	0,34
4061427	HSK40AST12103M	12,5	M12	21	31	103	10	75	0,50
4061428	HSK40AST12128M	12,5	M12	21	31	128	10	100	0,61

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Machinable front 32–38 RW C.



ERICKSON

■ **BB-HSK Form A**

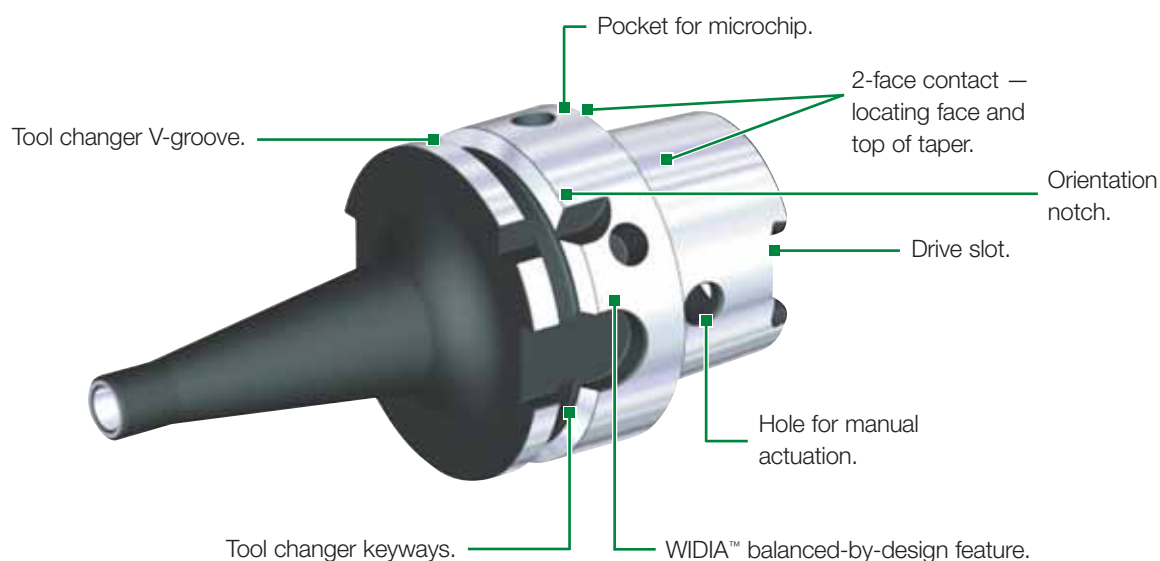
order number	catalog number	D2	L1	kg
2260649	HSK40ABB040120M	40,8	120	1,16

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

Erickson™ HSK Shank Tooling System • **HSK50A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK50A



The HSK50A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.



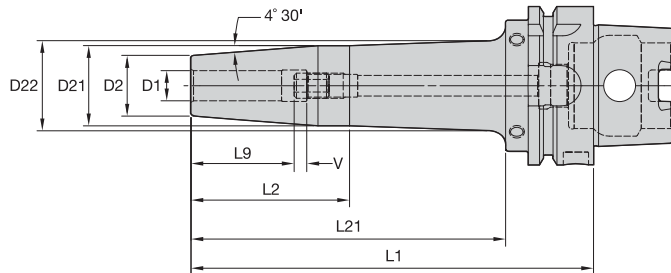
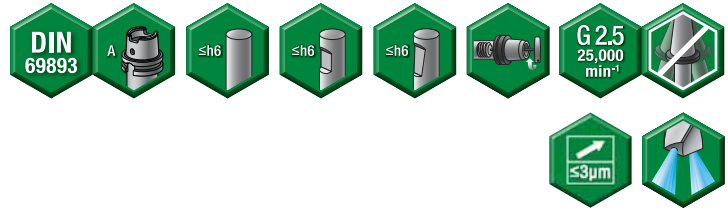
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK50A Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



HSK50A Shank Tools

ERICKSON

■ TT GP HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3874888	HSK50AHPVTT03080M	3	9	15	—	80	45	54	14	10,0	TTSS05014M	2,5mm	0,50
3874889	HSK50AHPVTT04080M	4	9	15	—	80	45	54	15	10,0	TTSS05014M	2,5mm	0,50
3874890	HSK50AHPVTT05080M	5	9	15	—	80	45	54	15	10,0	TTSS06014M	3mm	0,50
3874891	HSK50AHPVTT06080M	6	21	27	—	80	54	—	26	10,0	TTSS05014M	2,5mm	0,57
3874989	HSK50AHPVTT06120M	6	21	27	—	120	85	94	26	10,0	TTSS05014M	2,5mm	0,79
3874997	HSK50AHPVTT06160M	6	21	27	32	160	50	125	26	10,0	TTSS05014M	2,5mm	1,03
3874892	HSK50AHPVTT08080M	8	21	27	—	80	45	54	26	10,0	TTSS06014M	3mm	0,62
3874990	HSK50AHPVTT08120M	8	21	27	—	120	85	94	26	10,0	TTSS06014M	3mm	0,78
3874998	HSK50AHPVTT08160M	8	21	27	32	160	50	125	26	10,0	TTSS06014M	3mm	1,02
3874983	HSK50AHPVTT10085M	10	24	32	—	85	59	—	31	10,0	TTSS08014M	4mm	0,64
3874991	HSK50AHPVTT10120M	10	24	32	—	120	85	94	31	10,0	TTSS08014M	4mm	0,89
3874999	HSK50AHPVTT10160M	10	24	32	36	160	63	125	31	10,0	TTSS08014M	4mm	1,18
3874984	HSK50AHPVTT12090M	12	24	32	—	90	64	—	36	10,0	TTSS10014M	5mm	0,66
3874992	HSK50AHPVTT12120M	12	24	32	—	120	85	94	36	10,0	TTSS10014M	5mm	0,87
3875000	HSK50AHPVTT12160M	12	24	32	36	160	63	125	36	10,0	TTSS10014M	5mm	1,16
3874985	HSK50AHPVTT14090M	14	27	34	—	90	64	—	36	10,0	TTSS10014M	5mm	0,71
3874993	HSK50AHPVTT14120M	14	27	34	—	120	85	94	36	10,0	TTSS10014M	5mm	0,94
3875001	HSK50AHPVTT14160M	14	27	34	39	160	57	125	36	10,0	TTSS10014M	5mm	1,28
3874986	HSK50AHPVTT16095M	16	27	34	—	95	69	—	39	10,0	TTSS12014M	6mm	0,71
3874994	HSK50AHPVTT16120M	16	27	34	—	120	85	94	39	10,0	TTSS12014M	6mm	0,91
3875002	HSK50AHPVTT16160M	16	27	34	39	160	57	125	39	10,0	TTSS12014M	6mm	1,26
3874987	HSK50AHPVTT18095M	18	33	41	—	95	69	—	39	10,0	TTSS12014M	6mm	0,88
3874995	HSK50AHPVTT18120M	18	33	41	—	120	94	—	39	10,0	TTSS12014M	6mm	1,13
3875003	HSK50AHPVTT18160M	18	33	41	—	160	134	—	39	10,0	TTSS12014M	6mm	1,53
3874988	HSK50AHPVTT20100M	20	33	41	—	100	74	—	41	10,0	TTSS16014M	3mm	0,90
3874996	HSK50AHPVTT20120M	20	33	41	—	120	94	—	41	10,0	TTSS16014M	8mm	1,10
3875004	HSK50AHPVTT20160M	20	33	41	—	160	134	—	41	10,0	TTSS16014M	8mm	1,50

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

(continued)

(TT GP HPV continued)

**Cutting Tool Shank Requirements
metric (ISO standard)**

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
1/8 & 3/16	-.0001/-0.0003
1/4 & 3/8	-.0001/-0.0004
1/2 & 5/8	.0000/-0.0004
3/4	.0000/-0.0005

■ TT GP HPV In-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3863678	HSK50AHPVTT012315	1/8	.35	.59	—	3.15	1.77	—	.63	.39	TTSS05014M	2,5mm	1.10
3863705	HSK50AHPVTT012472	1/8	.35	.59	.68	4.72	1.97	3.35	.63	.39	TTSS05014M	2,5mm	1.22
3863711	HSK50AHPVTT012630	1/8	.35	.59	.79	6.30	1.97	4.92	.63	.39	TTSS05014M	2,5mm	1.40
3863679	HSK50AHPVTT018315	3/16	.35	.59	—	3.15	1.77	—	.59	.39	TTSS06014M	3mm	1.10
3863712	HSK50AHPVTT018630	3/16	.35	.59	.79	6.30	1.97	4.92	.59	.39	TTSS06014M	3mm	1.40
3863680	HSK50AHPVTT025315	1/4	.83	1.06	—	3.15	2.13	—	1.02	.39	TTSS05014M	2,5mm	1.26
3863706	HSK50AHPVTT025472	1/4	.83	1.06	—	4.72	3.35	—	1.02	.39	TTSS05014M	2,5mm	1.74
3863713	HSK50AHPVTT025630	1/4	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	TTSS05014M	2,5mm	2.26
3863681	HSK50AHPVTT038335	3/8	.94	1.26	—	3.35	2.32	—	1.22	.39	TTSS08014M	4mm	1.42
3863707	HSK50AHPVTT038472	3/8	.94	1.26	—	4.72	3.35	—	1.22	.39	TTSS08014M	4mm	1.96
3863714	HSK50AHPVTT038630	3/8	.94	1.26	1.43	6.30	2.48	4.92	1.22	.39	TTSS08014M	4mm	2.61
3863682	HSK50AHPVTT050354	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	1.43
3863708	HSK50AHPVTT050472	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	TTSS10014M	5mm	1.91
3863715	HSK50AHPVTT050630	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	TTSS10014M	5mm	2.55
3863703	HSK50AHPVTT062374	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	TTSS12014M	6mm	1.58
3863709	HSK50AHPVTT062472	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	TTSS12014M	6mm	2.01
3863716	HSK50AHPVTT062630	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	TTSS12014M	6mm	2.77
3863704	HSK50AHPVTT075394	3/4	1.30	1.61	—	3.94	2.92	—	1.61	.39	TTSS16014M	8mm	2.00
3863710	HSK50AHPVTT075472	3/4	1.30	1.61	—	4.72	3.70	—	1.61	.39	TTSS16014M	8mm	2.44
3863717	HSK50AHPVTT075630	3/4	1.30	1.61	—	6.30	5.28	—	1.61	.39	TTSS16014M	8mm	3.33

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

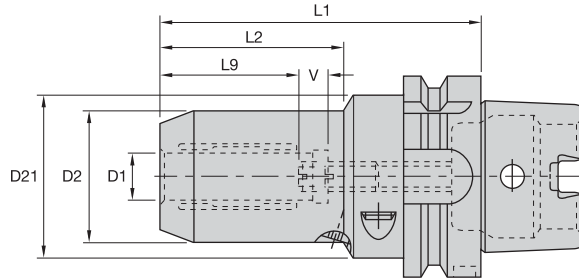
Shrink Fit accessories, see page J2.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK50A Shank Tools

Hydraulic Chucks Standard HP Line



HSK50A Shank Tools

ERICKSON™

■ HC MM-HSK Form A

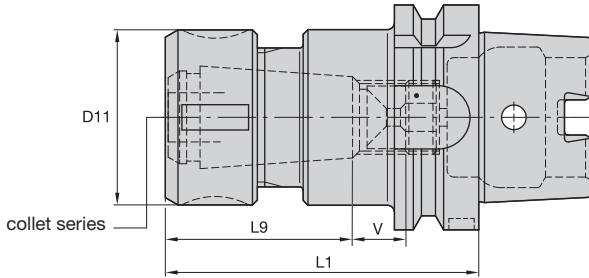
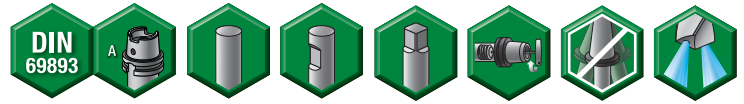


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245473	HSK50AHC06080M	6	25,7	40	80	35	27	10	170.135	5mm	170.002	2,5mm	0,80
1245474	HSK50AHC08080M	8	27,7	40	80	36	27	10	170.135	5mm	170.002	2,5mm	0,90
1245475	HSK50AHC10085M	10	29,7	40	85	41	31	10	170.135	5mm	170.002	2,5mm	0,90
1245476	HSK50AHC12090M	12	31,6	40	90	47	36	10	170.135	5mm	170.002	2,5mm	1,30

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 For hydraulic chuck technical section, see page K60.
 Chucks supplied with stop screw.
 Wrenches must be ordered separately.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I7.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



- Tremendous Grip (3:1 advantage).



HSK50A Shank Tools

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TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4

■ TG Round-HSK Form A • Metric



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1307819	HSK50ATG050100M	TG50	38	100	42	12	LNA050M	HSW34M	68	SS056041G	4mm & 5/32	SSCC056	0,86
1307821	HSK50ATG075115M	TG75	50	115	54	11	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	SSCC081	0,79

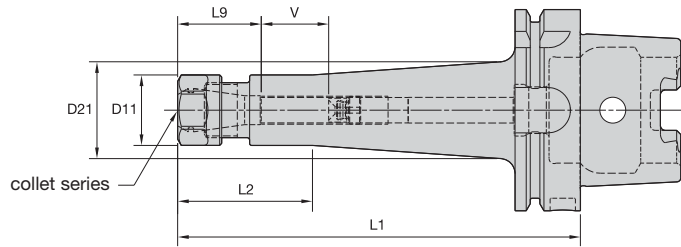
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK50A Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK50A Shank Tools

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

ERICKSON™

■ ER HEX-HSK Form A

order number	catalog number	collet series	D11	D21	L2	L1	L9	V	kg
1307789	HSK50AER16100M	ER16	28	—	71	100	32	24	0,64
1307790	HSK50AER16160M	ER16	28	40	71	160	32	48	1,05
1307791	HSK50AER20100M	ER20	34	—	73	100	36	17	0,72

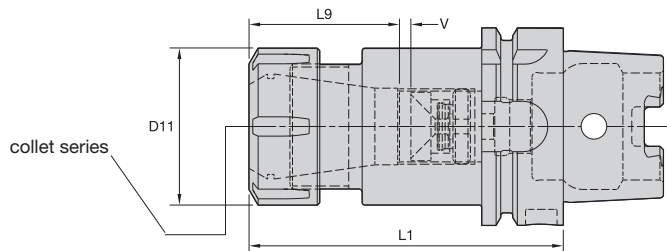
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK50AER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	S SCC044
HSK50AER16160M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	S SCC044
HSK50AER20100M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32	S SCC056

(continued)

(ER-HSK continued)



HSK50A Shank Tools

■ ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1307792	HSK50AER25100M	ER25	42	100	40	11	0,91
1134534	HSK50AER32100M	ER32	50	100	45	4	0,90

■ Spare Parts

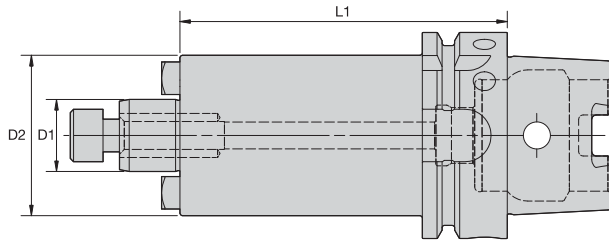


catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK50AER25100M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32	SSCC075
HSK50AER32100M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32	SSCC094

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK50A Shank Tools

Shell Mill Adapters with Through Coolant

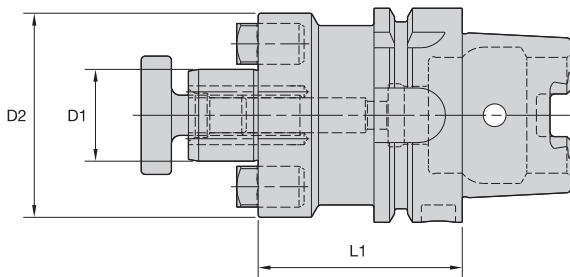


HSK50A Shank Tools

ERICKSON

■ SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
4144667	HSK50ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,62
3872678	HSK50ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,67
4144668	HSK50ASM2C22060M	22	42	60	MS1234	—	8mm	0,80
3872679	HSK50ASMC22060M	22	49	60	MS1234	KDK22M	8mm	0,86



■ SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872680	HSK50ASMC27060M	27	60	60	KLSS27M	KDK27M	10mm	1,07



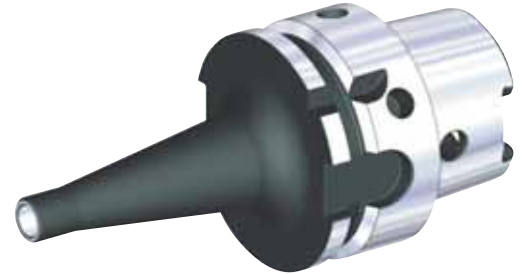
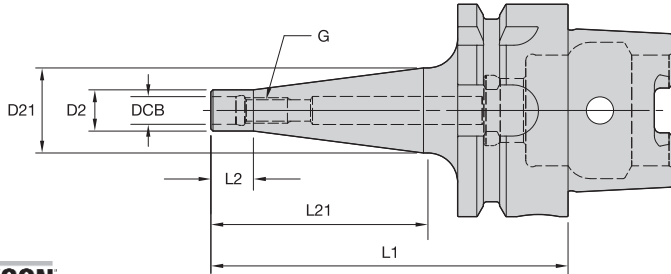
■ SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762406	HSK50ASM2C050200	1/2	1.20	2	KLS05	KDK04	3/16	1.20
3762405	HSK50ASMC050200	1/2	1.44	2	KLS05	KDK04	3/16	1.33
3872517	HSK50ASMC100225	1	2.75	2	KLS10	KDK06	5/16	2.31



NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.





HSK50A Shank Tools

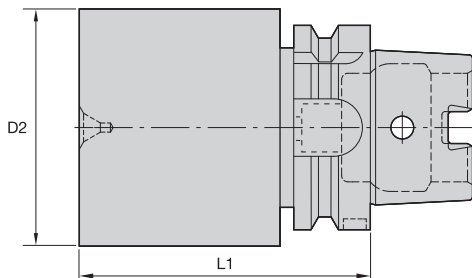
ERICKSON

■ ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061440	HSK50AST06059M	6,5	M6	10	10	59	10	25	0,39
4061441	HSK50AST06084M	6,5	M6	10	20	84	10	50	0,45
4061442	HSK50AST06109M	6,5	M6	10	23	109	10	75	0,51
4061443	HSK50AST08059M	8,5	M8	13	15	59	10	25	0,41
4061444	HSK50AST08084M	8,5	M8	13	23	84	10	50	0,48
4061445	HSK50AST08109M	8,5	M8	13	23	109	10	75	0,53
4061446	HSK50AST08134M	8,5	M8	13	25	134	10	100	0,60
4061447	HSK50AST10059M	10,5	M10	18	20	59	10	25	0,44
4061448	HSK50AST10084M	10,5	M10	18	25	84	10	50	0,53
4061449	HSK50AST10109M	10,5	M10	18	28	109	10	75	0,63
4061450	HSK50AST10134M	10,5	M10	18	30	134	10	100	0,74
4061451	HSK50AST12059M	12,5	M12	21	24	59	10	25	0,46
4061452	HSK50AST12084M	12,5	M12	21	24	84	10	50	0,53
4061453	HSK50AST12109M	12,5	M12	21	31	109	10	75	0,69
4061454	HSK50AST12134M	12,5	M12	21	31	134	10	100	0,79

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Machinable front 28–34 RWC.



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■ BB-HSK Form A • Metric

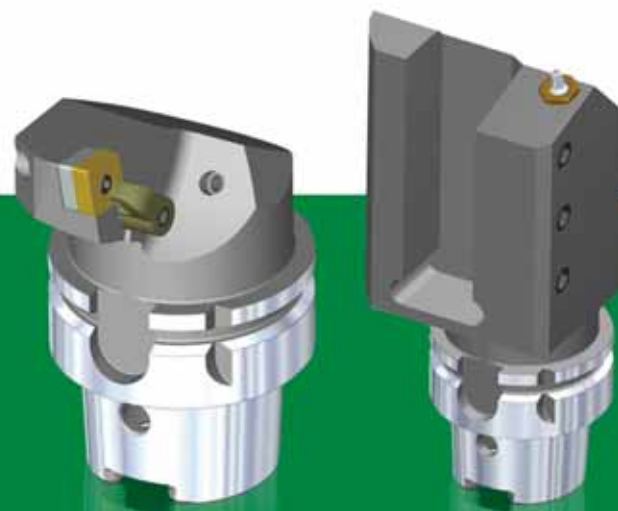
order number	catalog number	D2	L1	kg
1256059	HSK50ABB063200M	63,8	200	4,49
1256060	HSK50ABB100125M	100,8	125	5,69

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

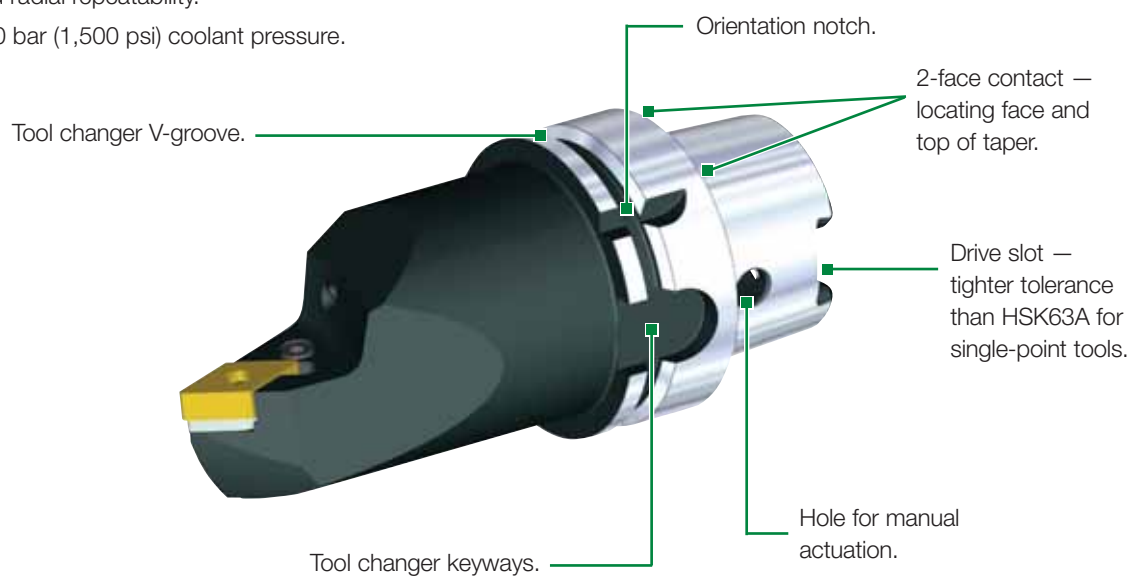
Erickson™ HSK Shank Tooling System • **HSK63T Series**

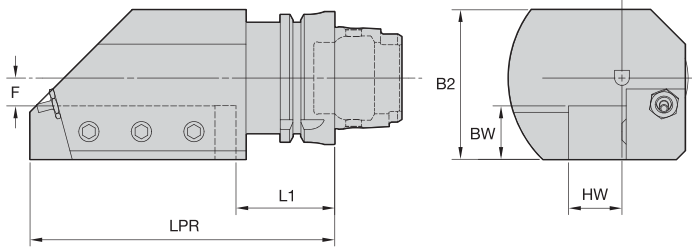
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form T versions are generally used in static and multitasking operations. The HSK63T has qualified drive slot widths for single-point cutting.

HSK63T



- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability.
- Maximum 100 bar (1,500 psi) coolant pressure.





HSK63T Adapters

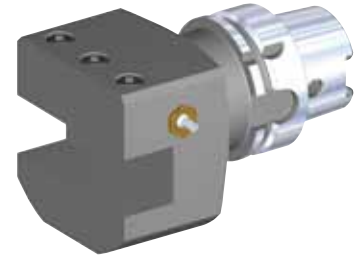
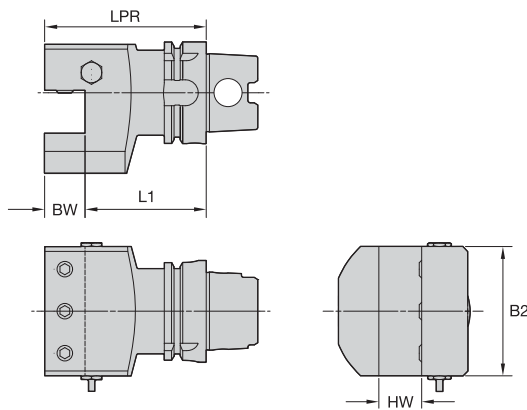
ERICKSON

■ STAR/L • Metric



order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	kg
	right hand									
3377242	HSK63TSTAR2525M	70	25	13	25	49	145	MS1430	PMT04526 COOLANT NOZZLE SPRAY	3,97
	left hand									
3377313	HSK63TSTAL2525M	70	25	13	25	49	145	MS1430	PMT04526 COOLANT NOZZLE SPRAY	3,96

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



ERICKSON

■ ETAR/L-ETA • Metric



order number	catalog number	B2	BW	HW	L1	LPR	cup point socket set screw	nozzle	plug	kg
3897805	HSK63TETAN2525M	80	25	25	75	100	MS1430	PMT04526 COOLANT NOZZLE SPRAY	PMP08350	3,14

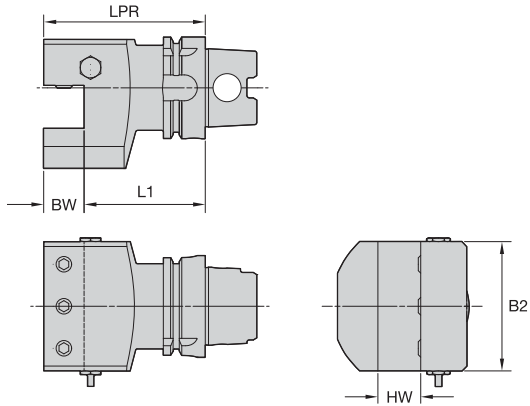
NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63T Adapters

ETA End Mount Square Shank Adapters • HSK-T Cutting Units M-Clamping



HSK63T Adapters



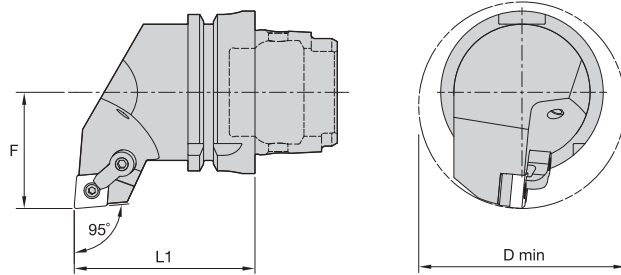
ERICKSON™

■ ETAR/L-ETA • Inch



order number	catalog number	B2	BW	HW	L1	LPR	cup point socket set screw	nozzle	plug	kg
3897806	HSK63TETAN16	3.150	1.000	1.000	2.963	3.963	MS1430	PMT04526 COOLANT NOZZLE SPRAY	PMP08350	3,20

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



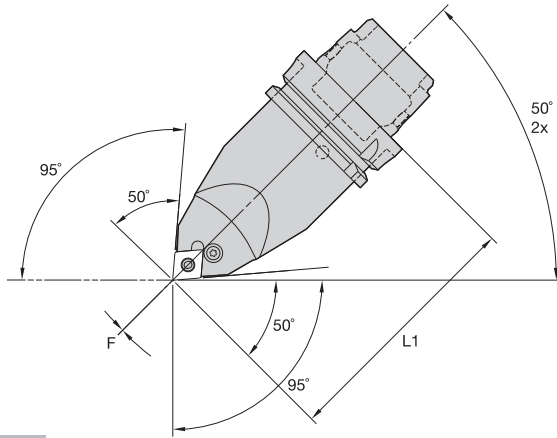
ERICKSON™

■ MCLN 95°



order number	catalog number	D min	F	L1	gage insert	shim	lock pin	clamp	clamp screw	kg
3897467	right hand HSK63TMCLNR12070	80	45	70	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,20
3897468	left hand HSK63TMCLNL12070	80	45	70	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,20

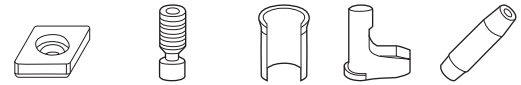
NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK63T Cutting Units

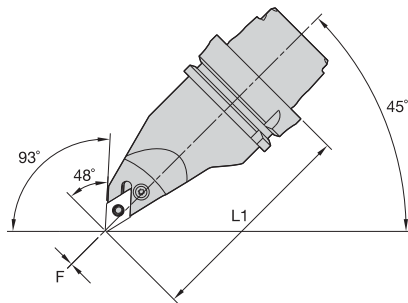
ERICKSON

■ PCMN 50° • 95° Application • Centerline



order number	catalog number	F	L1	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg
3575690	HSK63TPCMN12115	0	115	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,64

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



Left-Hand Tool

ERICKSON

■ PDMN 48° • 93° Application • Centerline



order number	catalog number	F	L1	gage insert	shim	lever lock screw	shim pin	wrench	toggle lever	punch	kg
3897470	right hand HSK63TPDMNR15115	0	115	DN..150608/DN..442	512.153	514.128	513.023	—	511.024	515.018	1,46
3575691	left hand HSK63TPDMNL15115	0	115	DN..150608/DN..442	512.153	514.128	513.023	K15IP	511.024	515.018	1,62

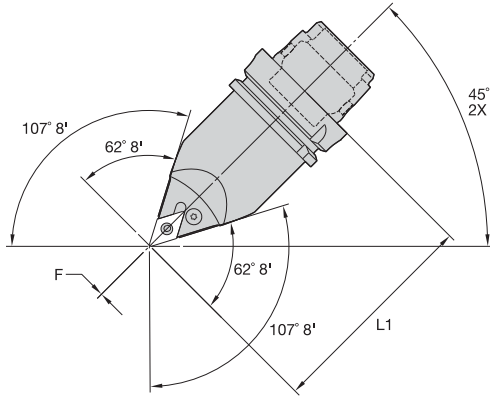
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63T Cutting Units

P-Clamping Systems

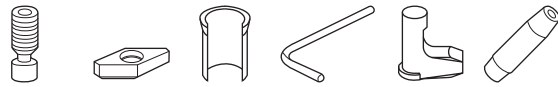


HSK63T Cutting Units



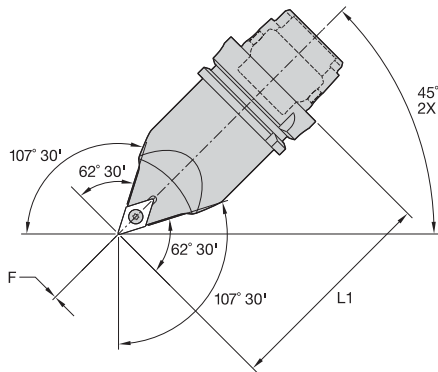
ERICKSON

■ PDNN 45° • Centerline



order number	catalog number	F	L1	gage insert	lever lock screw	shim	shim pin	wrench	toggle lever	punch	kg
3897469	HSK63TPDNNN15115	0	115	DN..150608/DN..442	514.128	512.153	513.023	K15IP	511.024	515.018	1,61

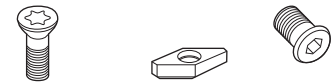
NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK63T Cutting Units

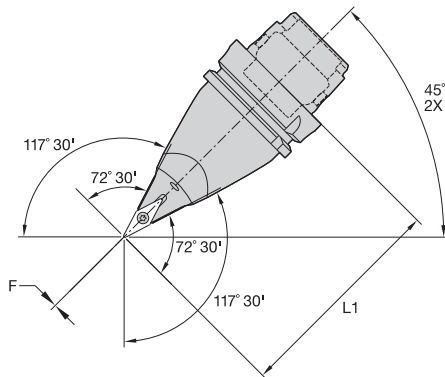
ERICKSON

■ SDNC 45° • Centerline



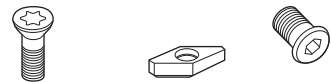
order number	catalog number	F	L1	gage insert	insert screw	shim	shim screw	kg
3897553	HSK63TSDNCN11115	0	115	DC..11T308DC..3252	MS1156	SKDP343	SRS3	1,59
3897554	HSK63TSDNCN15115	0	115	DC..150408/DC..432	MS1158	SKDP453	SRS4	1,59

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately, see page J32.



ERICKSON

■ SVVB 45° • Centerline

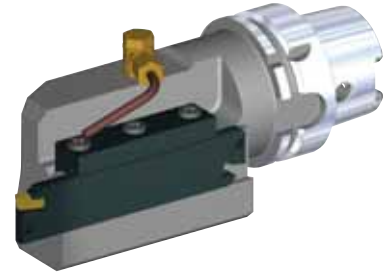
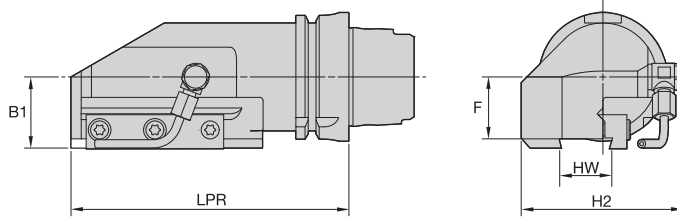


order number	catalog number	F	L1	gage insert	insert screw	shim	shim screw	kg
3897472	HSK63TSVVBN11115	0	115	VB..110304/VB..221	MS1153	—	—	1,41
3897471	HSK63TSVVBN16115	0	115	VB..160408/VB..332	MS1156	SKVN343	SRS3	1,41

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63T Cutting Units

ProGroove™ Grooving and Cut-Off



HSK63T Cutting Units

ERICKSON™

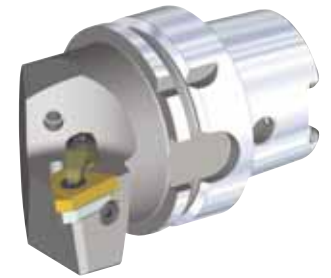
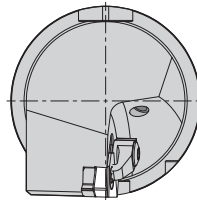
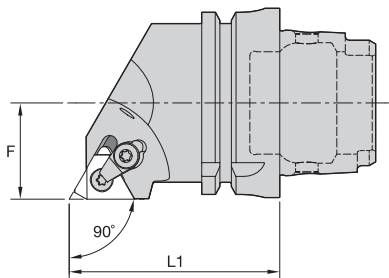
■ BS Side Mount

order number	catalog number	B1	F	H2	HW	LPR	cartridge size	cartridge 1	kg
	right hand								
3897571	HSK63TBSR4	35	30	79	26	136	26	A2BNSN26...	2,74
3897573	HSK63TBSR5	45	39	84	32	157	32	A2BNSN32...	3,86
	left hand								
3897572	HSK63TBSL4	35	30	79	26	136	26	A2BNSN26...	2,74
3897574	HSK63TBSL5	45	39	84	32	157	32	A2BNSN32...	3,86

■ Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
HSK63TBSR4	CGS4	MS1595	12649910900	12649910800
HSK63TBSR5	CGS5	MS1595	12649910900	12649910800
left hand				
HSK63TBSL4	CGS4	MS1595	12649910900	12649910800
HSK63TBSL5	CGS5	MS1595	12649910900	12649910800

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 For blades, see the WIDIA Turning (A-09-02078) catalog.



HSK63T Cutting Units

ERICKSON

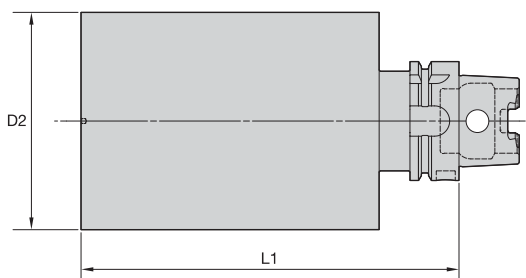
■ LSS 90°



order number	catalog number	F	L1	gage insert	insert screw	shim screw	shim	clamp assembly	kg
right hand									
3897556	HSK63TLSSR16	32	70	LT16ER	SSA3T	SSY3T	SMYE3	CKC3	1,12
3897558	HSK63TLSSR22	32	70	LT22ER	SSA4T	SSY4T	SMYE4	CKC4	1,11
left hand									
3897557	HSK63TLSSL16	32	70	LT16EL	SSA3T	SSY3T	SMYI3	CKC3	1,12
3897559	HSK63TLSSL22	32	70	LT22EL	SSA4T	SSY4T	SMYI4	CKC4	1,11

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Machinable front 32–38 RW C.



ERICKSON

■ BN

order number	catalog number	D2		L1		kg
		mm	in	mm	in	
3897546	HSK63TBN115200M	115,00	4.528	200,00	7.874	13,74

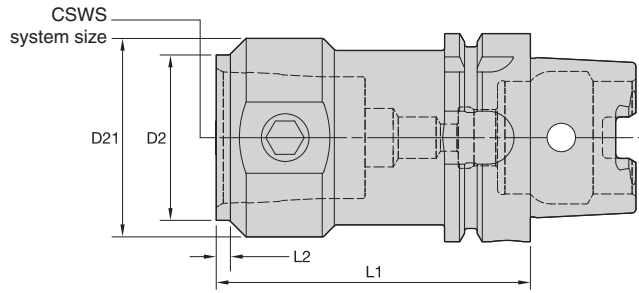
NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63T Adapters

HSK63T to KM™ Clamping Units • Boring Bar Adapters



HSK63T Adapters



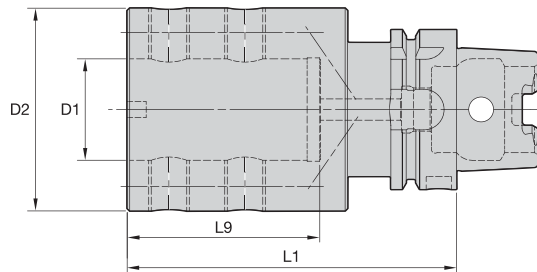
ERICKSON™

■ HSK63T to KM



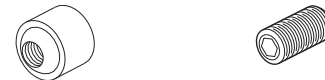
order number	catalog number	CSWS system size	D2	D21	L1	L2	Nm	KM spare parts package	kg
3387620	HSK63TKM40070M	KM40	40	48	70	4,000	12-16	KM40PKG3L	1,13
3895298	HSK63TKM50095M	KM50	50	60	95	4,000	27-37	KM50PKG3L	1,74
3892899	HSK63TKM63105M	KM63	63	76	105	4,000	47-54	KM63PKG3L	2,54

NOTE: Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



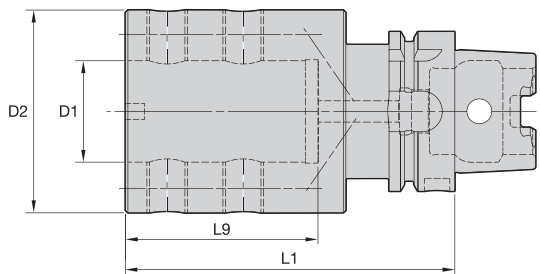
ERICKSON™

■ BA Boring Bar Adapter • Internal and External Coolant • Metric



order number	catalog number	D1	D2	L1	L9	nozzle	Nm	clamp screw	kg
3892897	HSK63TBA40130M	40	80	130	76	PWZ1012	125	MS1947	3,52

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 For bushings, see page A286.



HSK63T Adapters

ERICKSON

■ BA Boring Bar Adapter • Internal and External Coolant • Inch



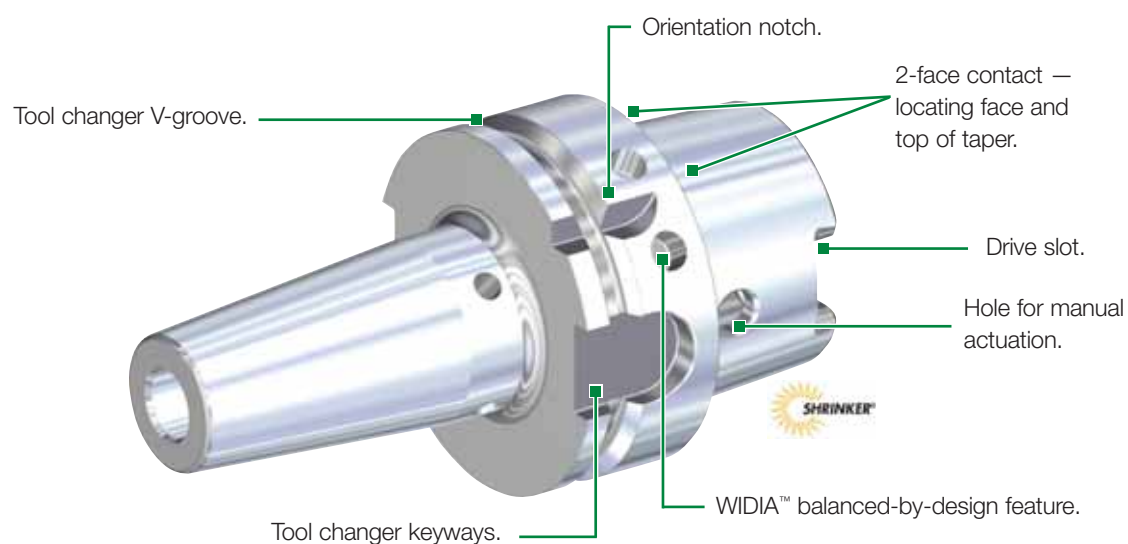
order number	catalog number	D1	D2	L1	L9	nozzle	ft. lbs.	clamp screw	kg
3892898	HSK63TBA150512	1.500	3.150	5.118	2.992	PWZ1012	90	MS1947	3,58

*NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 For bushings, see page A286.*

Erickson™ HSK Shank Tooling System • **HSK63A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK63A



The HSK63A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.



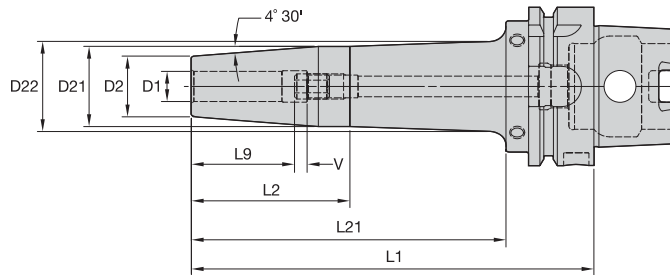
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 20,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK63A Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON™

■ TT GP HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3866567	HSK63AHPVTT03080M	3	9	15	—	80	45	—	14	10,0	TTSS05014M	2,5mm	0,81
3866576	HSK63AHPVTT04080M	4	9	15	—	80	45	—	15	10,0	TTSS05014M	2,5mm	0,81
3866577	HSK63AHPVTT05080M	5	9	15	—	80	45	—	15	10,0	TTSS06014M	3mm	0,81
3866568	HSK63AHPVTT06080M	6	21	27	—	80	54	—	26	10,0	TTSS05014M	2,5mm	0,83
3866569	HSK63AHPVTT06120M	6	21	27	—	120	85	—	26	10,0	TTSS05014M	2,5mm	1,09
3866570	HSK63AHPVTT06160M	6	21	27	32	160	50	125	26	10,0	TTSS05014M	2,5mm	1,33
3866571	HSK63AHPVTT08080M	8	21	27	—	80	54	—	26	10,0	TTSS06014M	3mm	0,82
3866572	HSK63AHPVTT08120M	8	21	27	—	120	85	—	26	10,0	TTSS06014M	3mm	1,09
3866573	HSK63AHPVTT08160M	8	21	27	32	160	50	125	26	10,0	TTSS06014M	3mm	1,32
3866574	HSK63AHPVTT10085M	10	24	32	—	85	59	—	31	10,0	TTSS08014M	4mm	0,90
3866575	HSK63AHPVTT10120M	10	24	32	—	120	85	—	31	10,0	TTSS08014M	4mm	1,19
3866581	HSK63AHPVTT10160M	10	24	32	36	160	63	125	31	10,0	TTSS08014M	4mm	1,48
3866582	HSK63AHPVTT12090M	12	24	32	—	90	64	—	36	10,0	TTSS10014M	5mm	0,91
3866683	HSK63AHPVTT12120M	12	24	32	—	120	85	—	36	10,0	TTSS10014M	5mm	1,18
3866684	HSK63AHPVTT12160M	12	24	32	36	160	63	125	36	10,0	TTSS10014M	5mm	1,47
3866685	HSK63AHPVTT14090M	14	27	34	—	90	64	—	36	10,0	TTSS10014M	5mm	0,96
3866686	HSK63AHPVTT14120M	14	27	34	—	120	85	—	36	10,0	TTSS10014M	5mm	1,25
3866687	HSK63AHPVTT14160M	14	27	34	39	160	57	125	36	10,0	TTSS10014M	5mm	1,58
3866688	HSK63AHPVTT16095M	16	27	34	—	95	69	—	39	10,0	TTSS12014M	6mm	0,97
3866689	HSK63AHPVTT16120M	16	27	34	—	120	85	—	39	10,0	TTSS12014M	6mm	1,22
3866690	HSK63AHPVTT16160M	16	27	34	39	160	57	125	39	10,0	TTSS12014M	6mm	1,56
3866691	HSK63AHPVTT18095M	18	33	42	—	95	69	—	39	10,0	TTSS12014M	6mm	1,14
3866692	HSK63AHPVTT18120M	18	33	42	—	120	85	—	39	10,0	TTSS12014M	6mm	1,45
3866693	HSK63AHPVTT18160M	18	33	42	46	160	69	125	39	10,0	TTSS12014M	6mm	1,92
3866694	HSK63AHPVTT20100M	20	33	42	—	100	74	—	41	10,0	TTSS16014M	8mm	1,16
3866695	HSK63AHPVTT20120M	20	33	42	—	120	85	—	41	10,0	TTSS16014M	8mm	1,42
3866696	HSK63AHPVTT20160M	20	33	42	46	160	69	125	41	10,0	TTSS16014M	8mm	1,89
3866697	HSK63AHPVTT25115M	25	44	53	—	115	89	—	47	10,0	TTSS16014M	8mm	1,74
3866698	HSK63AHPVTT25160M	25	44	53	—	160	134	—	47	10,0	TTSS16014M	8mm	2,49
3866699	HSK63AHPVTT32120M	32	44	53	—	120	94	—	51	10,0	TTSS16014M	8mm	1,66
3866700	HSK63AHPVTT32160M	32	44	53	—	160	134	—	51	10,0	TTSS16014M	8mm	2,32

(continued)



(TT GP HPV continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, & 5/8	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ **TT GP HPV IN-HSK Form A**



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3864077	HSK63AHPVTT025315	1/4	.83	1.06	—	3.15	2.13	—	1.02	.39	TTSS05014M	2,5mm	1.82
3864078	HSK63AHPVTT025472	1/4	.83	1.06	—	4.72	3.35	—	1.02	.39	TTSS05014M	2,5mm	2.41
3864079	HSK63AHPVTT025630	1/4	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	TTSS05014M	2,5mm	2.92
3864080	HSK63AHPVTT031315	5/16	.83	1.06	—	3.15	2.13	—	1.02	.39	TTSS06014M	3mm	1.81
3864081	HSK63AHPVTT031472	5/16	.83	1.06	—	4.72	3.35	—	1.02	.39	TTSS06014M	3mm	2.40
3864082	HSK63AHPVTT031630	5/16	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	TTSS06014M	3mm	2.91
3864083	HSK63AHPVTT038335	3/8	.94	1.24	—	3.35	2.32	—	1.22	.39	TTSS08014M	4mm	1.98
3864084	HSK63AHPVTT038472	3/8	.94	1.26	—	4.72	3.35	—	1.22	.39	TTSS08014M	4mm	2.64
3864085	HSK63AHPVTT038630	3/8	.94	1.26	1.43	6.30	2.48	4.92	1.22	.39	TTSS08014M	4mm	3.28
3864086	HSK63AHPVTT044354	7/16	.94	1.26	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	2.02
3864087	HSK63AHPVTT044472	7/16	.94	1.26	—	4.72	3.35	—	1.42	.39	TTSS10014M	5mm	2.61
3864088	HSK63AHPVTT050354	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	2.00
3864089	HSK63AHPVTT050472	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	TTSS10014M	5mm	2.59
3864090	HSK63AHPVTT050630	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	TTSS10014M	5mm	3.23
3864091	HSK63AHPVTT056354	9/16	1.06	1.33	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	2.11
3864092	HSK63AHPVTT062374	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	TTSS12014M	6mm	2.14
3864093	HSK63AHPVTT062472	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	TTSS12014M	6mm	2.70
3864094	HSK63AHPVTT062630	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	TTSS12014M	6mm	3.44
3864095	HSK63AHPVTT075394	3/4	1.30	1.65	—	3.94	2.92	—	1.61	.39	TTSS16014M	8mm	2.59
3864096	HSK63AHPVTT075630	3/4	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	TTSS16014M	8mm	4.19
3864097	HSK63AHPVTT088394	7/8	1.30	1.65	—	3.94	2.92	—	1.61	.39	TTSS16014M	8mm	2.50
3864098	HSK63AHPVTT088630	7/8	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	TTSS16014M	8mm	4.10
3864099	HSK63AHPVTT100453	1	1.73	2.07	—	4.53	3.51	—	1.85	.39	TTSS16014M	8mm	3.82
3864100	HSK63AHPVTT100630	1	1.73	2.07	—	6.30	5.28	—	1.85	.39	TTSS16014M	8mm	5.46
3864101	HSK63AHPVTT125472	1 1/4	1.73	2.07	—	4.72	3.70	—	2.01	.39	TTSS16014M	8mm	3.67
3864102	HSK63AHPVTT125630	1 1/4	1.73	2.07	—	6.30	5.28	—	2.01	.39	TTSS16014M	8mm	5.13

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

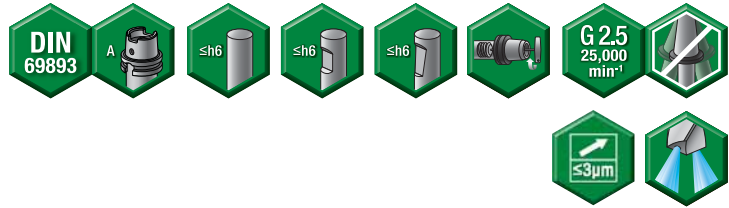
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

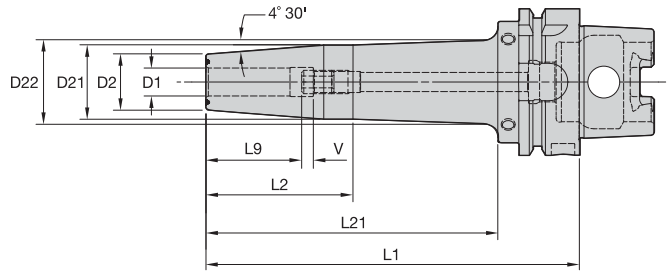
Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



HSK63A Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3867178	HSK63AHPVTTH12090M	12	24	32	—	90	64	—	36	10,00	TTSS10014M	5mm	0,91
3867179	HSK63AHPVTTH12120M	12	24	32	—	120	85	—	36	10,00	TTSS10014M	5mm	1,18
3867180	HSK63AHPVTTH12160M	12	24	32	36	160	63	125	36	10,00	TTSS10014M	5mm	1,47
3867181	HSK63AHPVTTH14090M	14	27	34	—	90	64	—	36	10,00	TTSS10014M	5mm	0,96
3867182	HSK63AHPVTTH14120M	14	27	34	—	120	85	—	36	10,00	TTSS10014M	5mm	1,25
3867193	HSK63AHPVTTH14160M	14	27	34	36	160	57	125	36	10,00	TTSS10014M	5mm	1,58
3867194	HSK63AHPVTTH16095M	16	27	34	—	95	69	—	39	10,00	TTSS12014M	6mm	0,97
3867195	HSK63AHPVTTH16120M	16	27	34	—	120	85	—	39	10,00	TTSS12014M	6mm	1,22
3867196	HSK63AHPVTTH16160M	16	27	34	39	160	57	125	39	10,00	TTSS12014M	6mm	1,56
3867197	HSK63AHPVTTH18095M	18	33	42	—	95	69	—	39	10,00	TTSS12014M	6mm	1,14
3867198	HSK63AHPVTTH18120M	18	33	42	—	120	85	—	39	10,00	TTSS12014M	6mm	1,45
3867199	HSK63AHPVTTH18160M	18	33	42	46	160	69	125	39	10,00	TTSS12014M	6mm	1,92
3867200	HSK63AHPVTTH20100M	20	33	42	—	100	74	—	41	10,00	TTSS16014M	8mm	1,16
3867201	HSK63AHPVTTH20120M	20	33	42	—	120	85	—	41	10,00	TTSS16014M	8mm	1,42
3867202	HSK63AHPVTTH20160M	20	33	42	46	160	69	125	41	10,00	TTSS16014M	8mm	1,89
3867206	HSK63AHPVTTH25115M	25	44	53	—	115	89	—	47	10,00	TTSS16014M	8mm	1,74
3867207	HSK63AHPVTTH25160M	25	44	53	—	160	134	—	47	10,00	TTSS16014M	8mm	2,49
3867208	HSK63AHPVTTH32120M	32	44	53	—	120	94	—	51	10,00	TTSS16014M	8mm	1,66
3867209	HSK63AHPVTTH32160M	32	44	53	—	160	134	—	51	10,00	TTSS16014M	8mm	2,32

(continued)

(TT HT HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, & 5/8	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ TT HT HPV IN-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3872700	HSK63AHPVTTH050354	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	2.00
3872701	HSK63AHPVTTH050472	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	TTSS10014M	5mm	2.59
3872702	HSK63AHPVTTH050630	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	TTSS10014M	5mm	3.23
3872703	HSK63AHPVTTH056354	9/16	1.06	1.33	—	3.54	2.52	—	1.42	.39	TTSS10014M	5mm	2.11
3872704	HSK63AHPVTTH062374	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	TTSS12014M	6mm	2.14
3872705	HSK63AHPVTTH062472	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	TTSS12014M	6mm	2.70
3872706	HSK63AHPVTTH062630	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	TTSS12014M	6mm	3.44
3872707	HSK63AHPVTTH075394	3/4	1.30	1.65	—	3.94	2.92	—	1.61	.39	TTSS16014M	8mm	2.59
3872708	HSK63AHPVTTH075630	3/4	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	TTSS16014M	8mm	4.19
3872709	HSK63AHPVTTH088394	7/8	1.30	1.65	—	3.94	2.92	—	1.61	.39	TTSS16014M	8mm	2.50
3872710	HSK63AHPVTTH088630	7/8	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	TTSS16014M	8mm	4.10
3872711	HSK63AHPVTTH100453	1	1.73	2.07	—	4.53	3.51	—	1.85	.39	TTSS16014M	8mm	3.82
3872712	HSK63AHPVTTH100630	1	1.73	2.07	—	6.30	5.28	—	1.85	.39	TTSS16014M	8mm	5.46
3872713	HSK63AHPVTTH125472	1 1/4	1.73	2.07	—	4.72	3.70	—	2.01	.39	TTSS16014M	8mm	3.67
3872714	HSK63AHPVTTH125630	1 1/4	1.73	2.07	—	6.30	5.28	—	2.01	.39	TTSS16014M	8mm	5.13

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

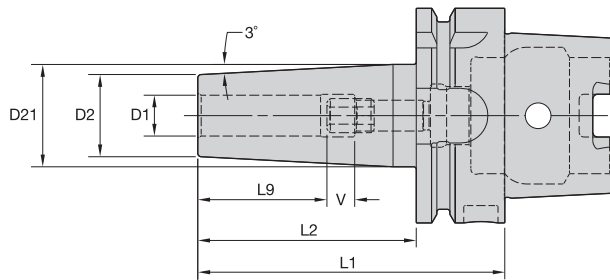
HSK coolant unit and wrench are available and must be ordered separately, see page J32.

HSK63A Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Suitable for carbide and HSS cutting tools (requirements below).
- Die and mold.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12 & 16	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013

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TT MD MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw
1926291	HSK63ATTMD05080M	5	10	14,4	80	54	14	10	TTSS06014M	3mm
1926292	HSK63ATTMD06080M	6	12	16,4	80	54	26	10	TTSS05014M	2,5mm
1926293	HSK63ATTMD08080M	8	16	20,4	80	54	26	10	TTSS06014M	3mm
1926294	HSK63ATTMD10085M	10	20	24,9	85	59	31	10	TTSS08014M	4mm
1926295	HSK63ATTMD12090M	12	24	29,9	90	64	36	10	TTSS10014M	5mm
1926296	HSK63ATTMD16095M	16	28	33,9	95	69	39	10	TTSS12014M	6mm
1926297	HSK63ATTMD20100M	20	34	40,9	100	74	41	10	TTSS16014M	8mm
1926298	HSK63ATTMD25115M	25	39	46,9	115	89	47	10	TTSS16014M	8mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Shrink Fit accessories, see page J2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

WIN WITH WIDIA™



WIDIA™ VariDrill™

WIDIA is pleased to announce the new VariDrill for a wide range of materials

The most extensive solid carbide drill line on the market today.

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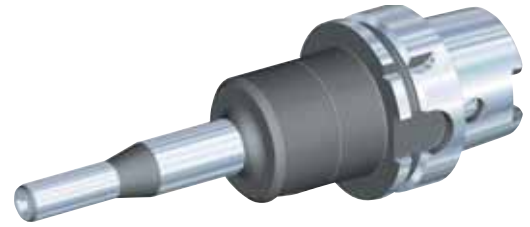
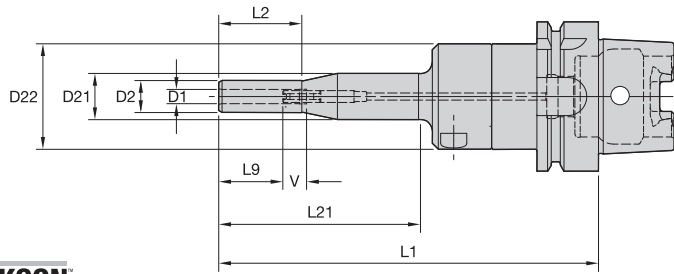
WIDIA 

HSK63A Shank Tools

Hydraulic Chucks Slim Line



HSK63A Shank Tools



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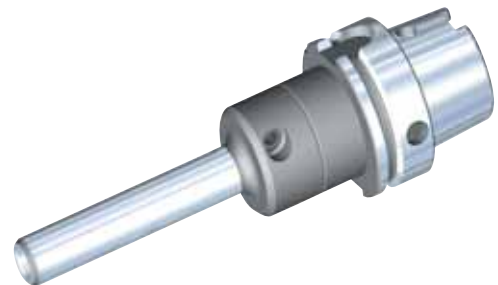
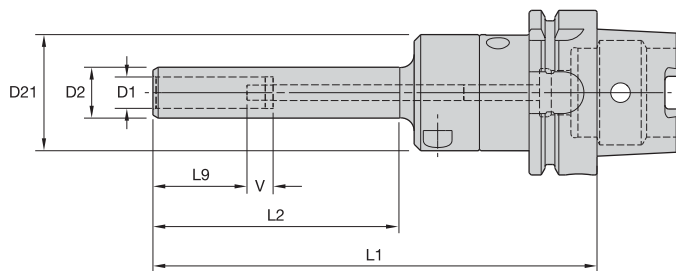
■ HC Slim-T MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
2639015	HSK63AHCSLT06160M	6	13,5	19,5	44	160	35	27	85	10	1,29
2868501	HSK63AHCSLT08160M	8	15,5	19,5	44	160	35	27	85	10	1,30
2638477	HSK63AHCSLT10160M	10	17,5	44,5	—	160	85	31	—	10	1,29

■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSLT06160M	170.135	5mm	170.002	2,5mm
HSK63AHCSLT08160M	170.135	5mm	170.002	2,5mm
HSK63AHCSLT10160M	170.135	5mm	170.003	3mm



■ HC Slim MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2458200	HSK63AHCSL12170M	12	19,5	44,5	170	95	36	10	1,33
2541833	HSK63AHCSL14170M	14	21,5	52,5	170	95	36	10	1,57
2458202	HSK63AHCSL16170M	16	23,5	52,5	170	95	39	10	1,59
2541834	HSK63AHCSL18170M	18	25,5	52,5	170	95	39	10	1,63
2458203	HSK63AHCSL20170M	20	27,5	52,5	170	95	41	10	1,67

(continued)

(HC Slim continued)

■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSL12170M	170.135	5mm	170.002	2,5mm
HSK63AHCSL14170M	170.135	5mm	170.002	2,5mm
HSK63AHCSL16170M	170.135	5mm	170.002	2,5mm
HSK63AHCSL18170M	170.135	5mm	170.002	2,5mm
HSK63AHCSL20170M	170.135	5mm	170.002	2,5mm

■ HC Slim IN-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508159	HSK63AHCSL050669	1/2	.81	2.07	6.69	3.74	1.42	.39	3.42
2508160	HSK63AHCSL075669	3/4	1.06	2.07	6.69	3.74	1.61	.39	3.68

■ Spare Parts

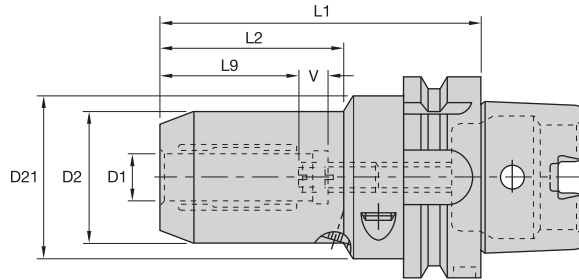


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSL050669	170.135	5mm	170.002	2,5mm
HSK63AHCSL075669	170.135	5mm	170.002	2,5mm

NOTE: Do not overtighten actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrenches must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 Unable to use SEFAS™ chamfering rings on these adapters.

HSK63A Shank Tools

Hydraulic Chucks Standard HP Line



HSK63A Shank Tools

ERICKSON

■ HC MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245440	HSK63AHC06080M	6	25,7	50	80	33	27	10	170.135	5mm	170.002	2,5mm	1,00
1245441	HSK63AHC08080M	8	27,7	50	80	34	27	10	170.135	5mm	170.002	2,5mm	1,10
1245477	HSK63AHC10085M	10	29,7	50	85	39	31	10	170.135	5mm	170.002	2,5mm	1,10
1245478	HSK63AHC12090M	12	31,6	50	90	45	36	10	170.135	5mm	170.002	2,5mm	2,00
1245479	HSK63AHC14090M	14	33,6	50	90	46	36	10	170.135	5mm	170.003	3mm	2,00
1245480	HSK63AHC16095M	16	37,6	50	95	52	39	10	170.135	5mm	170.003	3mm	2,00
1245481	HSK63AHC18095M	18	39,6	50	95	52	39	10	170.135	5mm	170.003	3mm	2,10
1191019	HSK63AHC20100M	20	41,6	50	100	58	41	10	170.135	5mm	170.003	3mm	2,10
1245482	HSK63AHC25120M	25	49,8	63	120	51	47	10	170.136	6mm	170.004	4mm	2,30
1192226	HSK63AHC32125M	32	59,8	63	125	59	51	10	170.136	6mm	170.004	4mm	2,26

■ HC In-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
1246521	HSK63AHC025325	1/4	1.01	1.97	3.25	1.30	1.06	-	170.135	5mm	170.002	2,5mm	2.20
1246525	HSK63AHC038338	3/8	1.17	1.97	3.38	1.54	1.22	-	170.135	5mm	170.002	2,5mm	2.40
1246528	HSK63AHC050350	1/2	1.24	1.97	3.50	1.75	1.42	-	170.135	5mm	170.002	2,5mm	4.40
1246532	HSK63AHC062375	5/8	1.48	1.97	3.75	2.03	1.54	-	170.135	5mm	170.003	3mm	4.40
1246534	HSK63AHC075400	3/4	1.64	1.97	4.00	2.28	1.61	-	170.135	5mm	170.003	3mm	4.60
1246536	HSK63AHC100475	1	1.97	2.48	4.75	2.01	1.81	-	170.136	6mm	170.004	4mm	5.10
1246540	HSK63AHC125500	1 1/4	2.35	2.48	5.00	2.32	1.97	-	170.136	6mm	170.004	4mm	5.30

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

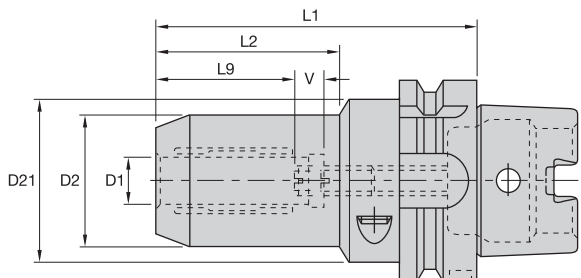
Hydraulic chuck technical section, see page K60.

Wrenches must be ordered separately.

Supplied with stop screw.

Reduction sleeves are available and must be ordered separately; see page I2.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK63A Shank Tools

ERICKSON

■ HC Trend MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1724543	HSK63AHCT06080M	6	25,7	50	80	33	27	10	170.135	5mm	3mm	1,01
1724615	HSK63AHCT06150M	6	25,7	50	150	105	27	10	170.135	5mm	3mm	1,27
1724544	HSK63AHCT08080M	8	27,7	50	80	34	27	10	170.135	5mm	3mm	1,03
1724657	HSK63AHCT08150M	8	27,7	50	150	105	27	10	170.135	5mm	3mm	1,33
1724545	HSK63AHCT10085M	10	29,7	50	85	39	31	10	170.135	5mm	3mm	1,07
1724658	HSK63AHCT10150M	10	29,7	50	150	105	31	10	170.135	5mm	3mm	1,40
1724546	HSK63AHCT12090M	12	31,6	50	90	45	36	10	170.135	5mm	3mm	1,10
1724660	HSK63AHCT12150M	12	31,6	50	150	105	36	10	170.135	5mm	3mm	1,46
1724547	HSK63AHCT14090M	14	33,6	50	90	46	36	10	170.135	5mm	5mm	1,12
1724761	HSK63AHCT14150M	14	33,6	50	150	105	36	10	170.135	5mm	5mm	1,51
1724548	HSK63AHCT16095M	16	37,6	50	95	52	39	10	170.135	5mm	5mm	1,22
1724763	HSK63AHCT16150M	16	37,6	50	150	105	39	10	170.135	5mm	5mm	1,68
1724550	HSK63AHCT18095M	18	39,6	50	95	52	39	10	170.135	5mm	5mm	1,25
1724764	HSK63AHCT18150M	18	39,6	50	150	105	39	10	170.135	5mm	5mm	1,76
1724611	HSK63AHCT20100M	20	41,6	50	100	58	41	10	170.135	5mm	5mm	1,32
1724765	HSK63AHCT20150M	20	41,6	50	150	105	41	10	170.135	5mm	5mm	1,84
1724612	HSK63AHCT25120M	25	49,8	63	120	51	47	10	170.136	6mm	5mm	2,00
1724613	HSK63AHCT32125M	32	59,8	63	125	59	51	10	170.136	6mm	5mm	2,59

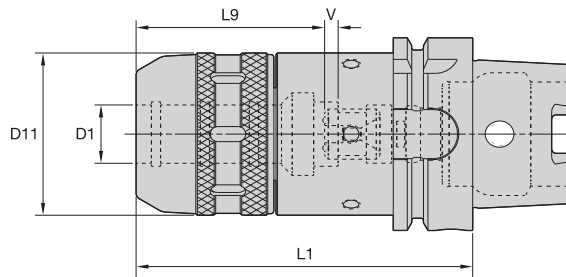
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Wrenches must be ordered separately.
 Supplied with stop screw.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

HPMC High-Performance Milling Chucks



- Balancable — fine tune with set screws.
- Heavy and fine capabilities.



HSK63A Shank Tools

ERICKSON

■ HPMC MM-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3100547	HSK63AHPMC20110M	20	53	110	56	10	PSW52M	MCSS16018M	2,5mm & 5mm	1,77
3100548	HSK63AHPMC32120M	32	70	120	66	10	PSW68M	MCSS16018M	2,5mm & 5mm	2,61

■ HPMC IN-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100544	HSK63AHPMC075433	3/4	2.09	4.33	2.20	.39	PSW52M	MCSS16018M	2,5mm & 5mm	3.90
3100545	HSK63AHPMC100472	1	2.40	4.72	2.60	.39	PSW58M	MCSS16018M	2,5mm & 5mm	5.30
3100546	HSK63AHPMC125472	1 1/4	2.76	4.72	2.56	.39	PSW68M	MCSS16018M	2,5mm & 5mm	5.70

NOTE: Milling chuck technical section, see page K64.

Supplied with locknut and stop screw.

Locknut wrench not included.

Optional M6-1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.

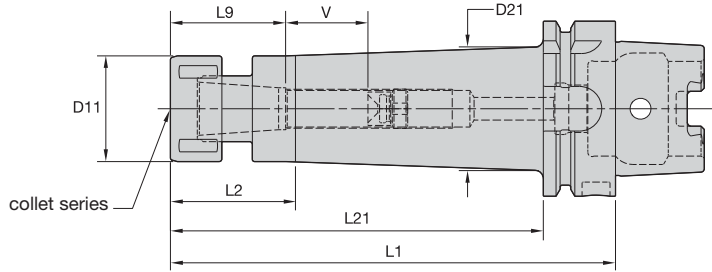
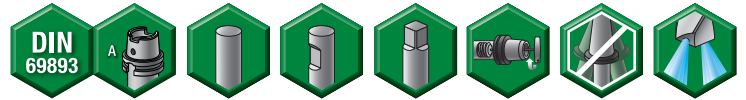
Reduction sleeves are available and must be ordered separately; see page I6.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

Heavy milling with locknut tightened to face stop.

Fine milling with locknut tightened to face stop then back off one half turn.

- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

HSK63A Shank Tools

ERICKSON

■ TG Round-HSK Form A



order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	Nm	stop screw	wrench size	stop screw	stop screw cone cap	kg
1119347	HSK63ATG050100M	TG50	38	—	100	74	—	42	12	LNA050M	HSW34M	68	SS056041G	4mm & 5/32		S SCC056	1,14
1086567	HSK63ATG050160M	TG50	38	44,5	160	41	134	42	58	LNA050M	HSW34M	68	SS056041G	4mm & 5/32		S SCC056	1,75
1086568	HSK63ATG075115M	TG75	50	—	115	89	—	54	13	LNA075M	HSW45M	136	SS081041G	4mm & 5/32		S SCC081	1,65
1086559	HSK63ATG100135M	TG100	60	—	135	109	—	70	12	LNA100M	HSW58M	203	SS112041G	4mm & 5/32		S SCC112	2,05

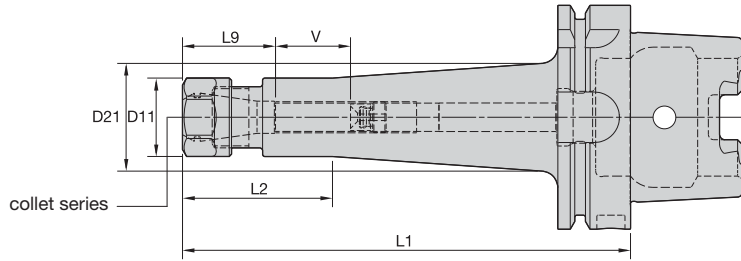
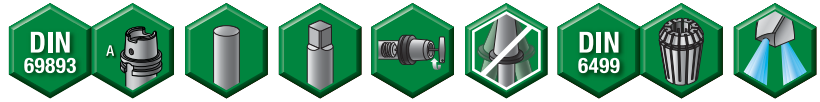
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK63A Shank Tools

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

■ ER Hex-HSK Form A

order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1086425	HSK63AER16100M	ER16	28	—	100	74	32	24	0,90
1086426	HSK63AER16160M	ER16	28	45	160	85	32	48	1,32
1086427	HSK63AER20100M	ER20	34	—	100	68	36	17	1,03

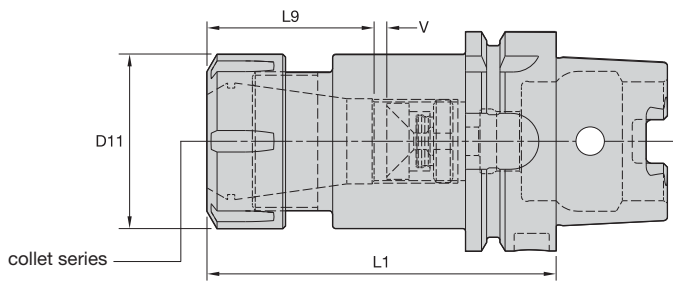
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK63AER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	SSCC044
HSK63AER16160M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	SSCC044
HSK63AER20100M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32	SSCC056

(continued)

(ER continued)



HSK63A Shank Tools

■ ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1086855	HSK63AER25100M	ER25	42	100	40	12	1,18
1086566	HSK63AER32100M	ER32	50	100	45	4	1,37
1086856	HSK63AER40120M	ER40	63	120	54	15	1,80

■ Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK63AER25100M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32	S SCC075
HSK63AER32100M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32	S SCC094
HSK63AER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32	S SCC112

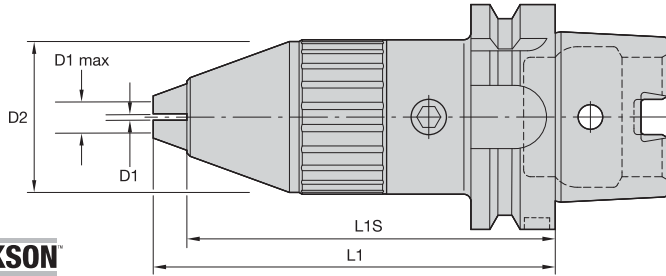
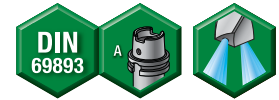
*NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.*

HSK63A Shank Tools

Drill Chucks • Whistle Notch™ Adapters



HSK63A Shank Tools

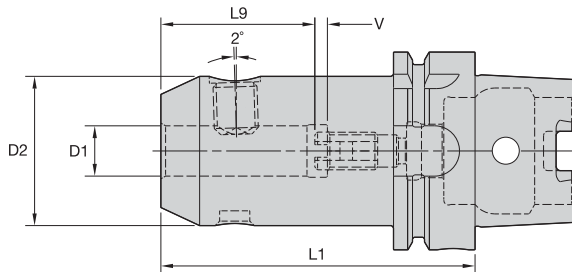


ERICKSON™

■ DC-HSK Form A

order number	catalog number	D1		D1 max		D2	L1	L1S
		mm	in	mm	in			
2636451	HSK63ADC13117M	0,5	.020	13,0	.512	50	126	117
2636452	HSK63ADC16117M	3,0	.118	16,0	.630	52	127	117

NOTE: Tighten to the recommended tightening torque.
 4mm locking wrench must be ordered separately; order number 170.304.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



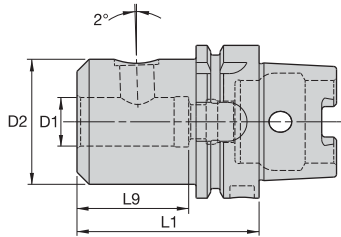
ERICKSON™

■ WN MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	Nm	stop screw	wrench size stop screw	kg
1126151	HSK63AWN08080M	8	28	80	30	10	SS03M014	4mm	15	571.067	3mm	0,86
1126161	HSK63AWN10080M	10	35	80	35	7	SS03M018	5mm	25	571.068	4mm	1,00
1126168	HSK63AWN12090M	12	42	90	40	7	SS03M023	6mm	35	571.074	5mm	1,23
1126178	HSK63AWN14090M	14	44	90	40	8	SS03M023	6mm	35	571.074	5mm	1,28
1126187	HSK63AWN16100M	16	48	100	43	10	SS03M025	6mm	50	571.069	6mm	1,53
1130396	HSK63AWN18100M	18	50	100	43	10	SS03M025	6mm	50	571.069	6mm	1,59
1126205	HSK63AWN20100M	20	52	100	45	8	SS03M026	8mm	95	571.076	6mm	1,65
1126220	HSK63AWN25110M	25	65	110	50	9	SS03M027	10mm	135	571.077	6mm	2,31
1126230	HSK63AWN32110M	32	72	110	54	9	SS03M029	10mm	160	571.077	6mm	2,55

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw and stop screw.
 Clamp screw or stop screw wrenches not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.





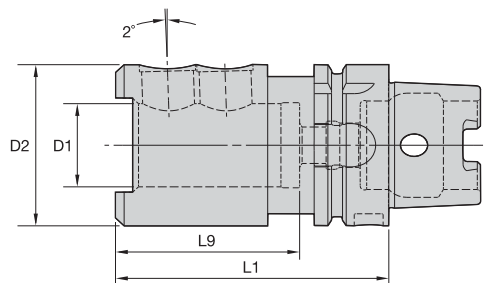
HSK63A Shank Tools

ERICKSON

■ SWN MM-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254119	HSK63ASWN20075M	20	50	75	48	SS03M026	8mm	95	3,00
1254120	HSK63ASWN25080M	25	55	80	48	SS03M023	6mm	35	2,90



■ SWN MM • With Drive • HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254121	HSK63ASWN32090M	32	62	90	66	SS03M023	6mm	35	1,67

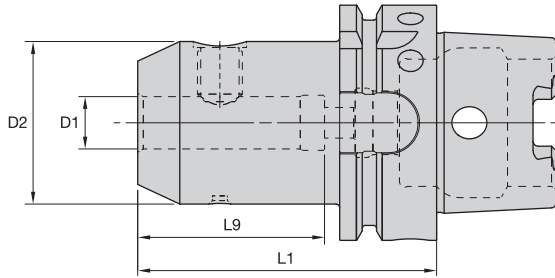
*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.*

HSK63A Shank Tools

End Mill Adapters



HSK63A Shank Tools

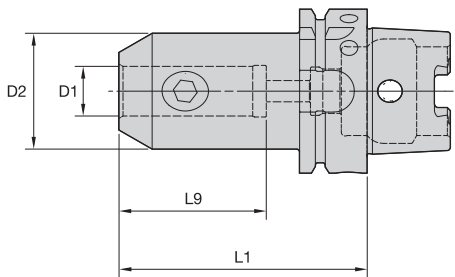


ERICKSON™

EM MM-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	kg
1125914	HSK63AEM06065M	6	25	65	43	SS03M012	3mm	7	0,76
1125924	HSK63AEM08065M	8	28	65	40	SS03M014	4mm	15	0,79
1125931	HSK63AEM10065M	10	35	65	41	SS03M018	5mm	25	0,88
1125940	HSK63AEM12080M	12	42	80	50	SS03M023	6mm	35	1,13
1125951	HSK63AEM14080M	14	44	80	50	SS03M023	6mm	35	1,17
1125958	HSK63AEM16080M	16	48	80	53	SS03M025	6mm	50	1,26
1125987	HSK63AEM18080M	18	50	80	53	SS03M025	6mm	50	1,30
1125997	HSK63AEM20080M	20	52	80	55	SS03M026	8mm	95	1,33
1126005	HSK63AEM25110M	25	65	110	60	SS03M027	10mm	135	2,30
1126012	HSK63AEM32110M	32	72	110	65	SS03M029	10mm	160	2,52



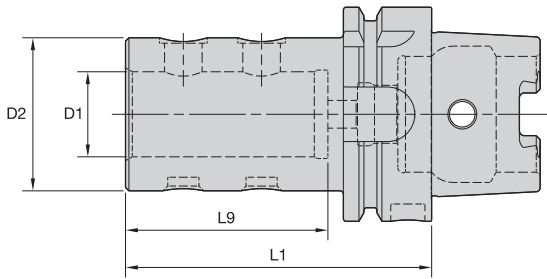
EM IN-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	ft. lbs.	lbs
1015191	HSK63AEM025300	1/4	1.00	3.00	2.14	ELS025025PKG	1/8	8	1.79
1015192	HSK63AEM038300	3/8	1.00	3.00	1.73	ELS038031PKG	3/16	15	1.76
1015193	HSK63AEM050300	1/2	1.38	3.00	1.97	ELS044038PKG	7/32	20	2.05
1015224	HSK63AEM062375	5/8	1.63	3.75	2.09	ELS056050PKG	1/4	40	2.71
1015225	HSK63AEM075375	3/4	1.75	3.75	2.22	ELS062050PKG	5/16	70	2.85
1015226	HSK63AEM100375	1	2.00	3.75	2.46	ELS075056PKG	3/8	110	3.12
1015227	HSK63AEM125425	1 1/4	2.50	4.25	2.51	ELS075062PKG	3/8	110	4.51

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.





HSK63A Shank Tools

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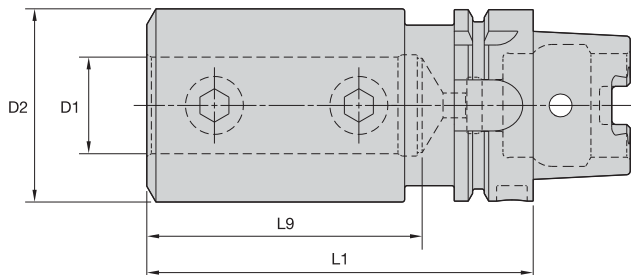
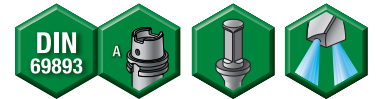
■ **DAT MM-HSK Form A**



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	cone point socket set screw	kg
2402295	HSK63ADAT25090M	25	45	90	60	12166903900	6mm	40	12166903700	1,19
2402296	HSK63ADAT32095M	32	50	95	64	12166903900	6mm	40	12166903700	1,28
2402297	HSK63ADAT40105M	40	60	105	74	12166904000	8mm	50	12166903800	1,56

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- For drill with flats.



ERICKSON

■ **SSF IN-HSK Form A**



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1808884	HSK63ASSF125500	1 1/4	2.50	5.00	3.50	ELS075056PKG	3/8	110	4.99
1809016	HSK63ASSF150550	1 1/2	2.75	5.50	4.00	ELS075056PKG	3/8	110	5.99

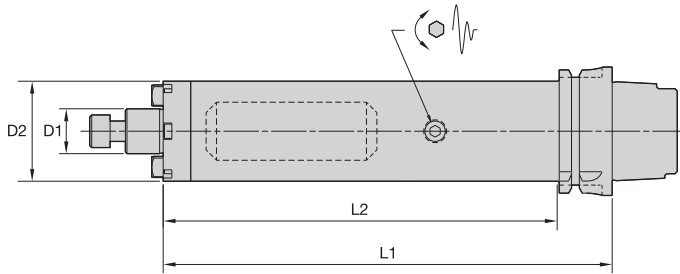
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrenches not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

Tunable Shell Mill Adapters with Through Coolant



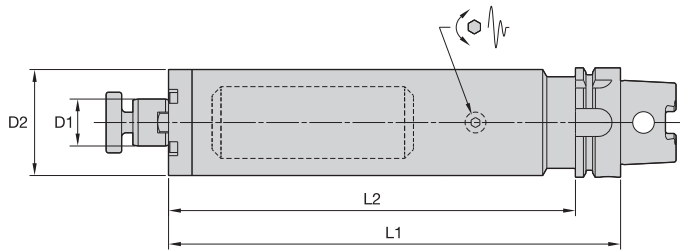
HSK63A Shank Tools



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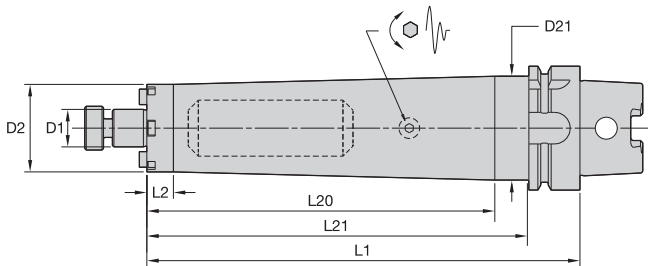
■ SMC TD Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4136192	HSK63ATDSMC22220M	22	49	220	194	MS1234	KDK22M	8mm	3,34



■ SMC TD Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135978	HSK63ATDSMC27260M	27	61	260	234	KLSS27M	—	10mm	5,59



■ SMC TD Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135979	HSK63ATDSMC0750866	3/4	1.75	8.66	.53	6.96	7.64	KLS07	KDK05	1/4	7.28
4135980	HSK63ATDSMC1001050	1	2.19	10.50	9.48	—	—	KLS10	KDK06	5/16	11.06



NOTE: Do not overtighten lock screw.

Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.

Lock screw wrench not included.

For HSK coolant unit and wrench, see page J32.



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M690 SD1204.. | M690 SD1506..

Strong and specially designed to streamline most milling operations, M690 Series 90° shoulder mills enable excellent shoulder finishes, enhanced chip evacuation, and optimal insert support.

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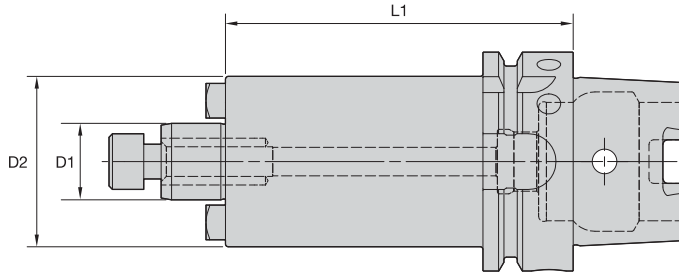
WIDIA 

HSK63A Shank Tools

Shell Mill Adapters with Through Coolant



HSK63A Shank Tools

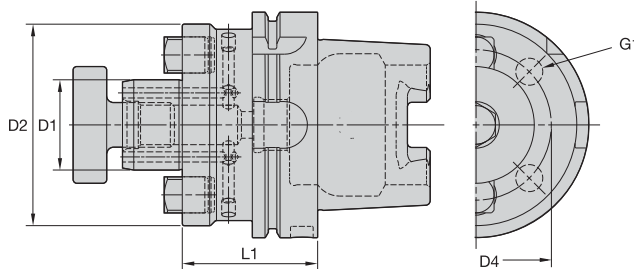


ERICKSON

■ SMC Cap MM-HSK Form A



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872682	HSK63ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,88
3872681	HSK63ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,95
3872684	HSK63ASM2C22050M	22	42	50	MS1234	—	8mm	0,96
3872683	HSK63ASMC22050M	22	49	50	MS1234	KDK22M	8mm	1,05
3872685	HSK63ASMC22100M	22	49	100	MS1234	KDK22M	8mm	1,77
3872686	HSK63ASMC22160M	22	49	160	MS1234	KDK22M	8mm	2,63



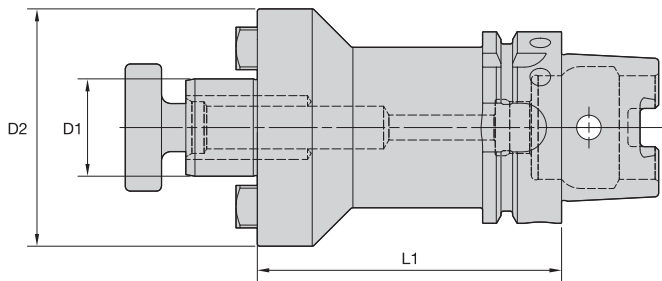
■ SMC Lock MM-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	kg
3872687	HSK63ASMC27060M	27	60	—	—	60	KLSS27M	KDK27M	10mm	1,42
3872688	HSK63ASMC27100M	27	60	—	—	100	KLSS27M	KDK27M	10mm	2,11
3872689	HSK63ASMC27160M	27	60	—	—	160	KLSS27M	KDK27M	10mm	3,11
3872690	HSK63ASMC32060M	32	78	—	—	60	KLSS32M	KDK32M	14mm	1,77
3872691	HSK63ASMC32100M	32	78	—	—	100	KLSS32M	KDK32M	14mm	2,59
3872692	HSK63ASMC32160M	32	78	—	—	160	KLSS32M	KDK32M	14mm	3,59
3872693	HSK63ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	2,14
3872694	HSK63ASMC40100M	40	89	67	M12X1.75	100	KLSS40M	KDK40M	17mm	3,18
3872695	HSK63ASMC40160M	40	89	67	M12X1.75	160	KLSS40M	KDK40M	17mm	4,19

(continued)

(SMC continued)



HSK63A Shank Tools

■ SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762410	HSK63ASM2C050200	1/2	1.20	2	KLS05	KDK04	3/16	1.76
3762409	HSK63ASMC050200	1/2	1.44	2	KLS05	KDK04	3/16	1.89
3762412	HSK63ASM2C075200	3/4	1.46	2	KLS07	—	1/4	1.97
3762411	HSK63ASMC075200	3/4	1.75	2	KLS07	KDK05	1/4	2.17
3762414	HSK63ASM2C100225	1	2.19	2	KLS10	KDK06	5/16	2.83
3762413	HSK63ASMC100225	1	2.75	2	KLS10	KDK06	5/16	3.11
3762415	HSK63ASMC125225	1 1/4	2.88	2	KLS12	KDK08	5/16	3.40
3762416	HSK63ASMC150225	1 1/2	3.81	2	KLS15	KDK10	3/8	4.59

NOTE: Do not overtighten lock screw.

Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately, see page J26.

Lock screw wrench not included.

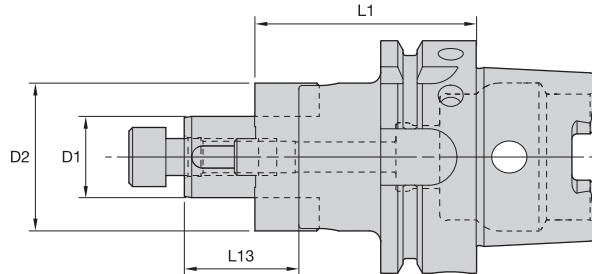
For HSK coolant unit and wrench, see page J32.

HSK63A Shank Tools

Combi Shell Mill Adapters



- Through-the-toolholder coolant capability.



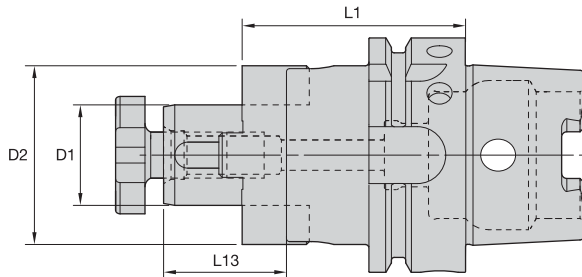
HSK63A Shank Tools

ERICKSON™

■ CS MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1126799	HSK63ACS16060M	16	32	60	27	MS1294	6mm	CDR16M	CDK16M	0,88
1126808	HSK63ACS22060M	22	40	60	31	MS1234	8mm	CDR22M	CDK22M	1,03



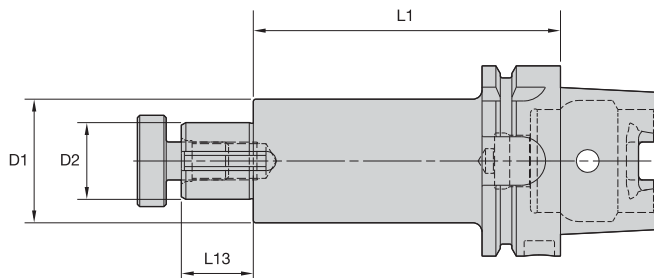
■ CS Lock MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key	kg
1126816	HSK63ACS27060M	27	48	60	33	KLS27M	SMW27M	CDR27M	CDK27M	1,23
1126823	HSK63ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,48
1126829	HSK63ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	2,08

NOTE: Do not overtighten lock screw.
 Supplied with lock screw, drive ring, and drive keys.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.





HSK63A Shank Tools

ERICKSON

■ SA IN-HSK Form A

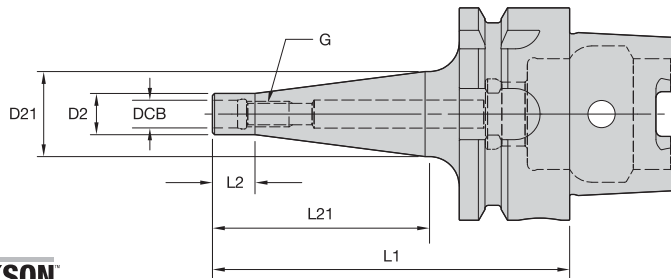


order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive key	lbs
1307823	HSK63ASA062400	5/8	1.25	4.00	.78	KLS07	1/4	DWG SDK062088	2.22
1307824	HSK63ASA100400	1	1.61	4.00	.94	KLS10	5/16	DWG SDK100106	3.09
1307825	HSK63ASA125400	1 1/4	1.86	4.00	1.09	KLS12	5/16	DWG SDK125119	3.97

*NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.*

HSK63A Shank Tools

Screw-On Adapters for Modular Milling Cutters



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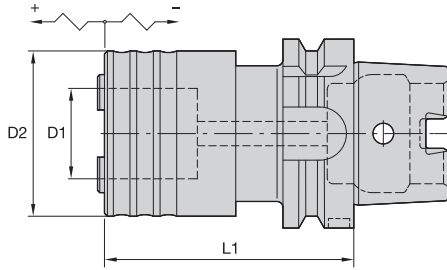
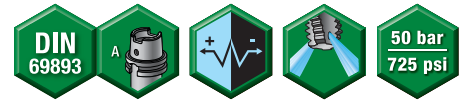
■ ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061564	HSK63AST06059M	6,5	M6	10	10	59	10	25	0,65
4061565	HSK63AST06084M	6,5	M6	10	20	84	10	50	0,71
4061566	HSK63AST06109M	6,5	M6	10	23	109	10	75	0,77
4061567	HSK63AST08059M	8,5	M8	13	15	59	10	25	0,66
4061568	HSK63AST08084M	8,5	M8	13	23	84	10	50	0,74
4061569	HSK63AST08109M	8,5	M8	13	23	109	10	75	0,78
4061570	HSK63AST08134M	8,5	M8	13	25	134	10	100	0,85
4061571	HSK63AST10059M	10,5	M10	18	20	59	10	25	0,70
4061572	HSK63AST10084M	10,5	M10	18	25	84	10	50	0,78
4061573	HSK63AST10109M	10,5	M10	18	28	109	10	75	0,88
4061574	HSK63AST10134M	10,5	M10	18	30	134	10	100	1,00
4061575	HSK63AST12059M	12,5	M12	21	24	59	10	25	0,72
4061576	HSK63AST12084M	12,5	M12	21	24	84	10	50	0,78
4061577	HSK63AST12109M	12,5	M12	21	31	109	10	75	0,95
4061578	HSK63AST12134M	12,5	M12	21	31	134	10	100	1,05
4061579	HSK63AST16059M	17,0	M16	29	34	59	10	25	0,79
4061580	HSK63AST16084M	17,0	M16	29	34	84	10	50	0,94
4061581	HSK63AST16109M	17,0	M16	29	34	109	10	75	1,09
4061582	HSK63AST16134M	17,0	M16	29	39	134	10	100	1,35

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

- Rapid Change style.



HSK63A Shank Tools

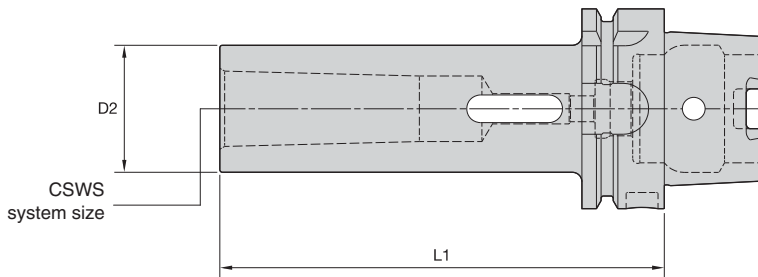
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■ RC-HSK Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	tension	compression	kg
			mm	in						
1520637	HSK63ACHRC1105M	1	M1.0 - M14	#0 - 9/16	19	39	105	7,5	7,5	1,30
1520639	HSK63ACHRC2140M	2	M4.5 - M24	5/16 - 7/8	31	60	140	10,0	10,0	2,20
1520641	HSK63ACHRC3203M	3	M14.0 - M36	13/16 - 1 3/8	48	86	203	17,5	17,5	4,90

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 For HSK adapters to DIN 69893-1.
 Form A or Form C (coolant pipe must be removed).

- Balanced-by-design.



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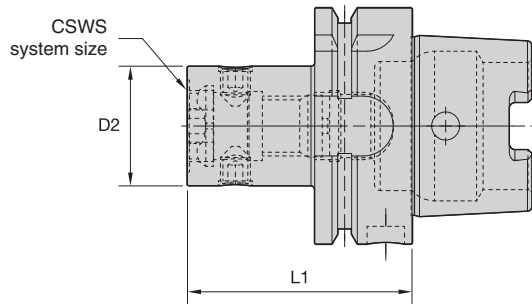
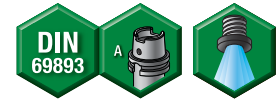
■ MT-HSK form A

order number	catalog number	CSWS system size	D2	L1	kg
1125543	HSK63AMT1100M	1	25	100	0,72
1127318	HSK63AMT2120M	2	32	120	0,94
1152347	HSK63AMT3140M	3	40	140	1,29
1230360	HSK63AMT4160M	4	48	160	1,72

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

HSK Modular Adapters



HSK63A Shank Tools

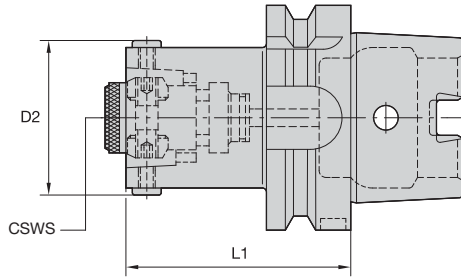
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■ RFX-HSK Form A



order number	catalog number	CSWS system size		L1	lock screw	Nm	wrench	kg
		D2						
3860549	HSK63ARFX185060M	RFX185	19	60	RFX185LS	6	12148041100	0,70
3860550	HSK63ARFX245060M	RFX245	25	60	RFX245LS	8	12148041100	0,70
3860551	HSK63ARFX320060M	RFX320	32	60	RFX320LS	14	12148041200	0,80
3860552	HSK63ARFX420070M	RFX420	42	70	RFX420LS	16	12148041300	1,00
3860623	HSK63ARFX550080M	RFX550	55	80	RFX550LS	20	12148041400	1,40
3860624	HSK63ARFX720095M	RFX720	72	95	RFX720LS	20	12148041400	2,00

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 For HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.



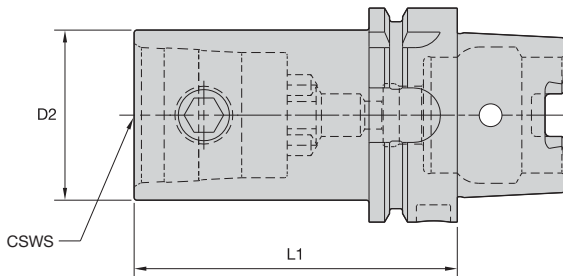
HSK 63A Shank Tools

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■ HSK-HSK Form A

order number	catalog number	CSWS system size	D2	L1	wrench size actuation screw	Nm	kg
1520609	HSK63AHSK32070M	HSK32	37	70	3mm	6	1,00
1189415	HSK63AHSK40080M	HSK40	45	80	3mm	8	1,10
1520612	HSK63AHSK50080M	HSK50	55	80	4mm	15	1,20
1188038	HSK63AHSK63080M	HSK63	70	80	5mm	20	1,60
1188027	HSK63AHSK63120M	HSK63	70	120	5mm	20	2,40

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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■ KM-HSK Form A



order number	catalog number	CSWS system size	D2	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1307929	HSK63AKM32070M	KM32	32	70	KM32PKG3S	5mm	8-11	0,87
1151763	HSK63AKM40080M	KM40	40	80	KM40PKG3S	6mm	12-16	1,08
1121672	HSK63AKM50095M	KM50	50	95	KM50PKG3S	10mm	27-34	1,49
1148578	HSK63AKM63105M	KM63	63	105	KM63PKG3S	12mm	47-54	2,03

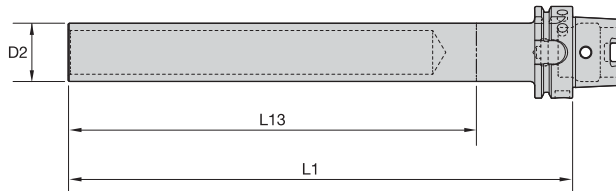
NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63A Shank Tools

Gage Bars • Bar Blanks



- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.

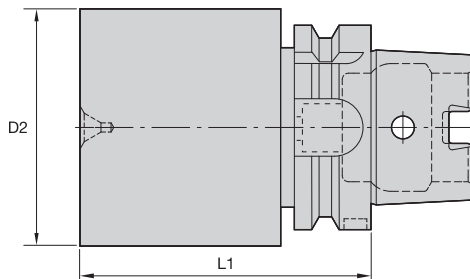


HSK63A Shank Tools

■ GB-HSK Form A

order number	catalog number	D2		L1		L13		kg
		mm	in	mm	in	mm	in	
1228288	HSK63AGB40346M	40,0	1.57	346	13.62	300	11.81	2,38

- Machinable front 32–38 RW C.



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■ BB-HSK Form A

order number	catalog number	D2	L1	kg
		mm	mm	
1015288	HSK63ABB080250M	80,8	250	9,09
1015289	HSK63ABB115150M	115,8	150	9,78

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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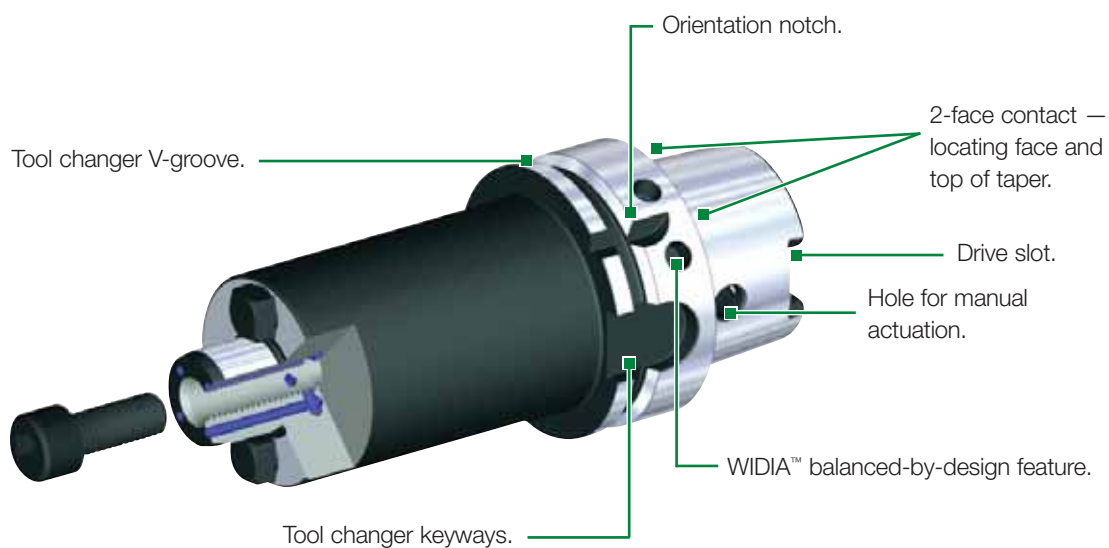
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Erickson™ HSK Shank Tooling System • **HSK80A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK80A



The HSK80A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.



- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 16,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK80A Shank Tools

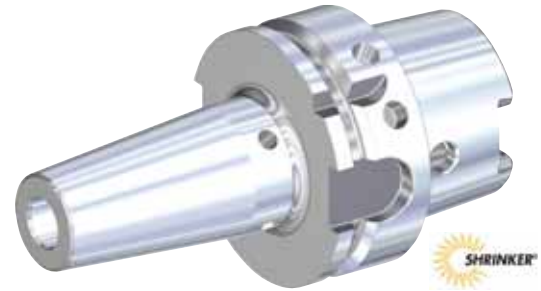
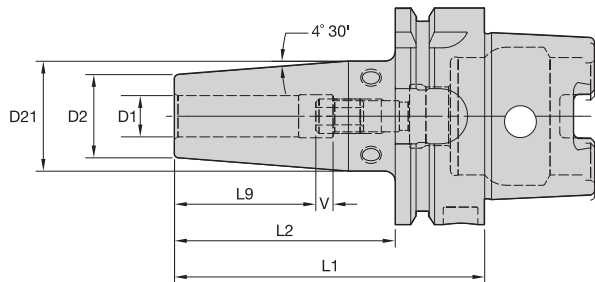
Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



HSK80A Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

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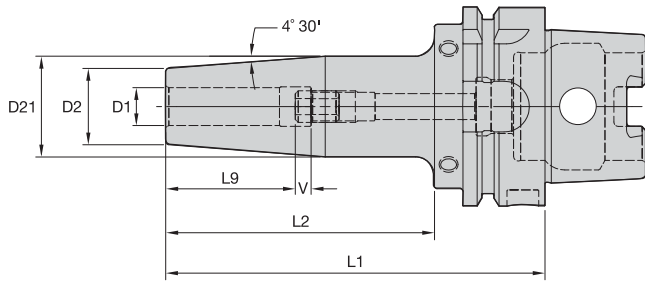
■ TT GP HPV MM-HSK Form A • With Hub



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867270	HSK80AHPVTT06085M	6	21	27	85	59	26	10	TTSS05014M	2,5mm	1,28
3867271	HSK80AHPVTT08085M	8	21	27	85	59	26	10	TTSS06014M	3mm	1,28
3867272	HSK80AHPVTT10090M	10	24	32	90	64	31	10	TTSS08014M	4mm	1,36
3867273	HSK80AHPVTT12095M	12	24	32	95	69	36	10	TTSS10014M	5mm	1,38
3867274	HSK80AHPVTT14095M	14	27	34	95	69	36	10	TTSS10014M	5mm	1,43
3867275	HSK80AHPVTT16100M	16	27	34	100	74	39	10	TTSS12014M	6mm	1,44
3867276	HSK80AHPVTT18100M	18	33	42	100	74	39	10	TTSS12014M	6mm	1,63
3867277	HSK80AHPVTT20105M	20	33	42	105	79	41	10	TTSS16014M	8mm	1,65
3867278	HSK80AHPVTT25115M	25	44	53	115	89	47	10	TTSS16014M	8mm	2,19
3867279	HSK80AHPVTT32120M	32	44	53	120	94	51	10	TTSS16014M	8mm	2,11
3867280	HSK80AHPVTT40130M	40	60	70	130	104	51	10	TTSS20014M	10mm	3,23
3867281	HSK80AHPVTT50140M	50	69	79	140	114	56	10	TTSS20014M	10mm	3,88

(continued)

(TT GP HPV continued)



HSK80A Shank Tools

■ TT GP HPV MM-HSK Form A • Without Hub



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867282	HSK80AHPVTT03085M	3	9	15	85	50	14	10	TTSS05014M	2,5mm	1,34
3867283	HSK80AHPVTT04085M	4	9	15	85	50	15	10	TTSS05014M	2,5mm	1,34
3867284	HSK80AHPVTT05085M	5	9	15	85	50	15	10	TTSS06014M	3mm	1,34

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, 9/16, & 5/8	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-0.0005

■ TT GP HPV In-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3863755	HSK80AHPVTT025335	1/4	.83	1.06	3.35	2.32	1.02	.39	TTSS05014M	2,5mm	2.83
3863756	HSK80AHPVTT031335	5/16	.83	1.06	3.35	2.32	1.02	.39	TTSS06014M	3mm	2.82
3863757	HSK80AHPVTT038354	3/8	.94	1.26	3.54	2.52	1.22	.39	TTSS08014M	4mm	3.01
3863758	HSK80AHPVTT044374	7/16	.94	1.26	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.05
3863759	HSK80AHPVTT050374	1/2	.94	1.26	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.03
3863760	HSK80AHPVTT056374	9/16	1.06	1.33	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.15
3863761	HSK80AHPVTT062394	5/8	1.06	1.33	3.94	2.92	1.54	.39	TTSS12014M	6mm	3.18
3863762	HSK80AHPVTT075413	3/4	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.66
3863763	HSK80AHPVTT088413	7/8	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.57
3863764	HSK80AHPVTT100453	1	1.73	2.08	4.53	3.51	1.85	.39	TTSS16014M	8mm	4.81
3863765	HSK80AHPVTT125472	1 1/4	1.73	2.08	4.72	3.70	2.01	.39	TTSS16014M	8mm	4.66
3863766	HSK80AHPVTT150512	1 1/2	2.36	2.75	5.12	4.10	2.01	.39	TTSS20014M	10mm	7.25
3863767	HSK80AHPVTT200551	2	2.72	3.11	5.51	4.49	2.20	.39	TTSS20014M	10mm	8.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

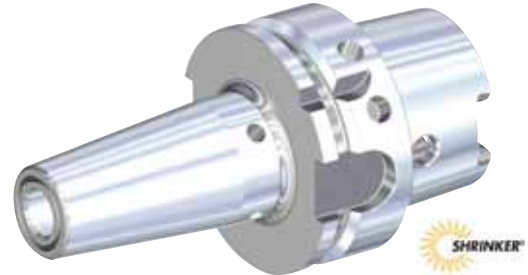
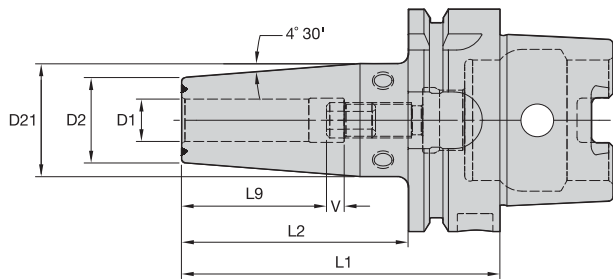
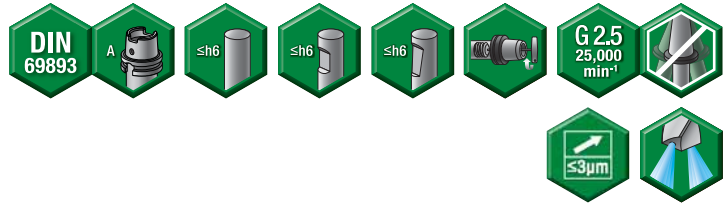
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80A Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

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■ TT HT HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867213	HSK80AHPVTTHT12095M	12	24	32	95	69	36	10	TTSS10014M	5mm	1,38
3867214	HSK80AHPVTTHT14095M	14	27	34	95	69	36	10	TTSS10014M	5mm	1,44
3867215	HSK80AHPVTTHT16100M	16	27	34	100	74	39	10	TTSS12014M	6mm	1,45
3867216	HSK80AHPVTTHT18100M	18	33	42	100	74	39	10	TTSS12014M	6mm	1,64
3867217	HSK80AHPVTTHT20105M	20	33	42	105	79	41	10	TTSS16014M	8mm	1,65
3867218	HSK80AHPVTTHT25115M	25	44	53	115	89	47	10	TTSS16014M	8mm	2,19
3867219	HSK80AHPVTTHT32120M	32	44	53	120	94	51	10	TTSS16014M	8mm	2,12
3867220	HSK80AHPVTTHT40130M	40	60	70	130	104	51	10	TTSS20014M	10mm	3,23
3867221	HSK80AHPVTTHT50140M	50	69	79	140	114	56	10	TTSS20014M	10mm	3,88

(continued)

HSK80A Shank Tools

(TT HT HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16 & 5/8	.0000/- .0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/- .0005

HSK80A Shank Tools

■ TT HT HPV In-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3862011	HSK80AHPVTTH050374	1/2	.94	1.26	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.03
3862012	HSK80AHPVTTH056374	9/16	1.06	1.33	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.15
3862393	HSK80AHPVTTH062394	5/8	1.06	1.33	3.94	2.92	1.54	.39	TTSS12014M	6mm	3.18
3862394	HSK80AHPVTTH075413	3/4	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.66
3862395	HSK80AHPVTTH088413	7/8	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.57
3862396	HSK80AHPVTTH100453	1	1.73	2.08	4.53	3.51	1.85	.39	TTSS16014M	8mm	4.81
3862397	HSK80AHPVTTH125472	1 1/4	1.73	2.08	4.72	3.70	2.01	.39	TTSS16014M	8mm	4.66
3862398	HSK80AHPVTTH150512	1 1/2	2.36	2.75	5.12	4.10	2.01	.39	TTSS20014M	10mm	7.25
3862399	HSK80AHPVTTH200551	2	2.72	3.11	5.51	4.49	2.20	.39	TTSS20014M	10mm	8.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

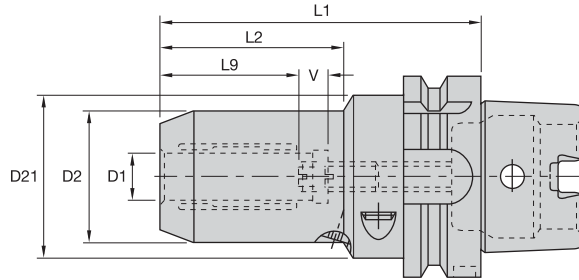
Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80A Shank Tools

Hydraulic Chucks Standard HP Line



HSK80A Shank Tools

ERICKSON™

■ HC MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1960122	HSK80AHC06085M	6	25,7	50	85	35	27	10	170.135	5mm	170.002	2,5mm	1,5
1960133	HSK80AHC08085M	8	27,7	50	85	36	27	10	170.135	5mm	170.002	2,5mm	1,5
1960134	HSK80AHC10090M	10	29,7	50	90	38	31	10	170.135	5mm	170.002	2,5mm	1,6
1960135	HSK80AHC12095M	12	31,6	50	95	43	36	10	170.135	5mm	170.002	2,5mm	1,6
1960136	HSK80AHC14095M	14	33,6	50	95	43	36	10	170.135	5mm	170.003	3mm	1,6
1960137	HSK80AHC16100M	16	37,6	50	100	46	39	10	170.135	5mm	170.003	3mm	1,7
1960138	HSK80AHC18100M	18	39,6	50	100	48	39	10	170.135	5mm	170.003	3mm	1,8
1960139	HSK80AHC20105M	20	41,6	50	105	54	41	10	170.135	5mm	170.003	3mm	1,8
1960140	HSK80AHC25115M	25	49,8	63	115	51	47	10	170.136	6mm	170.004	4mm	2,4
1960141	HSK80AHC32125M	32	59,8	63	125	59	51	10	170.136	6mm	170.004	4mm	2,8

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

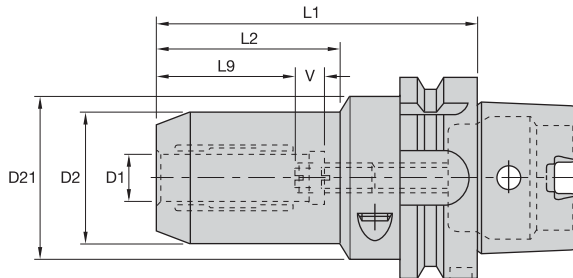
Hydraulic chuck technical section, see page K60.

Supplied with stop screw.

Actuation wrench must be ordered separately.

Reduction sleeves are available and must be ordered separately; see page I2.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK80A Shank Tools

ERICKSON

■ HC Trend MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	kg
1749613	HSK80AHCT06085M	6	25,7	50	85	36	27	10	170.135	5mm	1,51
1749614	HSK80AHCT08085M	8	27,7	50	85	37	27	10	170.135	5mm	1,52
1749615	HSK80AHCT10090M	10	29,7	50	90	39	31	10	170.135	5mm	1,57
1749616	HSK80AHCT12095M	12	31,6	50	95	45	36	10	170.135	5mm	1,61
1749617	HSK80AHCT14095M	14	33,6	50	95	46	36	10	170.135	5mm	1,63
1749618	HSK80AHCT16100M	16	37,6	50	100	52	39	10	170.135	5mm	1,74
1749619	HSK80AHCT18100M	18	39,6	50	100	52	39	10	170.135	5mm	1,79
1749620	HSK80AHCT20105M	20	41,6	50	105	58	41	10	170.135	5mm	1,83
1749621	HSK80AHCT25115M	25	49,8	63	115	51	47	10	170.136	6mm	2,45
1749622	HSK80AHCT32125M	32	59,8	63	125	59	51	10	170.136	6mm	2,85

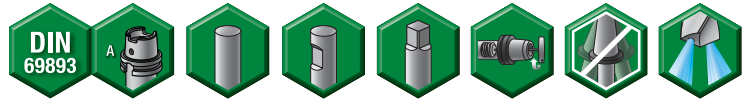
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80A Shank Tools

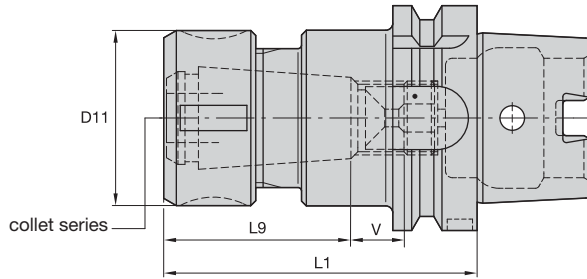
TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



HSK80A Shank Tools



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON™

■ TG Round-HSK Form A



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1860140	HSK80ATG075120M	TG75	50	120	54	13	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	SSCC081	2,16
1860141	HSK80ATG100140M	TG100	60	140	70	12	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	SSCC112	2,92

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

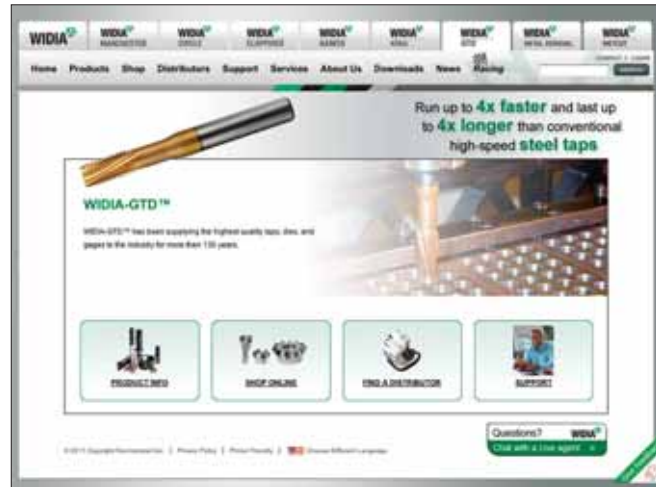
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

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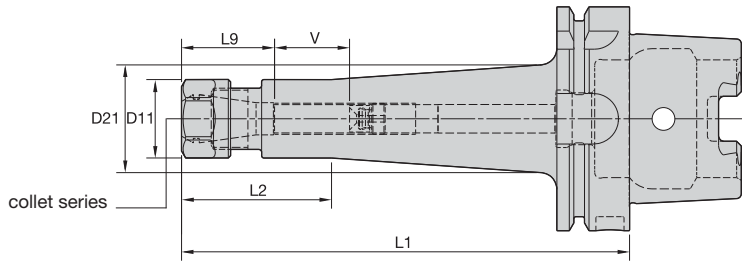
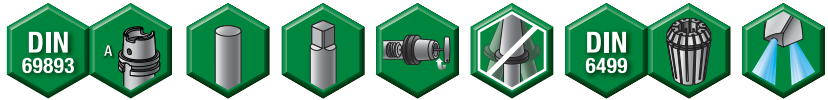
Whether your operation is turning, milling, or holmaking, WIDIA brands are the high-performance tooling you need. We offer standard and custom solutions for the general engineering market.

HSK80A Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK80A Shank Tools

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

■ ER Hex • HSK Form A

order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1727216	HSK80AER16100M	ER16	28	—	100	74	32	22	1,36
1778237	HSK80AER16160M	ER16	28	39	160	54	32	38	1,77
1885325	HSK80AER20100M	ER20	34	—	100	62	36	14	1,47

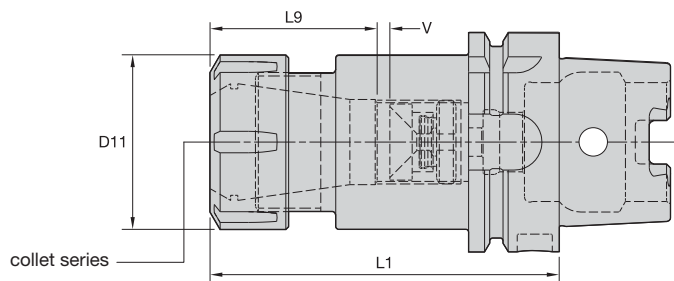
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK80AER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	S SCC044
HSK80AER16160M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	S SCC044
HSK80AER20100M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32	S SCC056

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(ER continued)



HSK80A Shank Tools

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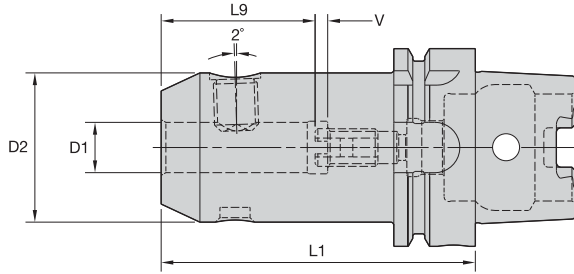
■ ER Round • HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1751709	HSK80AER25100M	ER25	42	100	40	7	1,63
1727217	HSK80AER32100M	ER32	50	100	46	6	1,83
1727218	HSK80AER40120M	ER40	63	120	52	6	2,66

■ Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK80AER25100M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32	SSCC075
HSK80AER32100M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32	SSCC094
HSK80AER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32	SSCC112

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK80A Shank Tools

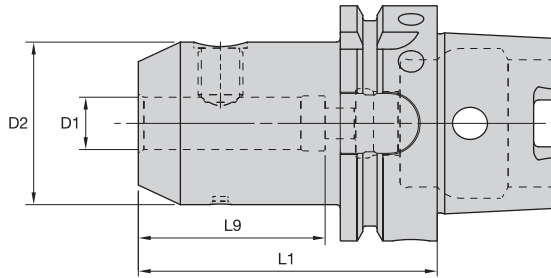
ERICKSON

■ WN MM • HSK Form A



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1885322	HSK80AWN06090M	6	25	90	30	10	SS03M012	3mm	7	571.060	2,5mm	1,30
1885443	HSK80AWN08090M	8	28	90	30	10	SS03M014	4mm	15	571.067	3mm	1,36
1750661	HSK80AWN10090M	10	35	90	33	10	SS03M018	5mm	25	571.068	4mm	1,52
1729444	HSK80AWN12100M	12	42	100	40	10	SS03M023	6mm	35	571.074	5mm	1,78
1885444	HSK80AWN14100M	14	44	100	40	10	SS03M023	6mm	35	571.074	5mm	1,84
1885445	HSK80AWN16100M	16	48	100	43	10	SS03M025	6mm	50	571.075	6mm	1,98
1885446	HSK80AWN18100M	18	50	100	43	10	SS03M025	6mm	50	571.075	6mm	2,04
1748577	HSK80AWN20110M	20	52	110	45	10	SS03M026	8mm	95	571.076	6mm	2,26
1730388	HSK80AWN25110M	25	65	110	50	10	SS03M027	10mm	135	571.077	6mm	2,90
1730699	HSK80AWN32120M	32	72	120	54	10	SS03M029	10mm	160	571.077	6mm	3,45

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw or stop screw wrenches not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



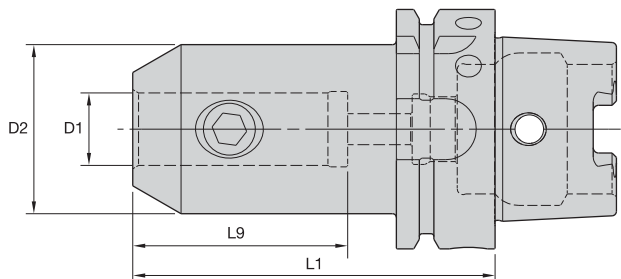
HSK80A Shank Tools

ERICKSON

■ EM MM • HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1727202	HSK80AEM06080M	6	25	80	54	SS03M012	3mm	7	1,26
1727203	HSK80AEM08080M	8	28	80	54	SS03M014	4mm	15	1,31
1727204	HSK80AEM10080M	10	35	80	45	SS03M018	5mm	25	1,44
1727205	HSK80AEM12080M	12	42	80	50	SS03M023	6mm	35	1,57
1885447	HSK80AEM14080M	14	44	80	50	SS03M023	6mm	35	1,61
1885448	HSK80AEM16100M	16	48	100	53	SS03M025	6mm	50	1,97
1885449	HSK80AEM18100M	18	50	100	53	SS03M025	6mm	50	2,04
1778182	HSK80AEM20100M	20	52	100	55	SS03M026	8mm	95	2,09
1885450	HSK80AEM25100M	25	65	100	60	SS03M027	10mm	135	2,63
1727209	HSK80AEM32110M	32	72	110	65	SS03M029	10mm	160	3,15



ERICKSON

■ EM IN • HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1860166	HSK80AEM038300	3/8	1.00	3.00	2	ELS038031PKG	3/16	15	3
1860167	HSK80AEM050325	1/2	1.38	3.25	2	ELS044038PKG	7/32	20	3
1860168	HSK80AEM062375	5/8	1.63	3.75	2	ELS056050PKG	1/4	40	4
1860169	HSK80AEM075375	3/4	1.75	3.75	2	ELS062050PKG	5/16	70	4
1860170	HSK80AEM100425	1	2.00	4.25	2	ELS075056PKG	3/8	110	5
1860171	HSK80AEM125425	1 1/4	2.50	4.25	3	ELS075062PKG	3/8	110	6

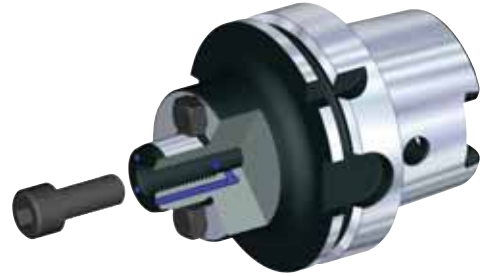
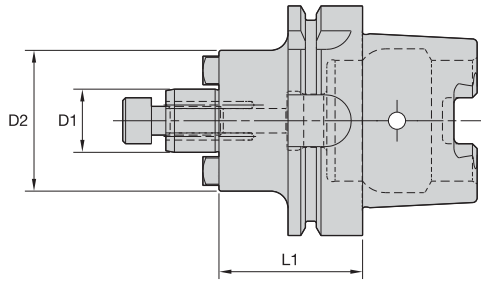
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80A Shank Tools

Shell Mill Adapters with Through Coolant



HSK80A Shank Tools

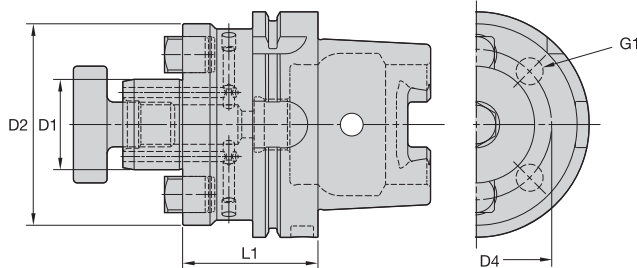


ERICKSON™

■ SMC Cap MM-HSK Form A



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	kg
3872280	HSK80ASM2C22050M	22	42	50	MS1234	—	8mm	1,40
3872279	HSK80ASMC22050M	22	49	50	MS1234	KDK22M	8mm	1,49



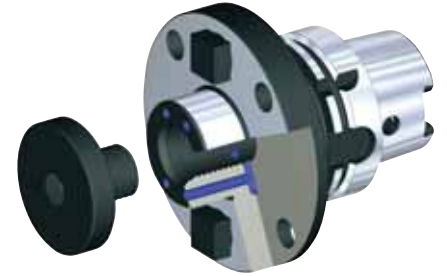
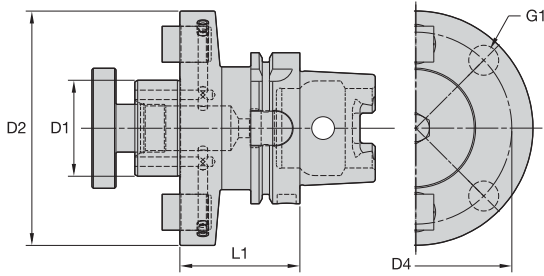
■ SMC Lock MM-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	locknut wrench	kg
3872281	HSK80ASMC27050M	27	60	—	—	50	KLSS27M	KDK27M	10mm	—	1,73
3872282	HSK80ASMC32060M	32	78	—	—	60	KLSS32M	KDK32M	14mm	—	2,39
3872493	HSK80ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	—	2,73
3872494	HSK80ASMC50070M	50	98	—	—	70	KLSS50M	—	—	SMW50M	3,42
3872495	HSK80ASMC60070M	60	129	102	M16X2.0	70	—	KDK60M	—	—	4,49

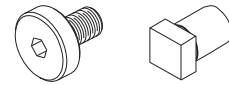
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(SMC continued)



HSK80A Shank Tools

■ SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3762772	HSK80ASM2C075225	3/4	1.457	—	—	2.250	KLS07	—	1/4	3.05
3762771	HSK80ASMC075225	3/4	1.752	—	—	2.250	KLS07	KDK05	1/4	3.31
3763064	HSK80ASM2C100225	1	2.189	—	—	2.250	KLS10	KDK06	5/16	3.88
3763063	HSK80ASMC100225	1	2.752	—	—	2.250	KLS10	KDK06	5/16	4.47
3763065	HSK80ASMC125250	1 1/4	2.878	—	—	2.500	KLS12	KDK08	5/16	5.18
3763066	HSK80ASMC150250	1 1/2	3.811	—	—	2.500	KLS15	KDK10	3/8	6.57
3763067	HSK80ASMC200250	2	4.882	.158	.625-11 UNC	2.500	KLS20	KDK12	9/16	8.61
3763068	HSK80ASMC250250	2 1/2	4.882	.158	.625-11 UNC	2.500	KLS25	KDK16	9/16	9.77

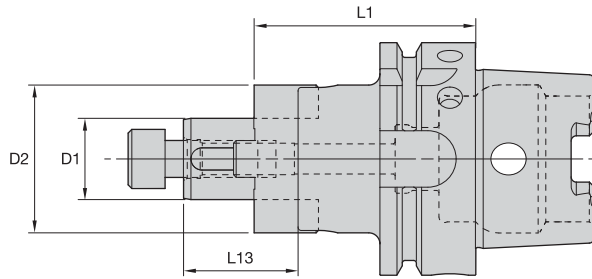
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.
 HSK80ASMC250250 supplied with four locking bolts (S-388).

HSK80A Shank Tools

Combi Shell Mill Adapters



HSK80A Shank Tools

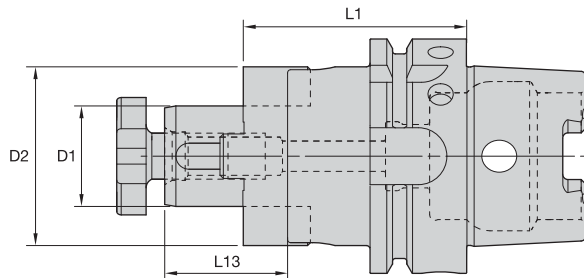


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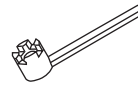
■ CS • Cap Screw Design • HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size	lock screw	Nm	combi driver ring	combi drive key	kg
1839882	HSK80ACS16060M	16	32	60	27	MS1294	6mm	40	40	CDR16M	CDK16M	1,33
1778235	HSK80ACS22060M	22	40	60	31	MS1234	8mm	60	60	CDR22M	CDK22M	1,49



■ CS • Lock Screw Design • HSK Form A

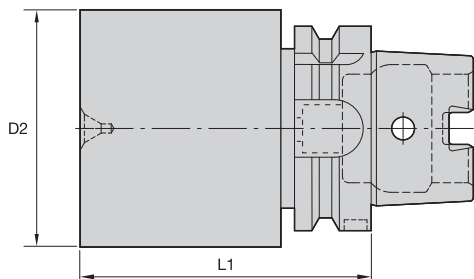


order number	catalog number	D1	D2	L1	L13	lock screw	wrench	combi driver ring	combi drive key	kg
1730386	HSK80ACS27060M	27	48	60	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,67
1730387	HSK80ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,96
1878181	HSK80ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	2,69
1126837	HSK80ACS50080M	50	90	80	46	KLS50M	SMW50M	CDR50M	CDK50M	4,01

NOTE: Do not overtighten lock screw.
 Supplied with lock screw, drive ring, and drive keys.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.



- Machinable front 32–38 RW C.



HSK80A Shank Tools

ERICKSON

■ BB-HSK Form A

order number	catalog number	D2	L1	kg
1860172	HSK80ABB100250M	100,8	250	14,47
1860203	HSK80ABB150150M	150,8	150	16,51

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

Erickson™ HSK Shank Tooling System • **HSK100A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK100A



The HSK100A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.



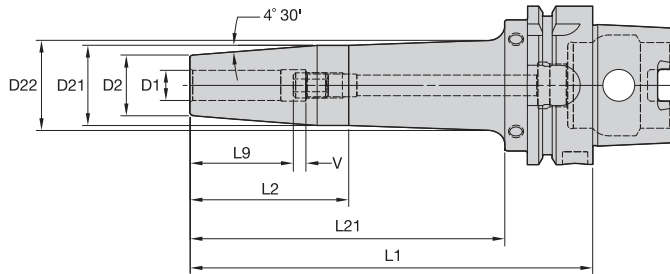
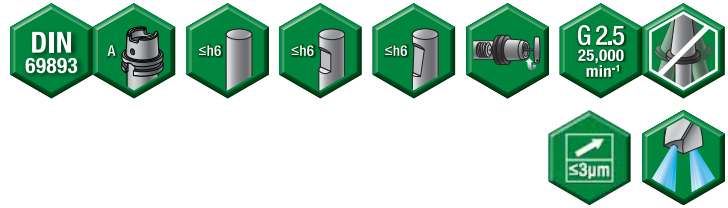
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 12,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK100A Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3866701	HSK100AHPVTT06085M	6	21	27	—	85	56	—	26	10	TTSS05014M	2,5mm	2,18
3866711	HSK100AHPVTT06160M	6	21	27	32	160	50	122	26	10	TTSS05014M	2,5mm	2,86
3866702	HSK100AHPVTT08085M	8	21	27	—	85	56	—	26	10	TTSS06014M	3mm	2,18
3866712	HSK100AHPVTT08160M	8	21	27	32	160	50	122	26	10	TTSS06014M	3mm	2,85
3866703	HSK100AHPVTT10090M	10	24	32	—	90	61	—	31	10	TTSS08014M	4mm	2,26
3866713	HSK100AHPVTT10160M	10	24	32	36	160	63	122	31	10	TTSS08014M	4mm	3,02
3866704	HSK100AHPVTT12095M	12	24	32	—	95	66	—	36	10	TTSS10014M	5mm	2,27
3866714	HSK100AHPVTT12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	3,00
3866705	HSK100AHPVTT14095M	14	27	34	—	95	66	—	36	10	TTSS10014M	5mm	2,33
3866715	HSK100AHPVTT14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	3,11
3866706	HSK100AHPVTT16100M	16	27	34	—	100	71	—	39	10	TTSS12014M	6mm	2,33
3866716	HSK100AHPVTT16160M	16	27	34	38	160	57	122	39	10	TTSS12014M	6mm	3,09
3866707	HSK100AHPVTT18100M	18	33	42	—	100	71	—	39	10	TTSS12014M	6mm	2,52
3866717	HSK100AHPVTT18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	3,45
3866708	HSK100AHPVTT20105M	20	33	42	—	105	76	—	41	10	TTSS16014M	8mm	2,53
3866718	HSK100AHPVTT20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	3,42
3866709	HSK100AHPVTT25115M	25	44	53	—	115	86	—	47	10	TTSS16014M	8mm	3,06
3866719	HSK100AHPVTT25160M	25	44	53	57	160	69	122	47	10	TTSS16014M	8mm	4,09
3866710	HSK100AHPVTT32120M	32	44	53	—	120	91	—	51	10	TTSS16014M	8mm	2,98
3866720	HSK100AHPVTT32160M	32	44	53	57	160	69	122	51	10	TTSS16014M	8mm	3,93

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
1/2 & 5/8	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-0.0005

■ TT GP HPV In-HSK Form A



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3863572	HSK100AHPVTT025335	1/4	.83	1.06	—	3.35	2.21	—	1.02	.39	TTSS05014M	2,5mm	4.81
3863643	HSK100AHPVTT025630	1/4	.83	1.06	1.26	6.30	1.97	4.81	1.02	.39	TTSS05014M	2,5mm	6.31
3863644	HSK100AHPVTT031335	5/16	.83	1.06	—	3.35	2.21	—	1.02	.39	TTSS06014M	3mm	4.80
3863645	HSK100AHPVTT031630	5/16	.83	1.06	1.26	6.30	1.97	4.81	1.02	.39	TTSS06014M	3mm	6.29
3863646	HSK100AHPVTT038354	3/8	.94	1.26	—	3.54	2.40	—	1.22	.39	TTSS08014M	4mm	4.98
3863647	HSK100AHPVTT038630	3/8	.94	1.26	1.42	6.30	2.48	4.81	1.22	.39	TTSS08014M	4mm	6.65
3863648	HSK100AHPVTT050374	1/2	.94	1.26	—	3.74	2.60	—	1.42	.39	TTSS10014M	5mm	5.00
3863649	HSK100AHPVTT050630	1/2	.94	1.26	1.42	6.30	2.48	4.81	1.42	.39	TTSS10014M	5mm	6.61
3863650	HSK100AHPVTT062394	5/8	1.06	1.33	—	3.94	2.80	—	1.54	.39	TTSS12014M	6mm	5.15
3863651	HSK100AHPVTT062630	5/8	1.06	1.33	1.51	6.30	2.24	4.81	1.54	.39	TTSS12014M	6mm	6.82
3863652	HSK100AHPVTT075413	3/4	1.30	1.65	—	4.13	2.99	—	1.61	.39	TTSS16014M	8mm	5.61
3863653	HSK100AHPVTT075630	3/4	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	TTSS16014M	8mm	7.56
3863654	HSK100AHPVTT088413	7/8	1.30	1.65	—	4.13	2.99	—	1.61	.39	TTSS16014M	8mm	5.52
3863655	HSK100AHPVTT088630	7/8	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	TTSS16014M	8mm	7.47
3863656	HSK100AHPVTT100453	1	1.73	2.08	—	4.53	3.39	—	1.85	.39	TTSS16014M	8mm	6.72
3863657	HSK100AHPVTT100630	1	1.73	2.08	2.23	6.30	2.72	4.81	1.85	.39	TTSS16014M	8mm	9.00
3863658	HSK100AHPVTT125472	1 1/4	1.73	2.08	—	4.72	3.58	—	2.01	.39	TTSS16014M	8mm	6.57
3863659	HSK100AHPVTT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	4.81	2.01	.39	TTSS16014M	8mm	8.67
3863660	HSK100AHPVTT150531	1 1/2	2.36	2.75	—	5.31	4.18	—	2.01	.39	TTSS20014M	10mm	9.50

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

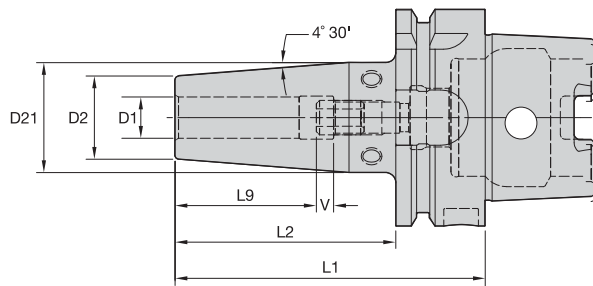
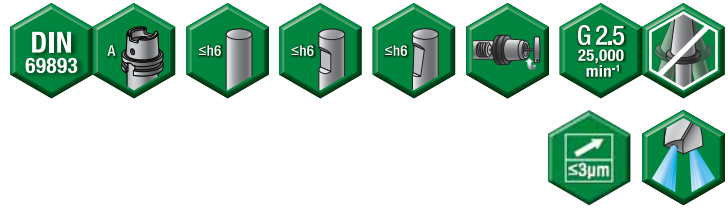
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-HSK Form A

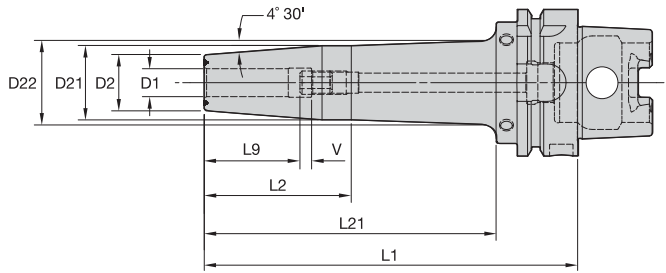


order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867222	HSK100AHPVTHT12095M	12	24	32	95	66	36	10	TTSS10014M	5mm	2,28
3867223	HSK100AHPVTHT14095M	14	27	34	95	66	36	10	TTSS10014M	5mm	2,33
3867224	HSK100AHPVTHT16100M	16	27	34	100	71	39	10	TTSS12014M	6mm	2,33
3867225	HSK100AHPVTHT18100M	18	33	42	100	71	39	10	TTSS12014M	6mm	2,52
3867226	HSK100AHPVTHT20105M	20	33	42	105	76	41	10	TTSS16014M	8mm	2,53
3867227	HSK100AHPVTHT25115M	25	44	53	115	86	47	10	TTSS16014M	8mm	3,06
3867228	HSK100AHPVTHT32120M	32	44	53	120	91	51	10	TTSS16014M	8mm	2,98

(continued)

HSK100A Shank Tools

(TT HT HPV continued)



HSK100A Shank Tools

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/- .0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/- .0005

■ **TT HT HPV IN-HSK Form A**



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3862400	HSK100AHPVTTH050374	1/2	.94	1.26	—	3.74	2.60	—	1.42	.39	TTSS10014M	5mm	5.00
3862401	HSK100AHPVTTH050630	1/2	.94	1.26	1.42	6.30	2.48	4.81	1.42	.39	TTSS10014M	5mm	6.61
3862402	HSK100AHPVTTH062394	5/8	1.06	1.33	—	3.94	2.80	—	1.54	.39	TTSS12014M	6mm	5.15
3862403	HSK100AHPVTTH062630	5/8	1.06	1.33	1.51	6.30	2.24	4.81	1.54	.39	TTSS12014M	6mm	6.82
3862404	HSK100AHPVTTH075413	3/4	1.30	1.65	—	4.13	2.99	—	1.61	.39	TTSS16014M	8mm	5.61
3862405	HSK100AHPVTTH075630	3/4	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	TTSS16014M	8mm	7.56
3862406	HSK100AHPVTTH088413	7/8	1.30	1.65	—	4.13	2.99	—	1.61	.39	TTSS16014M	8mm	5.52
3862407	HSK100AHPVTTH088630	7/8	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	TTSS16014M	8mm	7.47
3862408	HSK100AHPVTTH100453	1	1.73	2.08	—	4.53	3.39	—	1.85	.39	TTSS16014M	8mm	6.72
3862409	HSK100AHPVTTH100630	1	1.73	2.08	2.23	6.30	2.72	4.81	1.85	.39	TTSS16014M	8mm	8.99
3862410	HSK100AHPVTTH125472	1 1/4	1.73	2.08	—	4.72	3.58	—	2.01	.39	TTSS16014M	8mm	6.57
3862411	HSK100AHPVTTH125630	1 1/4	1.73	2.08	2.23	6.30	2.72	4.81	2.01	.39	TTSS16014M	8mm	8.66
3862412	HSK100AHPVTTH150531	1 1/2	2.36	2.75	—	5.31	4.18	—	2.01	.39	TTSS20014M	10mm	9.48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

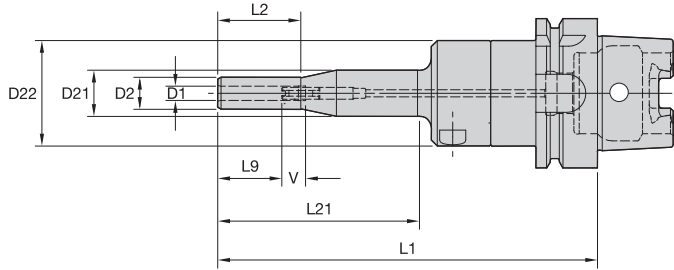
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Hydraulic Chucks Slim Line



HSK100A Shank Tools



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■ HC Slim-T MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3061086	HSK100AHCSLT06200M	6	13,5	19,5	44	200	35	85	27	10	3,08
3061087	HSK100AHCSLT08200M	8	15,5	19,5	44	200	35	85	27	10	3,09
3061088	HSK100AHCSLT10200M	10	17,5	44,5	—	200	85	171	31	10	3,08

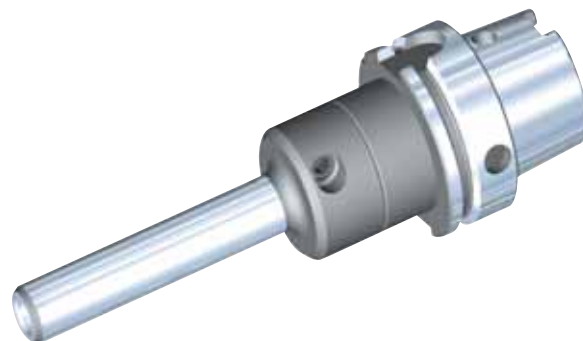
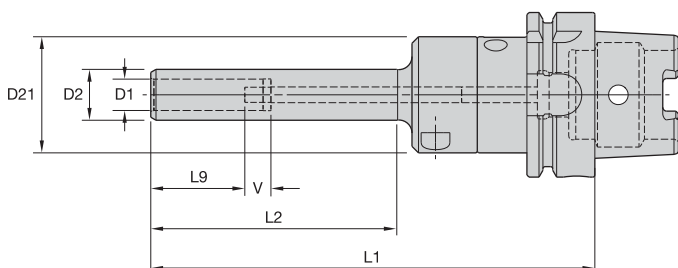
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK100AHCSLT06200M	170.135	5mm	170.002	2,5mm
HSK100AHCSLT08200M	170.135	5mm	170.002	2,5mm
HSK100AHCSLT10200M	170.135	5mm	170.003	3mm

(continued)

(HC Slim continued)



HSK100A Shank Tools

■ HC Slim MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061089	HSK100AHCSL12200M	12	19,5	44,5	200	95	36	10	3,00
3061090	HSK100AHCSL14200M	14	21,5	52,5	200	95	36	10	3,37
3061091	HSK100AHCSL16200M	16	23,5	52,5	200	95	39	10	3,38
3061092	HSK100AHCSL18200M	18	25,5	52,5	200	95	39	10	3,42
3061263	HSK100AHCSL20200M	20	27,5	52,5	200	95	41	10	3,46

■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK100AHCSL12200M	170.135	5mm	170.002	2,5mm
HSK100AHCSL14200M	170.135	5mm	170.002	2,5mm
HSK100AHCSL16200M	170.135	5mm	170.002	2,5mm
HSK100AHCSL18200M	170.135	5mm	170.002	2,5mm
HSK100AHCSL20200M	170.135	5mm	170.002	2,5mm

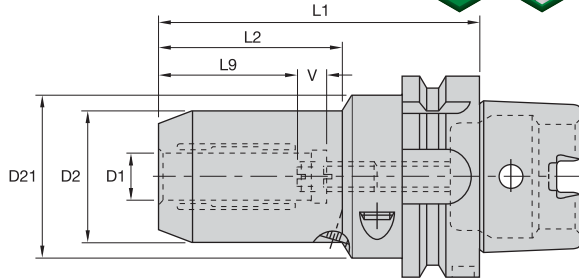
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Unable to use SEFAS™ chamfering rings on this design.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Hydraulic Chucks Standard HP Line



HSK100A Shank Tools



ERICKSON™

■ HC MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245483	HSK100AHC06085M	6	25,7	63	85	33	27	10	170.135	5mm	170.002	2,5mm	2,57
2229193	HSK100AHC06150M	6	25,7	63	150	90	27	10	170.135	5mm	170.002	2,5mm	2,96
1245484	HSK100AHC08085M	8	27,7	63	85	33	27	10	170.135	5mm	170.002	2,5mm	2,59
2215823	HSK100AHC08150M	8	27,7	63	150	90	27	10	170.135	5mm	170.002	2,5mm	3,00
1245485	HSK100AHC10090M	10	29,7	63	90	38	31	10	170.135	5mm	170.002	2,5mm	2,64
2229194	HSK100AHC10150M	10	29,7	63	150	94	31	10	170.135	5mm	170.002	2,5mm	3,00
1245486	HSK100AHC12095M	12	31,6	63	95	41	36	10	170.135	5mm	170.002	2,5mm	3,80
2229195	HSK100AHC12150M	12	31,6	63	150	100	36	10	170.135	5mm	170.002	2,5mm	2,94
1245487	HSK100AHC14095M	14	33,6	63	95	42	36	10	170.135	5mm	170.003	3mm	4,00
2229196	HSK100AHC14150M	14	33,6	63	150	92	36	10	170.135	5mm	170.003	3mm	3,10
1245488	HSK100AHC16100M	16	37,6	63	100	48	39	10	170.135	5mm	170.003	3mm	4,00
2229197	HSK100AHC16150M	16	37,6	63	150	96	39	10	170.135	5mm	170.003	3mm	3,20
1245489	HSK100AHC18100M	18	39,6	63	100	48	39	10	170.135	5mm	170.003	3mm	2,78
2229198	HSK100AHC18150M	18	39,6	63	150	96	39	10	170.135	5mm	170.003	3mm	3,28
1245490	HSK100AHC20105M	20	41,6	63	105	54	41	10	170.135	5mm	170.003	3mm	4,20
2229199	HSK100AHC20150M	20	41,6	63	150	100	41	10	170.135	5mm	170.003	3mm	3,31
1245491	HSK100AHC25115M	25	49,8	63	115	51	47	10	170.136	6mm	170.004	4mm	3,27
2229200	HSK100AHC25200M	25	49,8	63	200	137	47	10	170.136	6mm	170.004	4mm	4,50
1245492	HSK100AHC32120M	32	59,8	63	120	59	51	10	170.136	6mm	170.004	4mm	3,55
2229201	HSK100AHC32200M	32	59,8	63	200	139	51	10	170.136	6mm	170.004	4mm	5,26

■ HC IN-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
1246557	HSK100AHC038350	3/8	1.17	2.48	3.50	1.38	1.22	.4	170.135	5mm	170.002	2,5mm	5.84
1246560	HSK100AHC050375	1/2	1.24	2.48	3.75	1.59	1.42	.4	170.135	5mm	170.002	2,5mm	5.95
1246563	HSK100AHC062400	5/8	1.48	2.48	4.00	1.87	1.54	.4	170.135	5mm	170.003	3mm	6.17
1246567	HSK100AHC075425	3/4	1.64	2.48	4.25	2.13	1.61	.4	170.135	5mm	170.003	3mm	6.39
1246569	HSK100AHC100475	1	1.95	2.48	4.75	2.01	1.81	.4	170.136	6mm	170.004	4mm	7.28
1246573	HSK100AHC125500	1 1/4	2.36	2.48	5.00	2.32	1.97	.4	170.136	6mm	170.004	4mm	7.94

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

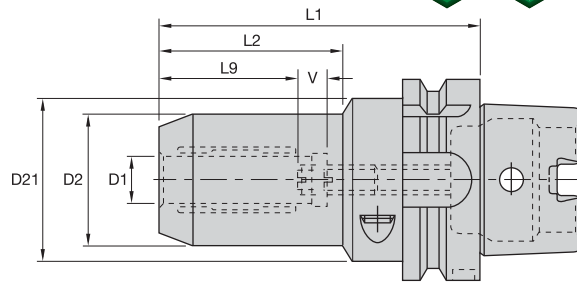
Hydraulic chuck technical section, see page K60.

Supplied with stop screw.

Actuation wrench must be ordered separately.

Reduction sleeves are available and must be ordered separately; see page I2.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK100A Shank Tools

ERICKSON

■ HC Trend MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1749601	HSK100AHCT06085M	6	25,7	63	85	33	27	10	170.135	5mm	170.003	3mm	2,61
1749602	HSK100AHCT08085M	8	27,7	63	85	33	27	10	170.135	5mm	170.003	3mm	2,63
1749603	HSK100AHCT10090M	10	29,7	63	90	38	31	10	170.135	5mm	170.003	3mm	2,66
1749604	HSK100AHCT12095M	12	31,6	63	95	40	36	10	170.135	5mm	170.003	3mm	2,70
1749605	HSK100AHCT14095M	14	33,6	63	95	42	36	10	170.135	5mm	170.005	5mm	2,70
1749606	HSK100AHCT16100M	16	37,6	63	100	48	39	10	170.135	5mm	170.005	5mm	2,80
1749608	HSK100AHCT18100M	18	39,6	63	100	48	39	10	170.135	5mm	170.005	5mm	2,82
1749609	HSK100AHCT20105M	20	41,6	63	105	54	41	10	170.135	5mm	170.005	5mm	2,89
1749611	HSK100AHCT25115M	25	49,8	63	115	51	47	10	170.136	6mm	170.005	5mm	3,29
1749612	HSK100AHCT32120M	32	59,8	63	120	59	51	10	170.136	6mm	170.005	5mm	3,57

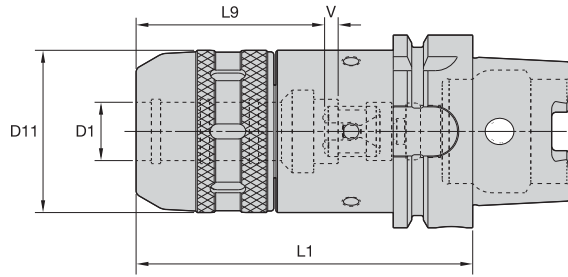
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

HPMC High-Performance Milling Chucks



HSK100A Shank Tools



ERICKSON™

■ HPMC MM-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3100542	HSK100AHPMC20115M	20	53	115	54	10	PSW52M	MCSS16018M	2,5mm & 5mm	3,13
3100543	HSK100AHPMC32135M	32	70	135	68	10	PSW68M	MCSS16018M	2,5mm & 5mm	4,13

■ HPMC IN-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100539	HSK100AHPMC075453	3/4	2.09	4.53	2.05	.4	PSW52M	MCSS16018M	2,5mm & 5mm	7.00
3100540	HSK100AHPMC100512	1	2.40	5.12	2.56	.4	PSW58M	MCSS16018M	2,5mm & 5mm	8.45
3100541	HSK100AHPMC125531	1 1/4	2.76	5.32	2.68	.4	PSW68M	MCSS16018M	2,5mm & 5mm	9.05

NOTE: Milling chuck technical section, see page K64.

Supplied with locknut and stop screw.

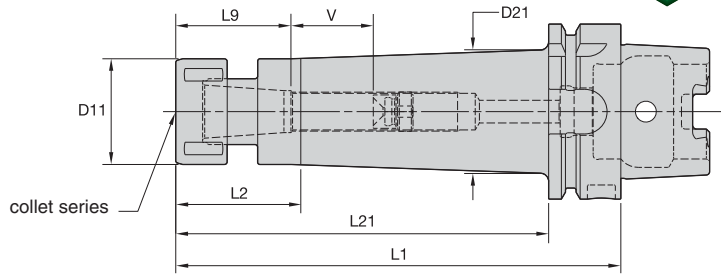
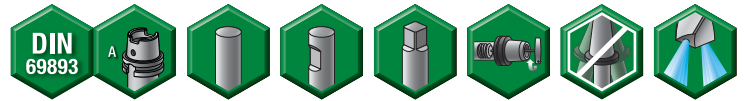
Locknut wrench must be ordered separately.

Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.

Reduction sleeves are available and must be ordered separately; see page I6.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Tremendous Grip (3:1 advantage).



HSK100A Shank Tools

ERICKSON

■ TG Round-HSK Form A

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

order number	catalog number	collet series							locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg	
		D11	D21	L1	L2	L21	L9	V								
1086586	HSK100ATG050105M	TG50	38	—	105	76	76	42	10	LNA050M	HSW34M	68	SS056041G	4mm & 5/32	S SCC056	2,48
1086587	HSK100ATG050160M	TG50	38	44	160	41	131	42	58	LNA050M	HSW34M	68	SS056041G	4mm & 5/32	S SCC056	3,06
1085040	HSK100ATG075120M	TG75	50	—	120	91	91	54	11	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	S SCC081	3,04
1086588	HSK100ATG100140M	TG100	60	—	140	111	111	70	12	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	S SCC112	3,79
1086589	HSK100ATG150165M	TG150	85	—	165	136	—	84	11	LNA150M	HSW80M	271	SS162062G	4mm & 5/32	S SCC162	6,40

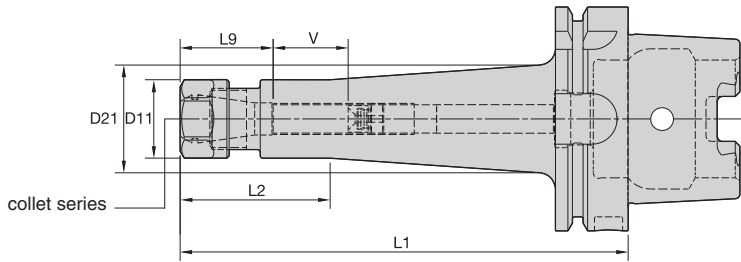
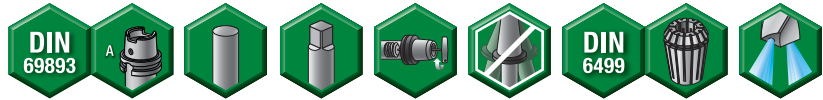
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK100A Shank Tools

Collet Capacity

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

ER Hex-HSK Form A

order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1086560	HSK100AER16100M	ER16	28	—	100	71	32	27	2,26
1086561	HSK100AER16160M	ER16	28	60	160	85	32	48	2,83
1086562	HSK100AER20100M	ER20	34	—	100	65	36	7	2,33

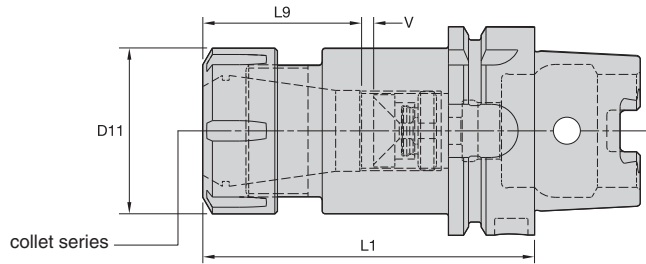
Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK100AER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	SSCC044
HSK100AER16160M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32	SSCC044
HSK100AER20100M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32	SSCC056

(continued)

(ER-HSK Form A continued)



HSK100A Shank Tools

■ ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1086563	HSK100AER25100M	ER25	42	100	40	5	2,51
1086584	HSK100AER32100M	ER32	50	100	45	4	2,70
1086585	HSK100AER40120M	ER40	63	120	52	8	3,51

■ Spare Parts

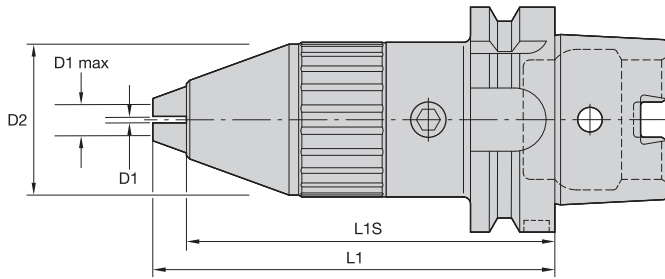


catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK100AER25100M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32	SSCC075
HSK100AER32100M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32	SSCC094
HSK100AER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32	SSCC112

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Drill Chucks • Whistle Notch™ Adapters



HSK100A Shank Tools

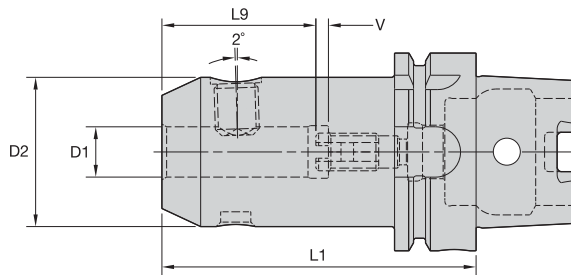
ERICKSON™

■ DC-HSK Form A

order number	catalog number	D1		D1 max		D2	L1	L1S
		mm	in	mm	in			
2637153	HSK100ADC13125M	0,5	.020	13,0	.512	50	134	125
2637154	HSK100ADC16125M	3,0	.118	16,0	.630	52	135	125

NOTE: Locking wrench not supplied.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



ERICKSON™

■ WN MM-HSK Form A

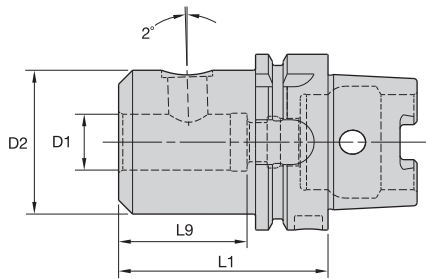
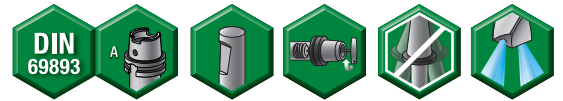
order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1155902	HSK100AWN06090M	6	25	90	30	10	SS03M012	3mm	7	571.060	2,5mm	2,20
1155903	HSK100AWN08090M	8	28	90	30	10	SS03M014	4mm	15	571.067	3mm	2,26
1155904	HSK100AWN10090M	10	35	90	35	10	SS03M018	5mm	25	571.068	4mm	2,40
1155905	HSK100AWN12100M	12	42	100	40	10	SS03M023	6mm	35	571.074	5mm	2,65
1155906	HSK100AWN14100M	14	44	100	40	10	SS03M023	6mm	35	571.074	5mm	2,71
1155909	HSK100AWN16100M	16	48	100	43	10	SS03M025	6mm	50	571.069	6mm	2,84
1126240	HSK100AWN18100M	18	50	100	43	10	SS03M025	6mm	50	571.069	6mm	2,91
1155911	HSK100AWN20110M	20	52	110	45	10	SS03M026	8mm	95	571.076	6mm	3,11
1188828	HSK100AWN25120M	25	65	120	50	10	SS03M027	10mm	135	571.077	6mm	3,97
1188829	HSK100AWN32120M	32	72	120	54	10	SS03M029	10mm	160	571.077	6mm	4,34

NOTE: Do not overtighten lock screw; use torque recommendations above.

Supplied with lock screw and stop screw.

Lock screw or stop screw wrench not included.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



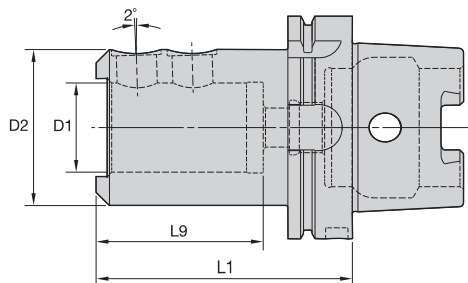
HSK100A Shank Tools

ERICKSON

■ SWN MM-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254122	HSK100ASWN20085M	20	50	85	48	SS03M026	8mm	95	4,53
1254123	HSK100ASWN25085M	25	55	85	48	SS03M023	6mm	35	4,25



■ SWN MM • With Drive • HSK Form A

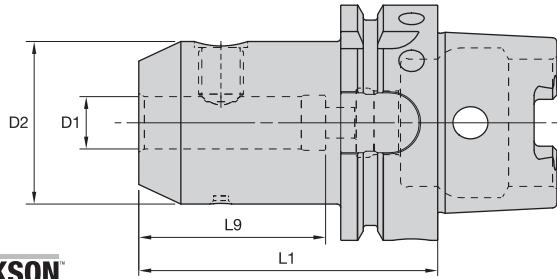


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254124	HSK100ASWN32100M	32	62	100	66	SS03M023	6mm	35	3,29
1254125	HSK100ASWN40110M	40	70	110	76	SS03M023	6mm	35	3,72
1254126	HSK100ASWN50110M	50	80	110	76	SS03M023	6mm	35	4,08

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

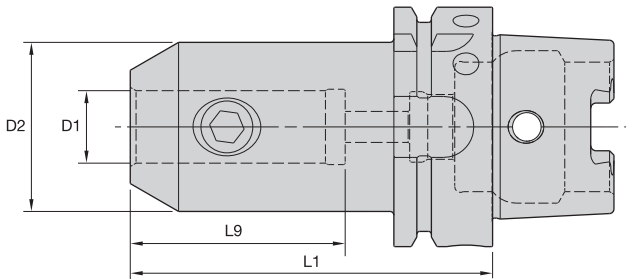
End Mill Adapters



ERICKSON™

EM MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1188810	HSK100AEM06080M	6	25	80	52	SS03M012	3mm	7	2,16
1333701	HSK100AEM08080M	8	28	80	52	SS03M014	4mm	15	2,19
1188811	HSK100AEM10080M	10	35	80	52	SS03M018	5mm	25	2,31
1155899	HSK100AEM12080M	12	42	80	49	SS03M023	6mm	35	2,45
1188812	HSK100AEM14080M	14	44	80	49	SS03M023	6mm	35	2,49
1155900	HSK100AEM16100M	16	48	100	53	SS03M025	6mm	50	2,84
1188813	HSK100AEM18100M	18	50	100	53	SS03M025	6mm	50	2,90
1126421	HSK100AEM20100M	20	52	100	55	SS03M026	8mm	95	2,95
1149696	HSK100AEM25100M	25	65	100	60	SS03M027	10mm	135	3,46
1126304	HSK100AEM32100M	32	72	100	65	SS03M029	10mm	160	3,73
1188814	HSK100AEM40120M	40	90	120	75	SS03M032	10mm	160	5,51
1322096	HSK100AEM50130M	50	100	130	85	—	12mm	200	6,37



EM I-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1015228	HSK100AEM025300	1/4	1.00	3.00	2	ELS025025PKG	1/8	8	4.77
1015229	HSK100AEM038300	3/8	1.00	3.00	2	ELS038031PKG	3/16	15	4.74
1015230	HSK100AEM050325	1/2	1.38	3.25	2	ELS044038PKG	7/32	20	5.06
1015231	HSK100AEM062375	5/8	1.63	3.75	2	ELS056050PKG	1/4	40	5.61
1015232	HSK100AEM075375	3/4	1.75	3.75	2	ELS062050PKG	5/16	70	5.75
1015233	HSK100AEM100425	1	2.00	4.25	2	ELS075056PKG	3/8	110	6.43
1015254	HSK100AEM125425	1 1/4	2.50	4.25	3	ELS075062PKG	3/8	110	7.63
1015255	HSK100AEM150450	1 1/2	2.75	4.50	3	ELS075069PKG	3/8	110	8.35
1015285	HSK100AEM200550	2	3.75	5.50	4	ELS100088PKG	1/2	150	14.05
1015286	HSK100AEM250575	2 1/2	4.19	5.75	4	ELS100088PKG	1/2	150	16.04



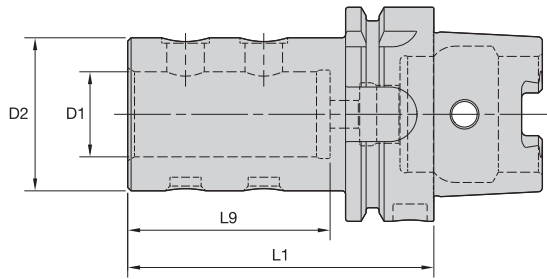
NOTE: Do not overtighten lock screw; use torque recommendations above.

Supplied with lock screw.

Lock screw wrench not included.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.





HSK100A Shank Tools

ERICKSON

■ DAT MM-HSK Form A



order number	catalog number	D1	D2	L1	L9	lock screw	lock screw	wrench size lock screw	Nm	kg
2402301	HSK100ADAT25095M	25	45	95	60	12166903900	12166903700	6mm	40	2,57
2402302	HSK100ADAT32100M	32	50	100	64	12166903900	12166903700	6mm	40	2,67
2402353	HSK100ADAT40110M	40	60	110	74	12166904000	12166903800	8mm	50	3,04

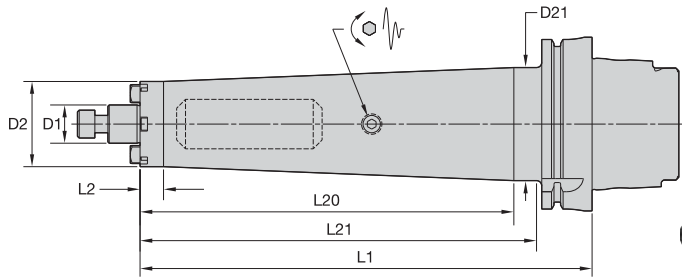
*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screws.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.*

HSK100A Shank Tools

Tunable Shell Mill Adapters with Through Coolant

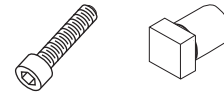


HSK100A Shank Tools

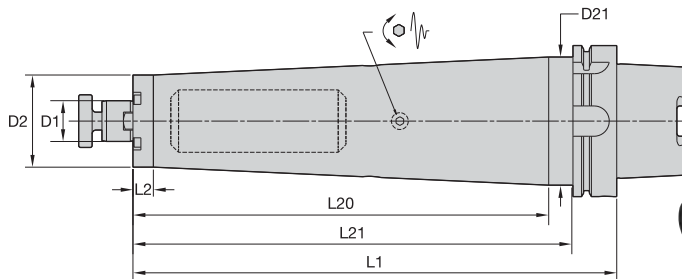


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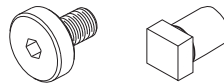
■ Cap MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135981	HSK100ATDSMC22260M	22	49	65	260	14	215	231	MS1234	KDK22M	8mm	6,43



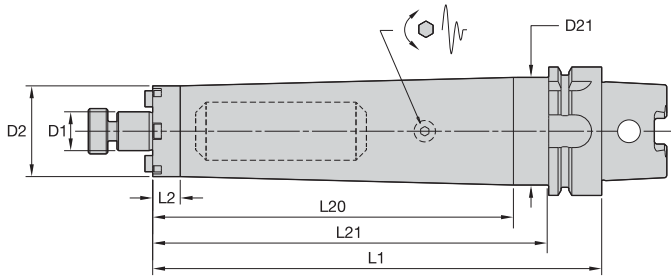
■ SMC Lock MM-HSK Form A



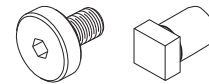
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135982	HSK100ATDSMC27320M	27	61	85	320	13,5	275	291	KLSS27M	—	10mm	11,22
4136283	HSK100ATDSMC32330M	32	78	—	330	301,1	—	—	KLSS32M	KDK32M	14mm	14,92

(continued)

(SMC continued)



■ SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136284	HSK100ATDSMC0751050	3/4	1.750	2.559	10.500	.532	8.728	9.360	KLS07	KDK05	1/4	13.69
4136285	HSK100ATDSMC1001250	1	2.752	3.337	12.500	.532	10.728	11.360	KLS10	KDK06	5/16	26.94
4136286	HSK100ATDSMC1251300	1 1/4	2.878	3.337	13.000	.630	11.228	11.860	KLS12	KDK08	5/16	33.52

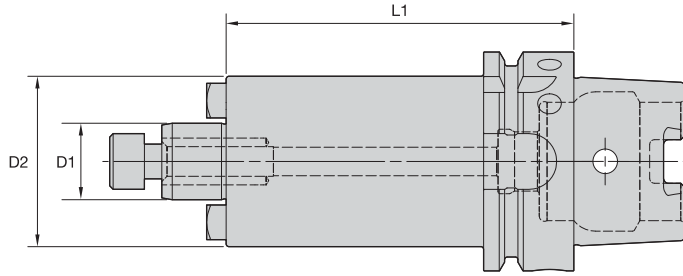
NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench; see page J32.

HSK100A Shank Tools

Shell Mill Adapters with Through Coolant



HSK100A Shank Tools

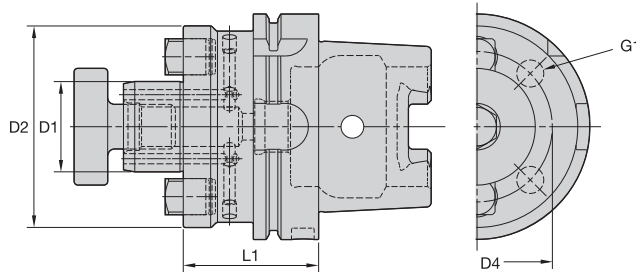


ERICKSON

■ SMC Cap MM-HSK Form A



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	kg
4144669	HSK100ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	2,20
4144670	HSK100ASM2C22050M	22	42	50	MS1234	—	8mm	2,28
3872496	HSK100ASMC16050M	16	44	50	MS1294	KDK16M	6mm	2,26
3872497	HSK100ASMC16100M	16	44	100	MS1294	KDK16M	6mm	2,81
3872498	HSK100ASMC16160M	16	44	160	MS1294	KDK16M	6mm	3,48
3872499	HSK100ASMC22050M	22	49	50	MS1234	KDK22M	8mm	2,36
3872500	HSK100ASMC22100M	22	49	100	MS1234	KDK22M	8mm	3,05
3872501	HSK100ASMC22160M	22	49	160	MS1234	KDK22M	8mm	3,89



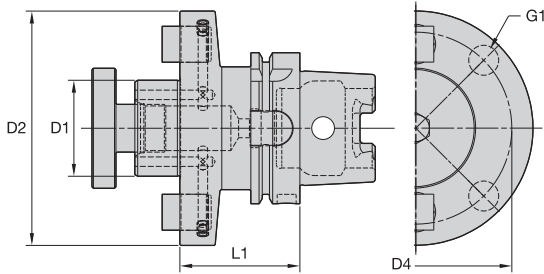
■ SMC Lock MM-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	kg
3872502	HSK100ASMC27050M	27	60	—	—	50	KLSS27M	KDK27M	10mm	2,59
3872503	HSK100ASMC27100M	27	60	—	—	100	KLSS27M	KDK27M	10mm	3,65
3872504	HSK100ASMC27160M	27	60	—	—	160	KLSS27M	KDK27M	10mm	4,93
3872505	HSK100ASMC32050M	32	78	—	—	50	KLSS32M	KDK32M	14mm	3,00
3872506	HSK100ASMC32100M	32	78	—	—	100	KLSS32M	KDK32M	14mm	4,82
3872507	HSK100ASMC32160M	32	78	—	—	160	KLSS32M	KDK32M	14mm	7,02
3872508	HSK100ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	3,78
3872509	HSK100ASMC40100M	40	89	67	M12X1.75	100	KLSS40M	KDK40M	17mm	5,54
3872510	HSK100ASMC40160M	40	89	67	M12X1.75	160	KLSS40M	KDK40M	17mm	8,14
3872511	HSK100ASMC50070M	50	98	—	—	70	KLS50M	—	—	4,67
3872512	HSK100ASMC50100M	50	98	—	—	100	KLS50M	—	—	6,14
3872513	HSK100ASMC50160M	50	98	—	—	160	KLS50M	—	—	8,70
3872514	HSK100ASMC60070M	60	129	102	M16X2.0	70	—	KDK60M	—	5,53
3872515	HSK100ASMC60100M	60	129	102	M16X2.0	100	—	KDK60M	—	7,58
3872516	HSK100ASMC60160M	60	129	102	M16X2.0	160	—	KDK60M	—	10,18

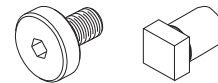
(continued)

(SMC continued)



HSK100A Shank Tools

■ SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3763072	HSK100ASM2C075225	3/4	1.535	—	—	2.250	KLS07	—	1/4	4.99
3763071	HSK100ASMC075225	3/4	1.752	—	—	2.250	KLS07	KDK05	1/4	5.23
3763074	HSK100ASM2C100225	1	2.189	—	—	2.250	KLS10	KDK06	5/16	5.77
3763073	HSK100ASMC100225	1	2.752	—	—	2.250	KLS10	KDK06	5/16	6.43
3763075	HSK100ASMC125250	1 1/4	2.878	—	—	2.500	KLS12	KDK08	5/16	7.26
3763076	HSK100ASMC150250	1 1/2	3.811	—	—	2.500	KLS15	KDK10	3/8	8.94
3763077	HSK100ASMC200250	2	4.882	4.000	.625-11 UNC	2.500	KLS20	KDK12	9/16	10.87
3763078	HSK100ASMC250250	2 1/2	4.882	4.000	.625-11 UNC	2.500	KLS25	KDK16	9/16	11.83

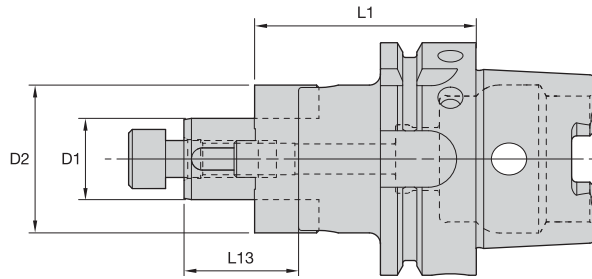
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.
 Supplied with four locking bolts (S-388).

HSK100A Shank Tools

Combi Shell Mill Adapters



- Through-the-toolholder coolant capability.



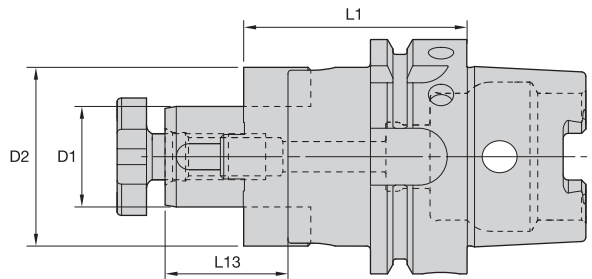
HSK100A Shank Tools

ERICKSON

■ CS Cap MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1125162	HSK100ACS16060M	16	32	60	27	MS1294	6mm	CDR16M	CDK16M	2,22
1151595	HSK100ACS22060M	22	40	60	31	MS1234	8mm	CDR22M	CDK22M	2,34



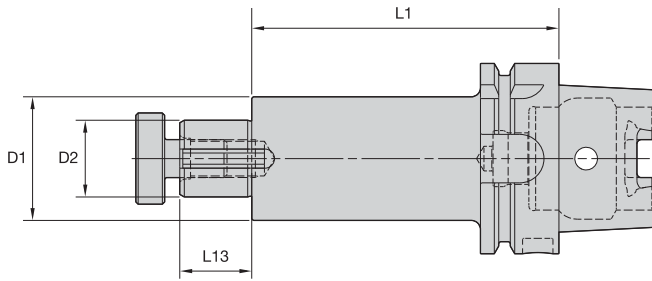
■ CS Lock MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key
1126856	HSK100ACS27060M	27	48	60	33	KLS27MPKG	SMW27M	CDR27M	CDK27M
1126865	HSK100ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M
1126873	HSK100ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M
1188682	HSK100ACS50080M	50	90	80	46	KLS50M	SMW50M	CDR50M	CDK50M

NOTE: Do not overtighten lock screw.
 Supplied with lock screw, drive ring, and drive keys.
 Lock screw must be ordered separately.
 For HSK coolant unit and wrench, see page J32.





HSK100A Shank Tools

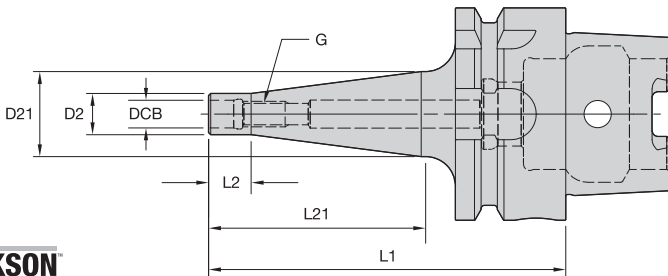
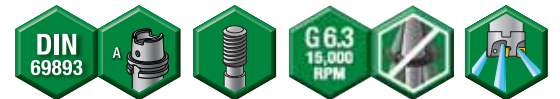
ERICKSON

SA IN-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive key	lbs
1256067	HSK100ASA062400	5/8	1.25	4.00	.78	KLS07	1/4	DWG SDK062088	5.46
1256068	HSK100ASA100400	1	1.61	4.00	.94	KLS10	5/16	DWG SDK100106	6.23
1256069	HSK100ASA125600	1 1/4	1.86	6.00	1.09	KLS12	5/16	DWG SDK125119	8.49
1256070	HSK100ASA150600	1 1/2	2.11	6.00	1.70	KLS15	3/8	DWG SDK150175	10.09
1256071	HSK100ASA200600	2	2.75	6.00	1.70	KLS20	9/16	SDK200169	14.19

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive key.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.



ERICKSON

ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061397	HSK100AST12087M	12,5	M12	21	24	87	10	50	2,13
4061398	HSK100AST12137M	12,5	M12	21	31	137	10	100	2,40
4061399	HSK100AST12187M	12,5	M12	21	31	187	10	150	2,57
4061400	HSK100AST12237M	12,5	M12	21	36	237	10	200	2,95
4061401	HSK100AST16087M	17,0	M16	29	31	87	10	50	2,24
4061402	HSK100AST16137M	17,0	M16	29	39	137	10	100	2,69
4061413	HSK100AST16187M	17,0	M16	29	39	187	10	150	3,02
4061414	HSK100AST16237M	17,0	M16	29	39	237	10	200	3,36

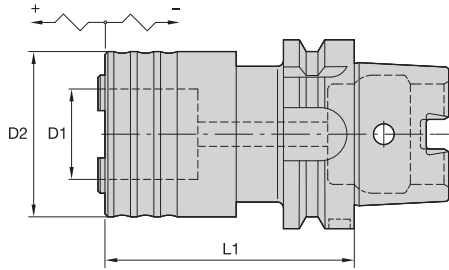
NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Tap Chucks RC Tension and Compression • Morse Taper Adapters



HSK100A Shank Tools



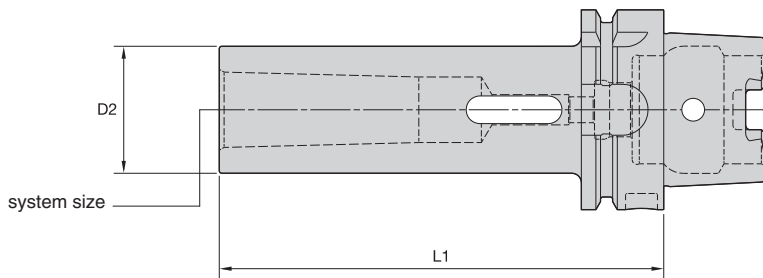
ERICKSON

RC-HSK Form A

order number	catalog number	adapter size	tap size			D1	D2	L1	tension	compression	kg
			mm	in							
1520643	HSK100ACHRC1112M	1	M1.0 - M14	#0 - 9/16	19	39	112	7,5	7,5	3,60	
1520644	HSK100ACHRC2144M	2	M4.5 - M24	5/16 - 7/8	31	60	144	10,0	10,0	4,10	
1520645	HSK100ACHRC3210M	3	M14.0 - M36	13/16 - 1 3/8	48	86	210	17,5	17,5	6,90	

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Balanced-by-design.

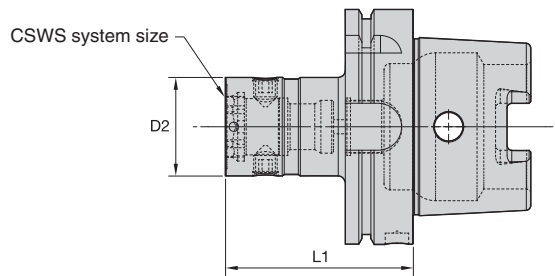


ERICKSON

MT-HSK Form A

order number	catalog number	system size	D2	L1	kg
1323373	HSK100AMT2120M	2	32,00	120	1,89
1323375	HSK100AMT3150M	3	40,00	150	2,31
1507601	HSK100AMT4170M	4	48,00	170	2,78
1518711	HSK100AMT5200M	5	70,00	200	4,92

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK100A Shank Tools

ERICKSON

■ RFX-HSK Form A

order number	catalog number	CSWS system size	D2	L1	lock screw	Nm	wrench	kg
3881208	HSK100ARFX420080M	RFX420	42	80	RFX420LS	20	12148041300	1,00
3881209	HSK100ARFX550090M	RFX550	55	90	RFX550LS	25	12148041400	2,20
3881210	HSK100ARFX720105M	RFX720	72	105	RFX720LS	25	12148041400	2,50

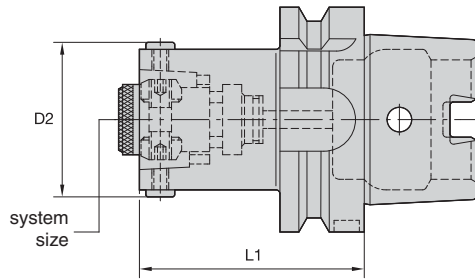
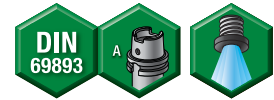
*NOTE: Do not overtorque actuation screw; use recommended torques referenced above.
 Supplied with actuation mechanism and sealing ring.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.
 With HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.*

HSK100A Shank Tools

HSK Modular Adapters • KM™ Modular Adapters



HSK100A Shank Tools



ERICKSON

■ HSK-HSK Form A

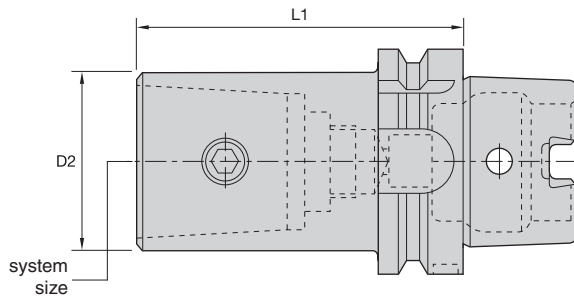
order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1318870	HSK100AHSK50080M	HSK50	55	80	4mm	15	2
1312947	HSK100AHSK63100M	HSK63	70	100	5mm	20	2
1320682	HSK100AHSK100140M	HSK100	110	140	8mm	40	7
1520596	HSK100AHSK100200M	HSK100	110	200	8mm	40	9

NOTE: Do not overtorque actuation screw; use torque recommendations above.

Supplied with actuation mechanism and sealing ring.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

With HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.



ERICKSON

■ KM-HSK Form A

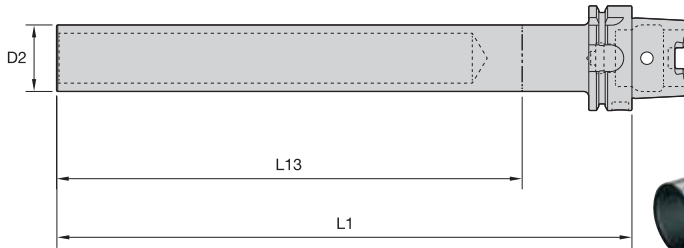
order number	catalog number	system size	D2	L1	spare parts package	wrench size actuation screw	Nm	kg
1139877	HSK100AKM32075M	KM32	32	75	KM32PKG3S	5mm	8	2,25
1140647	HSK100AKM40080M	KM40	40	80	KM40PKG3S	6mm	12	2,42
1140651	HSK100AKM50100M	KM50	50	100	KM50PKG3S	10mm	27	2,87
1140655	HSK100AKM63115M	KM63	63	115	KM63PKG3S	12mm	47	3,67
1255791	HSK100AKM80125M	KM80	80	125	KM80PKG3S	14mm	79	5,04

NOTE: Do not overtorque actuation screw; use torque recommendations above.

Supplied with KM actuation mechanism.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.

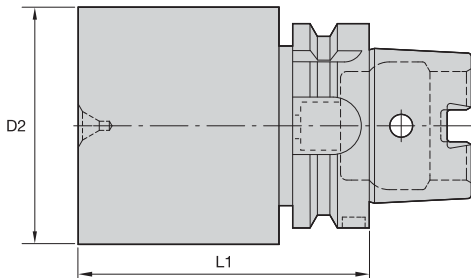


HSK100A Shank Tools

■ GB-HSK Form A

order number	catalog number	D2		L1		L13		kg
		mm	in	mm	in	mm	in	
1316356	HSK100AGB40349M	40,0	1.57	349,0	13.74	300,0	11.81	3,73

- Machinable front 32–38 RW C.



ERICKSON

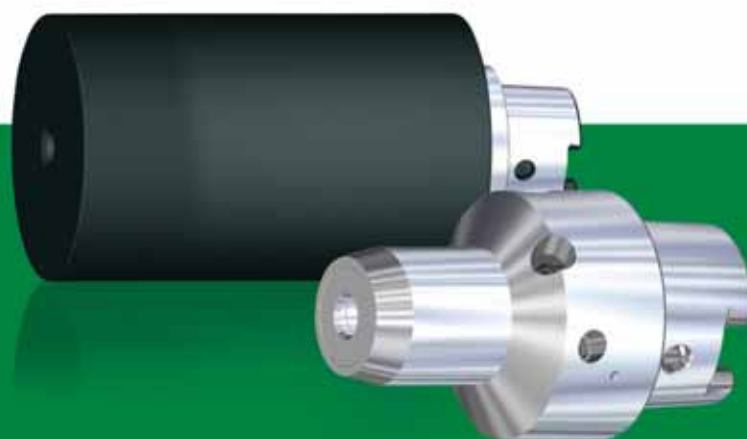
■ BB-HSK Form A

order number	catalog number	D2	L1	kg
1026681	HSK100ABB100300M	100,8	300	18,11
1015290	HSK100ABB200175M	200,8	175	34,36

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

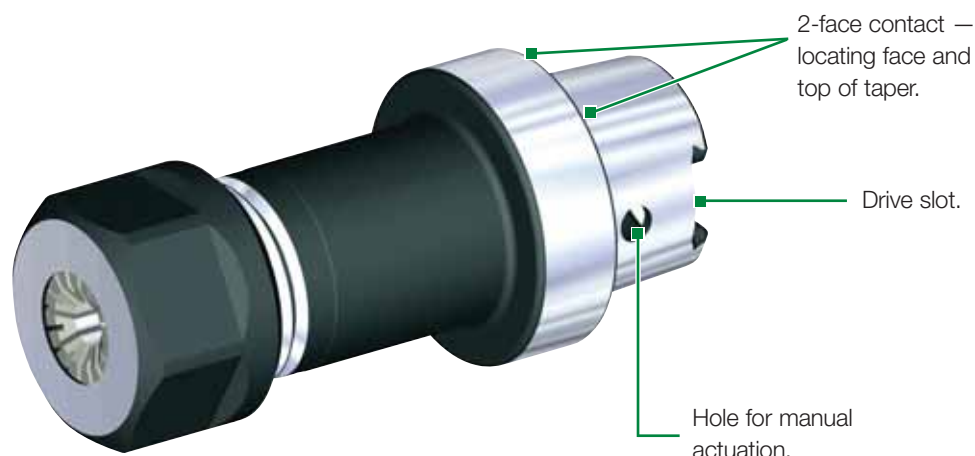
Erickson™ HSK Shank Tooling System • **HSK32C Series**

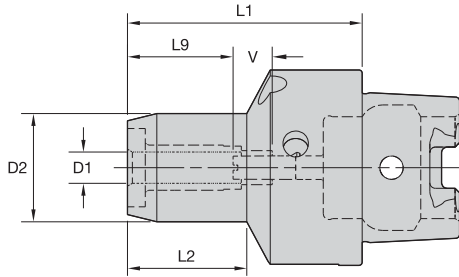
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



HSK32C

- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 42,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





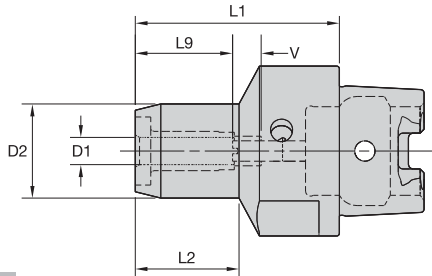
HSK32C Shank Tools

ERICKSON

■ HC MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245412	HSK32CHC06060M	6	25,7	60	33	26	10	170.254	4mm	170.002	2,5mm	2,77
1245413	HSK32CHC08060M	8	27,7	60	33	26	10	170.254	4mm	170.002	2,5mm	2,92
1245414	HSK32CHC10065M	10	29,7	65	38	31	10	170.254	4mm	170.002	2,5mm	3,30
1245415	HSK32CHC12070M	12	31,6	70	43	36	10	170.254	4mm	170.002	2,5mm	3,67

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.



ERICKSON

■ HC Trend MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1809981	HSK32CHCT06060M	6	25,7	60	33	26	10	170.254	4mm	170.003	3mm	0,30
1809982	HSK32CHCT08060M	8	27,7	60	33	26	10	170.254	4mm	170.003	3mm	0,30
1809983	HSK32CHCT10065M	10	29,7	65	38	31	10	170.254	4mm	170.003	3mm	0,40
1809984	HSK32CHCT12070M	12	31,6	70	43	36	10	170.254	4mm	170.003	3mm	0,40

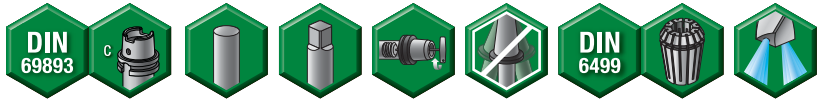
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.

HSK32C Shank Tools

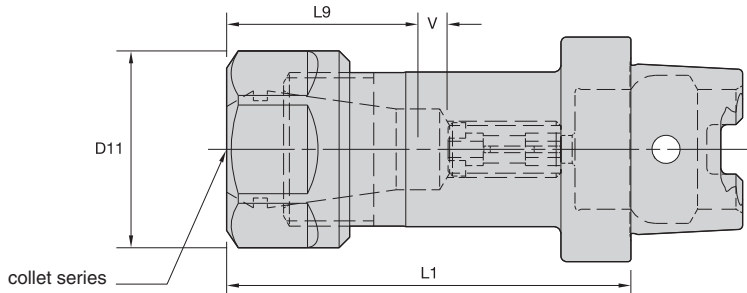
ER Single-Angle Collet Chucks • Bar Blanks



- Grip (2:1 advantage).



HSK32C Shank Tools



ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41

ERICKSON

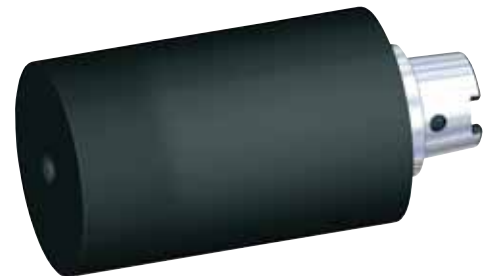
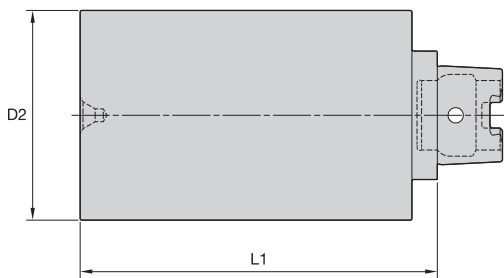
ER Hex-HSK Form C



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	kg
1139068	HSK32CER16060M	ER16	28	60	32	2	LNHER16M	OEW25M	40	56	571.068	4mm	0,19

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.

- Machinable front 32–38 RW C.



ERICKSON

BB-HSK Form C

order number	catalog number	D2	L1	kg
1519723	HSK32CBB034100M	34,8	100,0	0,73
1519724	HSK32CBB034200M	34,8	200,0	1,48
1519725	HSK32CBB053150M	53,8	150,0	2,54

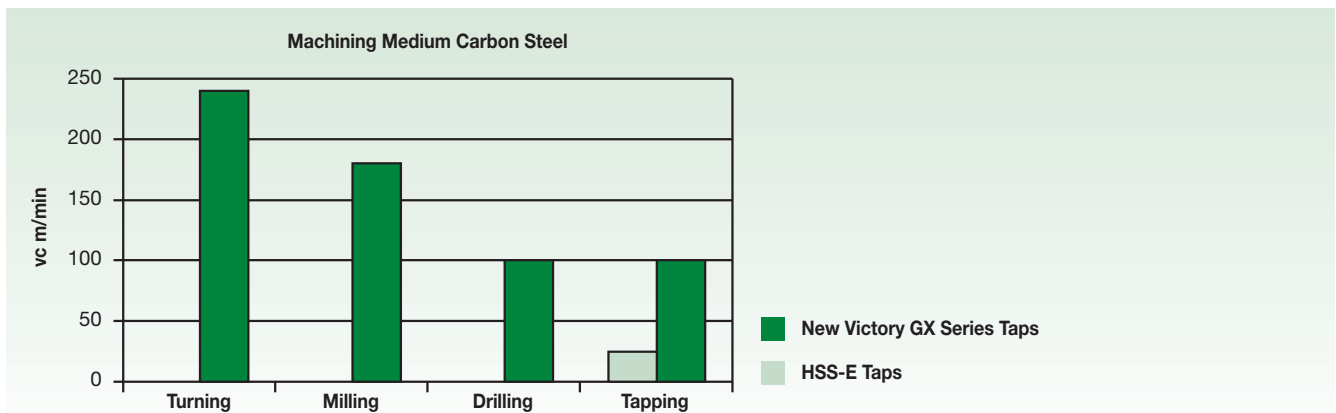
WIN WITH WIDIA™



Victory™ GX HP Solid Carbide for the Ultimate High-Performance Tapping Line

Run up to 4x faster and last up to 4x longer than conventional high-speed steel taps.

- Enhanced precision design delivers more accurately tapped holes.
- A full range of styles and grades for blind hole and through hole applications in ferrous and non-ferrous materials.
- After use, cutting taps can be factory reconditioned to original specifications and tolerances.



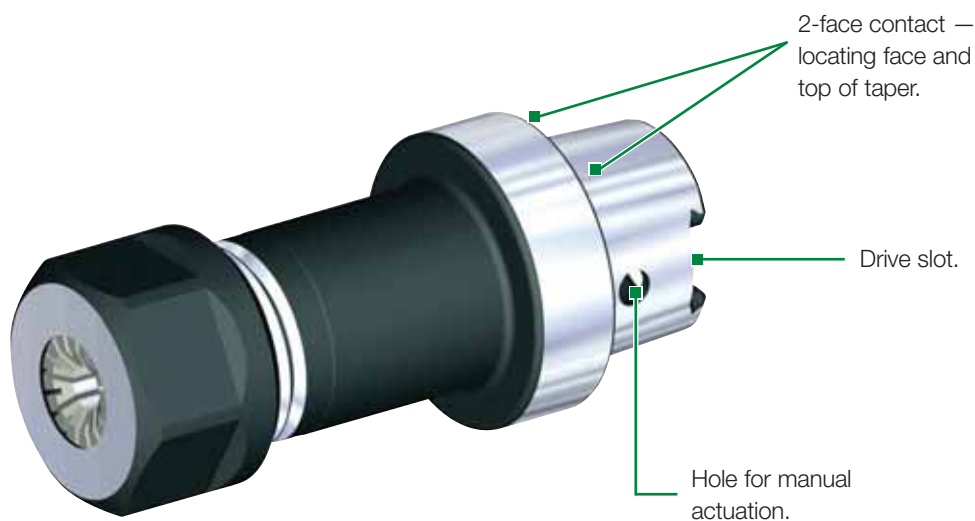
To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

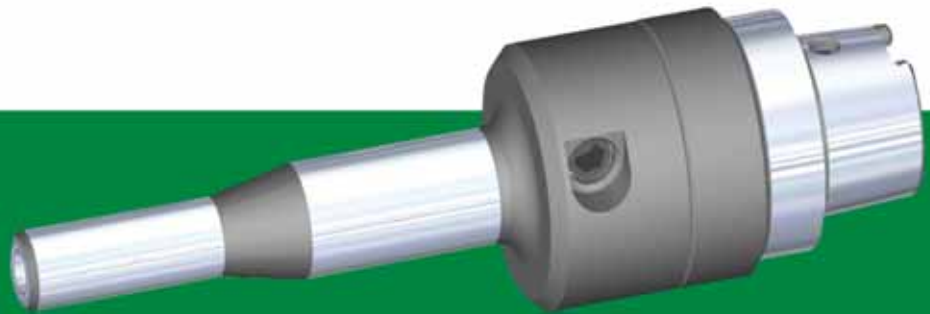
Erickson™ HSK Shank Tooling System • **HSK40C Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards.

HSK40C



Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



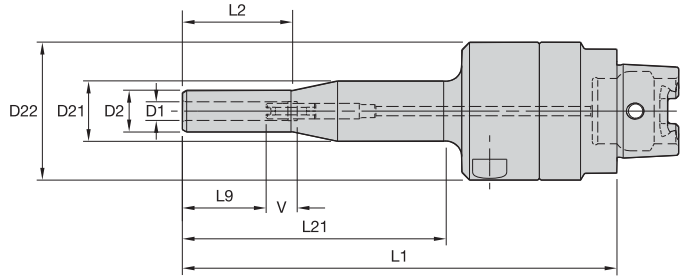
- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 30,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK40C Shank Tools

Hydraulic Chucks Slim Line



HSK40C Shank Tools



ERICKSON

■ HC Slim-T MM-HSK Form C

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3061272	HSK40CHCSLT06140M	6	13,5	19,5	44,5	140	35	27	85	10	0,72
3061273	HSK40CHCSLT08140M	8	15,5	19,5	44,5	140	35	27	85	10	0,73

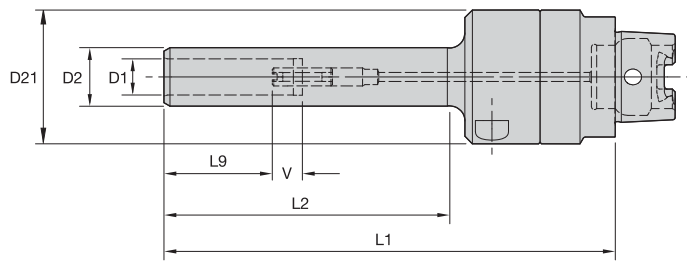
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK40CHCSLT06140M	170.135	5mm	170.002	2,5mm
HSK40CHCSLT08140M	170.135	5mm	170.002	2,5mm

(continued)

(HC Slim HSK Form C continued)



HSK40C Shank Tools

■ HC Slim MM-HSK Form C

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061275	HSK40CHCSLT12150M	12	19,5	44,5	150,0	95	36	10	0,76
3061276	HSK40CHCSLT14150M	14	21,5	52,5	150,0	95	36	10	0,96
3061277	HSK40CHCSLT16150M	16	23,5	52,5	150,0	95	39	10	0,98
3061278	HSK40CHCSLT18150M	18	25,5	52,5	150,0	95	39	10	1,02
3061279	HSK40CHCSLT20150M	20	27,5	52,5	150,0	95	41	10	1,06

■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK40CHCSLT12150M	170.135	5mm	170.003	3mm
HSK40CHCSLT14150M	170.135	5mm	170.003	3mm
HSK40CHCSLT16150M	170.135	5mm	170.005	5mm
HSK40CHCSLT18150M	170.135	5mm	170.005	5mm
HSK40CHCSLT20150M	170.135	5mm	170.005	5mm

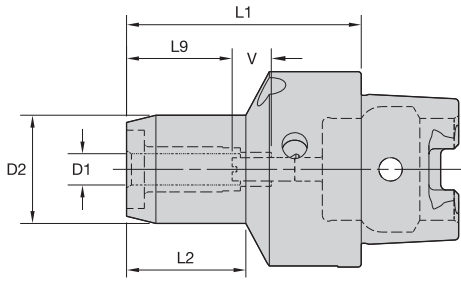
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrenches must be ordered separately.
 Unable to use SEFAS™ chamfering rings on this design.
 Reduction sleeves are available and must be ordered separately; see page I2.

HSK40C Shank Tools

Hydraulic Chucks Standard HP Line Trend Line



HSK40C Shank Tools

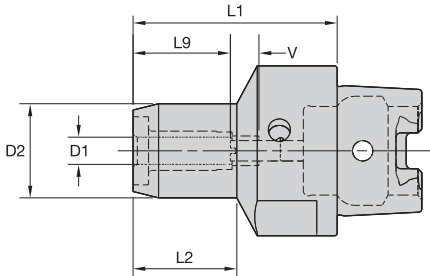


ERICKSON

■ HC MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245493	HSK40CHC06060M	6	25,7	60	33	26	10	170.135	5mm	170.002	2,5mm	0,30
1245494	HSK40CHC08060M	8	27,7	60	33	26	10	170.135	5mm	170.002	2,5mm	0,30
1245495	HSK40CHC10065M	10	29,7	65	39	30	10	170.135	5mm	170.002	2,5mm	0,50
1245496	HSK40CHC12070M	12	31,6	70	44	36	10	170.135	5mm	170.002	2,5mm	0,60

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.



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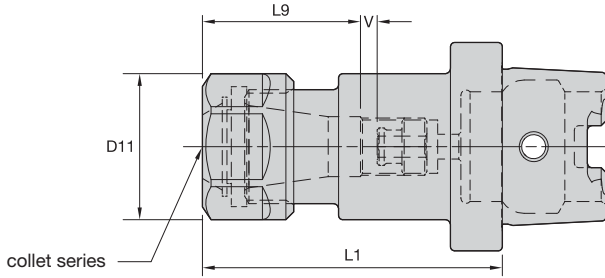
■ HC Trend MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1809985	HSK40CHCT06060M	6	25,7	60	33	26	10	170.135	5mm	3mm	0,30
1809986	HSK40CHCT08060M	8	27,7	60	33	26	10	170.135	5mm	3mm	0,30
1809987	HSK40CHCT10065M	10	29,7	65	39	30	10	170.135	5mm	3mm	0,50
1809988	HSK40CHCT12070M	12	31,6	70	44	36	10	170.135	5mm	3mm	0,60

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



- Grip (2:1 advantage).



HSK40C Shank Tools

ERICKSON

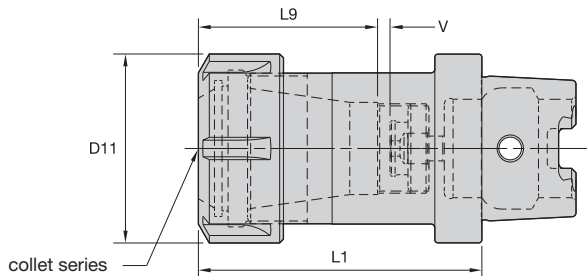
■ ER Hex-HSK Form C

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

order number	catalog number	collet series	D11	L1	L9	V	kg
1253864	HSK40CER16060M	ER16	28	60	32	5,00	0,27

■ Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40CER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32



■ ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253866	HSK40CER25070M	ER25	42	70	40	5	0,41
1125645	HSK40CER32075M	ER32	50	75	45	5	0,57

■ Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK40CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

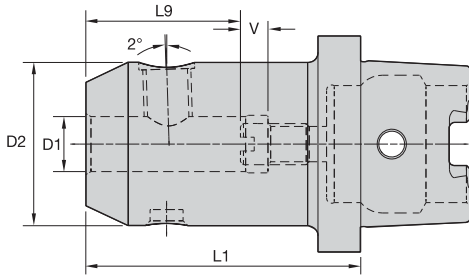
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

HSK40C Shank Tools

Whistle Notch™ Adapters • Modular Adapters



HSK40C Shank Tools



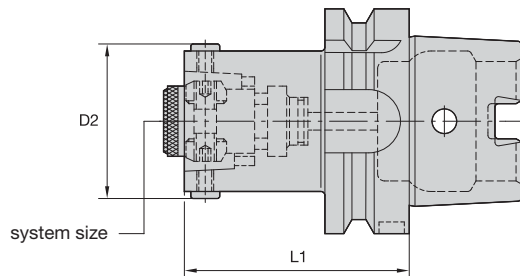
ERICKSON™

■ WN MM-HSK Form C



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1123137	HSK40CWN16075M	16	48	75	40	8	—	6mm	24	571.075	6mm	0,86

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw or stop screw wrenches are not included.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



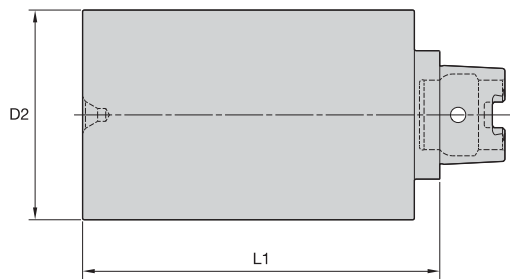
ERICKSON™

■ HSK-HSK Form C

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1520613	HSK40CHSK32050M	HSK32	37	50	3mm	6	0,40

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Machinable front 32–38 RW C.



HSK40C Shank Tools

ERICKSON

■ BB-HSK Form C

order number	catalog number	D2	L1	kg
1519726	HSK40CBB040100M	40,8	100	0,99
1519727	HSK40CBB040200M	40,8	200	2,02
1519729	HSK40CBB063150M	63,8	150	3,57

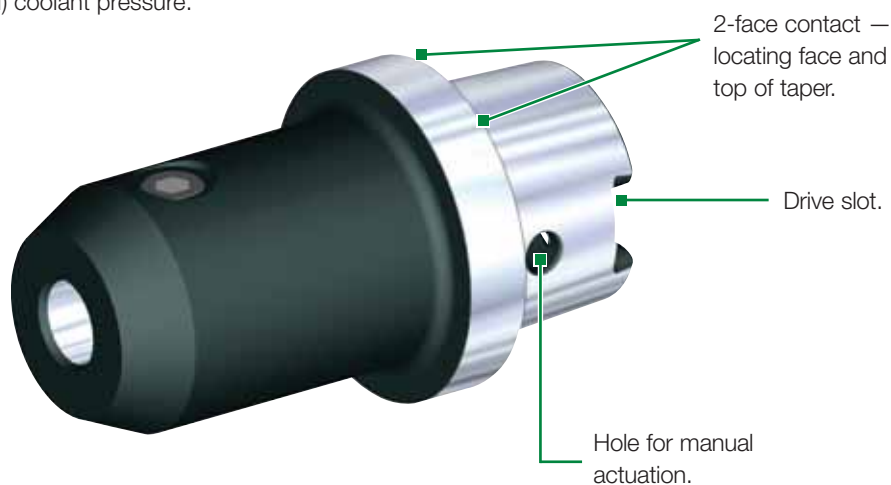
Erickson™ HSK Shank Tooling System • **HSK50C Series**

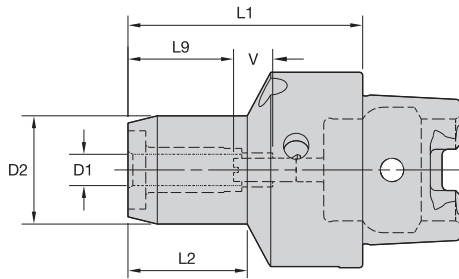
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



HSK50C

- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





HSK50C Shank Tools

ERICKSON

■ HC MM-HSK Form C

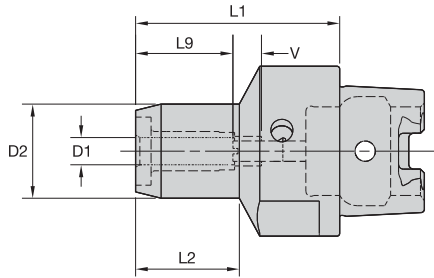


order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245497	HSK50CHC06060M	6	25,7	60	31	27	10	170.135	5mm	170.002	2,5mm	0,53
1245498	HSK50CHC08060M	8	27,7	60	31	27	10	170.135	5mm	170.002	2,5mm	0,55
1245499	HSK50CHC10065M	10	29,7	65	36	30	10	170.135	5mm	170.002	2,5mm	0,60
1245500	HSK50CHC12075M	12	31,6	75	46	36	10	170.135	5mm	170.002	2,5mm	0,80
1245501	HSK50CHC14075M	14	33,6	75	47	36	10	170.135	5mm	170.003	3mm	0,90
1245502	HSK50CHC16080M	16	37,6	80	53	39	10	170.135	5mm	170.003	3mm	1,00
1245503	HSK50CHC18080M	18	39,6	80	54	39	10	170.135	5mm	170.003	3mm	1,00
1245504	HSK50CHC20080M	20	41,6	80	54	40	10	170.135	5mm	170.003	3mm	1,10

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.

HSK50C Shank Tools

Hydraulic Chucks Trend Line



HSK50C Shank Tools

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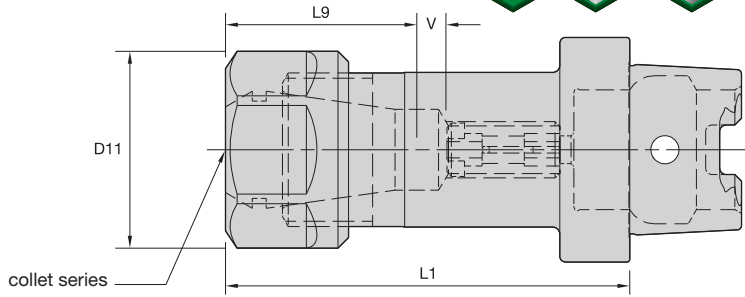
■ HC Trend MM-HSK Form C



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg
1809989	HSK50CHCT06060M	6	25,7	60	31	27	10	170.135	5mm	571.071	3mm	0,54
1809990	HSK50CHCT08060M	8	27,7	60	31	27	10	170.135	5mm	571.071	3mm	0,55
1809991	HSK50CHCT10065M	10	29,7	65	36	30	10	170.135	5mm	571.071	3mm	0,60
1809992	HSK50CHCT12075M	12	31,6	75	46	36	10	170.135	5mm	571.071	3mm	0,70
1810013	HSK50CHCT14075M	14	33,6	75	47	36	10	170.135	5mm	571.063	5mm	0,70
1810014	HSK50CHCT16080M	16	37,6	80	53	39	10	170.135	5mm	571.063	5mm	0,80
1810015	HSK50CHCT18080M	18	39,6	80	54	39	10	170.135	5mm	571.063	5mm	0,80
1810016	HSK50CHCT20080M	20	41,6	80	54	40	10	170.135	5mm	571.063	5mm	0,80

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Wrenches must be ordered separately.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.

- Grip (2:1 advantage).



HSK50C Shank Tools

ERICKSON

■ ER Hex-HSK Form C

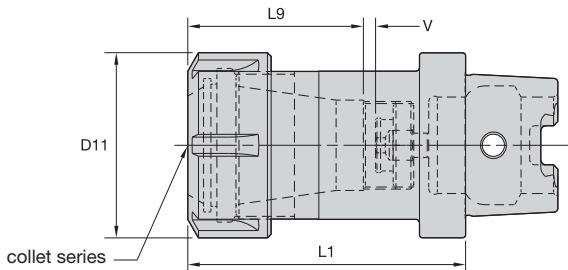
ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

order number	catalog number	collet series	D11	L1	L9	V	kg
1139074	HSK50CER16060M	ER16	28	60	28	5	0,38

■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK50CER16060M	LNHSER16M	OEW25M	40	56	TTSS08014M	4mm



■ ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1120659	HSK50CER25070M	ER25	42	70	40	5	0,50
1126932	HSK50CER32075M	ER32	50	75	45	5	0,67

■ Spare Parts

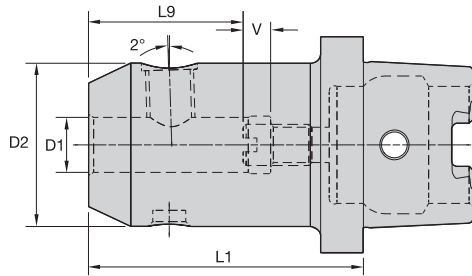


catalog number	round locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
HSK50CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK50CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

HSK50C Shank Tools

Whistle Notch™ Adapters • Bar Blanks



HSK50C Shank Tools

ERICKSON

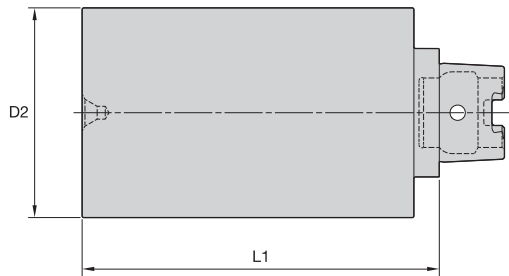
■ WN MM-HSK Form C



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1519772	HSK50CWN06060M	6	25	60	28	6	SS03M012	3mm	7	571.060	2,5mm	0,38
1519774	HSK50CWN08060M	8	28	60	28	6	SS03M014	4mm	15	571.067	3mm	0,42
1131275	HSK50CWN10065M	10	35	65	30	6	SS03M018	5mm	25	571.068	5mm	0,56
1131266	HSK50CWN12075M	12	42	75	38	8	SS03M023	6mm	35	571.074	5mm	0,80
1519777	HSK50CWN14075M	14	44	75	38	8	SS03M023	6mm	35	571.074	5mm	0,85
1519638	HSK50CWN16080M	16	48	80	41	10	SS03M025	6mm	50	571.075	6mm	1,03
1519639	HSK50CWN18080M	18	50	80	41	10	SS03M025	6mm	50	571.075	6mm	1,10
1519791	HSK50CWN20080M	20	52	80	39	8	SS03M026	8mm	95	571.076	6mm	1,15

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw and stop screw.
 Clamp screw or stop screw wrenches are not included.

- Machinable front 32–38 RW C.



ERICKSON

■ BB-HSK Form C

order number	catalog number	D2	L1	kg
1519733	HSK50CBB053100M	53,8	100	1,77
1519745	HSK50CBB053200M	53,8	200	3,55
1519750	HSK50CBB083175M	83,8	175	7,23

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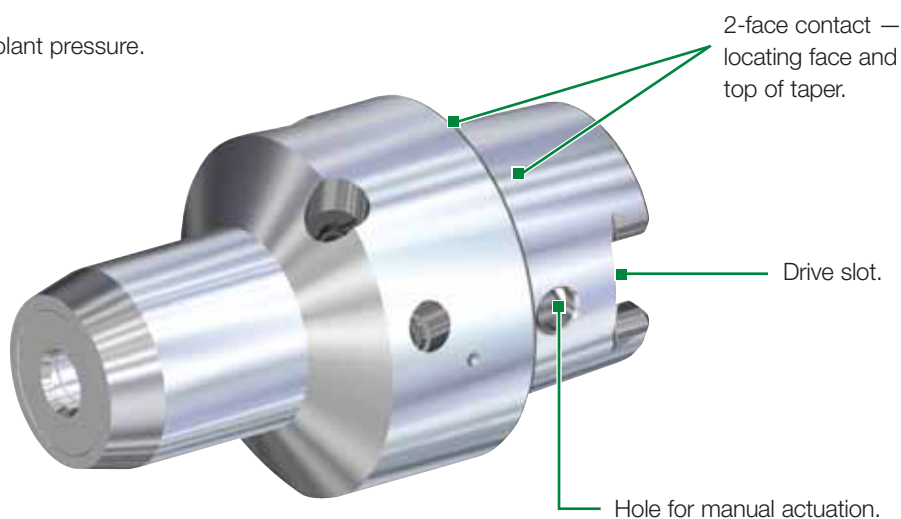
Erickson™ HSK Shank Tooling System • **HSK63C Series**

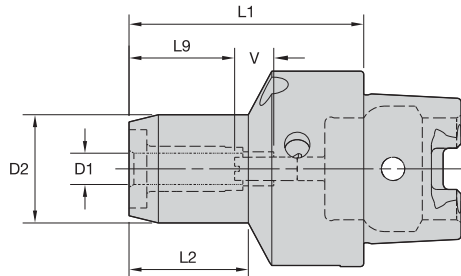
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



HSK63C

- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 20,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





HSK63C Shank Tools

ERICKSON

■ HC MM-HSK Form C

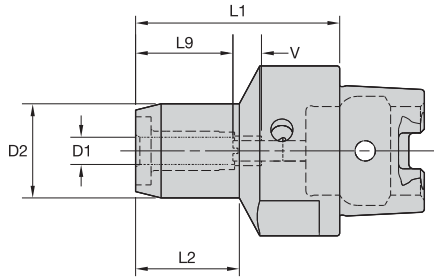


order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1245505	HSK63CHC06060M	6	25,7	60	26	26	10	170.135	5mm	2,5mm	0,84
1245506	HSK63CHC08060M	8	27,7	60	26	26	10	170.135	5mm	2,5mm	0,86
1245507	HSK63CHC10065M	10	29,7	65	32	30	10	170.135	5mm	2,5mm	0,89
1245508	HSK63CHC12075M	12	31,6	75	43	36	10	170.135	5mm	2,5mm	0,96
1245509	HSK63CHC14075M	14	33,6	75	43	36	10	170.135	5mm	3mm	0,97
1245510	HSK63CHC16080M	16	37,6	80	49	39	10	170.135	5mm	3mm	1,07
1245511	HSK63CHC18080M	18	39,6	80	50	39	10	170.135	5mm	3mm	1,10
1245512	HSK63CHC20080M	20	41,6	80	51	40	10	170.135	5mm	3mm	1,11
1245513	HSK63CHC25095M	25	49,9	95	52	46	10	170.136	6mm	4mm	1,57
1191022	HSK63CHC32100M	32	59,9	100	60	50	10	170.136	6mm	4mm	1,89

*NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.*

HSK63C Shank Tools

Hydraulic Chucks Trend Line



HSK63C Shank Tools

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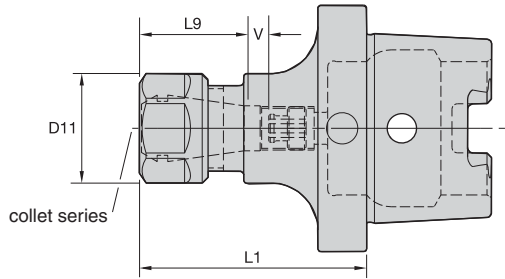
■ HC Trend MM-HSK Form C



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1810017	HSK63CHCT06060M	6	25,7	60	26	26	10	170.135	5mm	3mm	0,90
1810018	HSK63CHCT08060M	8	27,7	60	26	26	10	170.135	5mm	3mm	0,90
1810019	HSK63CHCT10065M	10	29,7	65	32	30	10	170.135	5mm	3mm	0,90
1810020	HSK63CHCT12075M	12	31,6	75	43	36	10	170.135	5mm	3mm	1,00
1810021	HSK63CHCT14075M	14	33,6	75	43	36	10	170.135	5mm	5mm	1,00
1810022	HSK63CHCT16080M	16	37,6	80	49	39	10	170.135	5mm	5mm	1,10
1810023	HSK63CHCT18080M	18	39,6	80	50	39	10	170.135	5mm	5mm	1,10
1810024	HSK63CHCT20080M	20	41,6	80	51	40	10	170.135	5mm	5mm	1,10
1810025	HSK63CHCT25095M	25	49,9	95	52	46	10	170.136	6mm	5mm	1,60
1810026	HSK63CHCT32100M	32	59,9	100	60	50	10	170.136	6mm	5mm	1,90

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Wrenches must be ordered separately.
 Supplied with stop screw.
 Reduction sleeves are available and must be ordered separately; see page I2.

- Grip (2:1 advantage).



HSK63C Shank Tools

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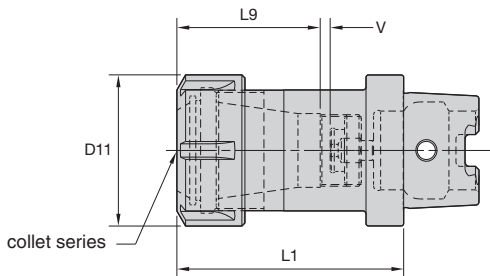
■ ER Hex-HSK Form C

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1253865	HSK63CER16060M	ER16	28	60	32	5	0,55

■ Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK63CER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32



■ ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253908	HSK63CER25070M	ER25	42	70	40	5	0,78
1253910	HSK63CER32075M	ER32	50	75	45	5	0,97
1253911	HSK63CER40080M	ER40	63	80	54	3	1,14

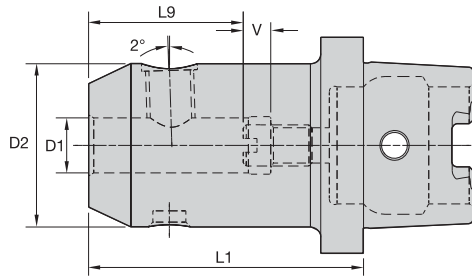
■ Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK63CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK63CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
HSK63CER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

*NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.*

HSK63C Shank Tools

Whistle Notch™ Adapters



HSK63C Shank Tools

ERICKSON™

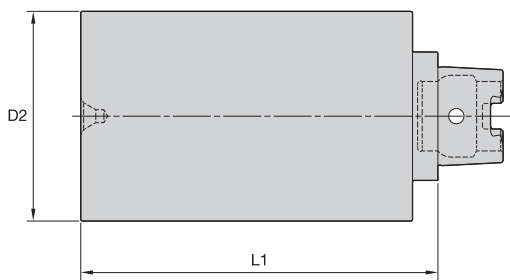
■ WN MM-HSK Form C



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	Nm	stop screw	wrench size stop screw	kg
1519797	HSK63CWN12075M	12	42	75	36	10	SS03M023	6mm	24	571.074	6mm	0,97
1519798	HSK63CWN14075M	14	44	75	36	10	SS03M023	6mm	24	571.074	6mm	1,02
1139503	HSK63CWN16080M	16	48	80	40	10	SS03M025	6mm	24	571.075	6mm	1,20
1519800	HSK63CWN18080M	18	50	80	40	10	SS03M025	6mm	24	571.075	6mm	1,25
1120623	HSK63CWN20080M	20	52	80	36	10	SS03M026	8mm	58	571.076	8mm	1,31
1124323	HSK63CWN25095M	25	65	95	50	10	SS03M027	10mm	92	571.077	10mm	2,17

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw or stop screw wrenches are not included.

- Machinable front 32–38 RW C.



HSK63C Shank Tools

ERICKSON

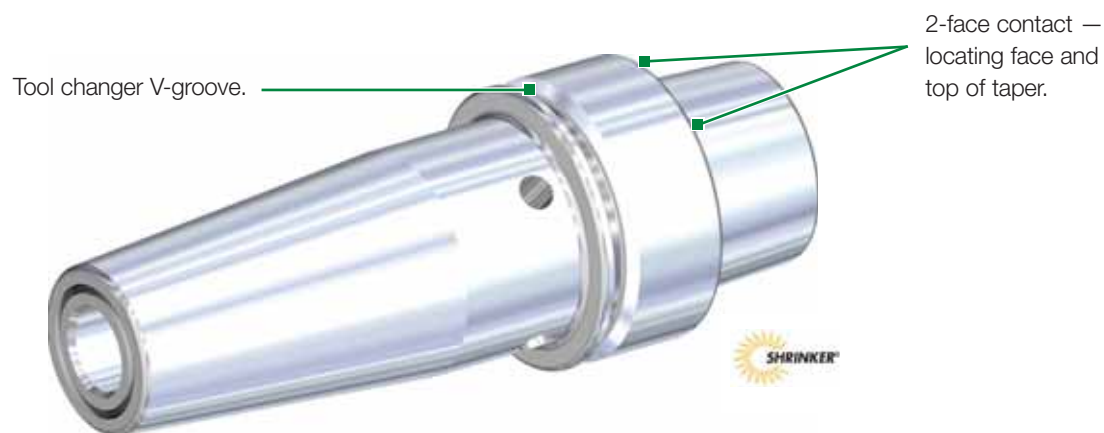
■ BB-HSK Form C

order number	catalog number	D2	L1	kg
1519755	HSK63CBB063100M	63,8	100	2,56
1519756	HSK63CBB063200M	63,8	200	5,06
1519757	HSK63CBB102175M	102,8	175	10,92

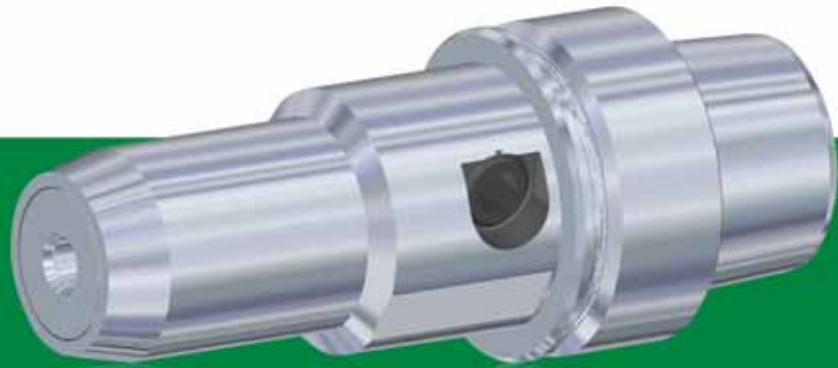
Erickson™ HSK Shank Tooling System • **HSK40E Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards.

HSK40E



Form E versions do not have drive slots or indexing features and are suited for high speeds in machining centers and milling machines with automatic tool changers.



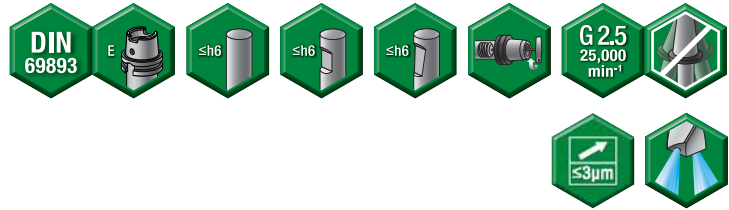
- ISO 12164-1/DIN 69893-1 Form E 1:10 short taper.
- High axial and radial repeatability.
- Maximum 55,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK40E Shank Tools

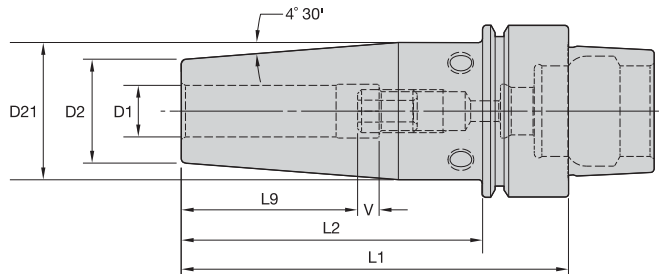
Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



HSK40E Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON

■ TT GP HPVmm-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867169	HSK40EHPVTT03060M	3	9	13	60	32	14	10	TTSS05014M	2,5mm	0,27
3867170	HSK40EHPVTT04060M	4	9	13	60	32	15	10	TTSS05014M	2,5mm	0,27
3867171	HSK40EHPVTT05060M	5	9	13	60	32	15	10	TTSS06014M	3mm	0,27
3867172	HSK40EHPVTT06080M	6	21	27	80	60	26	10	TTSS05014M	2,5mm	0,42
3867263	HSK40EHPVTT08080M	8	21	27	80	60	26	10	TTSS06014M	3mm	0,41
3867264	HSK40EHPVTT10080M	10	24	32	80	60	31	10	TTSS08014M	4mm	0,47
3867265	HSK40EHPVTT12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,51
3867266	HSK40EHPVTT14090M	14	27	34	90	70	36	10	TTSS10014M	5mm	0,57
3867267	HSK40EHPVTT16090M	16	27	34	90	70	39	10	TTSS12014M	6mm	0,54
3867268	HSK40EHPVTT18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,71
3867269	HSK40EHPVTT20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,68

(continued)

(TT GP HPV HSK Form E continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4	.0000/- .0005

HSK40E Shank Tools

■ TT GP HPV IN-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3863718	HSK40EHPVTT025315	1/4	.83	1.06	3.15	2.36	1.02	.39	TTSS05014M	2,5mm	.92
3863719	HSK40EHPVTT031315	5/16	.83	1.06	3.15	2.36	1.02	.39	TTSS06014M	3mm	.90
3863720	HSK40EHPVTT038315	3/8	.94	1.26	3.15	2.36	1.22	.39	TTSS08014M	4mm	1.04
3863721	HSK40EHPVTT050354	1/2	.94	1.26	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.12
3863722	HSK40EHPVTT056354	9/16	1.06	1.33	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.24
3863753	HSK40EHPVTT062354	5/8	1.06	1.33	3.54	2.76	1.54	.39	TTSS12014M	6mm	1.20
3863754	HSK40EHPVTT075374	3/4	1.30	1.65	3.74	3.74	1.61	.39	TTSS16014M	8mm	1.52

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

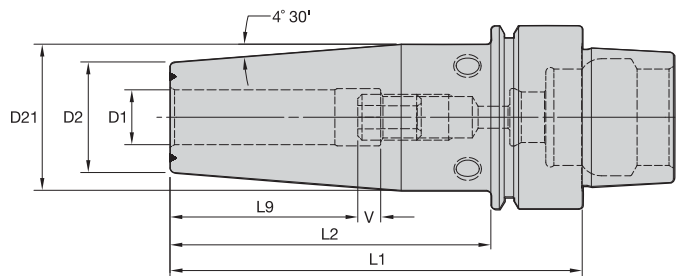
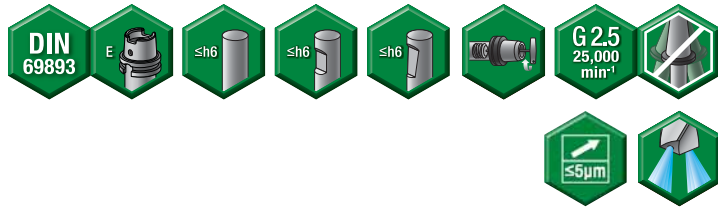
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40E Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON™

■ TT-HT-HPV-MM-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867229	HSK40EHPVTTH12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,51
3867230	HSK40EHPVTTH14090M	14	27	34	90	70	36	10	TTSS10014M	5mm	0,57
3867231	HSK40EHPVTTH16090M	16	27	34	90	70	39	10	TTSS12014M	6mm	0,54
3867232	HSK40EHPVTTH18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,71
3867233	HSK40EHPVTTH20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,68

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance	
1/2, 9/16, & 5/8		.0000/-0.0004
3/4		.0000/-0.0005

■ TT-HT-HPV-IN-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3862413	HSK40EHPVTTH050354	1/2	.94	1.26	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.12
3862414	HSK40EHPVTTH056354	9/16	1.06	1.33	3.54	2.76	1.42	.39	TTSS10014M	5mm	1.25
3862415	HSK40EHPVTTH062354	5/8	1.06	1.33	3.54	2.76	1.54	.39	TTSS12014M	6mm	1.20
3862416	HSK40EHPVTTH075374	3/4	1.30	1.61	3.74	3.74	1.61	.39	TTSS16014M	8mm	1.52

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

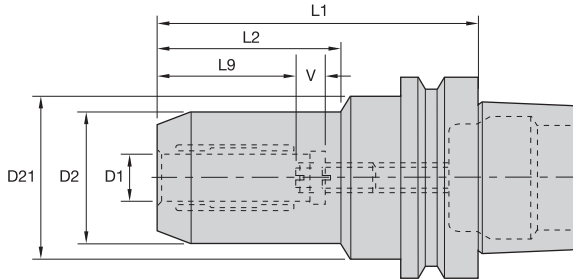
Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK40E Shank Tools

ERICKSON

■ HC Trend MM-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
2288133	HSK40EHCT06080M	6	25,7	32	80	35	27	10	170.135	5mm	170.003	3mm	0,47
2288134	HSK40EHCT08080M	8	27,7	32	80	36	27	10	170.135	5mm	170.003	3mm	0,49
2288135	HSK40EHCT10085M	10	29,7	32	85	38	31	10	170.135	5mm	170.003	3mm	0,53
2288136	HSK40EHCT12090M	12	31,6	32	90	40	36	10	170.135	5mm	170.003	3mm	0,57
2387467	HSK40EHCT14100M	14	33,6	50	100	42	36	10	170.135	5mm	170.005	5mm	0,80
2387468	HSK40EHCT16100M	16	37,6	50	100	47	39	10	170.135	5mm	170.005	5mm	0,85
2387469	HSK40EHCT18100M	18	39,6	50	100	47	39	10	170.135	5mm	170.005	5mm	0,87
2387470	HSK40EHCT20100M	20	41,6	50	100	48	41	10	170.135	5mm	170.005	5mm	0,89

■ HC Trend In-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
2260223	HSK40EHCT025315	1/4	1.01	1.25	3.15	1.38	1.06	.39	170.135	5mm	170.003	3mm	1.03
2260224	HSK40EHCT038335	3/8	1.17	1.25	3.55	1.58	1.22	.39	170.135	5mm	170.003	3mm	1.17
2260225	HSK40EHCT050354	1/2	1.24	1.25	3.54	1.69	1.42	.39	170.135	5mm	170.003	3mm	1.23
2387471	HSK40EHCT062394	5/8	1.48	1.96	3.94	1.83	1.54	.39	170.135	5mm	170.005	5mm	1.87
2387472	HSK40EHCT075394	3/4	1.64	1.96	3.94	1.89	1.61	.39	170.135	5mm	170.005	5mm	1.98

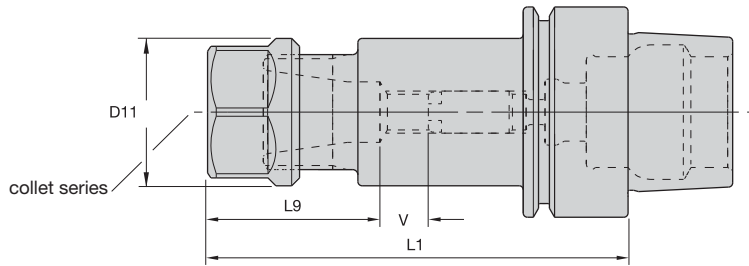
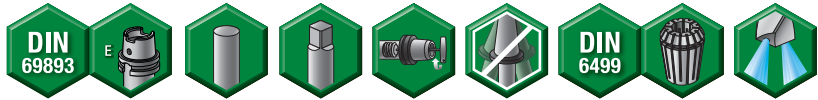
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40E Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



ERICKSON

ER Hex-HSK Form E

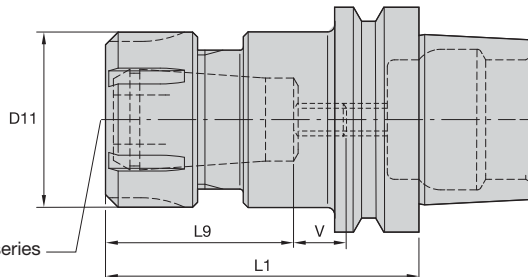
ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

order number	catalog number	collet series	D11	L1	L9	V	kg
2260355	HSK40EER16080M	ER16	28	80	27	5	0,41

Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40EER16080M	LNHSER16M	OEW25M	40	56	571.068	4mm & 5/32



ER Round-HSK Form E

order number	catalog number	collet series	D11	L1	L9	V	kg
1795995	HSK40EER25080M	ER25	42	80	31	5	0,51
2386949	HSK40EER32100M	ER32	50	100	40	5	0,71

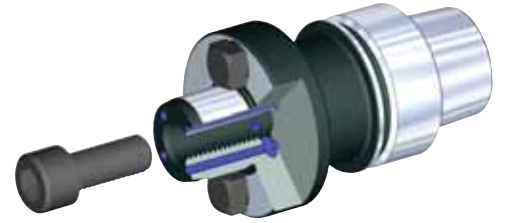
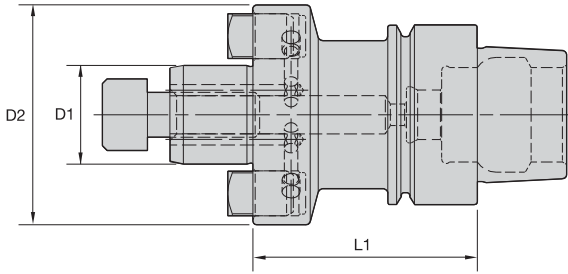
Spare Parts



catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40EER25080M	LNHSER25M	ER25WM	104	571.062	4mm & 5/32
HSK40EER32100M	LNHSER32M	ER32WM	136	571.062	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.





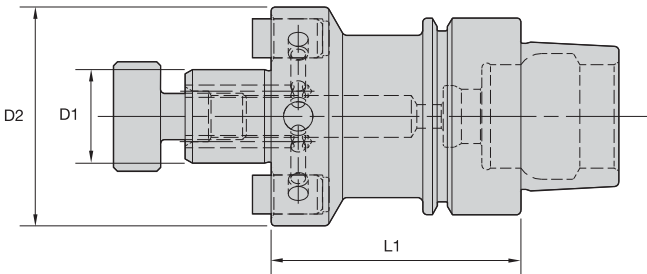
HSK40E Shank Tools

ERICKSON

■ SMC Cap MM-HSK Form E



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872675	HSK40ESM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,46
3872677	HSK40ESM2C22050M	22	42	50	MS1234	—	8mm	0,52
3872674	HSK40ESMC16050M	16	44	50	MS1294	KDK16M	6mm	0,50
3872676	HSK40ESMC22050M	22	49	50	MS1234	KDK22M	8mm	0,57



■ SMC Lock IN-HSK Form E



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	lbs
3762420	HSK40ESM2C050200	1/2	1.20	2.00	KLS05	KDK04	3/16	.88
3762422	HSK40ESM2C075200	3/4	1.46	2.00	KLS07	—	1/4	1.05
3762419	HSK40ESMC050200	1/2	1.44	2.00	KLS05	KDK04	3/16	.98
3762421	HSK40ESMC075200	3/4	1.75	2.00	KLS07	KDK05	1/4	1.16

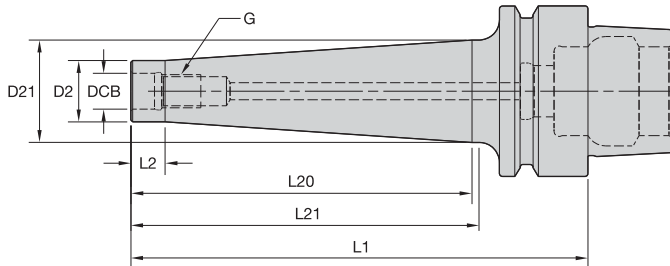
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For HSK coolant unit and wrench, see page J32.

HSK40E Shank Tools

Screw-On Adapters for Modular Milling Cutters • Bar Blanks



HSK40E Shank Tools



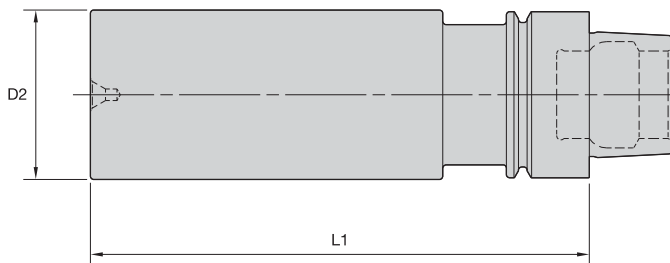
ERICKSON™

■ ST-HSK Form E

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4061429	HSK40EST06053M	6,5	M6	10	—	53	27	—	—	0,22
4061430	HSK40EST06078M	6,5	M6	10	20	78	10	50	52	0,28
4061431	HSK40EST06103M	6,5	M6	10	23	103	10	75	77	0,33
4061432	HSK40EST08053M	8,5	M8	13	15	53	10	25	27	0,23
4061433	HSK40EST08078M	8,5	M8	13	23	78	10	50	52	0,31
4061434	HSK40EST08103M	8,5	M8	13	23	103	10	75	77	0,35
4061435	HSK40EST08128M	8,5	M8	13	25	128	10	100	102	0,42
4061436	HSK40EST10053M	10,5	M10	18	20	53	10	25	27	0,26
4061437	HSK40EST10078M	10,5	M10	18	25	78	10	50	52	0,35
4061438	HSK40EST10103M	10,5	M10	18	28	103	10	75	77	0,44
4061439	HSK40EST10128M	10,5	M10	18	30	128	10	100	102	0,55

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Machinable front 32–38 RW C.



ERICKSON™

■ BB-HSK Form E

order number	catalog number	D2	L1	kg
2260650	HSK40EBB040120M	40,8	120,0	1,17

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

WIN WITH WIDIA™



WIDIA-CIRCLE™ Small-Hole Tooling Series

The WIDIA™ line of small-hole boring tools is an excellent, economical choice for a wide range of applications. Our solid carbide bars provide exceptional machining versatility and rupture strength. Indexable inserts are available in both steel and carbide shanks.

A/B Series

- Unique locking system enables quick, accurate insert changes.

Quadralock™

- V-slots and limit-stop bolts for increased indexability.

Micro Boring Bars

- Free cutting action, better surface finishes, and greater chip evacuation.

Solid Carbide Bars

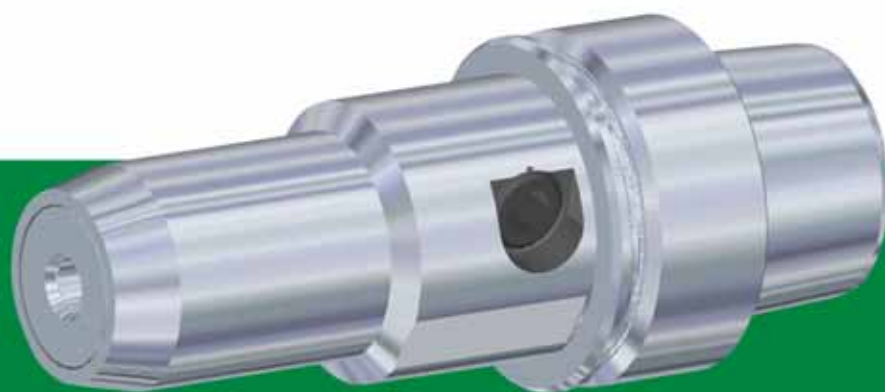
- Accurate, quick-change tooling and toolholders are ideal for small parts machining applications.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

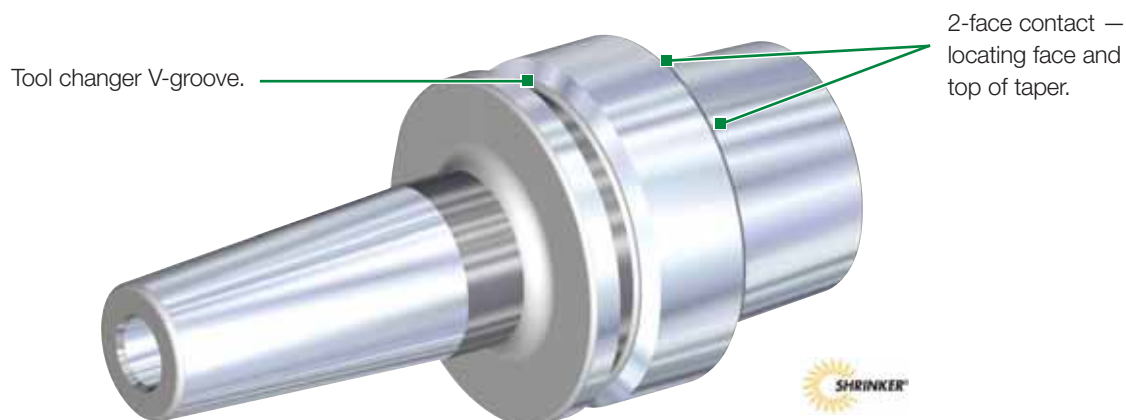
Erickson™ HSK Shank Tooling System • **HSK50E Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form E versions do not have drive slots or indexing features and are suited for high speeds in machining centers and milling machines with automatic tool changers.

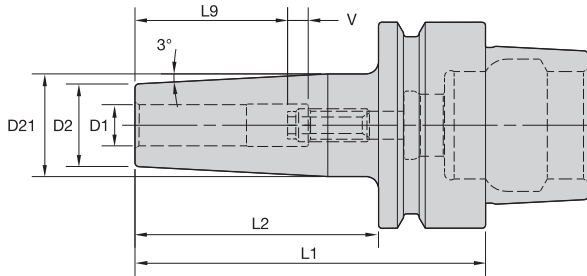
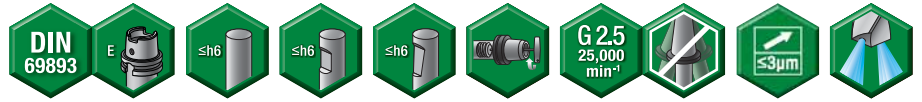


HSK50E

- ISO 12164-1/DIN 69893-1 Form E 1:10 short taper.
- High axial and radial repeatability.
- Maximum 44,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

HSK50E Shank Tools

ERICKSON

■ TT MDmm-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
2386938	HSK50ETTMD03080M	3	9	13	80	54	15	5	TTSS05018M	2,5mm	0,44
2386939	HSK50ETTMD04080M	4	9	13	80	54	15	5	TTSS05018M	2,5mm	0,44
2386940	HSK50ETTMD05080M	5	10	14	80	54	15	5	TTSS06020M	3mm	0,45
2386941	HSK50ETTMD06080M	6	12	16	80	54	26	10	TTSS05018M	2,5mm	0,47
2386942	HSK50ETTMD08080M	8	16	20	80	54	26	10	TTSS06020M	3mm	0,51
2386943	HSK50ETTMD10085M	10	20	25	85	59	32	10	TTSS08020M	4mm	0,57
2386944	HSK50ETTMD12090M	12	24	30	90	64	37	10	TTSS08020M	4mm	0,65
2386945	HSK50ETTMD14090M	14	26	31	90	64	37	10	TTSS08020M	4mm	0,68
2386946	HSK50ETTMD16095M	16	28	34	95	69	40	10	TTSS12020M	6mm	0,74
2386947	HSK50ETTMD18095M	18	30	36	95	69	40	10	TTSS12020M	6mm	0,77
2386948	HSK50ETTMD20100M	20	34	41	100	74	42	10	TTSS16020M	8mm	0,91

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

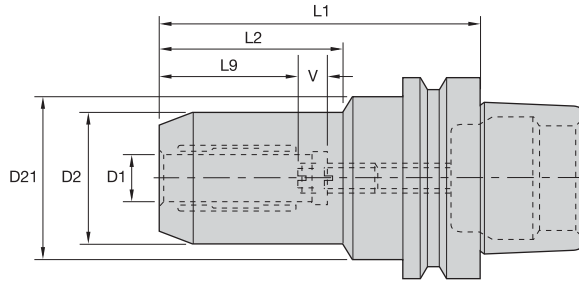
Shrink Fit accessories, see page J2.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK50E Shank Tools

Hydraulic Chucks Trend Line



HSK50E Shank Tools

ERICKSON™

■ HC Trend MM-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	adjusting screw	wrench size adjusting screw	kg
2288137	HSK50EHCT06080M	6	25,7	40	80	35	27	10	170.135	5mm	571.061	3mm	0,69
2288138	HSK50EHCT08080M	8	27,7	40	80	36	27	10	170.135	5mm	571.061	3mm	0,71
2288139	HSK50EHCT10085M	10	29,7	40	85	38	31	10	170.135	5mm	571.061	3mm	0,76
2288140	HSK50EHCT12090M	12	31,6	40	90	40	36	10	170.135	5mm	571.061	3mm	0,80
2288141	HSK50EHCT14105M	14	33,6	50	105	42	36	10	170.135	5mm	571.063	5mm	1,06
2288142	HSK50EHCT16105M	16	37,6	50	105	47	39	10	170.135	5mm	571.063	5mm	1,10
2288143	HSK50EHCT18105M	18	39,6	50	105	47	39	10	170.135	5mm	571.063	5mm	1,12
2288144	HSK50EHCT20105M	20	41,6	50	105	48	41	10	170.135	5mm	571.063	5mm	1,14

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.

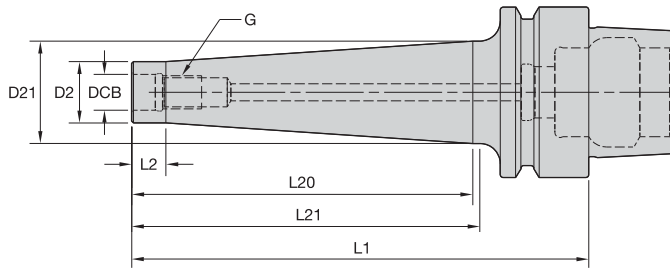
Hydraulic chuck technical section, see page K60.

Wrenches must be ordered separately.

Supplied with stop screw.

Reduction sleeves are available and must be ordered separately; see page I2.

HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK50E Shank Tools

ERICKSON

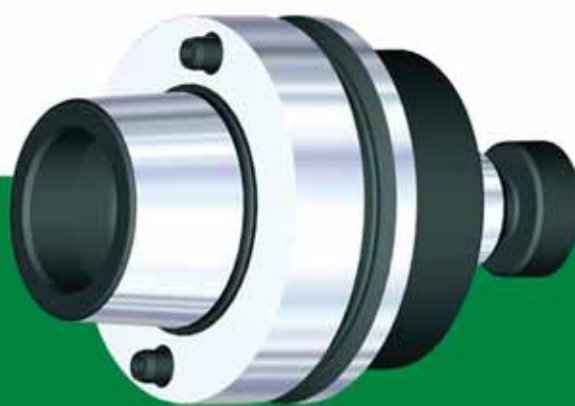
■ ST-HSK Form E

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4062449	HSK50EST06059M	6,5	M6	10	—	59	27	—	—	0,42
4062450	HSK50EST06084M	6,5	M6	10	20	84	10	50	52	0,48
4062451	HSK50EST06109M	6,5	M6	10	23	109	10	75	77	0,54
4062452	HSK50EST08059M	8,5	M8	13	15	59	10	25	27	0,44
4062843	HSK50EST08084M	8,5	M8	13	23	84	10	50	52	0,51
4062844	HSK50EST08109M	8,5	M8	13	23	109	10	75	77	0,55
4062845	HSK50EST08134M	8,5	M8	13	25	134	10	100	102	0,63
4062846	HSK50EST10059M	10,5	M10	18	20	59	10	25	27	0,46
4062847	HSK50EST10084M	10,5	M10	18	25	84	10	50	52	0,55
4062848	HSK50EST10109M	10,5	M10	18	28	109	10	75	77	0,65
4062849	HSK50EST10134M	10,5	M10	18	30	134	10	100	102	0,75

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

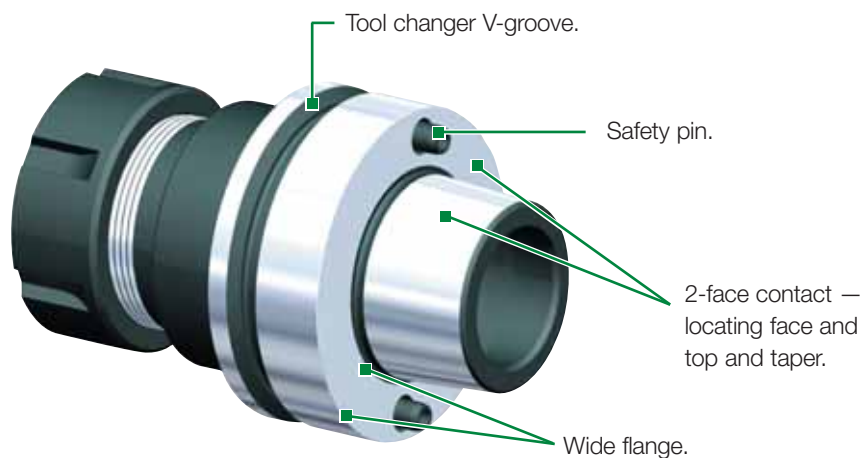
Erickson™ HSK Shank Tooling System • **HSK63F (Pin) Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form F versions with pin do not have drive slots or indexing features and, with their greater flange surface area support, are suited for high speeds in machining centers and milling machines with automatic tool changers.

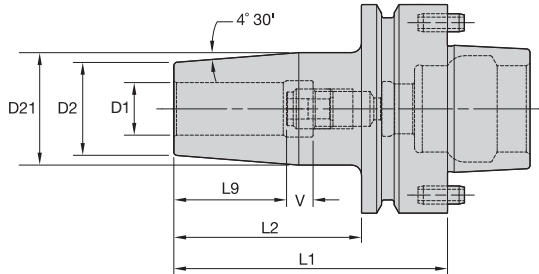
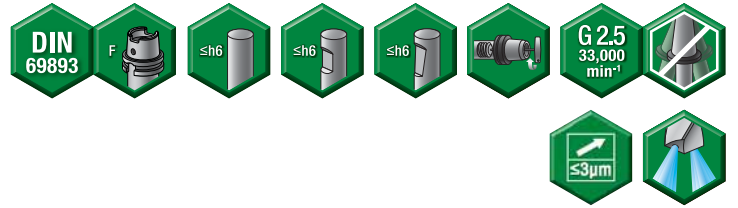


HSK63F

- ISO 12164-1/DIN 69893-1 Form F (with pin) 1:10 short taper.
- High axial and radial repeatability.
- Maximum 31,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- 30–50% higher clamping torque compared to GP line.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



HSK63F (Pin) Shank Tools

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4 & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4 & 1	.0000/-.0005

ERICKSON

■ TT HT HPV IN-HSK Form F (Pin)



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
2636755	HSK63FPTTHT025300	1/4	.87	1.06	3.00	1.98	1.02	.39	TTSS05014M	2,5mm	1.81
2636757	HSK63FPTTHT038300	3/8	1.02	1.26	3.00	1.86	1.22	.39	TTSS08014M	4mm	1.94
2636758	HSK63FPTTHT050325	1/2	.98	1.26	3.25	2.11	1.42	.39	TTSS10014M	5mm	1.94
2636759	HSK63FPTTHT062325	5/8	1.10	1.33	3.25	2.11	1.38	.27	TTSS12014M	6mm	2.02
2636761	HSK63FPTTHT075325	3/4	1.34	1.61	3.25	2.11	1.38	.20	TTSS16014M	8mm	2.29
2636762	HSK63FPTTHT100325	1	1.77	2.05	3.25	2.19	1.61	.20	TTSS16014M	8mm	2.83

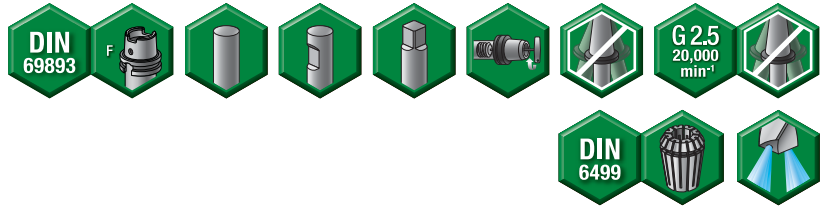
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK63F (Pin) Shank Tools

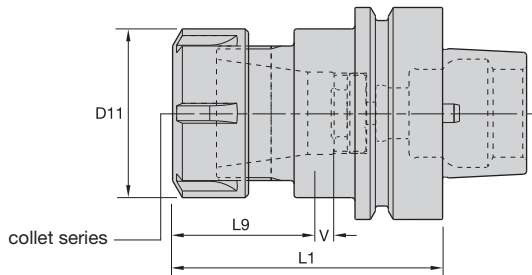
ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK63F (Pin) Shank Tools



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81

ER Round-HSK Form F (Pin)

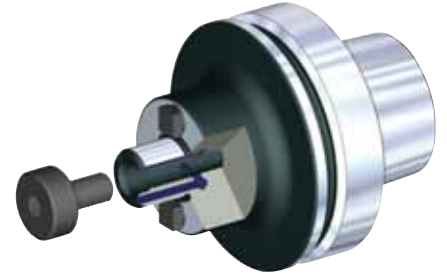
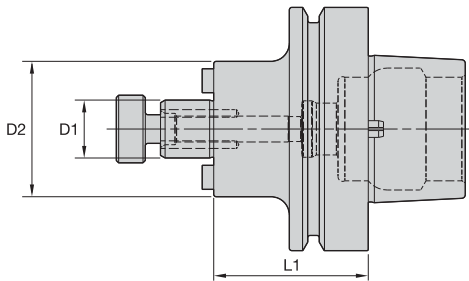
order number	catalog number	collet series	D11	L1	L9	V	kg
2657176	HSK63FPER32080M	ER32	50	80	43	4	1,10

Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
HSK63FPER32080M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK63F Shank Tools

ERICKSON

■ SMC Lock Screw IN-HSK Form F (Pin)



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	ft. lbs.	lbs
3762418	HSK63FPSM2C075175	3/4	1.46	1.75	—	—	1/4	—	1.85
3762417	HSK63FPSMC075175	3/4	1.75	1.75	—	—	1/4	—	2.00

*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.*

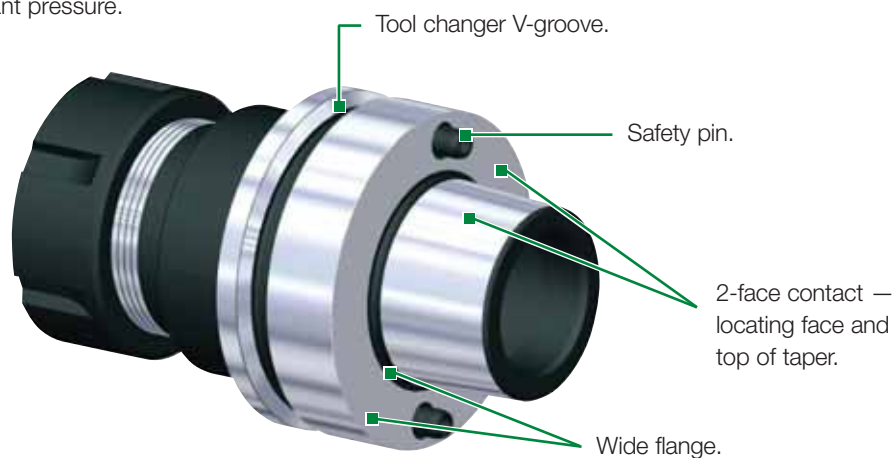
Erickson™ HSK Shank Tooling System • HSK80F (Pin) Series

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form F versions with pin do not have drive slots or indexing features and, with their greater flange surface area support, are suited for high speeds in machining centers and milling machines with automatic tool changers.

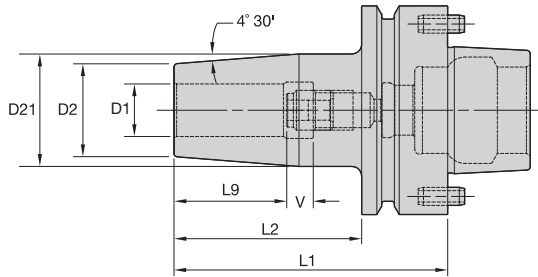
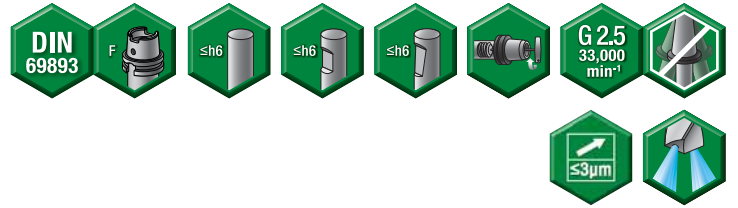


HSK80F

- ISO 12164-1/DIN 69893-1 Form F (with pin) 1:10 short taper.
- High axial and radial repeatability.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- 30–50% higher clamping torque compared to GP line.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



HSK80F (Pin) Shank Tools

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/4 & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4, 1, & 1-1/4	.0000/-.0005

ERICKSON

■ TT HT HPV IN-HSK Form F (Pin)



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
2952218	HSK80FPTTHT025325	1/4	.83	1.06	3.25	2.11	1.02	.39	TTSS05014M	2,5mm	2.76
2952219	HSK80FPTTHT038325	3/8	.98	1.26	3.25	2.11	1.22	.39	TTSS08014M	4mm	2.91
2952220	HSK80FPTTHT050325	1/2	.98	1.26	3.25	2.11	1.42	.28	TTSS10014M	5mm	2.86
2952221	HSK80FPTTHT062325	5/8	1.10	1.33	3.25	2.11	1.38	.31	TTSS12014M	6mm	2.93
2952222	HSK80FPTTHT075325	3/4	1.36	1.65	3.25	2.11	1.38	.31	TTSS16014M	8mm	3.23
2952223	HSK80FPTTHT100350	1	1.77	2.08	3.50	2.36	1.73	.31	TTSS16014M	8mm	3.97
2952224	HSK80FPTTHT125350	1 1/4	1.77	2.08	3.50	2.36	1.73	.20	TTSS16014M	8mm	3.71

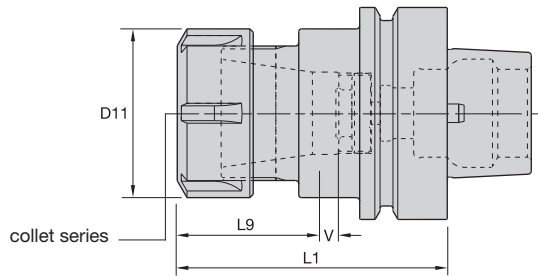
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80F (Pin) Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



HSK80F (Pin) Shank Tools

ERICKSON™

ER collet series	Collet Capacity		Collet Capacity	
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81

■ ER Round-HSK Form F (Pin)

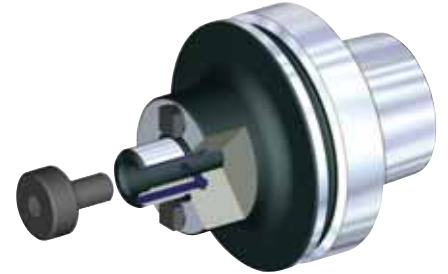
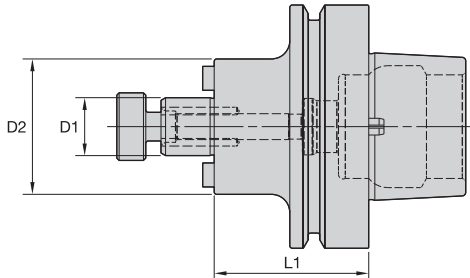
order number	catalog number	collet series	D11	L1	L9	V	kg
2952216	HSK80FPER32085M	ER32	50	85	43	4	1,59

■ Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
HSK80FPER32085M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 HSK coolant unit and wrench are available and must be ordered separately; see page J32.



HSK80F (Pin) Shank Tools

ERICKSON

■ SMC Lock IN-HSK Form F (Pin)



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3763070	HSK80FPSM2C075200	3/4	1.46	2.00	KLS07	—	1/4	2.89
3763069	HSK80FPSMC075200	3/4	1.75	2.00	KLS07	KDK05	1/4	3.10

*NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.*



 SHRINKER®

BTKV and CVKV Shank Tools

BTKV40	C2-C19
BTKV50	C20-C37
CVKV40	C38-C51
CVKV50	C52-C67



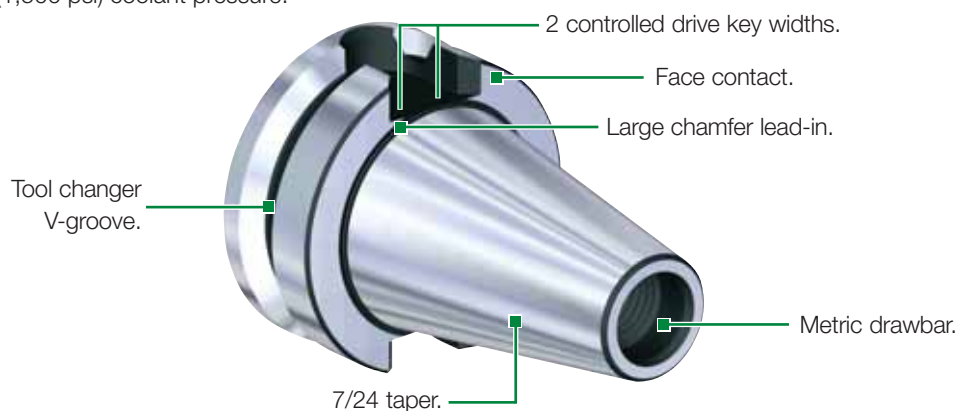
Erickson™ Taper Face Contact Shank Tooling System • BTKV40 Series

Erickson Taper Face BT Contact Taper Tooling is manufactured from premium materials and to the latest JIS B 6339 specification standard with an AT3 7/24 Taper per ISO-1974. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder. The BTKV40 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



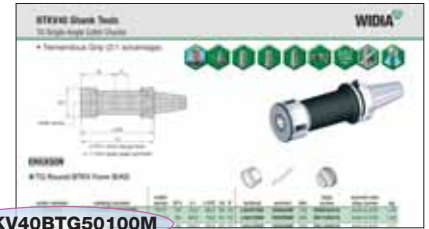
BTKV40

- JIS B 6339 7/24 taper.
- Standard M16 metric drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



BTKV40BTG50100M

BTKV

Shank Style

JIS B6339
Face Contact

40

Shank Taper Size

40 = 40
50 = 50

B

Special Feature
(optional)

B =
DIN form B coolant feature,
tool shipped to AD
specification
(design allows conversion
to form B style)

(blank) =
(no "B" or "Z") — tool built
to form A/AD coolant style

HPV =
High performance and
balanceable

TD =
Tunable

TG

Toolholder Style

50

Toolholder Size

100

Tool Length

(Gage line
on taper to
front of tool)

inch
xxx = x.xx

M

Identification Value

M =
Tool built to metric values and has
metric retention thread

- BB** = Bar blank
- EM** = End mill adapter
- ER** = DIN 6499 single-angle collet chuck
- KM** = KM™ adapter
- SM2C** = Shell mill adapter with coolant and small diameter
- SMC** = Shell mill adapter with coolant
- TG** = Tremendous Grip single-angle collet chuck
- TT** = Shrink Fit thermo toolholder
- TTHT** = Shrink Fit thermo toolholder — high torque

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

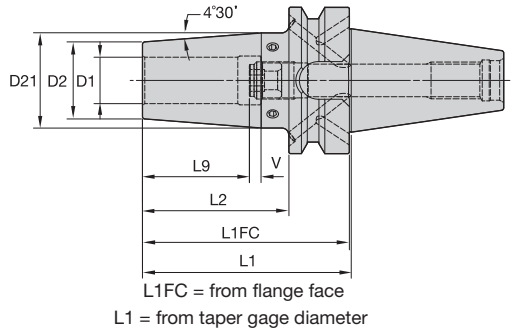
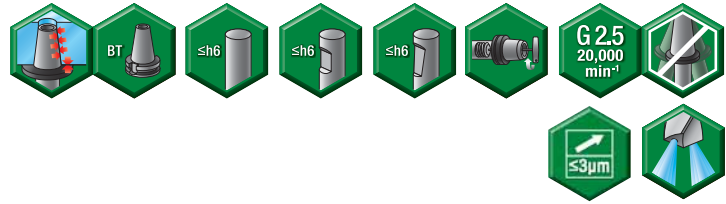
SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

BTKV40 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

BTKV40 Shank Tools

TT GP HPV MM-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3854807	BTKV40BHPVTT06090M	6	21	27	90	89,0	63,0	26	10	TTSS05014M	2,5mm	1,17
3854808	BTKV40BHPVTT08090M	8	21	27	90	89,0	63,0	26	10	TTSS06014M	3mm	1,16
3854809	BTKV40BHPVTT10090M	10	24	32	90	89,0	63,0	31	10	TTSS08014M	4mm	1,22
3854810	BTKV40BHPVTT12090M	12	24	32	90	89,0	63,0	36	10	TTSS10014M	5mm	1,21
3854811	BTKV40BHPVTT14090M	14	27	34	90	89,0	63,0	36	10	TTSS10014M	5mm	1,26
3854812	BTKV40BHPVTT16090M	16	27	34	90	89,0	63,0	39	10	TTSS12014M	6mm	1,24
3854823	BTKV40BHPVTT18090M	18	33	41	90	89,0	63,0	39	10	TTSS12014M	6mm	1,38
3854824	BTKV40BHPVTT20090M	20	33	41	90	89,0	63,0	41	10	TTSS16014M	8mm	1,35
3854825	BTKV40BHPVTT25100M	25	44	52	100	99,0	73,0	47	10	TTSS16014M	8mm	1,76
3854826	BTKV40BHPVTT32105M	32	44	53	105	104,0	78,0	51	10	TTSS16014M	8mm	1,67

(continued)

(TT GP HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, & 5/8	.0000/-0.0004
3/4, 7/8, 1, & 1-1/4	.0000/-0.0005

■ TT HPV IN-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3861327	BTKV40BHPVTT025350	1/4	.83	1.06	3.50	3.46	2.44	1.02	.39	TTSS05014M	2,5mm	2.56
3861328	BTKV40BHPVTT031350	5/16	.83	1.06	3.50	3.46	2.44	1.02	.39	TTSS06014M	3mm	2.55
3861329	BTKV40BHPVTT038350	3/8	.94	1.26	3.50	3.46	2.44	1.22	.39	TTSS08014M	4mm	2.68
3861330	BTKV40BHPVTT044350	7/16	.94	1.26	3.50	3.46	2.44	1.42	.39	TTSS10014M	5mm	2.66
3861331	BTKV40BHPVTT050350	1/2	.94	1.26	3.50	3.46	2.44	1.42	.39	TTSS10014M	5mm	2.64
3861332	BTKV40BHPVTT062350	5/8	1.06	1.33	3.50	3.46	2.44	1.54	.39	TTSS12014M	6mm	2.71
3861343	BTKV40BHPVTT075400	3/4	1.30	1.65	4.00	3.96	2.94	1.61	.39	TTSS16014M	8mm	3.26
3861344	BTKV40BHPVTT088400	7/8	1.30	1.65	4.00	3.96	2.94	1.61	.39	TTSS16014M	8mm	3.18
3861345	BTKV40BHPVTT100400	1	1.73	2.06	4.00	3.96	2.94	1.85	.39	TTSS16014M	8mm	3.91
3861346	BTKV40BHPVTT125425	1 1/4	1.73	2.08	4.25	4.21	3.19	2.01	.39	TTSS16014M	8mm	3.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

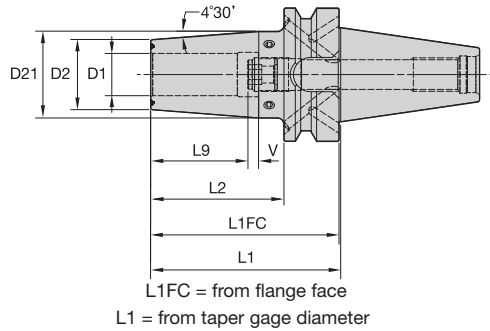
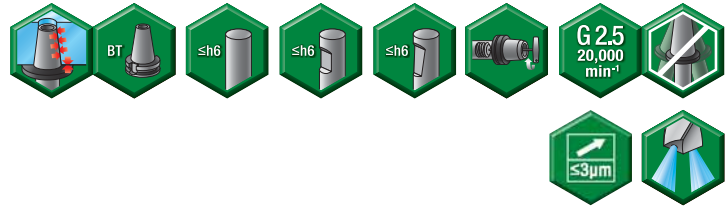
<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BTKV40 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

BTKV40 Shank Tools

■ TT HT HPV MM-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3854827	BTKV40BHPVTTHT12090M	12	24	32	90,0	89,0	63	36	10	TTSS10014M	5mm	1,21
3854828	BTKV40BHPVTTHT14090M	14	27	34	90,0	89,0	63	36	10	TTSS10014M	5mm	1,26
3854829	BTKV40BHPVTTHT16090M	16	27	34	90,0	89,0	63	39	10	TTSS12014M	6mm	1,24
3854830	BTKV40BHPVTTHT18090M	18	33	41	90,0	89,0	63	39	10	TTSS12014M	6mm	1,38
3854831	BTKV40BHPVTTHT20090M	20	33	41	90,0	89,0	63	41	10	TTSS16014M	8mm	1,35
3854832	BTKV40BHPVTTHT25100M	25	44	52	100,0	99,0	73	47	10	TTSS16014M	8mm	1,76
3854833	BTKV40BHPVTTHT32105M	32	44	53	105,0	104,0	78	51	10	TTSS16014M	8mm	1,67

(continued)

(TT HT HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ TT HT HPV IN-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3861347	BTKV40BHPVTTHT050350	1/2	.94	1.26	3.50	3.46	2.44	1.42	.39	TTSS10014M	5mm	2.64
3861348	BTKV40BHPVTTHT062350	5/8	1.06	1.33	3.50	3.46	2.44	1.54	.39	TTSS12014M	6mm	2.71
3861349	BTKV40BHPVTTHT075400	3/4	1.30	1.65	4.00	3.96	2.94	1.61	.39	TTSS16014M	8mm	3.26
3861350	BTKV40BHPVTTHT088400	7/8	1.30	1.65	4.00	3.96	2.94	1.61	.39	TTSS16014M	8mm	3.17
3861351	BTKV40BHPVTTHT100400	1	1.73	2.06	4.00	3.96	2.94	1.85	.39	TTSS16014M	8mm	3.91
3861352	BTKV40BHPVTTHT125425	1 1/4	1.73	2.08	4.25	4.21	3.19	2.01	.39	TTSS16014M	8mm	3.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
 For retention knobs, see page J33.

BTKV40 Shank Tools

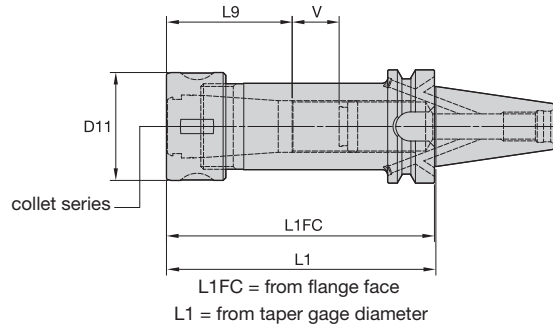
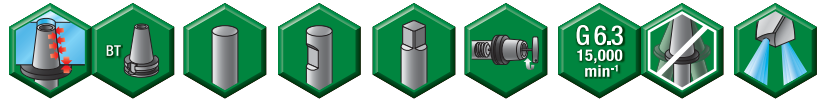
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BTKV40 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

ERICKSON™

■ TG Round-BTKV Form B/AD



order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3856650	BTKV40BTG075070M	TG75	50	70,0	69,0	50	10	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	1,24
3856651	BTKV40BTG100080M	TG100	60	80,0	79,0	64	10	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,43
3856652	BTKV40BTG100100M	TG100	60	100,0	99,0	64	14	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,71
3856663	BTKV40BTG100150M	TG100	60	150,0	149,0	64	64	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	2,19
3856664	BTKV40BTG150110M	TG150	85	110,0	109,0	78	15	LNA150M	HSW80M	271	SS112041G	4mm & 5/32	2,40

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

	Form AD					
	Form B					
			40	(2x) MS2221S	2,5mm	
			50	(2x) MS1296S	3mm	

WIN WITH WIDIA™



WIDIA™ M690 90° Shoulder Mill Series

M690 SD1204.. | M690 SD1506..

Strong and specially designed to streamline most milling operations, M690 Series 90° shoulder mills enable excellent shoulder finishes, enhanced chip evacuation, and optimal insert support.

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- Four cutting edges for economical and reliable machining.
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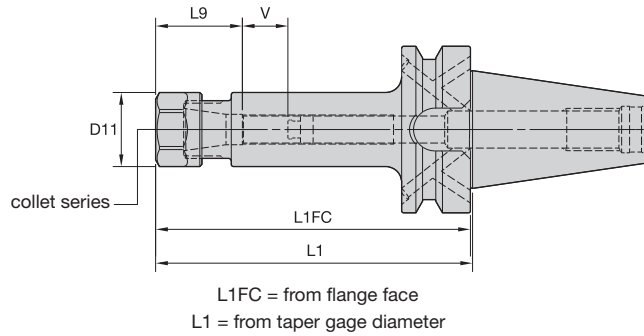
WIDIA 

BTKV40 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



BTKV40 Shank Tools

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

■ ER Hex-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857088	BTKV40BER16060M	ER16	28	60,0	59,0	32	32	1,04
3857089	BTKV40BER16120M	ER16	28	120,0	119,0	32	48	1,29
3857090	BTKV40BER20060M	ER20	34	60,0	59,0	36	27	1,04
3857091	BTKV40BER20120M	ER20	34	120,0	119,0	36	64	1,42

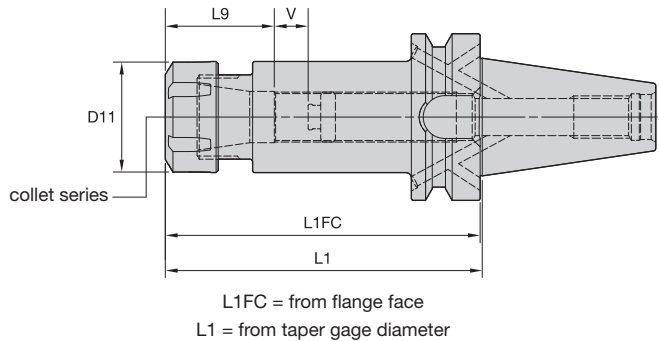
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BTKV40BER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV40BER16120M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV40BER20060M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BTKV40BER20120M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER BTKV Form B/AD continued)



BTKV40 Shank Tools

■ ER Round-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857092	BTKV40BER25070M	ER25	42	70,0	69,0	40	22	1,16
3857123	BTKV40BER25120M	ER25	42	120,0	119,0	40	60	1,61
3857124	BTKV40BER32070M	ER32	50	70,0	69,0	46	12	1,22
3857125	BTKV40BER32120M	ER32	50	120,0	119,0	46	54	1,85
3857126	BTKV40BER40080M	ER40	63	80,0	79,0	52	9	1,38
3857127	BTKV40BER40120M	ER40	63	120,0	119,0	52	41	2,26

■ Spare Parts

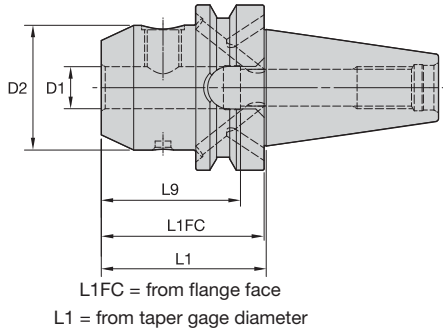
catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BTKV40BER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BTKV40BER25120M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BTKV40BER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BTKV40BER32120M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BTKV40BER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
BTKV40BER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

Form AD	✓				
Form B				40 (2x) MS2221S	2,5mm
				50 (2x) MS1296S	3mm

BTKV40 Shank Tools

End Mill Adapters



BTKV40 Shank Tools

ERICKSON™

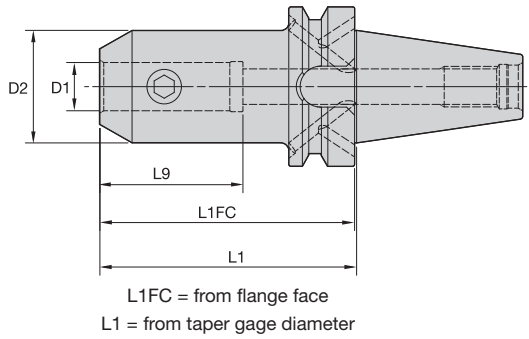
■ EM MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	Nm	kg
3856578	BTKV40BEM06050M	6	25	50,0	49,0	84	SS03M012	3mm	7	1,01
3856579	BTKV40BEM08050M	8	28	50,0	49,0	84	SS03M014	4mm	15	1,03
3856580	BTKV40BEM10063M	10	35	63,0	62,0	97	SS03M018	5mm	25	1,16
3856581	BTKV40BEM12063M	12	42	63,0	62,0	97	SS03M023	6mm	35	1,25
3856582	BTKV40BEM14063M	14	44	63,0	62,0	97	SS03M023	6mm	35	1,28
3856583	BTKV40BEM16063M	16	48	63,0	62,0	53	SS03M025	6mm	50	1,33
3856584	BTKV40BEM18063M	18	50	63,0	62,0	53	SS03M025	6mm	50	1,35
3856585	BTKV40BEM20063M	20	52	63,0	62,0	55	SS03M026	8mm	95	1,36
3856586	BTKV40BEM25090M	25	63	90,0	89,0	60	SS03M027	10mm	135	2,16

(continued)

(EM BTKV Form B/AD continued)



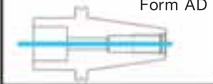








BTKV40 Shank Tools

■ EM IN-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3856587	BTKV40BEM025250	1/4	1.00	2.50	2.46	3.85	ELS025025PKG	1/8	5	2.35
3856588	BTKV40BEM031250	5/16	1.00	2.50	2.46	3.85	ELS031031PKG	5/32	11	2.31
3856589	BTKV40BEM038250	3/8	1.00	2.50	2.46	3.85	ELS038031PKG	3/16	15	2.32
3856590	BTKV40BEM050300	1/2	1.38	3.00	2.96	4.35	ELS044038PKG	7/32	20	2.69
3856591	BTKV40BEM062300	5/8	1.63	3.00	2.96	2.09	ELS056050PKG	1/4	40	2.93
3856592	BTKV40BEM075400	3/4	1.75	4.00	3.96	2.22	ELS062050PKG	5/16	70	3.62
3856593	BTKV40BEM088400	7/8	2.00	4.00	3.96	2.22	ELS062050PKG	5/16	70	4.11
3856594	BTKV40BEM100400	1	2.00	4.00	3.96	2.56	ELS075056PKG	3/8	110	3.95
3856595	BTKV40BEM125400	1 1/4	2.50	4.00	3.96	2.51	ELS075062PKG	3/8	110	4.81

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.

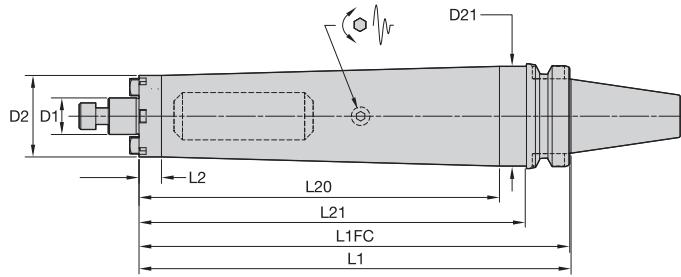
					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BTKV40 Shank Tools

Tunable Shell Mill Adapters with Through Coolant



BTKV40 Shank Tools



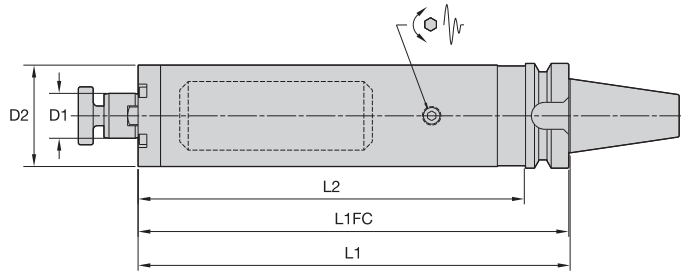
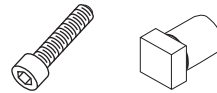
L1FC = from flange face
L1 = from taper gage diameter



ERICKSON

■ SMC TD Cap MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136287	BTKV40BTDSMC22260M	22	49	60	260	259	13,5	216,8	233	MS1234	KDK22M	8mm	5,07

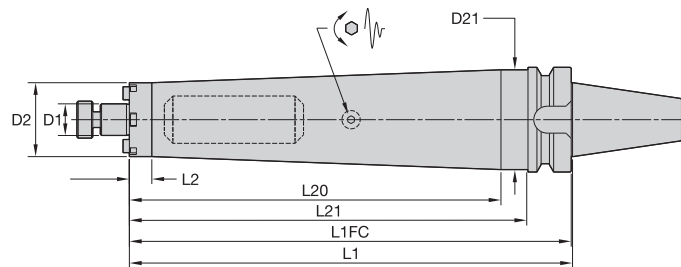


L1FC = from flange face
L1 = from taper gage diameter



■ SMC TD Lock MM-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L2	L1FC	lock screw	drive key	wrench size lock screw	kg
4136288	BTKV40BTDSMC27260M	27	61	260	233	259	KLSS27M	—	10mm	5,98

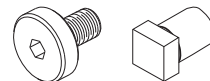


L1FC = from flange face
L1 = from taper gage diameter



■ SMC TD Lock IN-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136289	BTKV40BTDSMC0751050	3/4	1.750	2.362	10.500	10.460	.53	8.797	9.437	KLS07	KDK05	1/4	10.69
4136290	BTKV40BTDSMC1001050	1	2.189	—	10.500	10.460	9.44	—	—	KLS10	KDK06	5/16	11.84



NOTE: Do not overtighten lock screw.

Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.

Lock screw wrench not included.

For retention knob, see page J33.



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M270 Series • For Secure and Rigid Insert Clamping

With precision engineered ball nose, toroidal, and new high-feed inserts, the M270 Series provides the highest accuracy and insert stability for exceptional reliability and performance.

- New performance-boosting High-Feed (HF) inserts offered standard and are now available in grade TN6525™ for steel optimization.
- Ball nose and toroidal tools for semi-finishing through finishing are also available.
- V-shaped contact faces enable maximum rigidity and accuracy.

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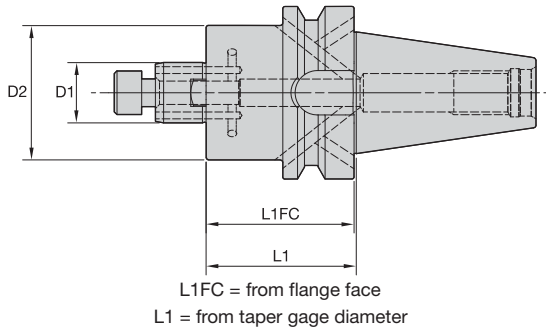
WIDIA 

BTKV40 Shank Tools

Shell Mill Adapters with Through Coolant

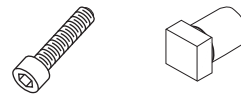


BTKV40 Shank Tools

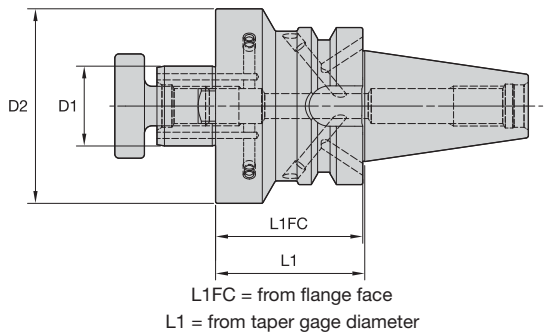


ERICKSON

■ SMC Cap MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857109	BTKV40BSM2C16050M	16	38	50,0	49,0	MS1294	KDK16M	6mm	1,17
3857108	BTKV40BSMC16050M	16	44	50,0	49,0	MS1294	KDK16M	6mm	1,24
3857111	BTKV40BSM2C22055M	22	42	55,0	54,0	MS1234	—	8mm	1,31
3857110	BTKV40BSMC22055M	22	49	55,0	54,0	MS1234	KDK22M	8mm	1,42



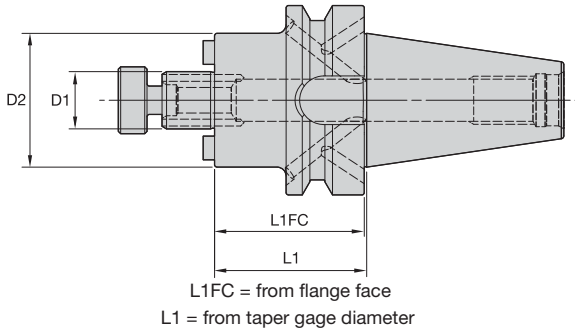
■ SMC Lock MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857112	BTKV40BSMC27055M	27	60	55,0	54,0	KLSS27M	KDK27M	10mm	1,68
3857163	BTKV40BSMC32060M	32	78	60,0	59,0	KLSS32M	KDK32M	14mm	2,23

(continued)

(SMC BTKV Form B/AD continued)



BTKV40 Shank Tools

■ SMC TD Lock IN-BTKV Form B/AD



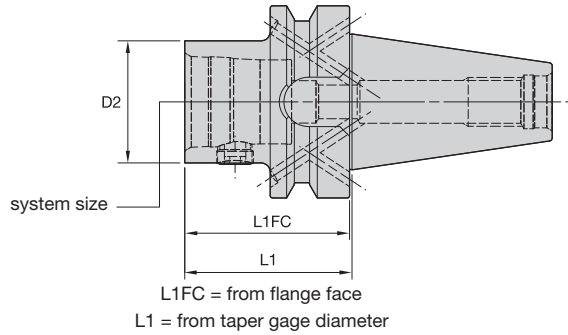
order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857166	BTKV40BSM2C050175	1/2	1.20	1.75	1.71	KLS05	KDK04	3/16	2.37
3857165	BTKV40BSMC050175	1/2	1.44	1.75	1.71	KLS05	KDK04	3/16	2.42
3857168	BTKV40BSM2C075200	3/4	1.46	2.00	1.96	KLS07	—	1/4	2.59
3857167	BTKV40BSMC075200	3/4	1.75	2.00	1.96	KLS07	KDK05	1/4	2.79
3857170	BTKV40BSM2C100200	1	2.19	2.00	1.96	KLS10	KDK06	5/16	3.25
3857169	BTKV40BSMC100200	1	2.75	2.00	1.96	KLS10	KDK06	5/16	3.71
3857171	BTKV40BSMC125200	1 1/4	2.88	2.00	1.96	KLS12	KDK08	5/16	4.05
3857172	BTKV40BSMC150200	1 1/2	3.81	2.00	1.96	KLS15	KDK10	3/8	5.39

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

Form AD						
Form B				40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BTKV40 Shank Tools

KM™ Modular Adapters



BTKV40 Shank Tools

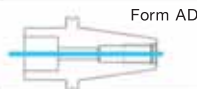








ERICKSON

■ KM-BTKV Form B/AD

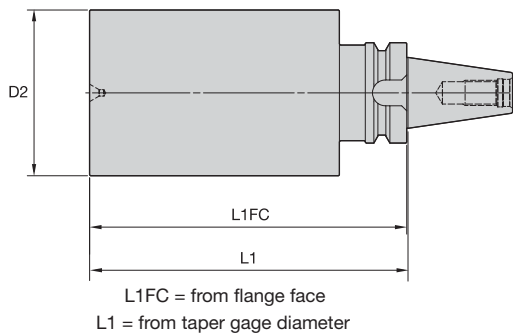


order number	catalog number	system size	D2	L1	L1FC	KM spare parts package	wrench size actuation screw	Nm	kg
3822963	BTKV40BKM32050M	KM32	32	50,0	49,0	KM32PKG3S	5mm	8-11	1,06
3822964	BTKV40BKM32090M	KM32	32	90,0	89,0	KM32PKG3S	5mm	8-11	1,28
3822965	BTKV40BKM40055M	KM40	40	55,0	54,0	KM40PKG3S	6mm	12-16	1,15
3822966	BTKV40BKM40100M	KM40	40	100,0	99,0	KM40PKG3S	6mm	12-16	1,54
3822967	BTKV40BKM50065M	KM50	50	65,0	64,0	KM50PKG3S	10mm	27-34	1,34
3822968	BTKV40BKM50120M	KM50	50	120,0	119,0	KM50PKG3S	10mm	27-34	2,13

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.

 <p>Form AD</p>					
 <p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>

- Machinable front 20–30 RW C.



BTKV40 Shank Tools

ERICKSON

■ BB-BTKV Form A

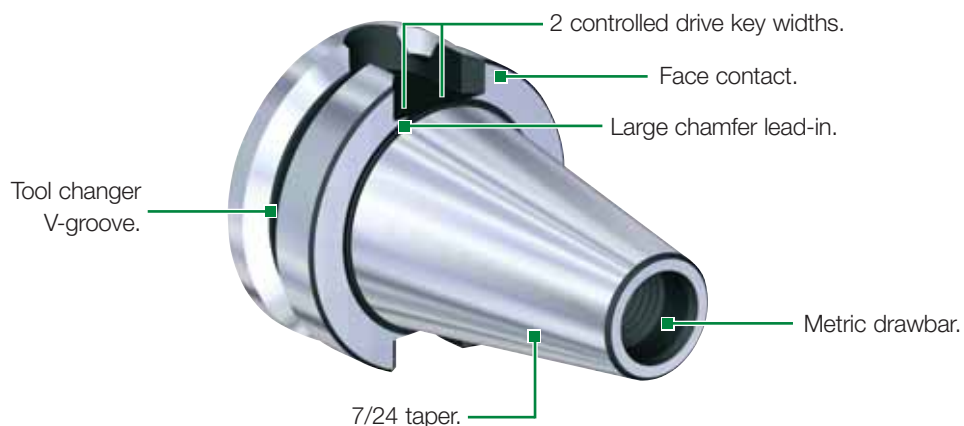
order number	catalog number	D2	L1	L1FC	kg
3815352	BTKV40BB063280M	63,0	280,0	279,0	7,13
3815363	BTKV40BB104200M	104,0	200,0	199,0	11,78

NOTE: For retention knobs, see page J33.

Erickson™ Taper Face Contact Shank Tooling System • BTKV50 Series

Erickson Taper Face BT Contact Taper Tooling is manufactured from premium materials and to the latest JIS B 6339 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder.

BTKV50



The BTKV50 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



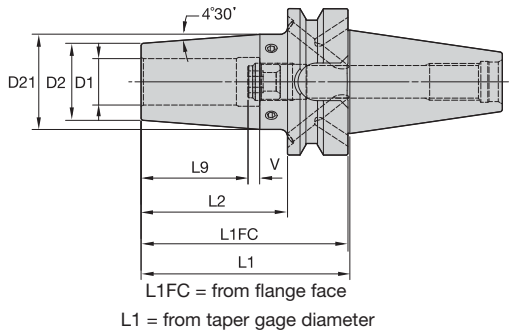
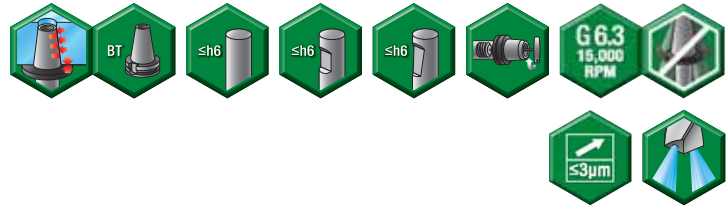
- JIS B 6339 7/24 taper.
- Standard M24 metric drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

BTKV50 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

BTKV50 Shank Tools

TT GP HPV MM-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3856633	BTKV50BHPVTT06100M	6	21	27	100	98,5	62,0	26	10	TTSS05014M	2,5mm	3,72
3856634	BTKV50BHPVTT08100M	8	21	27	100	98,5	62,0	26	10	TTSS06014M	3mm	3,72
3856635	BTKV50BHPVTT10100M	10	24	32	100	98,5	62,0	31	10	TTSS08014M	4mm	3,78
3856636	BTKV50BHPVTT12100M	12	24	32	100	98,5	62,0	36	10	TTSS10014M	5mm	3,76
3856637	BTKV50BHPVTT14100M	14	27	34	100	98,5	62,0	36	10	TTSS10014M	5mm	3,81
3856638	BTKV50BHPVTT16100M	16	27	34	100	98,5	62,0	39	10	TTSS12014M	6mm	3,79
3856639	BTKV50BHPVTT18100M	18	33	41	100	98,5	62,0	39	10	TTSS12014M	6mm	3,93
3856640	BTKV50BHPVTT20100M	20	33	41	100	98,5	62,0	41	10	TTSS16014M	8mm	3,90
3856641	BTKV50BHPVTT25100M	25	44	52	100	98,5	62,0	47	10	TTSS16014M	8mm	4,19
3856642	BTKV50BHPVTT32100M	32	44	52	100	98,5	62,0	51	10	TTSS16014M	8mm	4,03

(continued)

(TT GP HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, & 5/8	.0000/-0.0004
3/4, 7/8, 1, & 1-1/4	.0000/-0.0005

■ TT GP HPV In-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3859981	BTKV50BHPVTT025400	1/4	.83	1.06	4.00	3.94	2.50	1.02	.39	TTSS05014M	2,5mm	8.23
3859982	BTKV50BHPVTT031400	5/16	.83	1.06	4.00	3.94	2.50	1.02	.39	TTSS06014M	3mm	8.21
3860033	BTKV50BHPVTT038400	3/8	.94	1.26	4.00	3.94	2.50	1.22	.39	TTSS08014M	4mm	8.36
3860034	BTKV50BHPVTT044400	7/16	.94	1.26	4.00	3.94	2.50	1.42	.39	TTSS10014M	5mm	8.33
3860035	BTKV50BHPVTT050400	1/2	.94	1.26	4.00	3.94	2.50	1.42	.39	TTSS10014M	5mm	8.31
3860036	BTKV50BHPVTT062400	5/8	1.06	1.33	4.00	3.94	2.50	1.54	.39	TTSS12014M	6mm	8.38
3860037	BTKV50BHPVTT075400	3/4	1.30	1.61	4.00	3.94	2.50	1.61	.39	TTSS16014M	8mm	8.66
3860038	BTKV50BHPVTT088400	7/8	1.30	1.61	4.00	3.94	2.50	1.61	.39	TTSS16014M	8mm	8.60
3860039	BTKV50BHPVTT100400	1	1.73	2.05	4.00	3.94	2.50	1.85	.39	TTSS16014M	8mm	9.27
3860040	BTKV50BHPVTT125400	1 1/4	1.73	2.05	4.00	3.94	2.50	2.01	.39	TTSS16014M	8mm	8.95

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

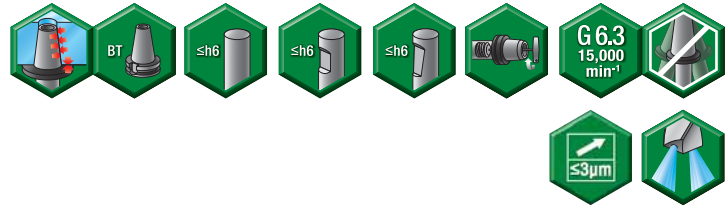
<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BTKV50 Shank Tools

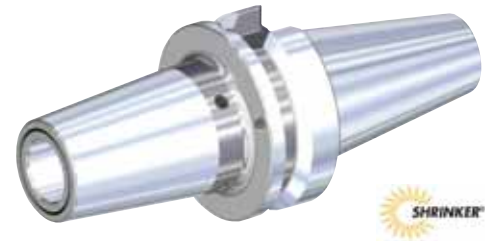
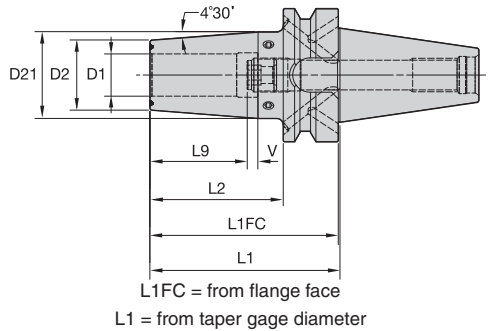
Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



BTKV50 Shank Tools



**Cutting Tool Shank Requirements
metric (ISO standard)**

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

■ TT HT HPV MM-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3856643	BTKV50BHPVTTHT12100M	12	24	32	100	98,5	62,0	36	10	TTSS10014M	5mm	3,76
3856644	BTKV50BHPVTTHT14100M	14	27	34	100	98,5	62,0	36	10	TTSS10014M	5mm	3,81
3856645	BTKV50BHPVTTHT16100M	16	27	34	100	98,5	62,0	39	10	TTSS12014M	6mm	3,79
3856646	BTKV50BHPVTTHT18100M	18	33	41	100	98,5	62,0	39	10	TTSS12014M	6mm	3,93
3856647	BTKV50BHPVTTHT20100M	20	33	41	100	98,5	62,0	41	10	TTSS16014M	8mm	3,90
3856648	BTKV50BHPVTTHT25100M	25	44	52	100	98,5	62,0	47	10	TTSS16014M	8mm	4,90
3856649	BTKV50BHPVTTHT32100M	32	44	52	100	98,5	62,0	51	10	TTSS16014M	8mm	4,03

(continued)

(TT HT HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ TT HT HPV In-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860041	BTKV50BHPVTTH050400	1/2	.94	1.26	4.00	3.94	2.504	1.42	.39	TTSS10014M	5mm	8.31
3860042	BTKV50BHPVTTH062400	5/8	1.06	1.33	4.00	3.94	2.504	1.54	.39	TTSS12014M	6mm	8.38
3860043	BTKV50BHPVTTH075400	3/4	1.30	1.61	4.00	3.94	2.504	1.61	.39	TTSS16014M	8mm	8.66
3860044	BTKV50BHPVTTH088400	7/8	1.30	1.61	4.00	3.94	2.504	1.61	.39	TTSS16014M	8mm	8.60
3860045	BTKV50BHPVTTH100400	1	1.73	2.05	4.00	3.94	2.504	1.85	.39	TTSS16014M	8mm	9.27
3860046	BTKV50BHPVTTH125400	1 1/4	1.73	2.05	4.00	3.94	2.504	2.01	.39	TTSS16014M	8mm	8.95

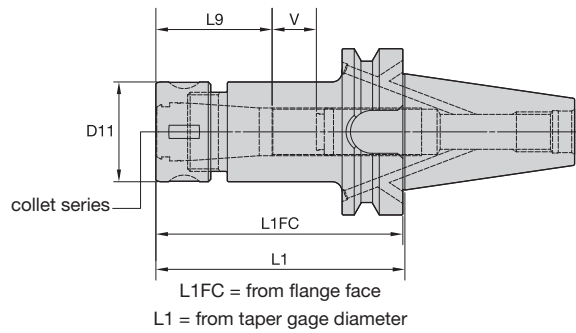
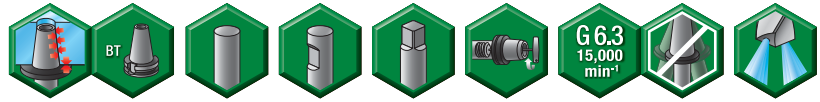
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
 For retention knobs, see page J33.

BTKV50 Shank Tools

	Form AD				
	Form B			40	(2x) MS2221S
				50	(2x) MS1296S
					2,5mm
					3mm

BTK50 Shank Tools

TG Single-Angle Collet Chucks



BTKV50 Shank Tools

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

ERICKSON™

■ TG Round-BTKV Form B/AD



order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	stop screw	wrench size stop screw	Nm	kg
3856665	BTKV50BTG100090M	TG100	60	90,0	88,5	64	36	LNA100M	HSW58M	SS112041G	4mm & 5/32	203	3,97
3856666	BTKV50BTG100150M	TG100	60	150,0	148,5	64	89	LNA100M	HSW58M	SS112041G	4mm & 5/32	203	5,15
3856667	BTKV50BTG150100M	TG150	85	100,0	98,5	78	13	LNA150M	HSW80M	SS162062G	4mm & 5/32	271	4,43
3856668	BTKV50BTG150150M	TG150	85	150,0	148,5	78	49	LNA150M	HSW80M	SS162062G	4mm & 5/32	271	6,08

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

<p>Form AD</p>						
<p>Form B</p>				40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

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ProGroove™

With easy-to-change inserts available in multiple high-performance carbide grades, the ProGroove system ensures accurate, reliable, and reproducible cutting edge performance.

ProGroove Grooving and Cut-Off

- Single-end inserts for grooving and cut-off.
- Offered with integral shanks and blades.
- Shallow, deep grooving, and cut-off capabilities.
- Available in four different geometries.

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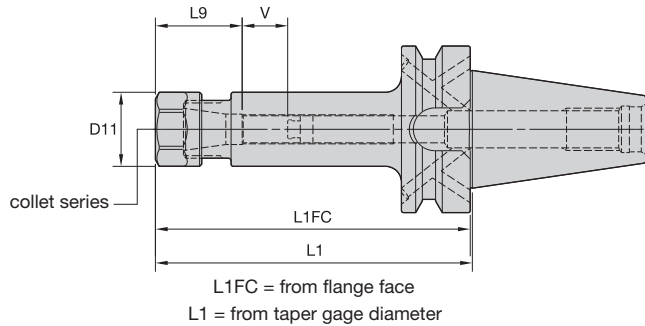
WIDIA 
Win with WIDIA™

BTKV50 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



BTKV50 Shank Tools

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

■ ER Hex-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857128	BTKV50BER16100M	ER16	28	100	98,5	32	48	3,78
3857129	BTKV50BER16150M	ER16	28	150	148,5	32	48	3,97
3857130	BTKV50BER20070M	ER20	34	70	68,5	36	24	3,65
3857131	BTKV50BER20150M	ER20	34	150	148,5	36	64	4,12

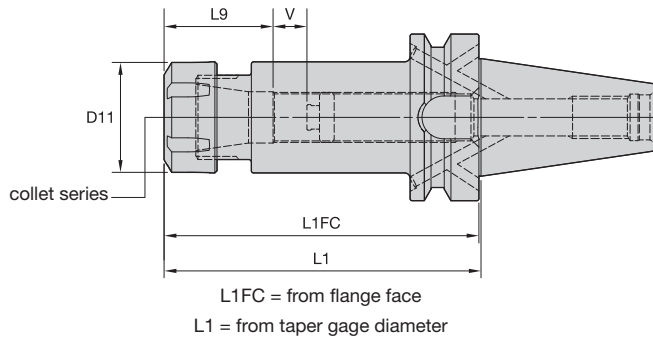
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BTKV50BER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV50BER16150M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV50BER20070M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BTKV50BER20150M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER BTKV Form B/AD continued)



BTKV50 Shank Tools

■ ER Round-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857132	BTKV50BER25070M	ER25	42	70,0	68,5	40	40	3,69
3857133	BTKV50BER25150M	ER25	42	150,0	148,5	40	60	4,38
3857134	BTKV50BER32070M	ER32	50	70,0	68,5	46	38	3,67
3857135	BTKV50BER32150M	ER32	50	150,0	148,5	46	54	4,67
3857136	BTKV50BER40080M	ER40	63	80,0	78,5	52	38	3,83
3857137	BTKV50BER40150M	ER40	63	150,0	148,5	52	48	5,33

■ Spare Parts

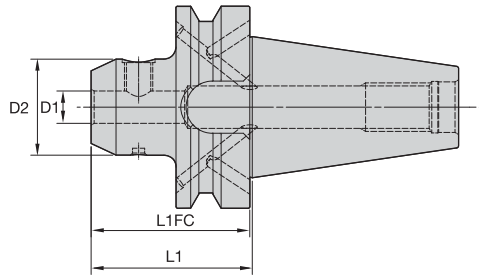
catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BTKV50BER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BTKV50BER25150M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BTKV50BER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BTKV50BER32150M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BTKV50BER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
BTKV50BER40150M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

Form AD	✓				
Form B					
		40	(2x) MS2221S	2,5mm	
		50	(2x) MS1296S	3mm	

BTKV50 Shank Tools

End Mill Adapters



L1FC = from flange face
L1 = from taper gage diameter



BTKV50 Shank Tools

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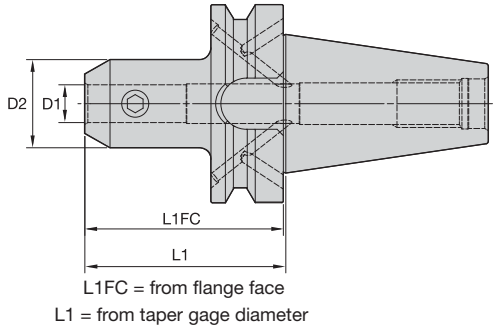
EM MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	wrench size lock screw	Nm	kg
3856539	BTKV50BEM06063M	6	24,5	63,0	61,5	SS03M012	3mm	7	3,58
3856541	BTKV50BEM08063M	8	27,5	63,0	61,5	SS03M014	4mm	15	3,60
3856542	BTKV50BEM10080M	10	34,5	80,0	78,5	SS03M018	5mm	25	3,79
3856563	BTKV50BEM12080M	12	41,5	80,0	78,5	SS03M023	6mm	35	3,86
3856564	BTKV50BEM14080M	14	43,5	80,0	78,5	SS03M023	6mm	35	3,90
3856565	BTKV50BEM16080M	16	47,5	80,0	78,5	SS03M025	6mm	50	3,97
3856566	BTKV50BEM18080M	18	49,5	80,0	78,5	SS03M025	6mm	50	4,00
3856567	BTKV50BEM20080M	20	51,5	80,0	78,5	SS03M026	8mm	95	4,02
3856568	BTKV50BEM25105M	25	64,5	105,0	103,5	SS03M027	10mm	135	4,80
3856569	BTKV50BEM32105M	32	71,5	105,0	103,5	SS03M029	10mm	160	5,04
3856570	BTKV50BEM40120M	40	89,5	120,0	118,5	SS03M029	10mm	160	6,56
3856571	BTKV50BEM50130M	50	99,5	130,0	128,5	—	12mm	200	7,50

(continued)

(EM BTKV Form B/AD continued)



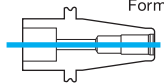





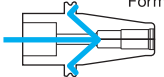


BTKV50 Shank Tools

■ EM IN-BTKV Form B/AD



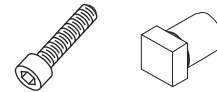
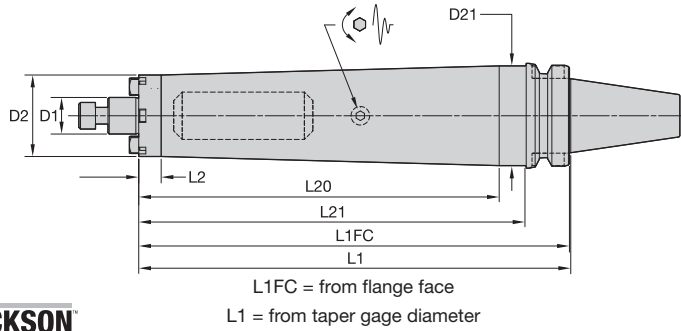
order number	catalog number	D1	D2	L1	L1FC	lock screw	wrench size lock screw	ft. lbs.	lbs
3856572	BTKV50BEM050300	1/2	1.37	3.00	2.94	ELS044038PKG	7/32	20	8.18
3856573	BTKV50BEM075400	3/4	1.75	4.00	3.94	ELS062050PKG	5/16	70	8.99
3856574	BTKV50BEM100400	1	2.00	4.00	3.94	ELS075056PKG	3/8	110	8.95
3856575	BTKV50BEM125400	1 1/4	2.50	4.00	3.94	ELS075062PKG	3/8	110	10.08
3856576	BTKV50BEM150450	1 1/2	2.75	4.50	4.44	ELS075069PKG	3/8	110	11.05
3856577	BTKV50BEM200550	2	3.75	5.50	5.44	ELS100088PKG	1/2	148	16.28

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BTKV50 Shank Tools

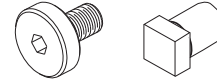
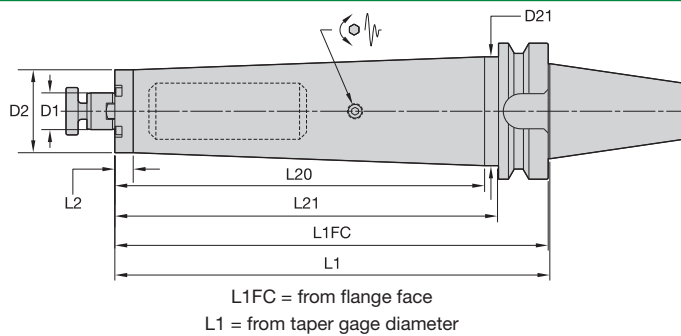
Tunable Shell Mill Adapters with Through Coolant



ERICKSON

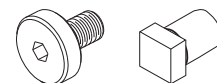
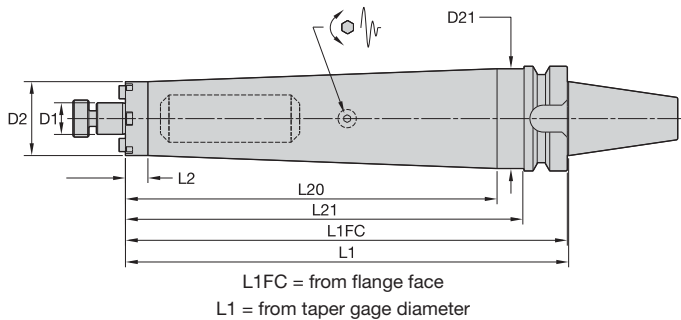
■ SMC TD Cap MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136291	BTKV50BTDSMC22260M	22	49	70	260,0	258,5	13,5	211,8	222	MS1234	KDK22M	8mm	8,27



■ SMC TD Lock MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136292	BTKV50BTDSMC27320M	27	61	80	320	318,5	13,5	271,8	282	KLSS27M	—	10mm	11,89
4136303	BTKV50BTDSMC32330M	32	78	—	330	328,5	292,0	—	—	KLSS32M	KDK32M	14mm	16,22



■ SMC TD Lock IN-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136304	BTKV50BTDSMC0751050	3/4	1.75	2.56	10.50	10.44	.53	8.60	9.00	KLS07	KDK05	1/4	16.86
4136305	BTKV50BTDSMC1001250	1	2.75	—	12.50	12.44	11.00	—	—	KLS10	KDK06	5/16	25.60
4136306	BTKV50BTDSMC1251300	1 1/4	2.88	—	13.00	12.94	11.50	—	—	KLS12	KDK08	5/16	32.85

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.



WIN WITH WIDIA™



KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

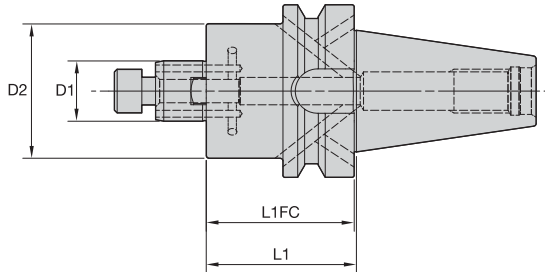
WIDIA 

BTKV50 Shank Tools

Shell Mill Adapters with Through Coolant



BTKV50 Shank Tools



L1FC = from flange face
L1 = from taper gage diameter

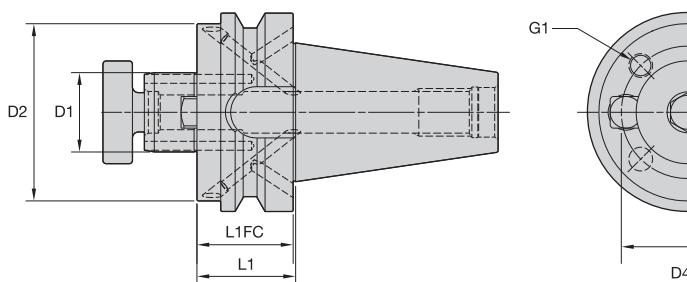


ERICKSON

■ SMC Cap MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857069	BTKV50BSM2C16045M	16	38	45,0	43,5	MS1294	KDK16M	6mm	3,66
3857068	BTKV50BSM16045M	16	44	45,0	43,5	MS1294	KDK16M	6mm	3,67
3857071	BTKV50BSM2C22045M	22	42	45,0	43,5	MS1234	—	8mm	3,66
3857070	BTKV50BSM22045M	22	49	45,0	43,5	MS1234	KDK22M	8mm	3,69



L1FC = from flange face
L1 = from taper gage diameter



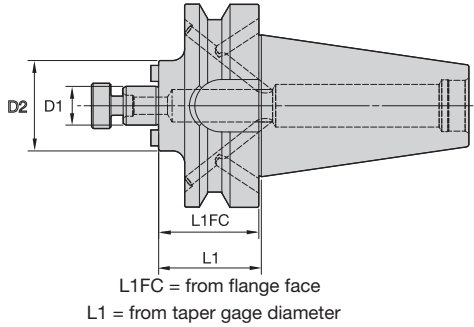
■ SMC Lock MM-BTKV Form B/AD



order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857072	BTKV50BSMC27045M	27	60	—	—	45,0	43,5	KLSS27M	KDK27M	10mm	3,80
3857093	BTKV50BSMC32045M	32	78	—	—	45,0	43,5	KLSS32M	KDK32M	14mm	4,01
3857094	BTKV50BSMC40050M	40	89	66,7	M12X1.75	50,0	48,5	KLSS40M	KDK40M	17mm	4,46
3857095	BTKV50BSMC60090M	60	129	101,6	M16X2.0	90,0	88,5	—	KDK60M	—	8,55

(continued)

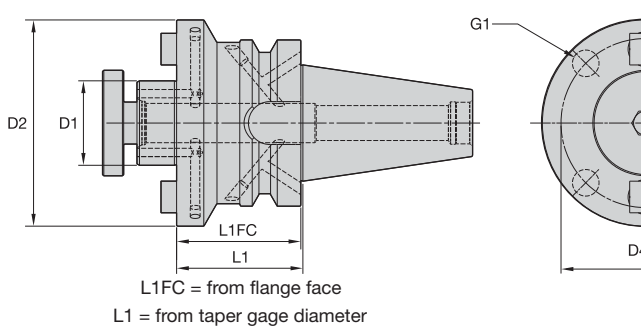
(SMC Lock BTKV Form B/AD continued)



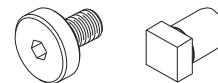
■ SMC Lock MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857097	BTKV50BSM2C075200	3/4	1.46	2.00	1.941	KLS07	—	1/4	8.14
3857096	BTKV50BSM2C075200	3/4	1.75	2.00	1.941	KLS07	KDK05	1/4	8.25
3857099	BTKV50BSM2C100200	1	2.19	2.00	1.941	KLS10	KDK06	5/16	8.45
3857098	BTKV50BSM2C100200	1	2.75	2.00	1.941	KLS10	KDK06	5/16	8.75
3857100	BTKV50BSM2C125200	1 1/4	2.88	2.00	1.941	KLS12	KDK08	5/16	9.05
3857101	BTKV50BSM2C150200	1 1/2	3.81	2.00	1.941	KLS15	KDK10	3/8	10.07



■ SMC Lock IN-BTKV Form B/AD



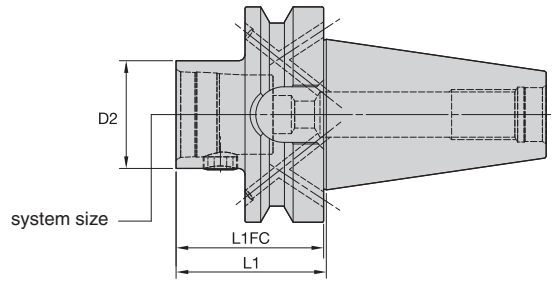
order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857102	BTKV50BSM2C200300	2	4.88	4.00	5/8-11 UNC	3.00	2.94	KLS20	KDK12	9/16	15.08
3857103	BTKV50BSM2C250300	2 1/2	4.88	4.00	5/8-11 UNC	3.00	2.94	KLS25	KDK16	9/16	16.33

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BTKV50 Shank Tools

KM™ Modular Adapters



L1FC = from flange face
L1 = from taper gage diameter



BTKV50 Shank Tools

ERICKSON™

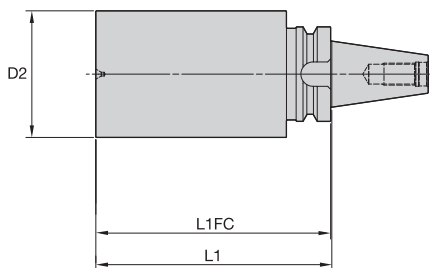
■ KM-BTKV Form B/AD

order number	catalog number	system size	D2	L1	L1FC	KM spare parts package	wrench size actuation screw	Nm	kg
3815301	BTKV50BKM32060M	KM32	32	60	58,5	KM32PKG3S	5mm	8-11	3,63
3815302.	BTKV50BKM32090M	KM32	32	90	88,5	KM32PKG3S	5mm	8-11	3,78
3815333	BTKV50BKM40065M	KM40	40	65	63,5	KM40PKG3S	6mm	12-16	3,72
3815334	BTKV50BKM40100M	KM40	40	100	98,5	KM40PKG3S	6mm	12-16	4,01
3815335	BTKV50BKM50070M	KM50	50	70	68,5	KM50PKG3S	10mm	27-34	3,86
3815336	BTKV50BKM50120M	KM50	50	120	118,5	KM50PKG3S	10mm	27-34	4,54
3815337	BTKV50BKM63080M	KM63	63	80	78,5	KM63PKG3S	12mm	47-54	4,22
3815338	BTKV50BKM63140M	KM63	63	140	138,5	KM63PKG3S	12mm	47-54	5,55
3815339	BTKV50BKM80090M	KM80	80	90	88,5	KM80PKG3S	14mm	79-85	5,00

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.
These products are only available in the U.S., Canada, and Japan.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

- Machinable front 20–30 RW C.



L1FC = from flange face
L1 = from taper gage diameter



BTKV50 Shank Tools

ERICKSON

■ BB-BTKV Form B/AD

order number	catalog number	D2	L1	L1FC	kg
3830226	BTKV50BB104350M	104	350	348,5	24,37
3830227	BTKV50BB134250M	134	250	248,5	26,58

NOTE: For retention knobs, see page J33.

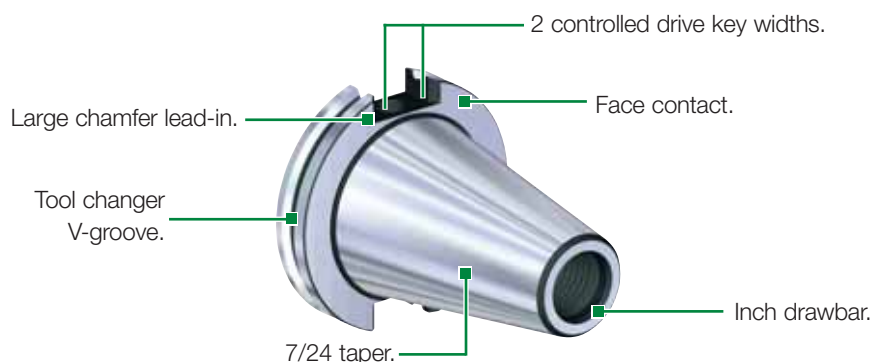
Erickson™ Taper Face Contact Shank Tooling System • CVKV40 Series

Erickson Taper Face CV Contact Taper Tooling is manufactured from premium materials and to the latest ANSI B5.50 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder. The CVKV40 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



CVKV40

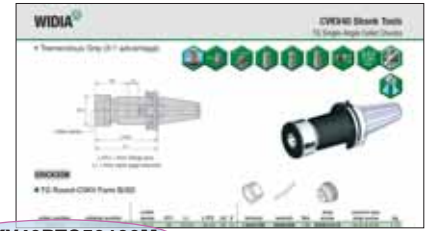
- ANSI B5.50 7/24 taper.
- Standard 5/8-11 drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



Drive key slots are unequal depths. Detent hole identifies shallow drive key slot.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



CVKV40BTG50100M

CVKV

Shank Style

ANSI B5.50
Face Contact

40

Shank Taper Size

40 = 40
50 = 50

B

Special Feature
(optional)

B =
DIN form B coolant feature,
tool shipped to AD
specification
(design allows conversion
to form B style)

(blank) =
(no "B" or "Z") — tool built
to form A/AD coolant style

HPV =
High performance and
balanceable

TD =
Tunable

TG

Toolholder Style

50

Toolholder Size

100

Tool Length

(Gage line
on taper to
front of tool)

inch
xxx = x.xx

M

Identification Value

M =
Tool built to metric values and has
metric retention thread

- BB** = Bar blank
- EM** = End mill adapter
- ER** = DIN 6499 single-angle collet chuck
- KM** = KM™ adapter
- SM2C** = Shell mill adapter with coolant and small diameter
- SMC** = Shell mill adapter with coolant
- TG** = Tremendous Grip single-angle collet chuck
- TT** = Shrink Fit thermo toolholder
- TTHT** = Shrink Fit thermo toolholder — high torque

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

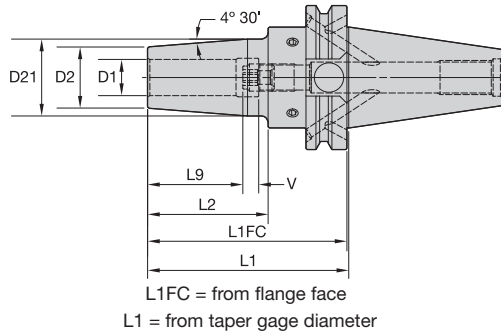
SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

CVKV40 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860164	CVKV40BHPVTT06M350	6	21	26,90	88,90	87,90	53,15	26	10	TTSS05014M	2,5mm	1,18
3860165	CVKV40BHPVTT08M350	8	21	26,90	88,90	87,90	53,15	26	10	TTSS06014M	3mm	1,18
3860166	CVKV40BHPVTT10M350	10	24	31,00	88,90	87,90	53,15	31	10	TTSS08014M	4mm	1,22
3860167	CVKV40BHPVTT12M350	12	24	31,00	88,90	87,90	53,15	36	10	TTSS10014M	5mm	1,21
3860168	CVKV40BHPVTT14M350	14	27	33,90	88,90	87,90	53,15	36	10	TTSS10014M	5mm	1,25
3860169	CVKV40BHPVTT16M350	16	27	33,90	88,90	87,90	53,15	39	10	TTSS12014M	6mm	1,22
3860170	CVKV40BHPVTT18M400	18	33	44,45	101,60	100,60	82,55	39	10	TTSS12014M	6mm	1,47
3860171	CVKV40BHPVTT20M400	20	33	44,45	101,60	100,60	82,55	41	10	TTSS16014M	8mm	1,43
3860172	CVKV40BHPVTT25M400	25	44	52,90	101,60	100,60	82,55	47	10	TTSS16014M	8mm	1,73
3860173	CVKV40BHPVTT32M400	32	44	52,90	101,60	100,60	82,55	51	10	TTSS16014M	8mm	1,56

(continued)

CVKV40 Shank Tools

(TT GP HPV CVKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-0.0004
3/4, 7/8, 1, & 1-1/4	.0000/-0.0005

■ TT GP HPV IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860008	CVKV40BHPVTT025350	1/4	.83	1.06	3.50	3.46	2.09	1.02	.39	TTSS05014M	2,5mm	2.61
3860009	CVKV40BHPVTT031350	5/16	.83	1.06	3.50	3.46	2.09	1.02	.39	TTSS06014M	3mm	2.59
3860010	CVKV40BHPVTT038375	3/4	.94	1.26	3.75	3.71	2.34	1.22	.39	TTSS08014M	4mm	2.78
3860011	CVKV40BHPVTT044375	7/16	.94	1.26	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.75
3860012	CVKV40BHPVTT050375	1/2	.94	1.26	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.73
3860013	CVKV40BHPVTT056375	9/16	1.06	1.33	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.84
3860014	CVKV40BHPVTT062375	5/8	1.06	1.33	3.75	3.71	2.34	1.54	.39	TTSS12014M	6mm	2.79
3860015	CVKV40BHPVTT068400	11/16	1.30	1.75	4.00	3.96	3.25	1.54	.39	TTSS12014M	6mm	3.25
3860016	CVKV40BHPVTT075400	3/4	1.30	1.75	4.00	3.96	3.25	1.61	.39	TTSS12014M	8mm	3.17
3860017	CVKV40BHPVTT088400	7/8	1.30	1.75	4.00	3.96	3.25	1.61	.39	TTSS16014M	8mm	3.09
3860018	CVKV40BHPVTT100400	1	1.73	2.08	4.00	3.96	3.25	1.85	.39	TTSS16014M	8mm	3.79
3860019	CVKV40BHPVTT125400	1 1/4	1.73	2.08	4.00	3.96	3.25	2.01	.39	TTSS16014M	8mm	3.46

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

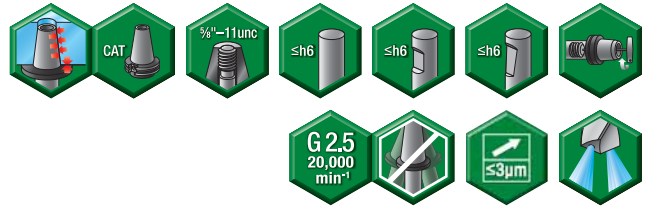
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CVKV40 Shank Tools

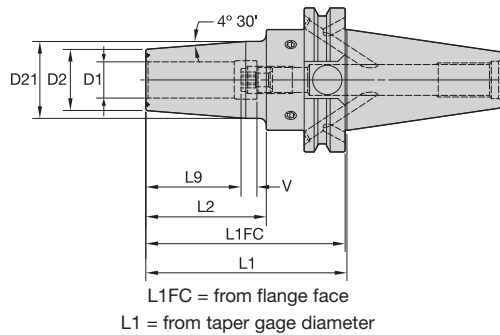
Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



CVKV40 Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT HT HPV MM-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	26,90	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	26,90	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	31,90	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	31,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860152	CVKV50BHPVTT16M400	16	27	33,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860154	CVKV50BHPVTT20M400	20	33	41,90	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42

(continued)

(TT HT HPV CVKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4 & 5/16	.0000/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ TT HT HPV IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860008	CVKV40BHPVTT025350	1/4	.83	1.06	3.50	3.46	2.09	1.02	.39	TTSS05014M	2,5mm	2.61
3860009	CVKV40BHPVTT031350	5/16	.83	1.06	3.50	3.46	2.09	1.02	.39	TTSS06014M	3mm	2.59
3860010	CVKV40BHPVTT038375	3/4	.94	1.26	3.75	3.71	2.34	1.22	.39	TTSS08014M	4mm	2.78
3860011	CVKV40BHPVTT044375	7/16	.94	1.26	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.75
3860012	CVKV40BHPVTT050375	1/2	.94	1.26	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.73
3860013	CVKV40BHPVTT056375	9/16	1.06	1.33	3.75	3.71	2.34	1.42	.39	TTSS10014M	5mm	2.84
3860014	CVKV40BHPVTT062375	5/8	1.06	1.33	3.75	3.71	2.34	1.54	.39	TTSS12014M	6mm	2.79
3860015	CVKV40BHPVTT068400	11/16	1.30	1.75	4.00	3.96	3.25	1.54	.39	TTSS12014M	6mm	3.25
3860016	CVKV40BHPVTT075400	3/4	1.30	1.75	4.00	3.96	3.25	1.61	.39	TTSS16014M	8mm	3.17
3860017	CVKV40BHPVTT088400	7/8	1.30	1.75	4.00	3.96	3.25	1.61	.39	TTSS16014M	8mm	3.09
3860018	CVKV40BHPVTT100400	1	1.73	2.08	4.00	3.96	3.25	1.85	.39	TTSS16014M	8mm	3.79
3860019	CVKV40BHPVTT125400	1 1/4	1.73	2.08	4.00	3.96	3.25	2.01	.39	TTSS16014M	8mm	3.46

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

WIDIA™ is pleased to announce the new
VariDrill™ for a wide range of materials.

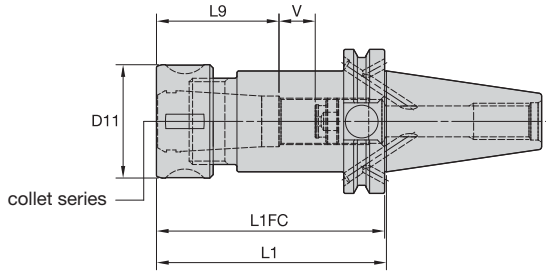
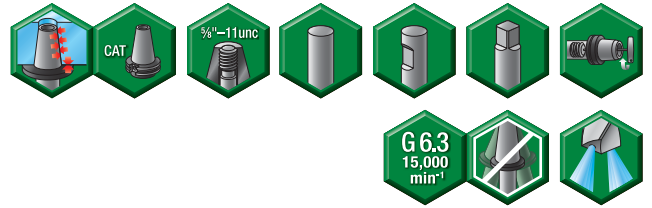


*The VariDrill line is available as
non-coolant drills in 3 x D and 5 x D,
coolant drills in 3 x D, 5 x D, and 8 x D.
"A" and "F" shanks available.*

The most extensive solid carbide drill line on the market today.

WIDIA™ VARIDRILL™

- Tremendous Grip (3:1 advantage).



L1FC = from flange face
L1 = from taper gage diameter



CVKV40 Shank Tools

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON

■ TG Round-CVKV Form B/AD



order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3860134	CVKV40BTG075250G	TG75	50	63,50	62,50	50	13	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	1,15
3860135	CVKV40BTG075400G	TG75	50	101,60	100,60	50	33	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	1,55
3860136	CVKV40BTG075600G	TG75	50	152,40	151,40	50	93	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	2,04
3860137	CVKV40BTG100275G	TG100	60	69,85	68,85	64	8	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,27
3860138	CVKV40BTG100400G	TG100	60	101,60	100,60	64	24	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,59
3860139	CVKV40BTG100600G	TG100	60	152,40	151,40	64	72	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	2,69

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

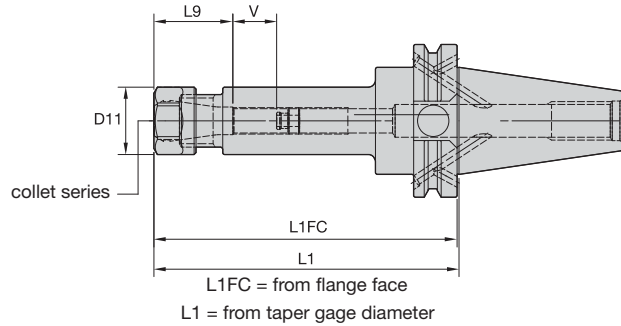
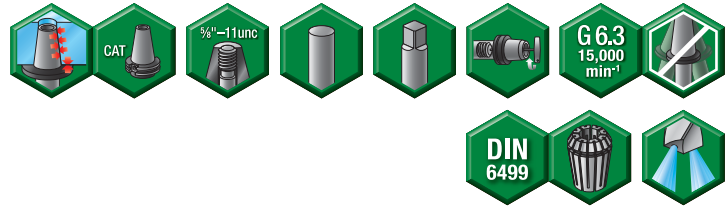
Form AD	✓				
Form B				40	(2x) MS2221S 2,5mm
				50	(2x) MS1296S 3mm

CVKV40 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



CVKV40 Shank Tools

ERICKSON™

■ ER Hex-CVKV Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860220	CVKV40BER16500	ER16	28	127,0	126,0	32	38	1,31
3860221	CVKV40BER20250	ER20	34	63,5	62,5	36	26	1,07
3860222	CVKV40BER20600	ER20	34	152,4	151,4	36	44	1,60

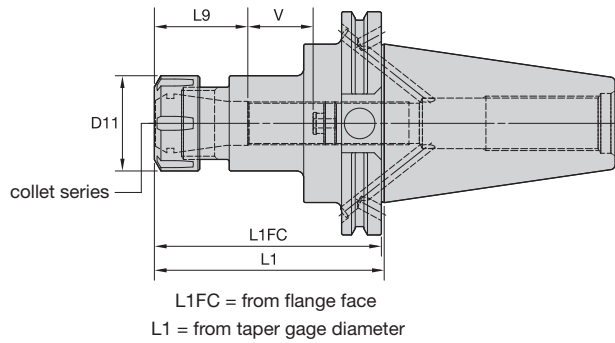
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
CVKV40BER16250	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV40BER16500	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV40BER20250	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
CVKV40BER20600	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER CVKV Form B/AD continued)



CVKV40 Shank Tools

■ ER Round-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860223	CVKV40BER25250	ER25	42	63,5	62,5	40	16	1,09
3860224	CVKV40BER25600	ER25	42	152,4	151,4	40	60	1,89
3860225	CVKV40BER32275	ER32	50	69,9	68,9	46	11	1,13
3860226	CVKV40BER32600	ER32	50	152,4	151,4	46	54	1,95
3860227	CVKV40BER40300	ER40	63	76,2	75,2	52	7	1,27
3860228	CVKV40BER40600	ER40	63	152,4	151,4	52	48	2,03

■ Spare Parts

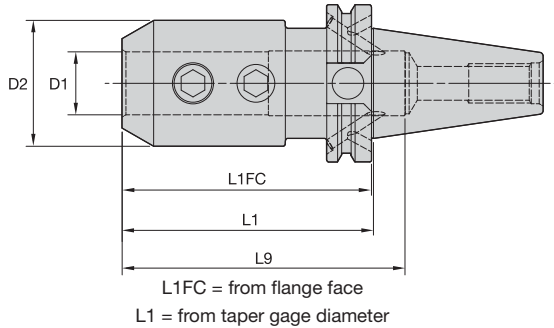


catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
CVKV40BER25250	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
CVKV40BER25600	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
CVKV40BER32275	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
CVKV40BER32600	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
CVKV40BER40300	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
CVKV40BER40600	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

CVKV40 Shank Tools

End Mill Adapters



CVKV40 Shank Tools

ERICKSON

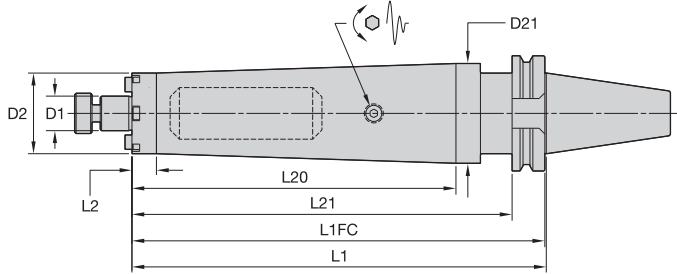
EM IN-CVKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	L2	lock screw	wrench size lock screw	ft. lbs.	lbs
3860087	CVKV40BEM012250	1/8	.69	2.50	2.46	1.09	S1045PKG	3/32	3	2.28
3860088	CVKV40BEM018250	3/16	.69	2.50	2.46	1.09	S1045PKG	3/32	3	2.28
3860089	CVKV40BEM025250	1/4	.78	2.50	2.46	1.09	ELS025025PKG	1/8	5	2.31
3860090	CVKV40BEM031250	5/16	1.00	2.50	2.46	1.09	ELS031031PKG	5/32	11	2.36
3860091	CVKV40BEM038250	3/8	1.00	2.50	2.46	1.09	ELS038031PKG	3/16	15	2.36
3860092	CVKV40BEM044250	7/16	1.25	2.50	2.46	1.09	ELS044038PKG	7/32	20	2.47
3860123	CVKV40BEM050300	1/2	1.38	3.00	2.96	1.59	ELS044038PKG	7/32	20	2.66
3860124	CVKV40BEM050450	1/2	1.38	4.50	4.46	3.09	ELS044038PKG	7/32	20	3.20
3860125	CVKV40BEM062300	5/8	1.63	3.00	2.96	1.59	ELS056050PKG	1/4	40	2.81
3860126	CVKV40BEM062450	5/8	1.63	4.50	4.46	3.09	ELS056050PKG	1/4	40	3.59
3860127	CVKV40BEM075300	3/4	1.75	3.00	2.96	2.25	ELS062050PKG	5/16	70	2.77
3860128	CVKV40BEM075450	3/4	1.75	4.50	4.46	3.75	ELS062050PKG	5/16	70	3.70
3860129	CVKV40BEM088400	7/8	2.00	4.00	3.96	3.25	ELS062050PKG	5/16	70	3.47
3860130	CVKV40BEM100400	1	2.00	4.00	3.96	3.25	ELS075056PKG	3/8	110	3.43
3860131	CVKV40BEM125450	1 1/4	2.50	4.50	4.46	3.75	ELS075062PKG	3/8	110	5.09
3860132	CVKV40BEM150500	1 1/2	2.75	5.00	4.96	5.00	ELS075069PKG	3/8	110	6.08

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



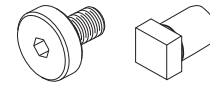
L1FC = from flange face
L1 = from taper gage diameter



CVKV40 Shank Tools

ERICKSON

■ SMC TD Lock IN-CVKV Form B/AD

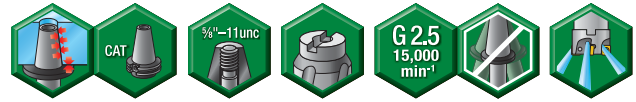
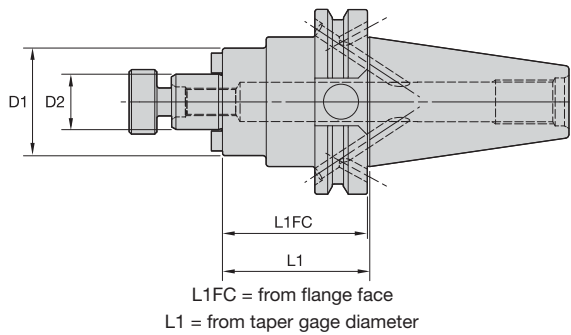


order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135497	CVKV40BTDSMC0750900	.750	1.750	2.165	9.000	8.961	.531	7.031	8.250	KLS07	KDK05	1/4	8.39
4135498	CVKV40BTDSMC1000900	1.000	2.189	—	9.000	8.961	8.250	—	—	KLS10	KDK06	5/16	10.03

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.

CVKV40 Shank Tools

Shell Mill Adapters with Through Coolant



CVKV40 Shank Tools

ERICKSON™

■ SMC TD Lock IN-CVKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size retention screw	lbs
3870017	CVKV40BSM2C050200	1/2	1.20	2.000	1.961	KLS05	KDK04	3/16	2.46
3870019	CVKV40BSM2C050400	1/2	1.20	4.000	3.961	KLS05	KDK04	3/16	2.99
3870016	CVKV40BSMC050200	1/2	1.44	2.000	1.961	KLS05	KDK04	3/16	2.51
3870018	CVKV40BSMC050400	1/2	1.44	4.000	3.961	KLS05	KDK04	3/16	3.30
3870021	CVKV40BSM2C075200	3/4	1.46	2.000	1.961	KLS07	—	1/4	2.55
3870023	CVKV40BSM2C075400	3/4	1.46	4.000	3.961	KLS07	—	1/4	3.37
3870025	CVKV40BSM2C075600	3/4	1.46	6.000	5.961	KLS07	—	1/4	4.19
3870020	CVKV40BSMC075200	3/4	1.75	2.000	1.961	KLS07	KDK05	1/4	2.68
3870022	CVKV40BSMC075400	3/4	1.75	4.000	3.961	KLS07	KDK05	1/4	3.91
3870024	CVKV40BSMC075600	3/4	1.75	6.000	5.961	KLS07	KDK05	1/4	5.15
3870027	CVKV40BSM2C100200	1	2.19	2.000	1.961	KLS10	KDK06	5/16	3.00
3870029	CVKV40BSM2C100400	1	2.19	4.000	3.961	KLS10	KDK06	5/16	4.33
3870031	CVKV40BSM2C100600	1	2.19	6.000	5.961	KLS10	KDK06	5/16	5.62
3870026	CVKV40BSMC100200	1	2.75	2.000	1.961	KLS10	KDK06	5/16	3.31
3870028	CVKV40BSMC100400	1	2.75	4.000	3.961	KLS10	KDK06	5/16	4.78
3870030	CVKV40BSMC100600	1	2.75	6.000	5.961	KLS10	KDK06	5/16	6.07
3870032	CVKV40BSMC125200	1 1/4	2.88	2.000	1.961	KLS12	KDK08	5/16	3.98
3870033	CVKV40BSMC125400	1 1/4	2.88	4.000	3.961	KLS12	KDK08	5/16	5.22
3870034	CVKV40BSMC150250	1 1/2	3.81	2.500	2.461	KLS15	KDK10	3/8	5.60
3870035	CVKV40BSMC150400	1 1/2	3.81	4.000	3.961	KLS15	KDK10	3/8	6.86

NOTE: Do not overtighten lock screw; use torque recommendations above.

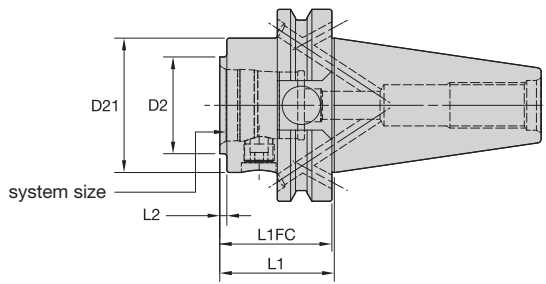
Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.

Lock screw wrench not included.

For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



L1FC = from flange face
L1 = from taper gage diameter



CVKV40 Shank Tools

ERICKSON

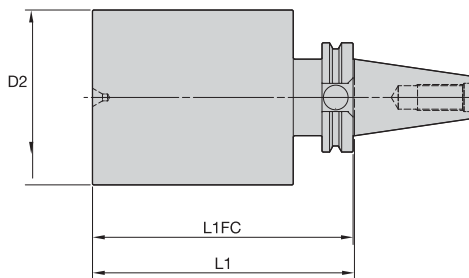
■ KM-CVKV Form B/AD

order number	catalog number	system size	D2	D21	L1	L1FC	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3815241	CVKV40BKM32150	KM32	32	44,5	38,1	37,1	2,4	KM32PKG3L	5mm	8-11	1,00
3815242	CVKV40BKM32350	KM32	32	44,5	88,9	87,9	53,2	KM32PKG3S	5mm	8-11	1,27
3815313	CVKV40BKM40175	KM40	40	44,5	44,5	43,5	7,7	KM40PKG3S	6mm	12-16	1,03
3815314	CVKV40BKM40400	KM40	40	44,5	101,6	100,6	65,9	KM40PKG3S	6mm	12-16	1,53
3815315	CVKV40BKM50350	KM50	50	44,5	88,9	87,9	69,9	KM50PKG3S	10mm	27-34	1,60
3815316	CVKV40BKM50475	KM50	50	44,5	120,7	119,7	101,6	KM50PKG3S	10mm	27-34	1,95

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

• Machinable front 20–30 RW C.



L1FC = from flange face
L1 = from taper gage diameter



ERICKSON

■ BB-CVKV Form A

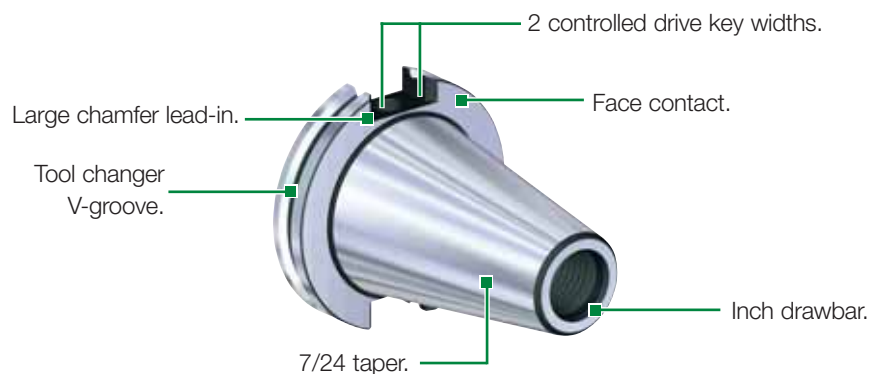
order number	catalog number	D2	L1	L1FC	kg
3815310	CVKV40BB400600	101,6	152,4	151,4	8,46
3815311	CVKV40BB400120	101,6	304,8	303,8	18,14

NOTE: For retention knobs, see page J33.

Erickson™ Taper Face Contact Shank Tooling System • CVKV50 Series

Erickson Taper Face CV Contact Taper Tooling is manufactured from premium materials and to the latest ANSI B5.50 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder.

CVKV50



Drive key slots are unequal depths. Detent hole identifies shallow drive key slot.

The CVKV50 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



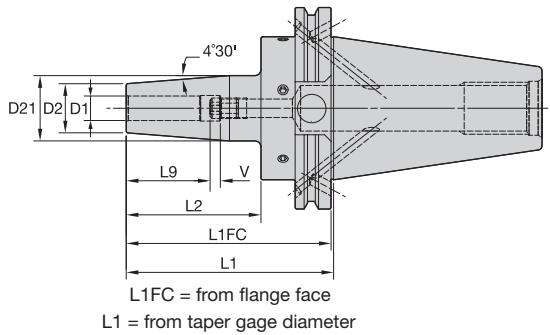
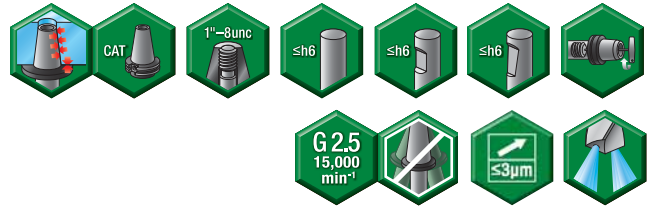
- ANSI B5.50 7/24 taper.
- Standard 1-8 drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

CVKV50 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance
6	h6 0,000/-0,008
8 & 10	h6 0,000/-0,009
12, 14, 16, & 18	h6 0,000/-0,011
20 & 25	h6 0,000/-0,013
32	h6 0,000/-0,016

ERICKSON

TT GP HPV MM-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	27	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	27	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	32	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	32	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860151	CVKV50BHPVTT14M400	14	27	34	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,32
3860152	CVKV50BHPVTT16M400	16	27	34	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860153	CVKV50BHPVTT18M400	18	33	42	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,46
3860154	CVKV50BHPVTT20M400	20	33	42	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42
3860155	CVKV50BHPVTT25M400	25	44	53	101,60	100,10	65,85	47	10	TTSS16014M	8mm	3,72
3860156	CVKV50BHPVTT32M400	32	44	53	101,60	100,10	65,85	51	10	TTSS16014M	8mm	3,56

(continued)

CVKV50 Shank Tools

(TT GP HPV CVKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-0.0005

■ TT GP HPV IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860047	CVKV50BHPVTT025350	1/4	.83	1.06	3.500	3.441	2.093	1.02	.39	TTSS05014M	2,5mm	6.99
3860048	CVKV50BHPVTT031350	5/16	.83	1.06	3.500	3.441	2.093	1.02	.39	TTSS06014M	3mm	6.98
3860049	CVKV50BHPVTT038375	3/8	.94	1.26	3.750	3.691	2.343	1.22	.39	TTSS08014M	4mm	7.17
3860050	CVKV50BHPVTT044375	7/16	.94	1.26	3.750	3.691	2.343	1.42	.39	TTSS10014M	5mm	7.14
3860051	CVKV50BHPVTT050400	1/2	.94	1.26	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.20
3860052	CVKV50BHPVTT056400	9/16	1.06	1.33	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.31
3860093	CVKV50BHPVTT062400	5/8	1.06	1.33	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.26
3860094	CVKV50BHPVTT068400	11/16	1.30	1.65	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.63
3860095	CVKV50BHPVTT075400	3/4	1.30	1.65	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.56
3860096	CVKV50BHPVTT088400	7/8	1.30	1.65	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.47
3860097	CVKV50BHPVTT100400	1	1.73	2.08	4.000	3.941	2.593	1.85	.39	TTSS16014M	8mm	8.18
3860098	CVKV50BHPVTT125400	1 1/4	1.73	2.08	4.000	3.941	2.593	2.01	.39	TTSS16014M	8mm	7.86
3860099	CVKV50BHPVTT150450	1 1/2	2.36	2.75	4.500	4.441	3.750	2.01	.39	TTSS20014M	10mm	9.88
3860100	CVKV50BHPVTT200450	2	2.72	3.11	4.500	4.441	3.750	2.20	.39	TTSS20014M	10mm	10.15

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

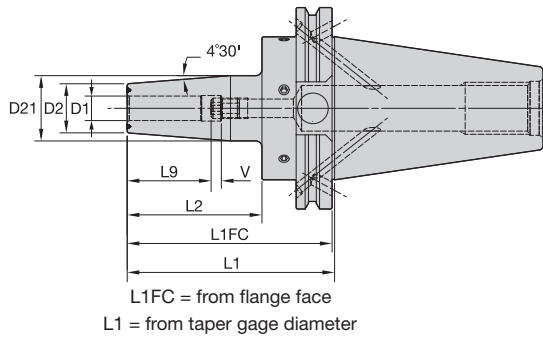
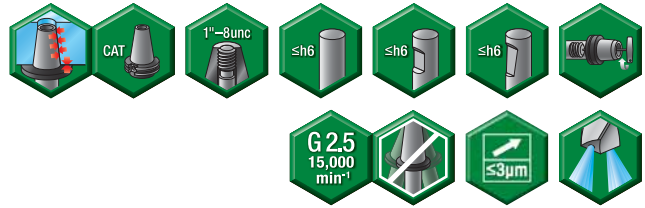
For retention knobs, see page J33.

 Form AD					
 Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CVKV50 Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT HT HPV MM-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	26,90	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	26,90	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	31,90	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	31,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860151	CVKV50BHPVTT14M400	14	27	33,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,32
3860152	CVKV50BHPVTT16M400	16	27	33,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860153	CVKV50BHPVTT18M400	18	33	41,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,46
3860154	CVKV50BHPVTT20M400	20	33	41,90	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42
3860155	CVKV50BHPVTT25M400	25	44	52,90	101,60	100,10	65,85	47	10	TTSS16014M	8mm	3,72
3860156	CVKV50BHPVTT32M400	32	44	52,90	101,60	100,10	65,85	51	10	TTSS16014M	8mm	3,56

(continued)

(TT HT HPV CVKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

■ TT HT HPV In-CVKV Form B/AD



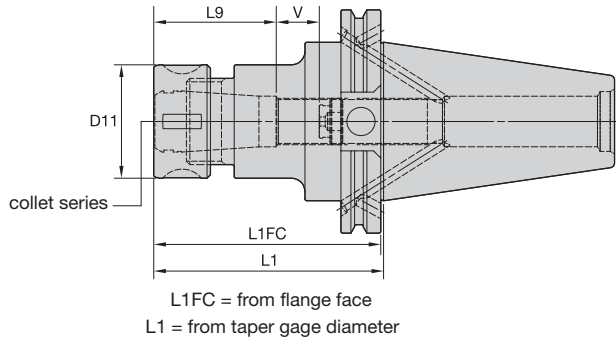
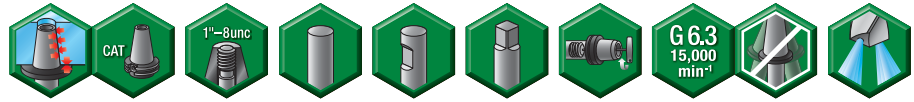
order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860047	CVKV50BHPVTT025350	1/4	.83	1.059	3.500	3.441	2.093	1.02	.39	TTSS05014M	2,5mm	6.99
3860048	CVKV50BHPVTT031350	5/16	.83	1.059	3.500	3.441	2.093	1.02	.39	TTSS06014M	3mm	6.98
3860049	CVKV50BHPVTT038375	3/8	.94	1.256	3.750	3.691	2.343	1.22	.39	TTSS08014M	4mm	7.17
3860050	CVKV50BHPVTT044375	7/16	.94	1.256	3.750	3.691	2.343	1.42	.39	TTSS10014M	5mm	7.14
3860051	CVKV50BHPVTT050400	1/2	.94	1.256	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.20
3860052	CVKV50BHPVTT056400	9/16	1.06	1.335	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.31
3860093	CVKV50BHPVTT062400	5/8	1.06	1.335	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.26
3860094	CVKV50BHPVTT068400	11/16	1.30	1.650	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.63
3860095	CVKV50BHPVTT075400	3/4	1.30	1.650	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.56
3860096	CVKV50BHPVTT088400	7/8	1.30	1.650	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.47
3860097	CVKV50BHPVTT100400	1	1.73	2.083	4.000	3.941	2.593	1.85	.39	TTSS16014M	8mm	8.18
3860098	CVKV50BHPVTT125400	1 1/4	1.73	2.083	4.000	3.941	2.593	2.01	.39	TTSS16014M	8mm	7.86
3860099	CVKV50BHPVTT150450	1 1/2	2.36	2.750	4.500	4.441	3.750	2.01	.39	TTSS20014M	10mm	9.88
3860100	CVKV50BHPVTT200450	2	2.72	3.106	4.500	4.441	3.750	2.20	.39	TTSS20014M	10mm	10.15

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CVKV50 Shank Tools

TG Single-Angle Collet Chucks



CVKV50 Shank Tools

TG collet series	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON

■ TG Round-CVKV Form B/AD



order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	stop screw	wrench size stop screw	Nm	kg
3860140	CVKV50BTG075275G	TG75	50	69,85	68,35	50	24	LNA075M	HSW45M	SS081041G	4mm & 5/32	136	3,26
3860143	CVKV50BTG100275G	TG100	60	69,85	68,35	64	12	LNA100M	HSW58M	SS112041G	4mm & 5/32	203	3,26
3860144	CVKV50BTG100400G	TG100	60	101,60	100,10	64	38	LNA100M	HSW58M	SS112041G	4mm & 5/32	203	3,81
3860141	CVKV50BTG075400G	TG75	50	101,60	100,10	50	59	LNA075M	HSW45M	SS081041G	4mm & 5/32	136	3,70
3860142	CVKV50BTG075600G	TG75	50	152,40	150,90	50	104	LNA075M	HSW45M	SS081041G	4mm & 5/32	136	4,46
3860145	CVKV50BTG100600G	TG100	60	152,40	150,90	64	90	LNA100M	HSW58M	SS112041G	4mm & 5/32	203	4,71

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

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KM™ Quick Change

WIDIA™ KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

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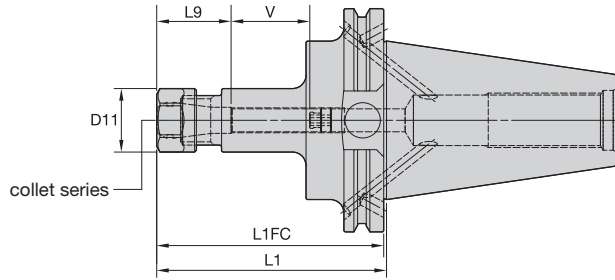
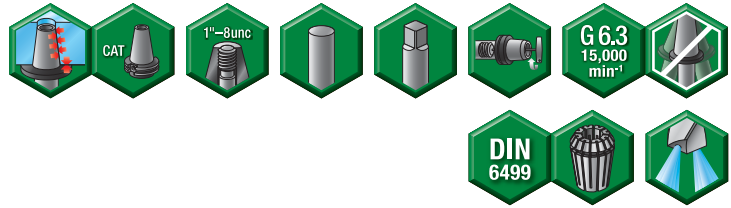
WIDIA 

CVKV50 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



L1FC = from flange face
L1 = from taper gage diameter



CVKV50 Shank Tools

Collet Capacity

ER collet series	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON™

■ ER Hex-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860229	CVKV50BER16250	ER16	28	63,50	62,00	32	43	3,14
3860230	CVKV50BER16400	ER16	28	101,60	100,10	32	38	3,22
3860231	CVKV50BER20250	ER20	34	63,50	62,00	36	42	3,15
3860232	CVKV50BER20400	ER20	34	101,60	100,10	36	54	3,35

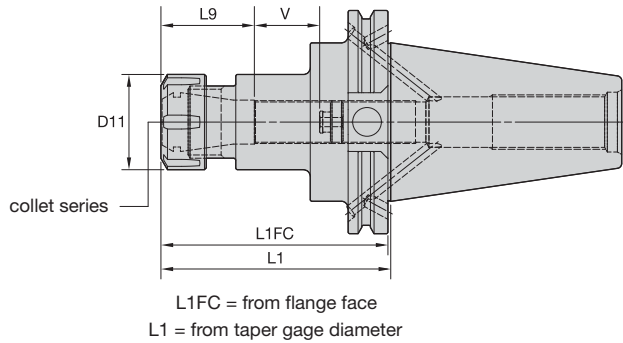
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
CVKV50BER16250	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV50BER16400	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV50BER20250	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
CVKV50BER20400	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER CVKV Form B/AD continued)



CVKV50 Shank Tools

ER Round-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860233	CVKV50BER25250	ER25	42	63,50	62,00	40	35	3,14
3860234	CVKV50BER25400	ER25	42	101,60	100,10	40	60	3,47
3860235	CVKV50BER32275	ER32	50	69,85	68,35	46	31	3,17
3860236	CVKV50BER32400	ER32	50	101,60	100,10	46	54	3,57
3860237	CVKV50BER40300	ER40	63	76,20	74,70	52	28	3,32
3860238	CVKV50BER40600	ER40	63	152,40	150,90	52	98	4,85

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
CVKV50BER25250	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
CVKV50BER25400	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
CVKV50BER32275	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
CVKV50BER32400	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
CVKV50BER40300	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
CVKV50BER40600	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 For retention knobs, see page J33.

Form AD	✓				
Form B				40	(2x) MS2221S
				50	(2x) MS1296S
					2,5mm
					3mm

WIN WITH WIDIA™



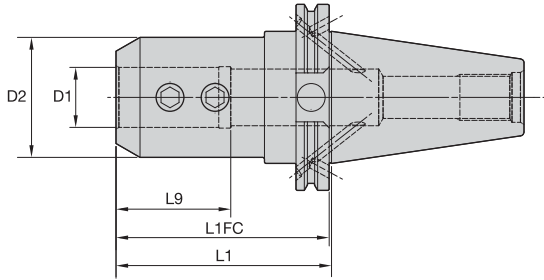
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L1FC = from flange face
L1 = from taper gage diameter



CVKV50 Shank Tools







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■ EM IN-CVKV Form B/AD



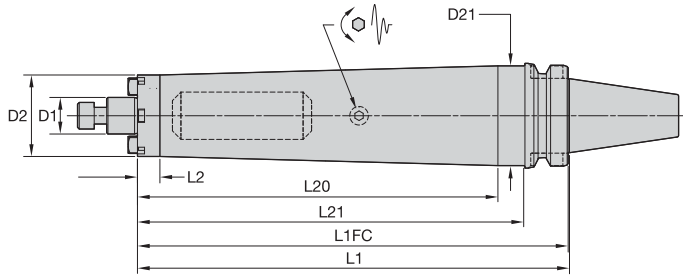
order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3860109	CVKV50BEM018250	3/16	.688	2.500	2.441	4.689	S1045PKG	3/32	3	6.66
3860110	CVKV50BEM025250	1/4	.780	2.500	2.441	4.689	ELS025025PKG	1/8	5	6.69
3860111	CVKV50BEM031250	5/16	1.000	2.500	2.441	4.689	ELS031031PKG	5/32	11	6.72
3860112	CVKV50BEM038250	3/8	1.000	2.500	2.441	4.689	ELS038031PKG	3/16	15	6.75
3860183	CVKV50BEM044250	7/16	1.250	2.500	2.441	4.689	ELS044038PKG	7/32	20	6.88
3860184	CVKV50BEM050300	1/2	1.375	3.000	2.941	5.189	ELS044038PKG	7/32	20	7.03
3860185	CVKV50BEM050450	1/2	1.375	4.500	4.441	6.689	ELS044038PKG	7/32	20	7.59
3860186	CVKV50BEM062300	5/8	1.625	3.000	2.941	5.189	ELS056050PKG	1/4	40	7.25
3860187	CVKV50BEM062450	5/8	1.625	4.500	4.441	6.689	ELS056050PKG	1/4	40	7.95
3860188	CVKV50BEM075300	3/4	1.750	3.000	2.941	5.189	ELS062050PKG	5/16	70	7.32
3860189	CVKV50BEM075450	3/4	1.750	4.500	4.441	6.689	ELS062050PKG	5/16	70	8.12
3860190	CVKV50BEM088400	7/8	2.000	4.000	3.941	4.190	ELS062050PKG	5/16	70	8.23
3860191	CVKV50BEM100450	1	2.000	4.500	4.441	4.493	ELS075056PKG	3/8	110	8.32
3860192	CVKV50BEM125450	1 1/4	2.500	4.500	4.441	2.390	ELS075062PKG	3/8	110	9.23
3860193	CVKV50BEM150450	1 1/2	2.750	4.500	4.441	2.820	ELS075069PKG	3/8	110	9.35
3860194	CVKV50BEM200600	2	3.750	6.000	5.941	3.375	ELS100088PKG	1/2	150	15.96

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CVKV50 Shank Tools

Tunable Shell Mill Adapters with Through Coolant



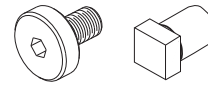
L1FC = from flange face
L1 = from taper gage diameter



CVKV50 Shank Tools

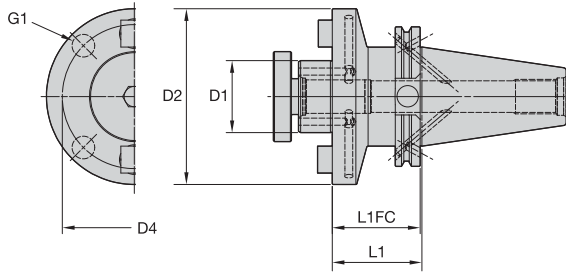
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■ SMC TD Lock IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135499	CVKV50BTDSMC0751050	3/4	1.75	2.75	10.500	10.441	.53	9.09	9.750	KLS07	KDK05	1/4	16.60
4135500	CVKV50BTDSMC1001250	1	2.75	—	12.500	12.441	11.75	—	—	KLS10	KDK06	5/16	24.68
4135501	CVKV50BTDSMC1251300	1 1/4	2.88	—	13.000	12.941	12.25	—	—	KLS12	KDK08	5/16	31.97

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.



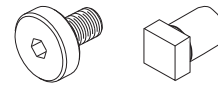
L1FC = from flange face
L1 = from taper gage diameter



CVKV50 Shank Tools

ERICKSON

■ SMC Lock IN-CVKV Form B/AD



order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size retention screw	lbs
3861304	CVKV50BSM2C075200	3/4	1.46	—	—	2.000	1.941	KLS07	—	1/4	7.10
3861306	CVKV50BSM2C075400	3/4	1.46	—	—	4.000	3.941	KLS07	—	1/4	7.69
3861308	CVKV50BSM2C075600	3/4	1.46	—	—	6.000	5.941	KLS07	—	1/4	8.45
3861303	CVKV50BSMC075200	3/4	1.75	—	—	2.000	1.941	KLS07	KDK05	1/4	7.16
3861305	CVKV50BSMC075400	3/4	1.75	—	—	4.000	3.941	KLS07	KDK05	1/4	8.17
3861307	CVKV50BSMC075600	3/4	1.75	—	—	6.000	5.941	KLS07	KDK05	1/4	9.31
3861310	CVKV50BSM2C100200	1	2.19	—	—	2.000	1.941	KLS10	KDK06	5/16	7.35
3861312	CVKV50BSM2C100400	1	2.19	—	—	4.000	3.941	KLS10	KDK06	5/16	9.21
3861314	CVKV50BSM2C100600	1	2.19	—	—	6.000	5.941	KLS10	KDK06	5/16	11.06
3861309	CVKV50BSMC100200	1	2.75	—	—	2.000	1.941	KLS10	KDK06	5/16	7.71
3861311	CVKV50BSMC100400	1	2.75	—	—	4.000	3.941	KLS10	KDK06	5/16	10.80
3861313	CVKV50BSMC100600	1	2.75	—	—	6.000	5.941	KLS10	KDK06	5/16	13.89
3861315	CVKV50BSMC125200	1 1/4	2.88	—	—	2.000	1.941	KLS12	KDK08	5/16	8.02
3861316	CVKV50BSMC125400	1 1/4	2.88	—	—	4.000	3.941	KLS12	KDK08	5/16	11.06
3861317	CVKV50BSMC125600	1 1/4	2.88	—	—	6.000	5.941	KLS12	KDK08	5/16	14.09
3861318	CVKV50BSMC150250	1 1/2	3.81	—	—	2.500	2.441	KLS15	KDK10	3/8	10.31
3861319	CVKV50BSMC150400	1 1/2	3.81	—	—	4.000	3.941	KLS15	KDK10	3/8	12.60
3861320	CVKV50BSMC150600	1 1/2	3.81	—	—	6.000	5.941	KLS15	KDK10	3/8	15.68
3861321	CVKV50BSMC200250	2	4.88	4.00	0.625-11	2.500	2.441	KLS20	KDK12	9/16	12.38
3861322	CVKV50BSMC200400	2	4.88	4.00	0.625-11	4.000	3.941	KLS20	KDK12	9/16	15.02
3861323	CVKV50BSMC200600	2	4.88	4.00	0.625-11	6.000	5.941	KLS20	KDK12	9/16	18.20
3861324	CVKV50BSMC250250	2 1/2	4.88	4.00	0.625-11	2.500	2.441	—	KDK16	—	13.60
3861325	CVKV50BSMC250400	2 1/2	4.88	4.00	0.625-11	4.000	3.941	—	KDK16	—	15.88

NOTE: Do not overtighten lock screw.

Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.

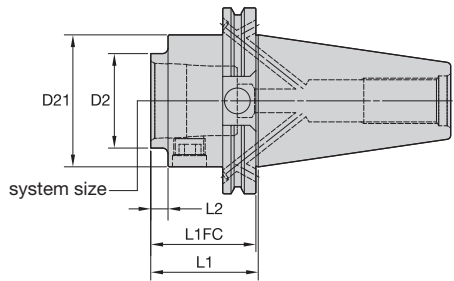
Lock screw wrench not included.

For retention knob, see page J33.

Form AD	✓				
Form B					
	40	(2x) MS2221S	2,5mm		
	50	(2x) MS1296S	3mm		

CVKV50 Shank Tools

KM™ Modular Adapters



L1FC = from flange face
L1 = from taper gage diameter

CVKV50 Shank Tools

ERICKSON™

■ KM-CVKV Form B/AD

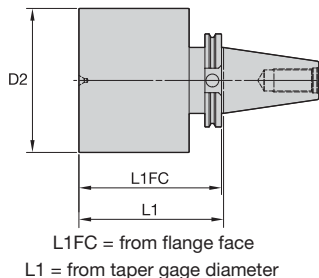


order number	catalog number	system size	D2	D21	L1	L1FC	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3815265	CVKV50BKM32150	KM32	32	69,85	38,10	36,60	2,4	KM32PKG3L	5mm	8-11	3,08
3815266	CVKV50BKM32350	KM32	32	69,85	88,90	87,40	53,2	KM32PKG3L	5mm	8-11	3,26
3815267	CVKV50BKM40175	KM40	40	69,85	44,45	42,95	6,5	KM40PKG3L	6mm	12-16	3,15
3815268	CVKV50BKM40400	KM40	40	69,85	101,60	100,10	65,9	KM40PKG3S	6mm	12-16	3,51
3815269	CVKV50BKM50225	KM50	50	69,85	57,15	55,65	9,2	KM50PKG3L	10mm	27-34	3,42
3815270	CVKV50BKM50475	KM50	50	69,85	120,65	119,15	84,9	KM50PKG3S	10mm	27-34	4,05
3815271	CVKV50BKM63225	KM63	63	69,85	57,15	55,65	13,2	KM63PKG3L	12mm	47-54	3,31
3815272	CVKV50BKM63550	KM63	63	69,85	139,70	138,20	104,0	KM63PKG3S	12mm	47-54	5,07
3815303	CVKV50BKM80325	KM80	80	69,85	82,55	81,05	63,5	KM80PKG3S	14mm	79-85	4,29

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.
These products are only available in the U.S., Canada, and Japan.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

- Machinable front 20–30 RW C.



CVKV50 Shank Tools

ERICKSON

■ BB-CVKV Form A

order number	catalog number	D2	L1	L1FC	kg
3815346	CVKV50BB400120	101,6	304,8	303,3	20,28
3815343	CVKV50BB400600	101,6	152,4	150,9	10,61
3815345	CVKV50BB600120	152,4	304,8	303,3	41,63
3815344	CVKV50BB600600	152,4	152,4	150,9	19,86

NOTE: For retention knobs, see page J33.



WIDIA 

BT Shank Tools

BT30 .....	.D2-D18
BT40 .....	.D20-D59
BT50 .....	.D60-D91



Erickson™ BT V-Flange Shank Tooling System • **BT30 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT30 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 18,000 RPM. For any applications higher than 18,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



BT30

- JIS B 6339 7/24 taper.
- Standard M12 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- Maximum 18,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

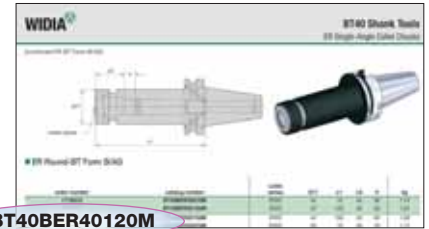


BT — JIS B6339 Shank

NOTE: Inherent balance conditions — all features are symmetrical.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



BT	40	B	ER	40	120	M
Shank Style	Shank Taper Size	Special Feature <i>(optional)</i>	Toolholder Style	Toolholder Size	Tool Length	Identification Value
JIS 6339	30 = 30 40 = 40 50 = 50	<p>B = DIN form B coolant feature, tool shipped to AD specifications (design allows conversion to form B style)</p> <p>(blank) = (no "B" or "Z") — tool built to form A/AD coolant style</p> <p>CH = Coolant form AD — high pressure</p> <p>HPV = High performance and balanceable</p> <p>TD = Tunable</p>			<p>(Taper gage line to front of tool)</p> <p>metric xxx = xxx</p> <p>inch xxx = x.xx</p>	<p>M = Tool built to metric values and has metric retention thread</p>
					<p>TG = Collet series xx (50), xxx (100)</p> <p>EM = I.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075)</p> <p>SM = O.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075)</p>	

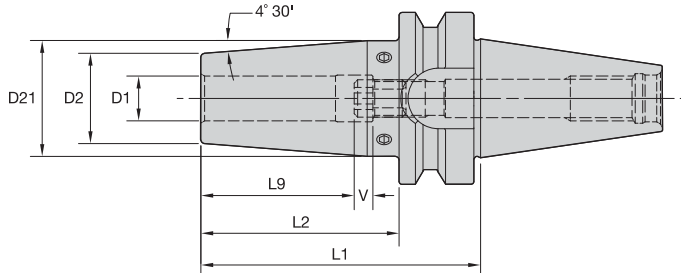
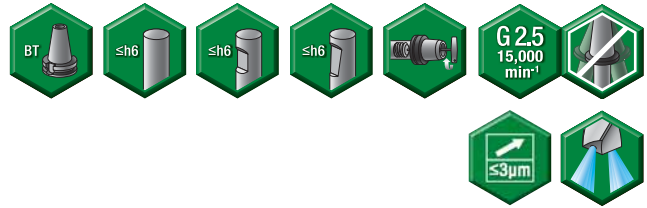
- | | | |
|--|---|---|
| BB = Bar blank | MT = Morse taper adapter | SWN = Whistle Notch™ 2° — short — (not to DIN standard) |
| DA = Double-angle collet chuck | RC = Rapid Change — T&C tapping adapter chuck | TA = Tap chuck adapter |
| DC = Drill chuck | SA = Slotting cutter adapter | TCRC = Rapid Change — T&C tapping adapter chuck |
| EM = End mill adapter | RFX = ROTAFLEX™ boring adapters | TG = Tremendous Grip single-angle collet chuck |
| ER = DIN 6499 single-angle collet chuck | SER = DIN 6499 single-angle collet chuck — short with internal locknut | TGF = Tremendous Grip single-angle collet chuck — flush face |
| HC = Hydraulic chuck — Standard Line | SM2C = Shell mill adapter with coolant and small diameter | TT = Shrink Fit thermo toolholder |
| HCB = Hydraulic chuck — Basic Line | SMC = Shell mill adapter with coolant | TTHT = Shrink Fit thermo toolholder — high torque |
| HCSL = Hydraulic chuck — Slim Line | SS = Adapter for straight shanks (drills) | WD = Whistle Notch with drive |
| HCSLT = Hydraulic chuck — Slim Line — Trend | SSF = Adapter for straight shanks with flat (drills) | WN = Whistle Notch (2° metric; 5° inch) |
| HCT = Hydraulic chuck — Trend Line | ST = Screw-on adapters | |
| HPMC = Bearing milling chuck — high performance | STRC = Rapid Change — solid tapping adapter chuck | |
| HSK = HSK adapter | | |
| JT = Jacobs taper adapter | | |
| KM = KM™ adapter | | |

BT30 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

BT30 Shank Tools

ERICKSON

■ TT GP HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3782116	BT30HPVTT06075M	6	21	27	75	53	26	10	TTSS05014M	2,5mm	0,56
3782117	BT30HPVTT08075M	8	21	27	75	53	26	10	TTSS06014M	3mm	0,55
3782118	BT30HPVTT10075M	10	24	31	75	53	31	10	TTSS08014M	4mm	0,60
3615348	BT30HPVTT12075M	12	24	31	75	53	36	10	TTSS10014M	5mm	0,58
3615349	BT30HPVTT14075M	14	27	34	75	53	36	10	TTSS10014M	5mm	0,63
3615350	BT30HPVTT16075M	16	27	34	75	53	39	10	TTSS12014M	6mm	0,60
3615351	BT30HPVTT18090M	18	33	41	90	68	39	10	TTSS12014M	6mm	0,84
3615352	BT30HPVTT20090M	20	33	41	90	68	41	10	TTSS16014M	8mm	0,81

(continued)

(TT HPV Form B/AD continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4	.0000/-.0005

■ TT HPV IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3782119	BT30HPVTT025295	1/4	.83	1.06	2.95	2.09	1.02	.39	TTSS05014M	2,5mm	1.23
3782120	BT30HPVTT031295	5/16	.83	1.06	2.95	2.09	1.02	.39	TTSS06014M	3mm	1.22
3782121	BT30HPVTT038295	3/8	.95	1.22	2.95	2.09	1.22	.39	TTSS08014M	4mm	1.32
3782122	BT30HPVTT044295	7/16	.95	1.22	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.30
3615343	BT30HPVTT050295	1/2	.95	1.22	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.27
3615344	BT30HPVTT056295	9/16	1.06	1.34	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.37
3615345	BT30HPVTT062295	5/8	1.06	1.34	2.95	2.09	1.54	.39	TTSS12014M	6mm	1.33
3615346	BT30HPVTT068354	11/16	1.30	1.61	3.54	2.68	1.54	.39	TTSS12014M	6mm	1.87
3615347	BT30HPVTT075354	3/4	1.30	1.61	3.54	2.68	1.61	.39	TTSS16014M	8mm	1.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

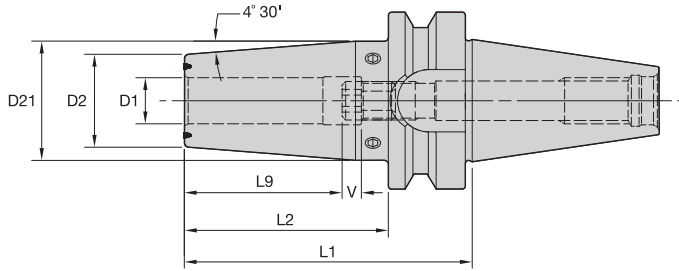
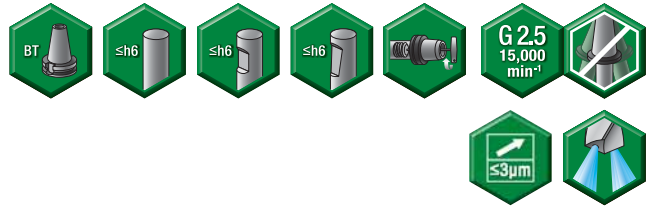
BT30 Shank Tools

BT30 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

BT30 Shank Tools

ERICKSON

■ TT HT HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3615439	BT30HPVTTH12075M	12	24	31	75	53	36	10	TTSS10014M	5mm	0,58
3615440	BT30HPVTTH14075M	14	27	34	75	53	36	10	TTSS10014M	5mm	0,63
3615441	BT30HPVTTH16075M	16	27	34	75	53	39	10	TTSS12014M	6mm	0,60
3615442	BT30HPVTTH18090M	18	33	41	90	68	39	10	TTSS12014M	6mm	0,84
3615443	BT30HPVTTH20090M	20	33	41	90	68	41	10	TTSS16014M	8mm	0,81

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4	.0000/- .0005

■ TT HT HPV IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3615434	BT30HPVTTH050295	1/2	.95	1.22	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.27
3615435	BT30HPVTTH056295	9/16	1.06	1.34	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.37
3615436	BT30HPVTTH062295	5/8	1.06	1.34	2.95	2.09	1.54	.39	TTSS12014M	6mm	1.33
3615437	BT30HPVTTH068354	11/16	1.30	1.61	3.54	2.68	1.54	.39	TTSS12014M	6mm	1.87
3615438	BT30HPVTTH075354	3/4	1.30	1.61	3.54	2.68	1.61	.39	TTSS16014M	8mm	1.82

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

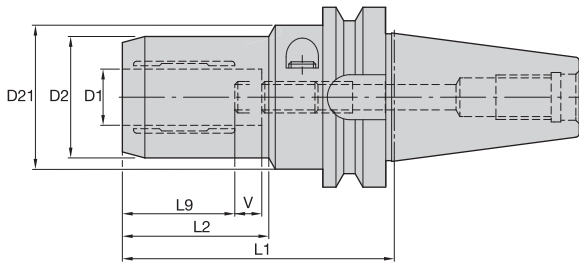
Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

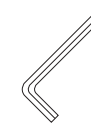




BT30 Shank Tools

ERICKSON

■ HC Trend MM-BT Form AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	kg
2255463	BT30HCT06075M	6	25,7	32	75	35	27	10	170.135	5mm	571.061	170.003	3mm	0,59
2255464	BT30HCT08075M	8	27,7	32	75	35	27	10	170.135	5mm	571.061	170.003	3mm	0,61
2255465	BT30HCT10080M	10	29,7	32	80	38	31	10	170.135	5mm	571.061	170.003	3mm	0,63
2255466	BT30HCT12085M	12	31,6	32	85	40	36	10	170.135	5mm	571.061	170.003	3mm	0,69
2255467	BT30HCT14100M	14	33,6	50	100	46	36	10	170.135	5mm	571.063	170.005	5mm	1,00
2255468	BT30HCT16100M	16	37,6	50	100	47	39	10	170.135	5mm	571.063	170.005	5mm	1,06
2255469	BT30HCT18100M	18	39,6	50	100	47	39	10	170.135	5mm	571.063	170.005	5mm	1,09
2255470	BT30HCT20100M	20	41,6	50	100	48	41	10	170.135	5mm	571.063	170.005	5mm	1,11

■ HC Trend IN-BT Form AD

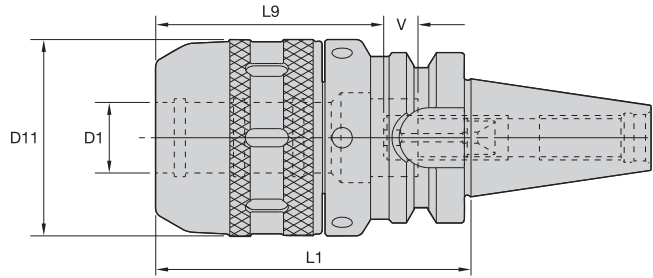


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size stop screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2259953	BT30HCT025295	1/4	1.01	1.25	2.95	1.38	1.06	.39	170.135	5mm	571.061	170.003	5mm	1.30
2259954	BT30HCT038315	3/8	1.17	1.25	3.15	1.57	1.22	.39	170.135	5mm	571.061	170.003	5mm	1.44
2259955	BT30HCT050335	1/2	1.24	1.25	3.35	1.69	1.42	.39	170.135	5mm	571.061	170.003	5mm	1.51
2259956	BT30HCT062394	5/8	1.48	1.96	3.94	1.83	1.54	.39	170.135	5mm	571.063	170.005	5mm	2.36
2259957	BT30HCT075413	3/4	1.64	1.96	4.13	1.89	1.61	.39	170.135	5mm	571.063	170.005	5mm	2.64

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

BT30 Shank Tools

HPMC High-Performance Milling Chucks



BT30 Shank Tools

ERICKSON™

■ HPMC MM-BT Form AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578486	BT30HPMC20085M	20	53	85	55	20	PSW52M	MCSS12030M	2,5mm & 5mm	1,00

■ HPMC IN-BT Form AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100411	BT30HPMC075335	3/4	2.09	3.35	2.17	.59	PSW52M	MCSS12030M	2,5mm & 5mm	2.50

NOTE: Milling chuck technical section, see page K64.

Supplied with locknut and stop screw.

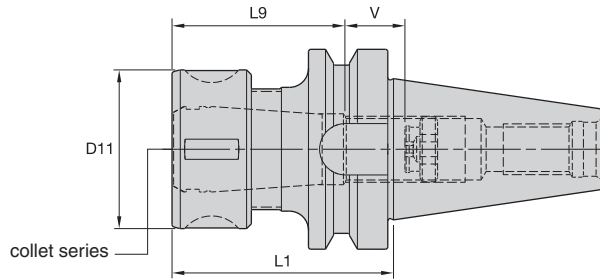
Locknut wrench not included.

Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.

Reduction sleeves are available and must be ordered separately; see page I6.

For retention knobs, see page J33.

- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4

ERICKSON

■ TG Round-BT Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156351	BT30TG075075M	TG75	50	75	55	17	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	0,60

*NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.*

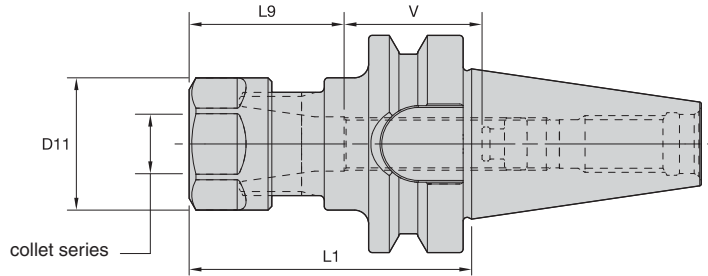
BT30 Shank Tools

BT30 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



BT30 Shank Tools

ERICKSON™

■ ER Hex-BT Form AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1258023	BT30ER16060M	ER16	28	60	32	33	0,48
1826220	BT30ER16100M	ER16	28	100	32	48	0,64
3847457	BT30ER16150M	ER16	28	150	32	48	0,85
1021296	BT30ER20060M	ER20	34	60	36	31	0,49
3847458	BT30ER20100M	ER20	34	100	36	44	0,74

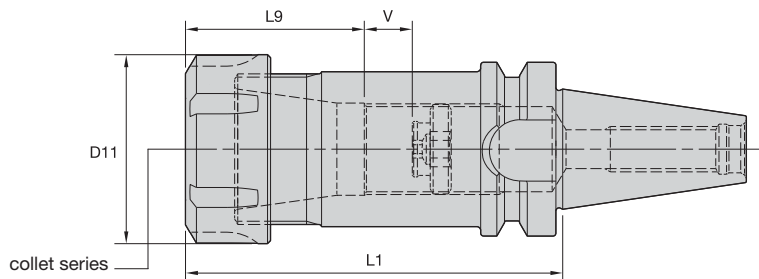
■ Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BT30ER16060M	LNHSER16M	OEW25M	40	SS044038G	4mm & 5/32
BT30ER16100M	LNHSER16M	OEW25M	40	SS044038G	4mm & 5/32
BT30ER16150M	LNHSER16M	OEW25M	40	SS044038G	4mm & 5/32
BT30ER20060M	LNHSER20M	OEW30M	32	SS056041G	4mm & 5/32
BT30ER20100M	LNHSER20M	OEW30M	32	SS056041G	4mm & 5/32

(continued)

(ER BT Form AD continued)



■ ER Round-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1258025	BT30ER25060M	ER25	42	60	40	16	0,52
1826221	BT30ER25100M	ER25	42	100	40	40	0,73
1156350	BT30ER32070M	ER32	50	70	46	10	0,65
3847459	BT30ER32100M	ER32	50	100	46	34	0,88
3847460	BT30ER40100M	ER40	63	100	52	10	1,15

■ Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BT30ER25060M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BT30ER25100M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BT30ER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BT30ER32100M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BT30ER40100M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

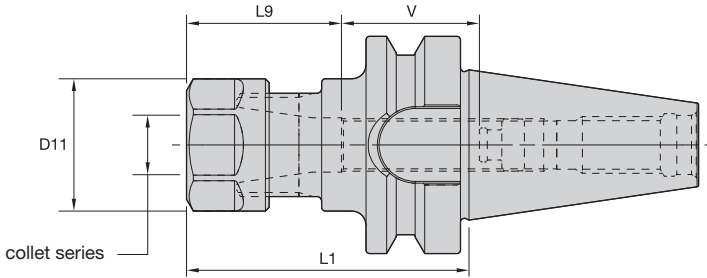
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 For retention knobs, see page J33.

BT30 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



BT30 Shank Tools

ERICKSON

■ DA Hex-BT Form AD

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64
DA180	2,2	20	1/64	3/4

order number	catalog number	collet series	D11	L1	L9	V	lbs
1258011	BT30DA208060M	DA200	1.08	2.36	1.50	1.17	1.10

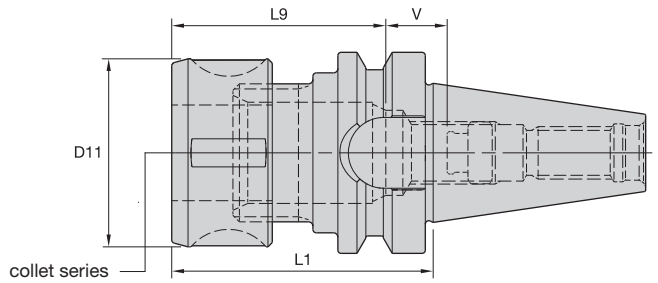
■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT30DA208060M	LNA208M	OEW24M	45	SS038031G	2mm & 5/64

(continued)

(DA BT Form AD continued)



BT30 Shank Tools

■ **DA Round-BT Form AD**

order number	catalog number	collet series	D11	L1	L9	V	lbs
1191712	BT30DA188060M	DA180	1.69	2.36	2.13	.35	1.54

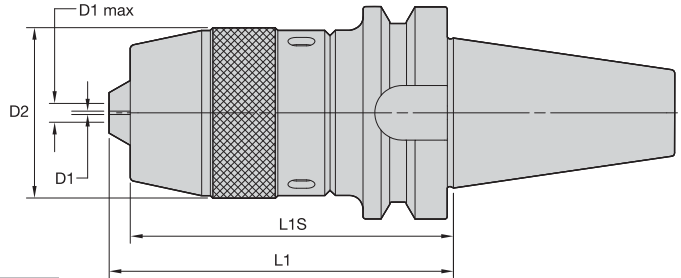
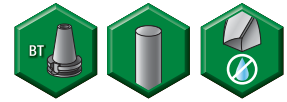
■ **Spare Parts**

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT30DA188060M	LNA188M	HSW45M	100	SS056041G	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.

BT30 Shank Tools

Drill Chucks • Whistle Notch™ Adapters



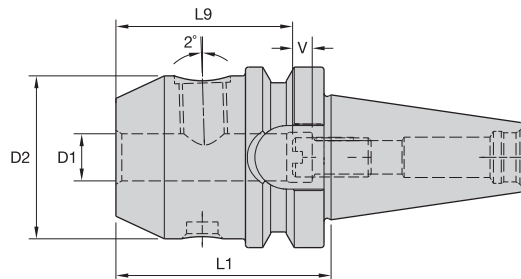
BT30 Shank Tools

ERICKSON™

■ DC-BT Form AD

order number	catalog number	D1		D1 max		D2	L1	L1S	Nm	lbs
		mm	in	mm	in					
3582592	BT30DC08092M	0,5	.020	8,0	.315	38	100	92	25	2.89

NOTE: Tighten to the recommended tightening torque.
Locknut wrench supplied.
For retention knobs, see page J33.



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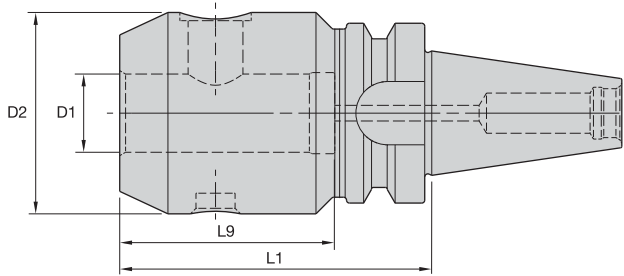
■ WN MM-BT Form AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size	Nm	stop screw	wrench size	kg
								lock screw			stop screw	
1861102	BT30WN06050M	6	25	50	30	10	SS03M012	3mm	7	571.060	2,5mm	0,47
1861123	BT30WN08050M	8	28	50	30	10	SS03M014	4mm	15	571.067	3mm	0,49
2255556	BT30WN10055M	10	35	55	35	10	SS03M018	5mm	25	571.062	4mm	0,58
2255557	BT30WN12055M	12	42	55	40	10	SS03M023	6mm	35	571.063	5mm	0,67
2255558	BT30WN14055M	14	44	55	40	10	SS03M023	6mm	35	571.063	5mm	0,68
2255559	BT30WN16055M	16	46	55	43	10	SS03M025	6mm	50	571.069	6mm	0,71

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches not included.
For retention knobs, see page J33.





BT30 Shank Tools

ERICKSON

■ EM MM-BT Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1258015	BT30EM06050M	6	25	50	74	SS03M012	3mm	7	0,46
1258018	BT30EM08060M	8	28	60	84	SS03M014	4mm	15	0,52
1258019	BT30EM10060M	10	35	60	84	SS03M018	5mm	25	0,60
1155346	BT30EM12060M	12	42	60	50	SS03M023	6mm	35	0,70
1258020	BT30EM16060M	16	48	60	53	SS03M025	6mm	50	0,77
1258021	BT30EM20080M	20	52	80	55	SS03M026	8mm	95	1,03

■ EM IN-BT Form AD

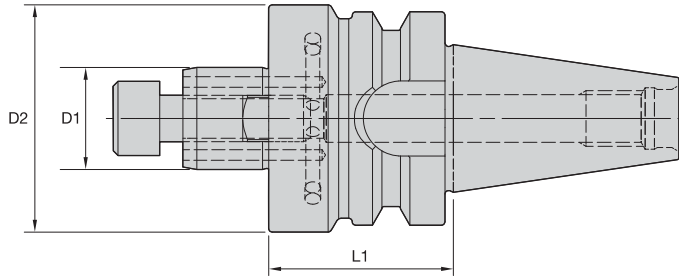


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2249689	BT30EM012236	1/8	.69	2.36	3.30	S1045PKG	3/32	3	.95
2249690	BT30EM018236	3/16	.69	2.36	3.30	S1045PKG	3/32	3	.94
1258012	BT30EM025236	1/4	1.00	2.36	3.30	ELS025025PKG	1/8	5	1.10
2249691	BT30EM031236	5/16	1.00	2.36	3.30	ELS031031PKG	5/32	11	1.08
1258013	BT30EM038236	3/8	1.00	2.36	3.30	ELS038031PKG	3/16	15	1.08
1258014	BT30EM050236	1/2	1.38	2.36	1.97	ELS044038PKG	7/32	20	1.26
1258016	BT30EM062236	5/8	1.63	2.36	2.09	ELS056050PKG	1/4	40	1.43
1258017	BT30EM075236	3/4	1.75	2.36	2.22	ELS062050PKG	5/16	70	1.46

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

BT30 Shank Tools

Shell Mill Adapters with Through Coolant



BT30 Shank Tools

ERICKSON™

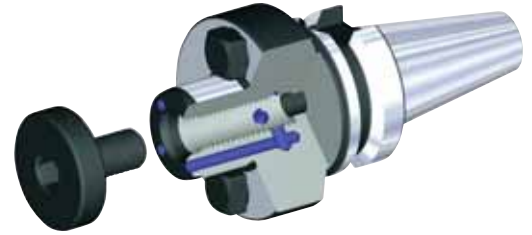
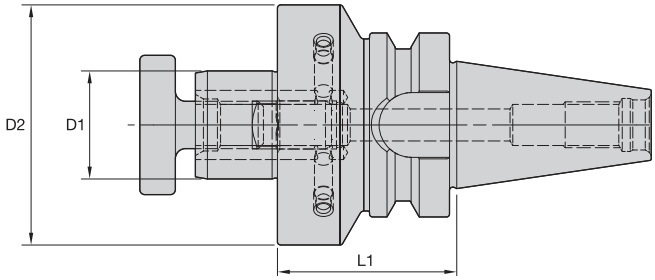
■ SMC Cap MM-BT Form B/AD



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752223	BT30SM2C16035M	16	38	35	MS1294	KDK16M	6mm	0,51
3752222	BT30SMC16035M	16	44	35	MS1294	KDK16M	6mm	0,55
3752227	BT30SM2C22040M	22	42	40	MS1234	—	8mm	0,62
3752226	BT30SMC22040M	22	49	40	MS1234	KDK22M	8mm	0,68
3752225	BT30SM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,64
3752229	BT30SM2C22050M	22	42	50	MS1234	—	8mm	0,73
3752224	BT30SMC16050M	16	44	50	MS1294	KDK16M	6mm	0,73
3752228	BT30SMC22050M	22	49	50	MS1234	KDK22M	8mm	0,79

(continued)

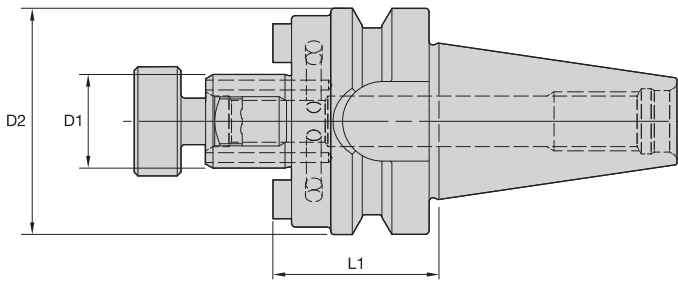
(SMC BT Form B/AD continued)



■ SMC Lock MM-BT Form B/AD



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752230	BT30SMC27045M	27	60	45	KLSS27M	KDK22M	10mm	0,97



■ SMC Lock IN-BT Form B/AD

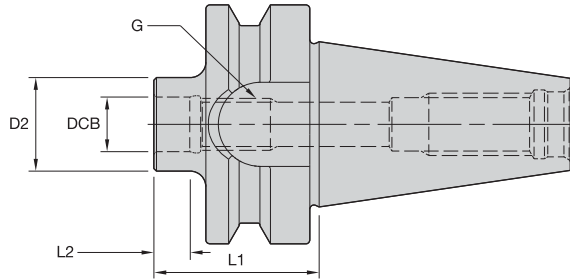


order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3648599	BT30SM2C050118	1/2	1.20	1.18	KLS05	KDK04	3/16	.97
3648598	BT30SMC050118	1/2	1.44	1.18	KLS05	KDK04	3/16	1.01
3648601	BT30SM2C075118	3/4	1.46	1.18	KLS07	—	1/4	1.08
3648600	BT30SMC075118	3/4	1.69	1.18	KLS07	KDK05	1/4	1.13
3648653	BT30SM2C100177	1	2.19	1.77	KLS10	KDK06	5/16	1.83
3648602	BT30SMC100177	1	2.75	1.77	KLS10	KDK06	5/16	2.16

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

BT30 Shank Tools

Screw-On Adapters for Modular Milling Cutters • KM™ Modular Adapters



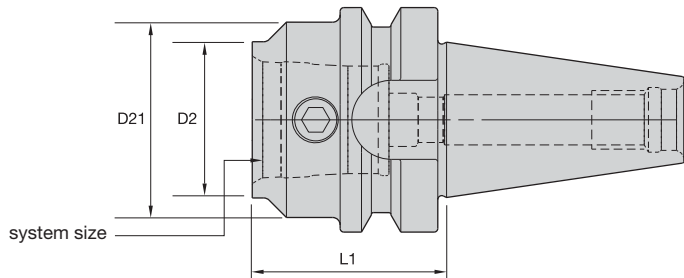
BT30 Shank Tools

ERICKSON

■ ST-BT Form AD

order number	catalog number	DCB	G	D2	L1	L2	kg
4070054	BT30ST06032M	6,5	M6	10	32	9	0,39
4070055	BT30ST08032M	8,5	M8	13	32	9	0,39
4070056	BT30ST10032M	10,5	M10	18	32	9	0,39
4070057	BT30ST12032M	12,5	M12	21	32	9	0,38

NOTE: For retention knobs, see page J33.



ERICKSON

■ KM-BT Form AD

order number	catalog number	system size	D2	D21	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1013658	BT30KM3240	KM32	32	40	40	KM32PKG3L	5mm	8-11	0,49

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.



WIN WITH WIDIA™



KM™ Quick Change

WIDIA KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

- Uniquely designed to have a high clamping force generated from a minimal amount of input force.
- The extremely rigid locking device reduces vibration between components.
- Reliability to run machines at high maximum speeds without loss of force after continuous use.
- Versatile clamping mechanism is designed to be used on all types of manufacturing equipment.

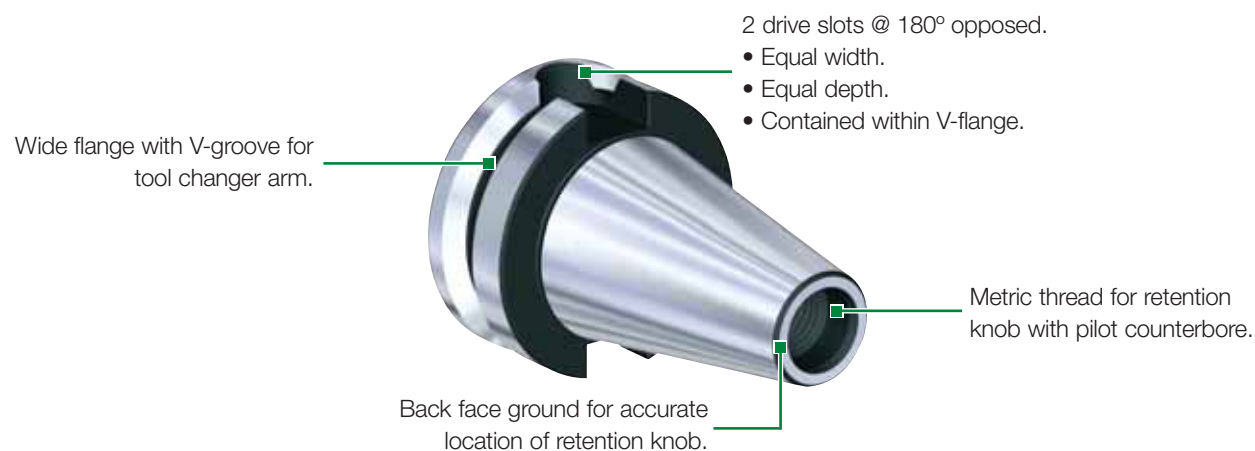
To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

Erickson™ BT V-Flange Shank Tooling System • **BT40 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM.

BT40



BT — JIS B6339 Shank

NOTE: Inherent balance conditions — all features are symmetrical.

For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



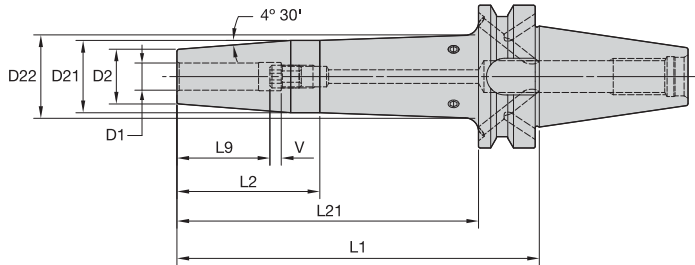
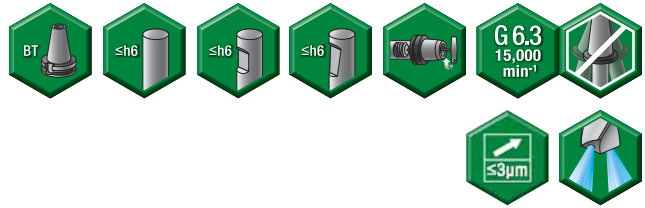
- JIS B 6339 7/24 taper.
- Standard M16 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

BT40 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

BT40 Shank Tools

ERICKSON

TT GP HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3782133	BT40BHPVTT06090M	6	21	27	—	90	63	—	26	10	TTSS05014M	2,5mm	1,16
3782134	BT40BHPVTT06120M	6	21	27	—	120	93	—	26	10	TTSS05014M	2,5mm	1,29
3782135	BT40BHPVTT06160M	6	21	27	33	160	50	133	26	10	TTSS05014M	2,5mm	1,54
3782136	BT40BHPVTT08090M	8	21	27	—	90	63	—	26	10	TTSS06014M	3mm	1,15
3782137	BT40BHPVTT08120M	8	21	27	—	120	93	—	26	10	TTSS06014M	3mm	1,28
3782138	BT40BHPVTT08160M	8	21	27	33	160	50	133	26	10	TTSS06014M	3mm	1,54
3782139	BT40BHPVTT10090M	10	24	32	—	90	63	—	31	10	TTSS08014M	4mm	1,22
3782140	BT40BHPVTT10120M	10	24	32	—	120	93	—	31	10	TTSS08014M	4mm	1,40
3782141	BT40BHPVTT10160M	10	24	32	37	160	63	133	31	10	TTSS08014M	4mm	1,71
3615365	BT40BHPVTT12090M	12	24	32	—	90	63	—	36	10	TTSS10014M	5mm	1,20
3615366	BT40BHPVTT12120M	12	24	32	—	120	93	—	36	10	TTSS10014M	5mm	1,38
3615367	BT40BHPVTT12160M	12	24	32	37	160	63	133	36	10	TTSS10014M	5mm	1,70
3615368	BT40BHPVTT14090M	14	27	34	—	90	63	—	36	10	TTSS10014M	5mm	1,25
3615369	BT40BHPVTT14120M	14	27	34	—	120	93	—	36	10	TTSS10014M	5mm	1,45
3615370	BT40BHPVTT14160M	14	27	34	39	160	63	133	36	10	TTSS10014M	5mm	1,81
3615371	BT40BHPVTT16090M	16	27	34	—	90	63	—	39	10	TTSS12014M	6mm	1,23
3615372	BT40BHPVTT16120M	16	27	34	—	120	93	—	39	10	TTSS12014M	6mm	1,43
3615373	BT40BHPVTT16160M	16	27	34	39	160	63	133	39	10	TTSS12014M	6mm	1,77
3615374	BT40BHPVTT18090M	18	33	41	—	90	63	—	39	10	TTSS12014M	6mm	1,38
3615375	BT40BHPVTT18120M	18	33	42	—	120	93	—	39	10	TTSS12014M	6mm	1,69
3615376	BT40BHPVTT18160M	18	33	42	—	160	133	—	39	10	TTSS12014M	6mm	2,10
3615377	BT40BHPVTT20090M	20	33	41	—	90	63	—	41	10	TTSS16014M	8mm	1,35
3615378	BT40BHPVTT20120M	20	33	42	—	120	93	—	41	10	TTSS16014M	8mm	1,65
3615379	BT40BHPVTT20160M	20	33	42	—	160	133	—	41	10	TTSS16014M	8mm	2,05
3615380	BT40BHPVTT25100M	25	44	52	—	100	73	—	47	10	TTSS16014M	8mm	1,75
3615381	BT40BHPVTT32105M	32	44	53	—	105	78	—	51	10	TTSS16014M	8mm	1,67

(continued)

(TT GP HPV BT Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

■ TT GP HPV IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3782142	BT40BHPVTT025354	1/4	.83	1.06	3.54	2.48	1.02	.39	TTSS05014M	2,5mm	2.55
3782143	BT40BHPVTT025630	1/4	.83	1.06	6.30	1.97	1.02	.39	TTSS05014M	2,5mm	3.39
3782144	BT40BHPVTT031354	5/16	.83	1.06	3.54	2.48	1.02	.39	TTSS06014M	3mm	2.53
3782145	BT40BHPVTT031630	5/16	.83	1.06	6.30	1.97	1.02	.39	TTSS06014M	3mm	3.39
3782146	BT40BHPVTT038354	3/8	.95	1.26	3.54	2.48	1.22	.39	TTSS08014M	4mm	2.69
3782147	BT40BHPVTT038630	3/8	.95	1.26	6.30	2.48	1.22	.39	TTSS08014M	4mm	3.78
3782148	BT40BHPVTT044354	7/16	.95	1.26	3.54	2.48	1.42	.39	TTSS10014M	5mm	2.66
3615353	BT40BHPVTT050354	1/2	.95	1.26	3.54	2.48	1.42	.39	TTSS10014M	5mm	2.64
3615354	BT40BHPVTT050630	1/2	.95	1.26	6.30	2.48	1.42	.39	TTSS10014M	5mm	3.73
3615355	BT40BHPVTT062354	5/8	1.06	1.34	3.54	2.48	1.54	.39	TTSS12014M	6mm	2.71
3615356	BT40BHPVTT062630	5/8	1.06	1.34	6.30	2.48	1.54	.39	TTSS12014M	6mm	3.91
3615357	BT40BHPVTT075354	3/4	1.30	1.61	3.54	2.48	1.61	.39	TTSS16014M	8mm	2.99
3615358	BT40BHPVTT075630	3/4	1.30	1.65	6.30	5.24	1.61	.39	TTSS16014M	8mm	4.56
3615359	BT40BHPVTT088354	7/8	1.30	1.61	3.54	2.48	1.61	.39	TTSS16014M	8mm	2.90
3615360	BT40BHPVTT088630	7/8	1.30	1.65	6.30	5.24	1.61	.39	TTSS16014M	8mm	4.47
3615361	BT40BHPVTT100394	1	1.73	2.06	3.94	2.87	1.85	.39	TTSS16014M	8mm	3.84
3615362	BT40BHPVTT100630	1	1.73	2.08	6.30	5.24	1.85	.39	TTSS16014M	8mm	6.03
3615363	BT40BHPVTT125413	1 1/4	1.73	2.08	4.13	3.07	2.01	.39	TTSS16014M	8mm	3.69
3615364	BT40BHPVTT125630	1 1/4	1.73	2.08	6.30	5.24	2.01	.39	TTSS16014M	8mm	5.69

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

BT40 Shank Tools

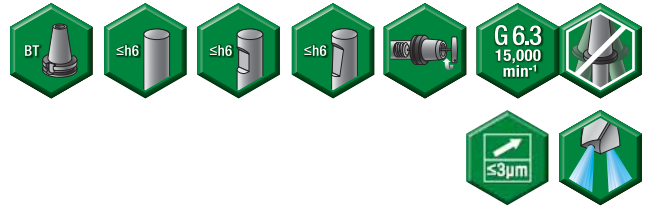
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BT40 Shank Tools

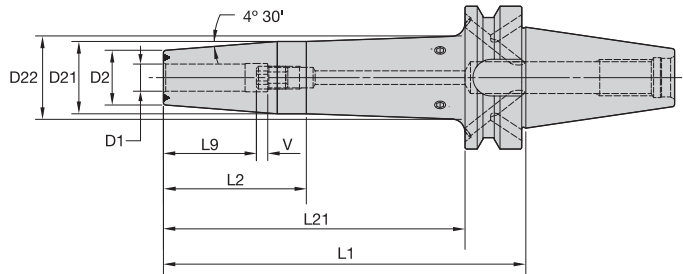
Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



BT40 Shank Tools



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT HT HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3615457	BT40BHPVTTH12090M	12	24	32	—	90	63	—	36	10	TTSS10014M	5mm	1,20
3615458	BT40BHPVTTH12120M	12	24	32	—	120	93	—	36	10	TTSS10014M	5mm	1,38
3615459	BT40BHPVTTH12160M	12	24	32	37	160	63	133	36	10	TTSS10014M	5mm	1,70
3615460	BT40BHPVTTH14090M	14	27	34	—	90	63	—	36	10	TTSS10014M	5mm	1,25
3615461	BT40BHPVTTH14120M	14	27	34	—	120	93	—	36	10	TTSS10014M	5mm	1,45
3615462	BT40BHPVTTH14160M	14	27	34	39	160	63	133	36	10	TTSS10014M	5mm	1,81
3615463	BT40BHPVTTH16090M	16	27	34	—	90	63	—	39	10	TTSS12014M	6mm	1,23
3615464	BT40BHPVTTH16120M	16	27	34	—	120	93	—	39	10	TTSS12014M	6mm	1,43
3615465	BT40BHPVTTH16160M	16	27	34	39	160	63	133	39	10	TTSS12014M	6mm	1,77
3615466	BT40BHPVTTH18090M	18	33	41	—	90	63	—	39	10	TTSS12014M	6mm	1,38
3615467	BT40BHPVTTH18120M	18	33	42	—	120	93	—	39	10	TTSS12014M	6mm	1,69
3615468	BT40BHPVTTH18160M	18	33	42	—	160	133	—	39	10	TTSS12014M	6mm	2,10
3615469	BT40BHPVTTH20090M	20	33	41	—	90	63	—	41	10	TTSS16014M	8mm	1,35
3615470	BT40BHPVTTH20120M	20	33	42	—	120	93	—	41	10	TTSS16014M	8mm	1,65
3615471	BT40BHPVTTH20160M	20	33	42	—	160	133	—	41	10	TTSS16014M	8mm	2,06
3615472	BT40BHPVTTH25100M	25	44	52	50	100	73	—	47	10	TTSS16014M	8mm	1,75
3615473	BT40BHPVTTH32105M	32	44	53	50	105	78	—	51	10	TTSS16014M	8mm	1,66

(continued)

(TT HT HPV BT Form B/AD continued)

Cutting Tool Shank Requirements

inch (industry standard)	
cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/-0.0004
3/4, 7/8, 1, & 1-1/4	.0000/-0.0005

■ TT HT HPV IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3615444	BT40BHPVTTH050354	1/2	.95	1.26	3.54	2.48	1.42	.39	TTSS10014M	5mm	2.63
3615445	BT40BHPVTTH050630	1/2	.95	1.26	6.30	2.48	1.42	.39	TTSS10014M	5mm	3.73
3615446	BT40BHPVTTH062354	5/8	1.06	1.34	3.54	2.48	1.54	.39	TTSS12014M	6mm	2.71
3615447	BT40BHPVTTH062630	5/8	1.06	1.34	6.30	2.48	1.54	.39	TTSS12014M	6mm	3.91
3615448	BT40BHPVTTH075354	3/4	1.30	1.61	3.54	2.48	1.61	.39	TTSS16014M	8mm	2.99
3615450	BT40BHPVTTH075630	3/4	1.30	1.65	6.30	5.24	1.61	.39	TTSS16014M	8mm	4.56
3615451	BT40BHPVTTH088354	7/8	1.30	1.61	3.54	2.48	1.61	.39	TTSS16014M	8mm	2.90
3615452	BT40BHPVTTH088630	7/8	1.30	1.65	6.30	5.24	1.61	.39	TTSS16014M	8mm	4.47
3615453	BT40BHPVTTH100394	1	1.73	2.06	3.94	2.87	1.85	.39	TTSS16014M	8mm	3.84
3615454	BT40BHPVTTH100630	1	1.73	2.08	6.30	5.24	1.85	.39	TTSS16014M	8mm	6.03
3615455	BT40BHPVTTH125413	1 1/4	1.73	2.08	4.13	3.07	2.01	.39	TTSS16014M	8mm	3.68
3615456	BT40BHPVTTH125630	1 1/4	1.73	2.08	6.30	5.24	2.01	.39	TTSS16014M	8mm	5.69

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

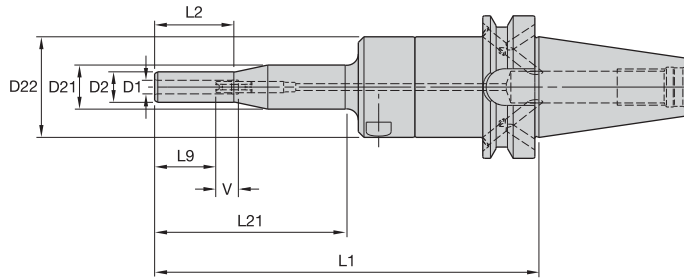
Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

BT40 Shank Tools

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



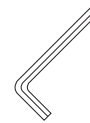
BT40 Shank Tools

ERICKSON

■ HC Slim-T MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019236	BT40BHCSLT06170M	6	13,5	19,5	44	170	35	85	27	10	1,68
3019237	BT40BHCSLT08170M	8	15,5	19,5	44	170	35	85	27	10	1,69
3019238	BT40BHCSLT10170M	10	17,5	44,5	—	170	85	145	31	10	1,68

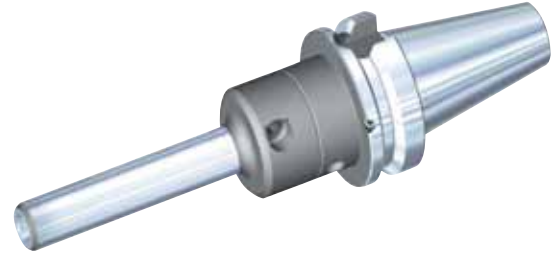
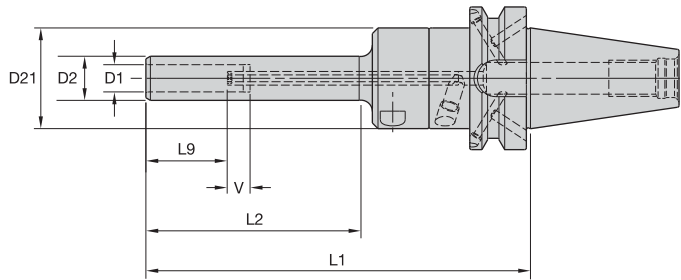
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw
BT40BHCSLT06170M	170.135	5mm	571.060	170.002	2,5mm
BT40BHCSLT08170M	170.135	5mm	571.060	170.002	2,5mm
BT40BHCSLT10170M	170.135	5mm	571.061	170.003	3mm

(continued)

(HC Slim MM-BT Form B/AD continued)

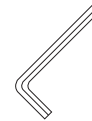


BT40 Shank Tools

■ HC Slim MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634575	BT40BHCSL12170M	12	19,5	44,5	170	95	36	10	1,61
2634576	BT40BHCSL14170M	14	21,5	52,5	170	95	36	10	1,84
2634577	BT40BHCSL16170M	16	23,5	52,5	170	95	39	10	1,87
2634578	BT40BHCSL18170M	18	25,5	52,5	170	95	39	10	1,91
2634579	BT40BHCSL20170M	20	27,5	52,5	170	95	41	10	1,95

■ Spare Parts



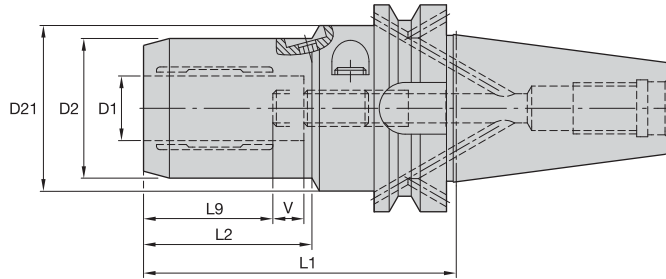
catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
BT40BHCSL12170M	170.135	5mm	170.002	2,5mm
BT40BHCSL14170M	170.135	5mm	170.002	2,5mm
BT40BHCSL16170M	170.135	5mm	170.002	2,5mm
BT40BHCSL18170M	170.135	5mm	170.002	2,5mm
BT40BHCSL20170M	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT40 Shank Tools

Hydraulic Chucks Standard HP Line



BT40 Shank Tools

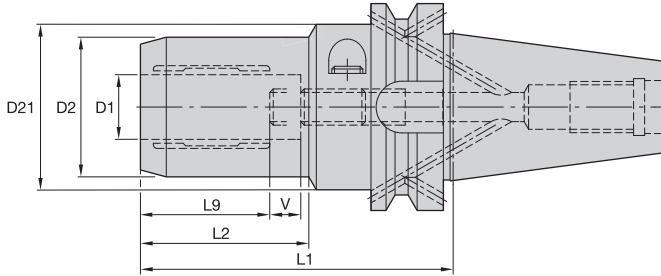
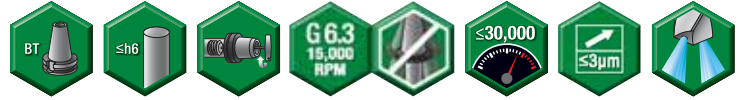
ERICKSON

■ HC MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1315341	BT40BHC06080M	6	25,7	50	80	33	27	10	170.135	5mm	170.002	2,5mm	1,28
1315342	BT40BHC08080M	8	27,7	50	80	34	27	10	170.135	5mm	170.002	2,5mm	1,30
1315343	BT40BHC10085M	10	29,7	50	85	35	31	10	170.135	5mm	170.002	2,5mm	1,35
1315344	BT40BHC12090M	12	31,6	50	90	40	36	10	170.135	5mm	170.002	2,5mm	1,39
1315345	BT40BHC14090M	14	33,6	50	90	42	36	10	170.135	5mm	170.003	3mm	1,40
1315347	BT40BHC16090M	16	37,6	50	90	47	39	10	170.135	5mm	170.003	3mm	1,44
1315348	BT40BHC18090M	18	39,6	50	90	47	39	10	170.135	5mm	170.003	3mm	1,47
1315349	BT40BHC20095M	20	41,6	50	95	48	41	10	170.135	5mm	170.003	3mm	1,54
1315350	BT40BHC25115M	25	49,8	63	115	51	46	10	170.136	6mm	170.004	4mm	2,18
1315351	BT40BHC32120M	32	59,8	63	120	59	50	10	170.136	6mm	170.004	4mm	2,46

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

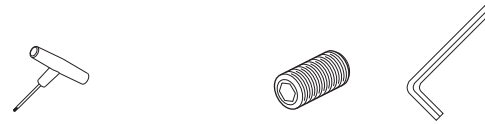
 Form AD					
 Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT40 Shank Tools







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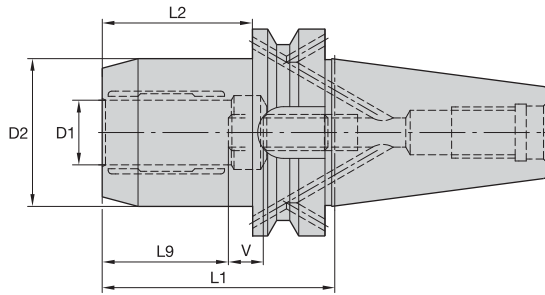
■ HC Trend IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2263075	BT40BHCT025315	1/4	1.011	1.963	3.150	1.378	1.063	.394	170.135	5mm	571.061	170.003	3mm	2.85
2263076	BT40BHCT038335	3/8	1.168	1.963	3.347	1.496	1.221	.394	170.135	5mm	571.061	170.003	3mm	3.02
2263077	BT40BHCT050354	1/2	1.243	1.963	3.543	1.575	1.417	.394	170.135	5mm	571.061	170.003	3mm	3.16
2263078	BT40BHCT062354	5/8	1.479	1.963	3.543	1.831	1.535	.394	170.135	5mm	571.063	—	5mm	3.23
2263079	BT40BHCT075374	3/4	1.636	1.963	3.740	1.890	1.614	.394	170.135	5mm	571.063	—	5mm	3.49
2263080	BT40BHCT100453	1	1.959	2.474	4.528	2.008	1.850	.394	170.136	6mm	571.063	170.005	5mm	4.80
2263081	BT40BHCT125472	1 1/4	2.352	2.474	4.724	2.323	2.008	.394	170.136	6mm	571.063	170.005	5mm	5.43

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT40 Shank Tools

ERICKSON

■ HC Basic MM-BT Form B/AD

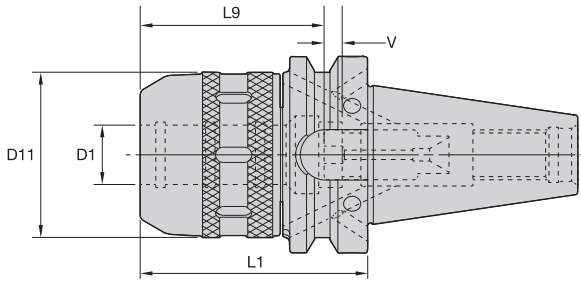
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg	
1599687	BT40BHCB20095M	20	49,9	95	68	41	10		5mm		280.034	5mm	1,79

■ HC Basic IN-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	lbs	
2263074	BT40BHCB075374	3/4	1.96	3.74	2.68	1.61	—		5mm		280.034	5mm	3.98

*NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.*

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



BT40 Shank Tools

ERICKSON

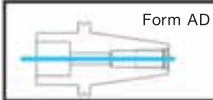








■ HPMC MM-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578487	BT40BHPMC20075M	20	53	75	47	20	PSW52M	MCSS16040M	2,5mm & 5mm	1,50
3578488	BT40BHPMC20120M	20	53	120	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	2,20
3578489	BT40BHPMC25085M	25	61	85	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	1,80
3578490	BT40BHPMC25120M	25	61	120	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	2,50
3578491	BT40BHPMC32090M	32	70	90	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	2,10
3578492	BT40BHPMC32120M	32	70	120	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	2,70

■ HPMC IN-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100412	BT40BHPMC075295	3/4	2.09	2.95	1.85	.79	PSW52M	MCSS16040M	2,5mm & 5mm	3.30
3100413	BT40BHPMC075472	3/4	2.09	4.72	1.97	.79	PSW52M	MCSS16040M	2,5mm & 5mm	4.90
3100414	BT40BHPMC100335	1	2.40	3.35	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	4.10
3100415	BT40BHPMC100472	1	2.40	4.72	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	5.70
3100416	BT40BHPMC125354	1 1/4	2.76	3.54	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	4.50
3100417	BT40BHPMC125472	1 1/4	2.76	4.72	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	6.10

NOTE: Milling chuck technical section, see page K64.
 Supplied with locknut and stop screw.
 Locknut wrench not included.
 Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
 Reduction sleeves are available and must be ordered separately; see page I6.
 For retention knobs, see page J33.

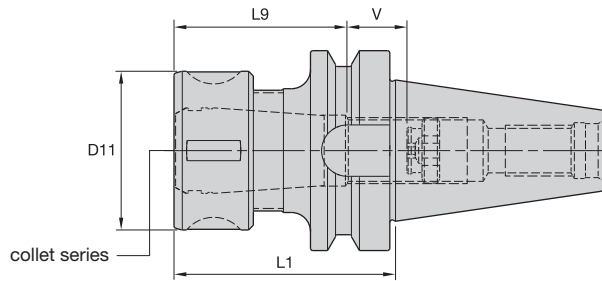
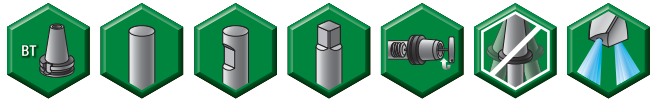
					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT40 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



BT40 Shank Tools

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

ERICKSON™

■ TG Round-BT Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156366	BT40TG075070M	TG75	50	70	54	27	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	1,24
1156367	BT40TG100080M	TG100	60	80	70	13	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,44
1191754	BT40TG100100M	TG100	60	100	70	33	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,63
1191755	BT40TG100150M	TG100	60	150	70	83	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	2,11
1191756	BT40TG150110M	TG150	85	110	86	20	LNA150M	HSW80M	271	SS112041G	4mm & 5/32	2,46

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

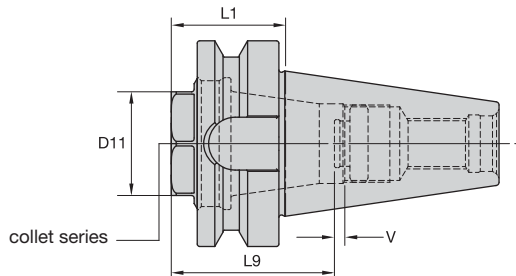
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

- Grip (2:1 advantage).



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81

BT40 Shank Tools

ERICKSON

■ ER Short-BT Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2978765	BT40SER32035M	ER32	36	35	50	6	LNECSER32M	OEW32M	136	SS094041G	4mm & 5/32	0,75

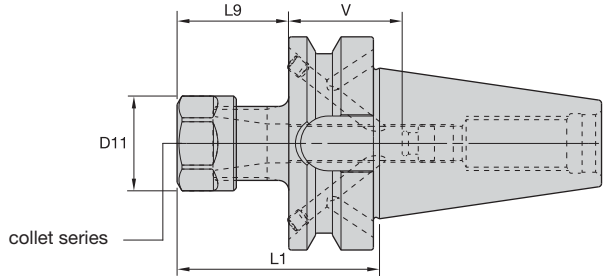
*NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I58.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.*

BT40 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



BT40 Shank Tools

ERICKSON™

■ ER Hex-BT Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1315660	BT40BER16060M	ER16	28	60	32	39	1,03
1623345	BT40BER16120M	ER16	28	120	32	48	1,27
3847461	BT40BER16150M	ER16	28	150	32	48	1,39
3847462	BT40BER20060M	ER20	34	60	37	38	1,04
3847513	BT40BER20120M	ER20	34	120	37	63	1,41
3847514	BT40BER20150M	ER20	34	150	37	63	1,59

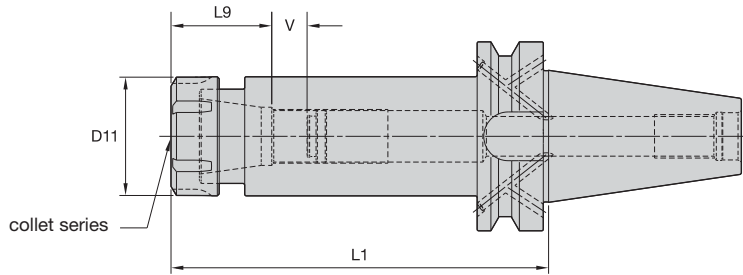
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BT40BER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BT40BER16120M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BT40BER16150M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BT40BER20060M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BT40BER20120M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BT40BER20150M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(continued ER BT Form B/AD)



■ ER Round-BT Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1718315	BT40BER25070M	ER25	42	70	40	38	1,15
1610709	BT40BER25120M	ER25	42	120	40	60	1,61
3798342	BT40BER25150M	ER25	42	150	40	60	1,90
1538985	BT40BER32070M	ER32	50	70	46	40	1,15
1538986	BT40BER32120M	ER32	50	120	46	54	1,82
3798343	BT40BER32150M	ER32	50	150	46	54	2,26
1871535	BT40BER40080M	ER40	63	80	52	28	1,37
1871538	BT40BER40120M	ER40	63	120	52	33	2,29

■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
BT40BER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BT40BER25120M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BT40BER25150M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
BT40BER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BT40BER32120M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BT40BER32150M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
BT40BER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
BT40BER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

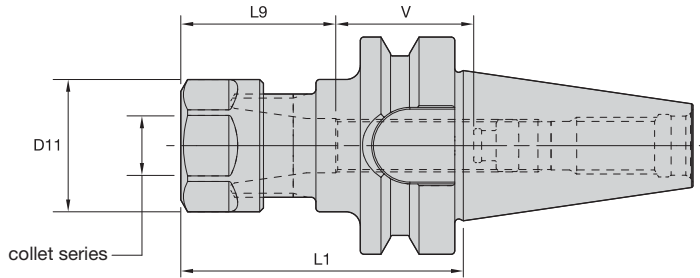
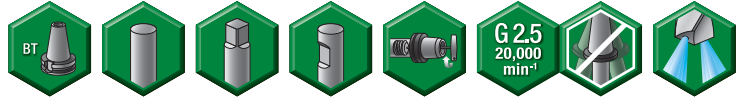
Form AD	✓				
Form B				40 (2x) MS2221S	2,5mm
				50 (2x) MS1296S	3mm

BT40 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



BT40 Shank Tools

ERICKSON™

■ DA Hex-BT form AD

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16

order number	catalog number	collet series	D11	L1	L9	V	lbs
1191725	BT40DA208070M	DA200	1.08	2.76	1.50	1.26	2.20
1191722	BT40DA108070M	DA100	1.44	2.76	1.77	1.10	2.20

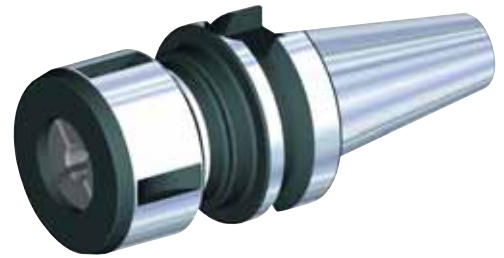
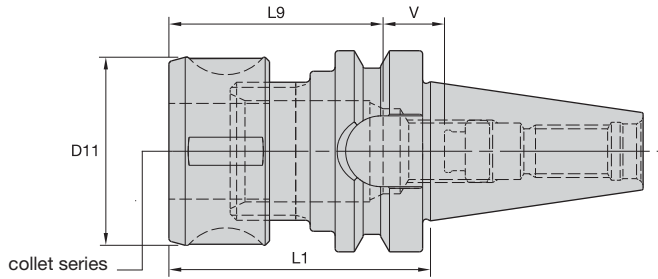
■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT40DA108070M	LNA108M	OEW32M	55	SS056041G	4mm & 5/32
BT40DA208070M	LNA208M	OEW24M	44	SS038031G	2mm & 5/64

(continued)

(DA BT Form AD continued)



BT40 Shank Tools

■ DA Round-BT form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1191723	BT40DA188070M	DA180	1.69	2.76	1.89	1.30	2.65
1258159	BT40DA188100M	DA180	1.69	3.94	1.89	2.05	3.09
1191724	BT40DA188150M	DA180	1.69	5.91	1.97	1.77	3.75

■ Spare Parts

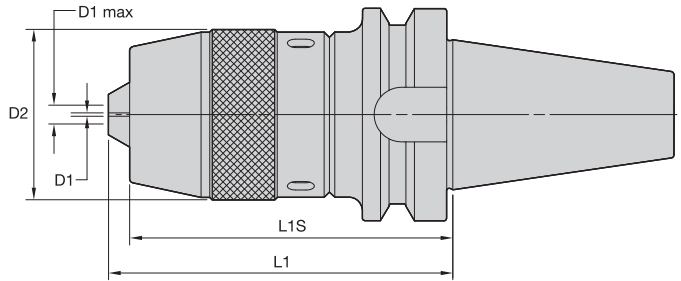
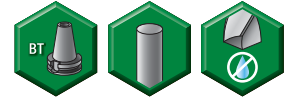


catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT40DA188070M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32
BT40DA188100M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32
BT40DA188150M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

BT40 Shank Tools

Drill Chucks



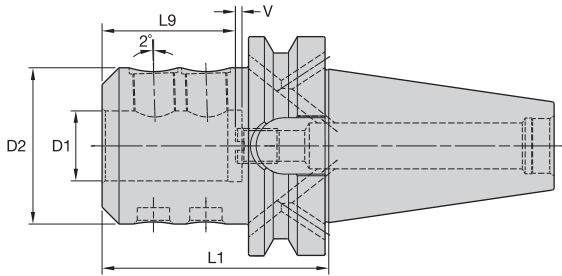
BT40 Shank Tools

ERICKSON™

■ DC-BT Form A

order number	catalog number	D1		D1 max		D2	L1	L1S	locknut wrench PSW45M	Nm	kg
		mm	in	mm	in						
3583293	BT40DC13096M	1,0	.039	13,0	.512	51	108	96		55	1,74

NOTE: Tighten to the recommended tightening torque.
Locknut wrench not supplied.
For retention knobs, see page J33.



BT40 Shank Tools

ERICKSON

■ WN MM-BT Form B/AD



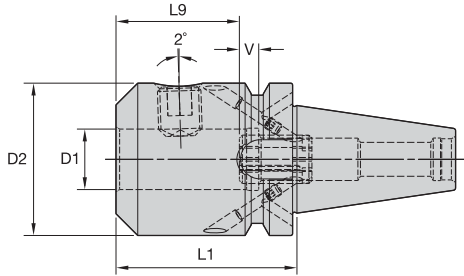
order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1126481	BT40BWN06050M	6	25	50	30	10	SS03M012	3mm	7	571.060	2,5mm	1,03
1126482	BT40BWN08050M	8	28	50	30	10	SS03M014	4mm	15	571.067	3mm	1,04
1126850	BT40BWN10063M	10	35	63	35	10	SS03M018	5mm	25	571.068	4mm	1,18
1126483	BT40BWN12063M	12	42	63	40	10	SS03M023	6mm	35	571.074	5mm	1,26
1126844	BT40BWN14063M	14	44	63	40	10	SS03M023	6mm	35	571.074	5mm	1,28
1126845	BT40BWN16063M	16	48	63	43	10	SS03M025	6mm	50	571.075	6mm	1,34
1126846	BT40BWN18063M	18	50	63	43	10	SS03M025	6mm	50	571.075	6mm	1,36
1126847	BT40BWN20063M	20	52	63	45	10	SS03M026	8mm	95	571.076	6mm	1,37
1126848	BT40BWN25090M	25	65	90	55	10	SS03M027	10mm	135	571.077	6mm	2,21
1126849	BT40BWN32100M	32	72	100	54	10	SS03M029	10mm	160	571.077	6mm	2,63

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BT40 Shank Tools

Whistle Notch™ Adapters Short • Whistle Notch Tap Chuck Adapters Short TA



BT40 Shank Tools

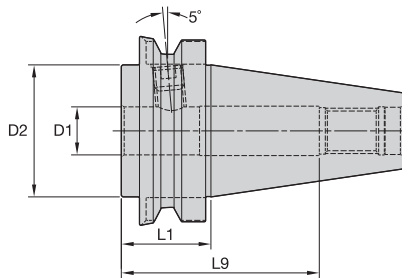
ERICKSON™

■ SWN MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	stop screw	wrench size stop screw	Nm	kg
1126479	BT40BSWN25075M	25	65	75	44	15	SS03M027	10mm	571.066	10mm	135	1,90
1126480	BT40BSWN32075M	32	72	75	46	17	SS03M029	10mm	571.066	10mm	160	1,98

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrenches not included.
 For retention knobs, see page J33.



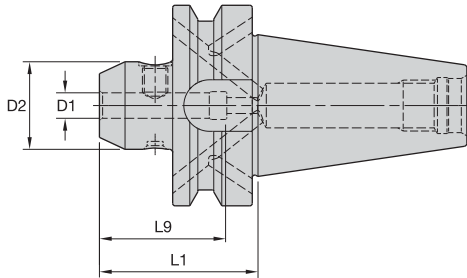
ERICKSON™

■ SWN IN-BT Form AD (Tap Chuck Adapter)



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1017937	BT40TA1106	1	2.48	1.06	2.50	ELS038031PKG	3/16	15	1.79

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.



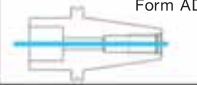











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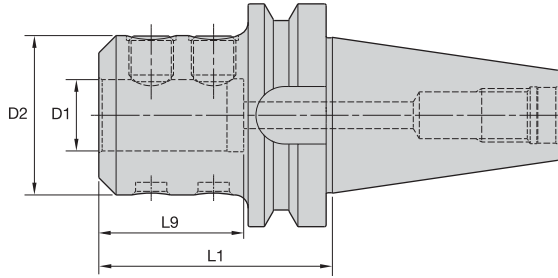
■ EM MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1126851	BT40BEM06050M	6	25	50	40	SS03M012	3mm	7	1,02
1126852	BT40BEM08050M	8	28	50	40	SS03M014	4mm	15	1,03
1126853	BT40BEM10063M	10	35	63	45	SS03M018	5mm	25	1,17
1127275	BT40BEM12063M	12	42	63	50	SS03M023	6mm	35	1,26
1126914	BT40BEM14063M	14	44	63	50	SS03M023	6mm	35	1,28
1126915	BT40BEM16063M	16	48	63	53	SS03M025	6mm	50	1,33
1126916	BT40BEM18063M	18	50	63	53	SS03M025	6mm	50	1,35
1126917	BT40BEM20063M	20	52	63	55	SS03M026	8mm	95	1,36
1126478	BT40BEM25090M	25	65	90	60	SS03M027	10mm	135	2,24

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

					
					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT40 Shank Tools

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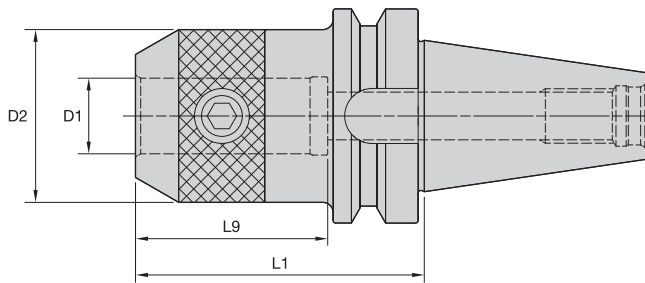
■ EM MM-BT Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1156359	BT40EM32110M	32	72	110	65	SS03M029	10mm	160	2,91

(continued)

(EM BT Form AD continued)



■ EM IN-BT Form AD

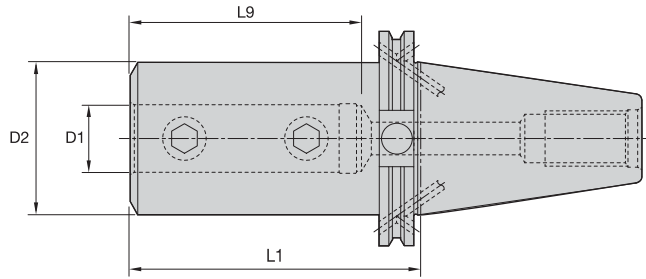


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1258164	BT40EM025255	1/4	1.00	2.55	3.93	ELS025025PKG	1/8	5	2.35
1258165	BT40EM031255	5/16	1.00	2.55	3.93	ELS031031PKG	5/32	11	2.35
1258166	BT40EM038255	3/8	1.00	2.55	3.93	ELS038031PKG	3/16	15	2.32
1026620	BT40EM050255	1/2	1.38	2.55	3.93	ELS044038PKG	7/32	20	2.52
1064863	BT40EM050400	1/2	1.38	4.00	5.38	ELS044038PKG	7/32	20	3.03
1258176	BT40EM062255	5/8	1.63	2.55	2.09	ELS056050PKG	1/4	40	2.69
1084589	BT40EM075150	3/4	1.68	1.50	2.22	ELS062050PKG	5/16	70	2.08
1258177	BT40EM075255	3/4	1.75	2.55	2.22	ELS062050PKG	5/16	70	2.73
1258184	BT40EM088335	7/8	2.00	3.35	2.22	ELS062050PKG	5/16	70	3.58
1084590	BT40EM100162	1	2.04	1.63	2.46	DWG ELS075044	3/8	110	2.00
1150875	BT40EM100374	1	2.00	3.74	2.56	ELS075056PKG	3/8	110	3.73
1064864	BT40EM100500	1	2.00	5.00	4.49	ELS075056PKG	3/8	110	4.42
1084591	BT40EM125250	1 1/4	2.46	2.50	2.51	ELS075062PKG	3/8	110	3.05
1258194	BT40EM125335	1 1/4	2.40	3.35	2.51	ELS075056PKG	3/8	110	3.95

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

BT40 Shank Tools

Straight Shanks with Flat Adapters



BT40 Shank Tools

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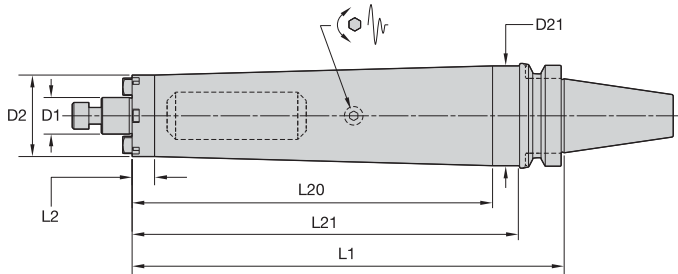
■ SSF IN-BT Form B/AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749289	BT40BSSF075325	3/4	1.75	3.25	2.25	ELS062050PKG	5/16	70	3.22
1749290	BT40BSSF100425	1	1.97	4.25	3.25	DWG ELS075050	3/8	110	4.01
1749292	BT40BSSF125500	1 1/4	2.50	5.00	3.50	ELS075056PKG	3/8	110	5.83

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

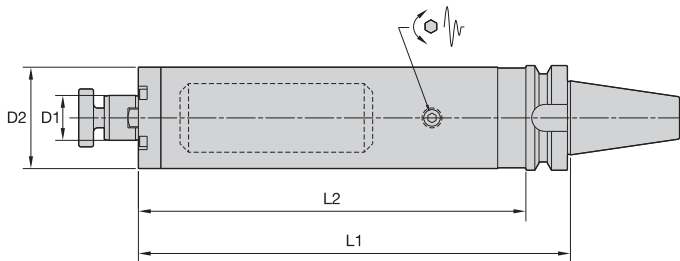


BT40 Shank Tools

ERICKSON

■ SMC TD Cap MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135487	BT40BTDSMC22260M	22	49	60	260	14	217	233	MS1234	KDK22M	8mm	5,06



■ SMC TD Lock MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	socket-head cap screw	drive key	wrench size retention screw	Nm	kg
4135488	BT40BTDSMC27260M	27	61	260	233	KLSS27M	—	10mm	—	5,96



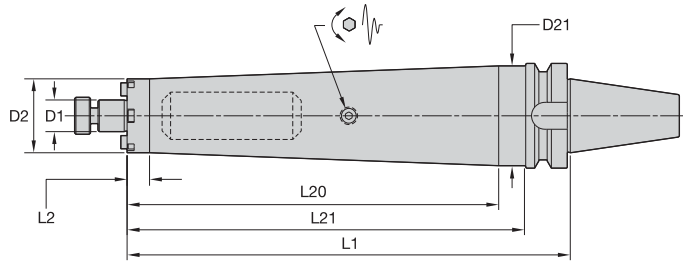
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BT40 Shank Tools

Tunable Shell Mill Adapters with Through Coolant

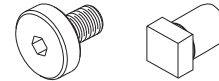


(SMC TD BT Form B/AD continued)



BT40 Shank Tools

■ SMC TD Lock IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135489	BT40BTDSMC0751050	3/4	1.75	2.36	10.50	.53	8.80	9.44	KLS07	KDK05	1/4	10.67
4135490	BT40BTDSMC1001050	1	2.75	—	10.50	10.50	—	—	KLS10	KDK06	5/16	16.86

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

TOOLING SYSTEMS



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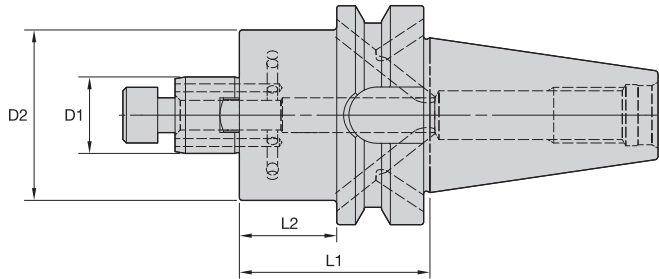
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BT40 Shank Tools

Shell Mill Adapters with Through Coolant



BT40 Shank Tools

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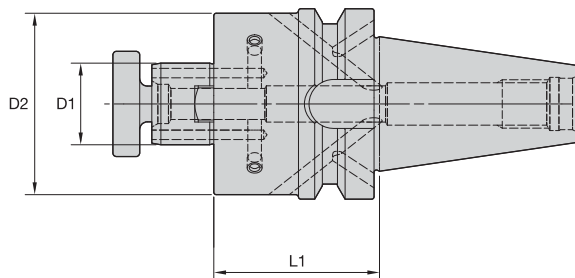
■ SMC Cap MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
3752232	BT40BSM2C16050M	16	38	50	23	MS1294	KDK16M	6mm	1,16
3752234	BT40BSM2C16075M	16	38	75	48	MS1294	KDK16M	6mm	1,35
3752236	BT40BSM2C16100M	16	38	100	73	MS1294	KDK16M	6mm	1,55
3752231	BT40BSMC16050M	16	44	50	23	MS1294	KDK16M	6mm	1,23
3752233	BT40BSMC16075M	16	44	75	48	MS1294	KDK16M	6mm	1,50
3752235	BT40BSMC16100M	16	44	100	73	MS1294	KDK16M	6mm	1,77
3752238	BT40BSM2C22055M	22	42	55	28	MS1234	—	8mm	1,30
3752241	BT40BSM2C22100M	22	42	100	73	MS1234	—	8mm	1,75
3752243	BT40BSM2C22150M	22	42	150	123	MS1234	—	8mm	2,26
3752237	BT40BSMC22055M	22	49	55	28	MS1234	KDK22M	8mm	1,41
3752239	BT40BSMC22100M	22	49	100	73	MS1234	KDK22M	8mm	2,03
3752242	BT40BSMC22150M	22	49	150	123	MS1234	KDK22M	8mm	2,74

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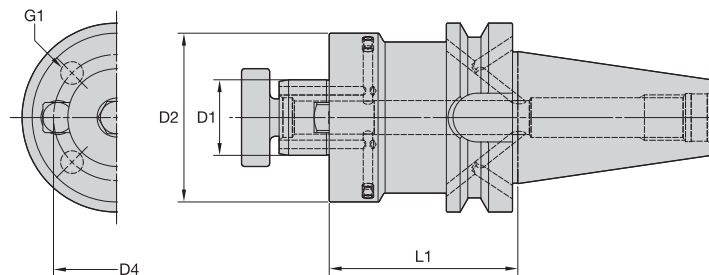
(SMC BT Form B/AD continued)



■ SMC Lock MM-BT Form B/AD



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752244	BT40BSMC27055M	27	60	55	KLSS27M	KDK22M	10mm	2
3752245	BT40BSMC27100M	27	60	100	KLSS27M	KDK22M	10mm	3
3752246	BT40BSMC27150M	27	60	150	KLSS27M	KDK22M	10mm	4
3752247	BT40BSMC32060M	32	78	60	KLSS32M	KDK32M	14mm	2
3752248	BT40BSMC32100M	32	78	100	KLSS32M	KDK32M	14mm	3



■ SMC DIR MM-BT Form B/AD



order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3752249	BT40BSMC40060M	40	89	60	M12 X 1.75	66,7	KLSS40M	KDK40M	17mm	3
3752250	BT40BSMC40100M	40	89	100	M12 X 1.75	66,7	KLSS40M	KDK40M	17mm	4

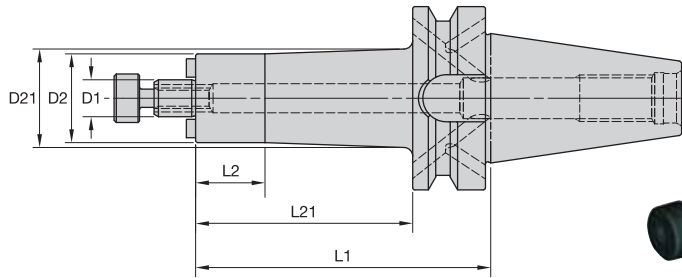
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BT40 Shank Tools

Shell Mill Adapters with Through Coolant



(SMC BT Form B/AD continued)



BT40 Shank Tools

SMC Lock IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L21	lock screw	drive key	wrench size lock screw	lbs
3648655	BT40BSM2C050177	1/2	1.20	—	1.77	.71	—	KLS05	KDK04	3/16	2.36
3648657	BT40BSM2C050400	1/2	1.20	1.34	4.00	.94	2.94	KLS05	KDK04	3/16	3.05
3648654	BT40BSMC050177	1/2	1.44	—	1.77	.71	—	KLS05	KDK04	3/16	2.41
3648656	BT40BSMC050400	1/2	1.44	1.58	4.00	.94	2.94	KLS05	KDK04	3/16	3.42
3648659	BT40BSM2C075177	3/4	1.46	—	1.77	.71	—	KLS07	—	1/4	2.47
3648662	BT40BSM2C075400	3/4	1.46	—	4.00	2.94	—	KLS07	—	1/4	3.39
3648658	BT40BSMC075177	3/4	1.75	—	1.77	.71	—	KLS07	KDK05	1/4	2.62
3648661	BT40BSMC075400	3/4	1.75	—	4.00	2.94	—	KLS07	KDK05	1/4	3.99
3648663	BT40BSMC075600	3/4	1.75	—	6.00	4.94	—	KLS07	KDK05	1/4	5.22
3648665	BT40BSM2C100177	1	2.19	—	1.77	.71	—	KLS10	KDK06	5/16	3.00
3648667	BT40BSM2C100400	1	2.19	—	4.00	2.94	—	KLS10	KDK06	5/16	5.30
3648664	BT40BSMC100177	1	2.75	—	1.77	1.77	—	KLS10	KDK06	5/16	3.31
3648666	BT40BSMC100400	1	2.75	—	4.00	4.00	—	KLS10	KDK06	5/16	6.09
3648668	BT40BSMC100600	1	2.75	—	6.00	6.00	—	KLS10	KDK06	5/16	8.50
3648669	BT40BSMC125236	1 1/4	2.88	—	2.36	2.36	—	KLS12	KDK08	5/16	4.41
3648670	BT40BSMC125500	1 1/4	2.88	—	5.00	5.00	—	KLS12	KDK08	5/16	7.65
3648671	BT40BSMC150236	1 1/2	3.63	—	2.36	2.36	—	KLS15	KDK10	3/8	5.59
3648672	BT40BSMC150500	1 1/2	3.81	—	5.00	5.00	—	KLS15	KDK10	3/8	9.11

NOTE: Do not overtighten lock screw.

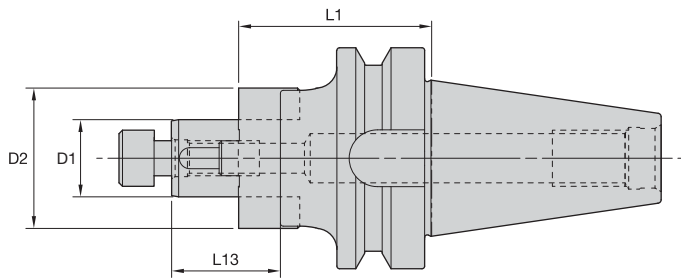
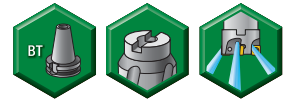
Supplied with lock screw and drive keys.

Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.

Lock screw wrench not included.

For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



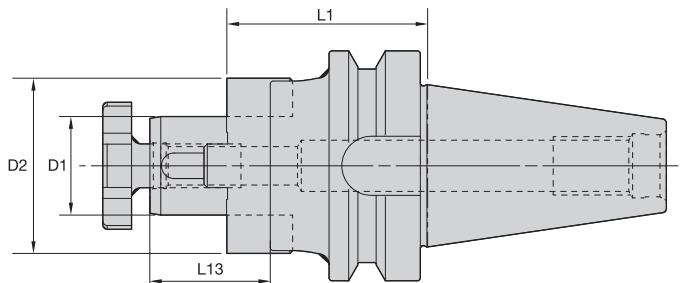
BT40 Shank Tools

ERICKSON

■ CS MM-BT Form AD



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1191713	BT40CS16055M	16	32	55	27	MS1294	6mm	CDR16M	CDK16M	1,15
1191714	BT40CS16100M	16	32	100	27	MS1294	6mm	CDR16M	CDK16M	1,41
1191715	BT40CS22055M	22	40	55	31	MS1234	8mm	CDR22M	CDK22M	1,28
1191716	BT40CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	2,16

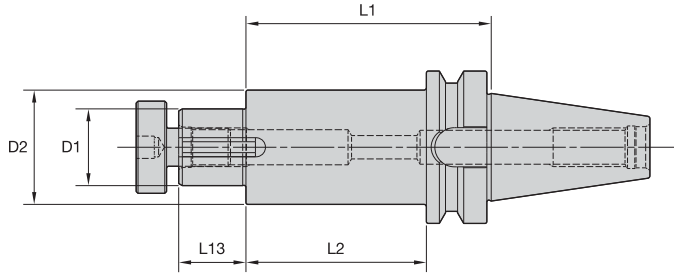


■ CS Lock MM-BT Form AD



order number	catalog number	D1	D2	L1	L13	lock screw	lock screw wrench	combi driver ring	combi drive key	kg
1191717	BT40CS27055M	27	48	55	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,47
1191718	BT40CS27150M	27	48	150	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	2,73
1191719	BT40CS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,80
1191720	BT40CS32150M	32	58	150	38	KLS32M	SMW32M	CDR32M	CDK32M	3,62
1191721	BT40CS40080M	40	70	80	41	KLS40M	SMW40M	CDR40M	CDK40M	2,75

NOTE: Do not overtighten lock screw.
Supplied with lock screw, combi drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



BT40 Shank Tools

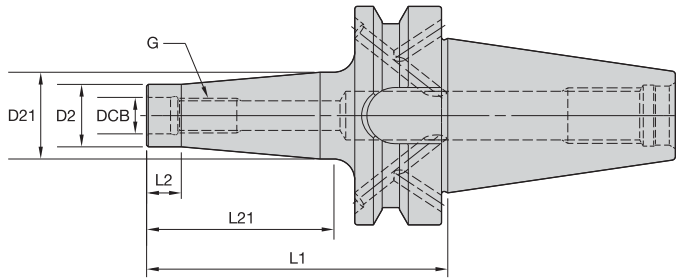
ERICKSON™

■ SA IN-BT Form AD



order number	catalog number	D1	D2	L1	L13	L2	lock screw	wrench size lock screw	drive key	lbs
1026219	BT40SA100400	1	1.61	4.00	.94	2.94	KLS10	5/16	DWG SDK100106	3.99
1026220	BT40SA125400	1 1/4	1.86	4.00	1.09	2.94	KLS12	5/16	DWG SDK125119	4.86

*NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.
Interchangeable coolant style lock screws are available and must be ordered separately; see page J26.*



BT40 Shank Tools

ERICKSON

■ ST-BT Form B/AD

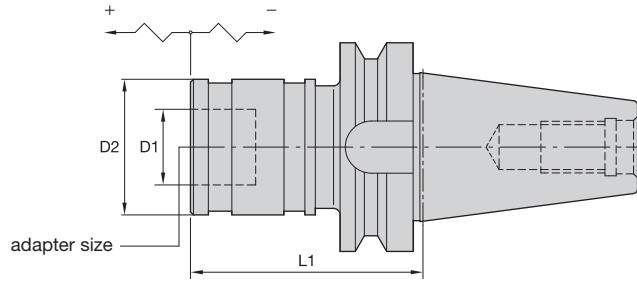
order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4066159	BT40BST06047M	6,5	M6	10	—	47	14	—	0,94
4066160	BT40BST06067M	6,5	M6	10	13	67	10	34	0,96
4066161	BT40BST06087M	6,5	M6	10	20	87	10	54	1,01
4066162	BT40BST06107M	6,5	M6	10	23	107	10	74	1,06
4066303	BT40BST08047M	8,5	M8	13	—	47	14	—	0,95
4066304	BT40BST08067M	8,5	M8	13	15	67	10	34	0,99
4066305	BT40BST08087M	8,5	M8	13	23	87	10	54	1,04
4066306	BT40BST08107M	8,5	M8	13	23	107	10	74	1,07
4066307	BT40BST10047M	10,5	M10	18	—	47	14	—	0,98
4066308	BT40BST10067M	10,5	M10	18	20	67	10	34	1,02
4066309	BT40BST10087M	10,5	M10	18	25	87	10	54	1,07
4066310	BT40BST10107M	10,5	M10	18	28	107	10	74	1,20
4066311	BT40BST12047M	12,5	M12	21	—	47	14	—	0,98
4066312	BT40BST12067M	12,5	M12	21	24	67	10	34	1,04
4066313	BT40BST12087M	12,5	M12	21	24	87	10	54	1,10
4066314	BT40BST12107M	12,5	M12	21	31	107	10	74	1,25
4066315	BT40BST12127M	12,5	M12	21	31	127	10	94	1,32
4066316	BT40BST16047M	17,0	M16	29	—	47	14	—	1,01
4066317	BT40BST16067M	17,0	M16	29	—	67	34	—	1,10
4066318	BT40BST16087M	17,0	M16	29	34	87	10	54	1,25
4066319	BT40BST16107M	17,0	M16	29	34	107	10	74	1,36
4066320	BT40BST16127M	17,0	M16	29	39	127	10	94	1,58

NOTE: For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT40 Shank Tools

Tap Chucks RC Tension and Compression • RC Solid



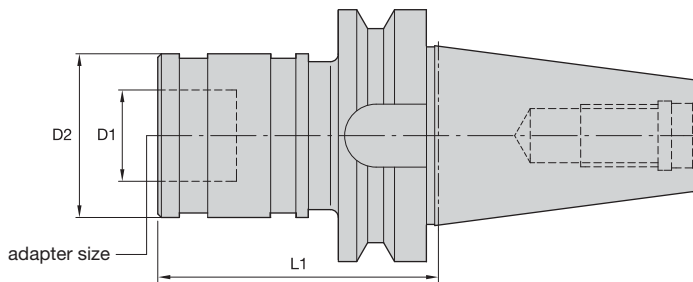
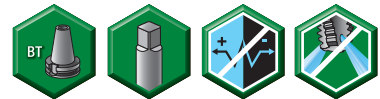
BT40 Shank Tools

ERICKSON

RC-BT Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	tension	compression	kg
			mm	in						
1125829	BT40RC1067M	1	M1 - M14	#0 - 9/16	19	36	67	7,5	7,5	2,00
1125812	BT40RC2094M	2	M5 - M24	5/16 - 7/8	31	53	94	12,5	12,5	2,20

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

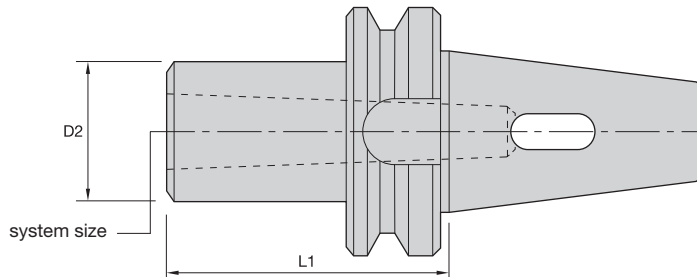


ERICKSON

STRC-BT Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	kg
			mm	in				
1778911	BT40STRC1074M	1	M1 - M14	#0 - 9/16	19	36	74	1,40
1778973	BT40STRC2089M	2	M5 - M24	5/16 - 7/8	31	53	89	1,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



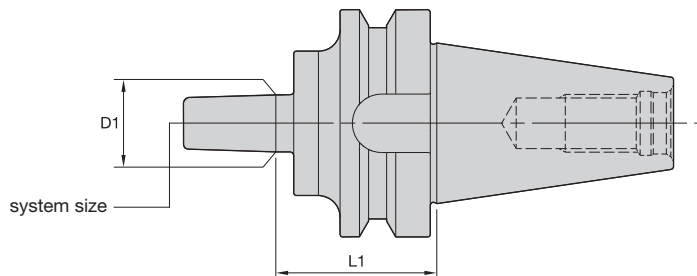
BT40 Shank Tools

ERICKSON

■ MT-BT Form A

order number	catalog number	system size	D2	L1	kg
1156364	BT40MT1050M	1	25	50	1,01
1191735	BT40MT2050M	2	32	50	1,06
1191736	BT40MT3070M	3	40	70	1,13
1191737	BT40MT4095M	4	48	95	1,33

NOTE: For retention knobs; see page J33.

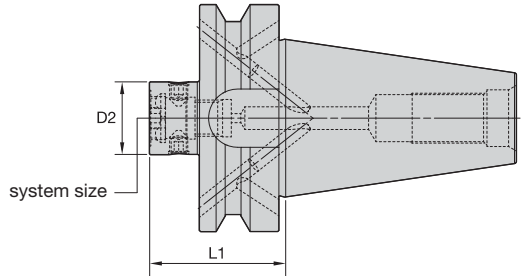
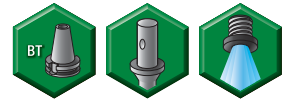


ERICKSON

■ JT-BT Form A

order number	catalog number	system size	D1	L1	kg
1156363	BT40JT33045M	33	15,85	45	1,12

NOTE: For retention knobs; see page J33.

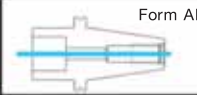










BT40 Shank Tools

■ RFX-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860676	BT40BRFX185060M	RFX185	19	60	3mm	8	1,00
3860677	BT40BRFX245060M	RFX245	25	60	3mm	8	1,10
3860678	BT40BRFX320060M	RFX320	32	60	4mm	12	1,10
3860679	BT40BRFX420060M	RFX420	42	60	5mm	20	1,20
3860680	BT40BRFX550065M	RFX550	55	65	6mm	25	1,30

NOTE: Do not overtorque actuation screw; use torque recommendations referenced above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

 <p>Form AD</p>					
 <p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>

WIN WITH WIDIA™



KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

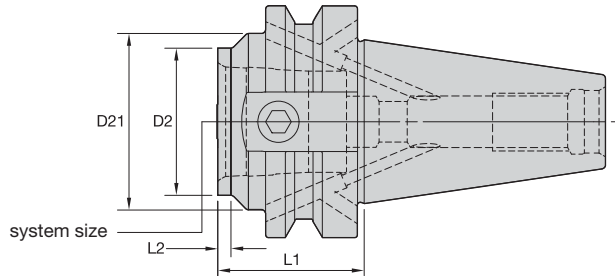
With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

BT40 Shank Tools

KM™ Modular Adapters



BT40 Shank Tools



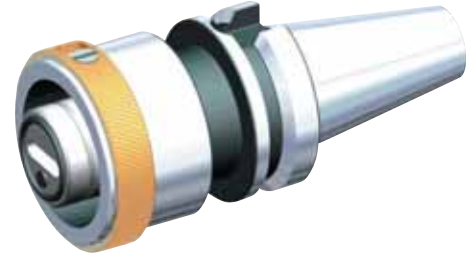
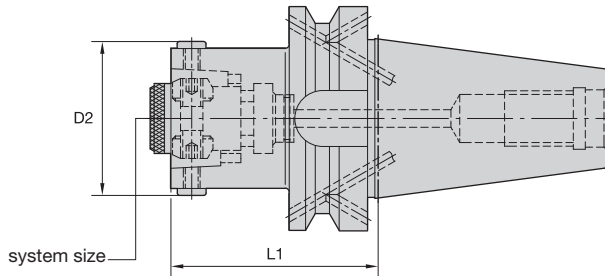
■ KM-BT Form B/AD



order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3783935	BT40BKM32040M	KM32	32	40	40	3	KM32PKG3L	5mm	8-11	1,01
3783945	BT40BKM32090M	KM32	32	—	90	63	KM32PKG3S	5mm	8-11	1,25
3783946	BT40BKM40040M	KM40	40	48	40	4	KM40PKG3L	6mm	12-16	1,03
3783947	BT40BKM40100M	KM40	40	—	100	73	KM40PKG3S	6mm	12-16	1,52
3783948	BT40BKM50060M	KM50	50	—	60	33	KM50PKG3S	10mm	27-34	1,26
3783949	BT40BKM50120M	KM50	50	—	120	93	KM50PKG3S	10mm	27-34	2,11

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



BT40 Shank Tools

ERICKSON

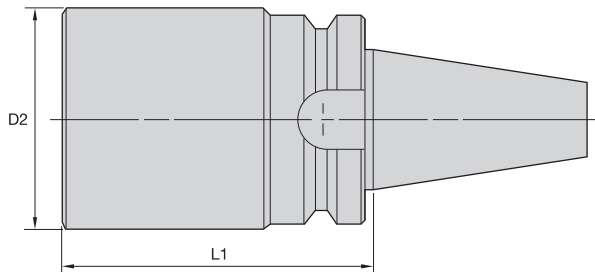
■ HSK-BT Form B/AD

order number	catalog number	system size	system size		wrench size		
			D2	L1	actuation screw	Nm	kg
1519684	BT40BHSK32050M	HSK32	37	50	3mm	6	1,00
1519685	BT40BHSK40060M	HSK40	45	60	3mm	8	1,10
1499750	BT40BHSK50070M	HSK50	55	70	4mm	15	1,10
1519688	BT40BHSK63075M	HSK63	70	75	5mm	20	1,40

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

Form AD	✓	✗	✗	✗	✗
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

- Machinable front 20–30 RW C.



ERICKSON

■ BB-BT Form A

order number	catalog number	D2	L1	kg
1258120	BT40BB063280M	63	280	7,12
1258122	BT40BB104200M	104	200	11,77

NOTE: For retention knobs, see page J33.

Erickson™ BT V-Flange Shank Tooling System • **BT50 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

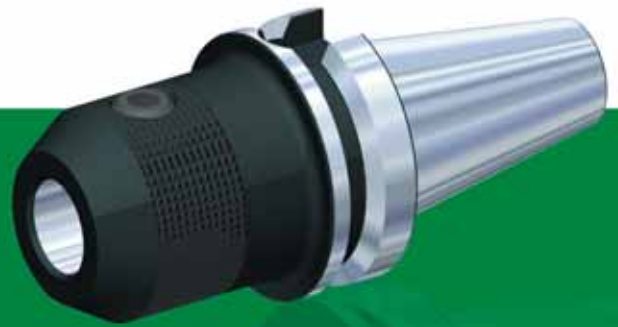
BT50



BT — JIS B6339 Shank

NOTE: Inherent balance conditions — all features are symmetrical.

For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



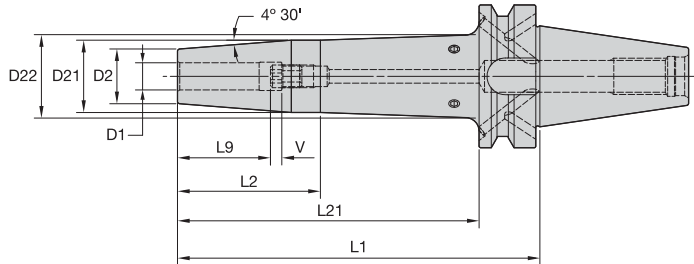
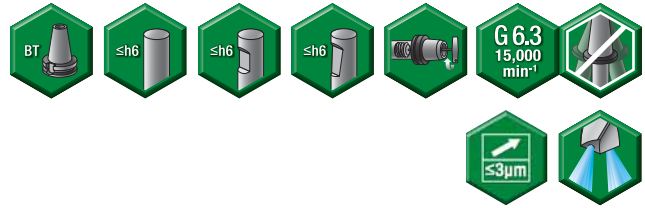
- JIS B 6339 7/24 taper.
- Standard M24 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

BT50 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3782149	BT50BHPVTT06100M	6	21	27	—	100	62	—	26	10	TTSS05014M	2,5mm	3,69
3782150	BT50BHPVTT06160M	6	21	27	32	160	50	122	26	10	TTSS05014M	2,5mm	4,01
3782151	BT50BHPVTT08100M	8	21	27	—	100	62	—	26	10	TTSS06014M	3mm	3,68
3782152	BT50BHPVTT08160M	8	21	27	32	160	50	122	26	10	TTSS06014M	3mm	4,00
3782153	BT50BHPVTT10100M	10	24	32	—	100	62	—	31	10	TTSS08014M	4mm	3,75
3782154	BT50BHPVTT10160M	10	24	32	36	160	63	122	31	10	TTSS08014M	4mm	4,16
3615394	BT50BHPVTT12100M	12	24	32	—	100	63	—	36	10	TTSS10014M	5mm	3,73
3615395	BT50BHPVTT12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	4,14
3615396	BT50BHPVTT14100M	14	27	34	—	100	62	—	36	10	TTSS10014M	5mm	3,78
3615397	BT50BHPVTT14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	4,26
3615398	BT50BHPVTT16100M	16	27	34	—	100	62	—	39	10	TTSS12014M	6mm	3,75
3615399	BT50BHPVTT16160M	16	27	34	39	160	56	122	39	10	TTSS12014M	6mm	4,22
3615400	BT50BHPVTT18100M	18	33	41	—	100	62	—	39	10	TTSS12014M	6mm	3,90
3615401	BT50BHPVTT18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	4,58
3615402	BT50BHPVTT20100M	20	33	41	—	100	62	—	41	10	TTSS16014M	8mm	3,87
3615403	BT50BHPVTT20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	4,53
3615404	BT50BHPVTT25100M	25	44	52	—	100	62	—	47	10	TTSS16014M	8mm	4,15
3615405	BT50BHPVTT32100M	32	44	52	—	100	62	—	51	10	TTSS16014M	8mm	4,00

(continued)



(TT GP HPV BT Form B/AD continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

■ TT GP HPV IN-BT Form B/AD


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3782155	BT50BHPVTT025394	1/4	.83	1.06	3.94	2.44	—	1.02	.39	TTSS05014M	2,5mm	8.14
3782156	BT50BHPVTT025787	1/4	.83	1.06	7.87	1.97	6.38	1.02	.39	TTSS05014M	2,5mm	9.42
3782157	BT50BHPVTT031394	5/16	.83	1.06	3.94	2.44	—	1.02	.39	TTSS06014M	3mm	8.12
3782158	BT50BHPVTT031787	5/16	.83	1.06	7.87	1.97	6.38	1.02	.39	TTSS06014M	3mm	9.41
3782159	BT50BHPVTT038394	3/8	.95	1.26	3.94	2.44	—	1.22	.39	TTSS08014M	4mm	8.26
3782160	BT50BHPVTT038787	3/8	.95	1.26	7.87	2.48	6.38	1.22	.39	TTSS08014M	4mm	9.92
3782161	BT50BHPVTT044394	7/16	.95	1.26	3.94	2.44	—	1.42	.39	TTSS10014M	5mm	8.24
3615382	BT50BHPVTT050394	1/2	.95	1.26	3.94	2.44	—	1.42	.39	TTSS10014M	5mm	8.21
3615383	BT50BHPVTT050787	1/2	.95	1.26	7.87	2.48	6.38	1.42	.39	TTSS10014M	5mm	9.87
3615384	BT50BHPVTT062394	5/8	1.06	1.34	3.94	2.44	—	1.54	.39	TTSS12014M	6mm	8.28
3615385	BT50BHPVTT062787	5/8	1.06	1.34	7.87	2.20	6.38	1.54	.39	TTSS12014M	6mm	10.14
3615386	BT50BHPVTT075394	3/4	1.30	1.61	3.94	2.44	—	1.61	.39	TTSS16014M	8mm	8.55
3615387	BT50BHPVTT075787	3/4	1.30	1.65	7.87	2.72	6.38	1.61	.39	TTSS16014M	8mm	11.17
3615388	BT50BHPVTT088394	7/8	1.30	1.61	3.94	2.44	—	1.61	.39	TTSS16014M	8mm	8.46
3615389	BT50BHPVTT088787	7/8	1.30	1.65	7.87	2.72	6.38	1.61	.39	TTSS16014M	8mm	11.08
3615390	BT50BHPVTT100394	1	1.73	2.05	3.94	2.44	—	1.85	.39	TTSS16014M	8mm	9.14
3615391	BT50BHPVTT100787	1	1.73	2.08	7.87	2.72	6.38	1.85	.39	TTSS16014M	8mm	13.21
3615392	BT50BHPVTT125394	1 1/4	1.73	2.05	3.94	2.44	—	2.01	.39	TTSS16014M	8mm	8.82
3615393	BT50BHPVTT125787	1 1/4	1.73	2.08	7.87	2.72	6.38	2.01	.39	TTSS16014M	8mm	12.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

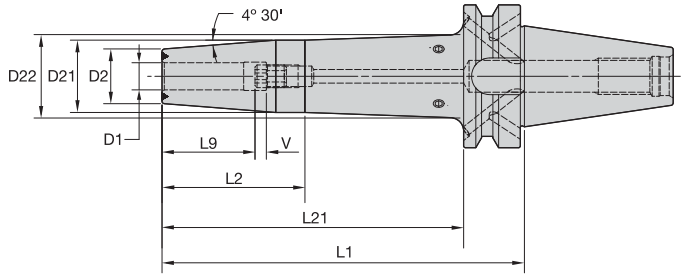
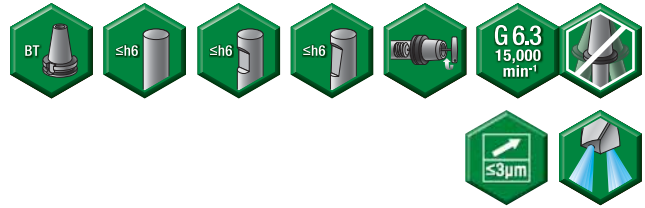
Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT50 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT HT HPV MM-BT Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3615487	BT50BHPVTTH12100M	12	24	32	—	100	62	—	36	10	TTSS10014M	5mm	3,73
3615488	BT50BHPVTTH12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	4,15
3615489	BT50BHPVTTH14100M	14	27	34	—	100	62	—	36	10	TTSS10014M	5mm	3,78
3615490	BT50BHPVTTH14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	4,26
3615491	BT50BHPVTTH16100M	16	27	34	—	100	62	—	39	10	TTSS12014M	6mm	3,76
3615492	BT50BHPVTTH16160M	16	27	34	39	160	56	122	39	10	TTSS12014M	6mm	4,23
3615493	BT50BHPVTTH18100M	18	33	41	—	100	62	—	39	10	TTSS12014M	6mm	3,90
3615494	BT50BHPVTTH18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	4,58
3615495	BT50BHPVTTH20100M	20	33	41	—	100	62	—	41	10	TTSS16014M	8mm	3,87
3615496	BT50BHPVTTH20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	4,54
3615497	BT50BHPVTTH25100M	25	44	52	—	100	62	—	47	10	TTSS16014M	8mm	4,16
3615498	BT50BHPVTTH32100M	32	44	52	—	100	62	—	51	10	TTSS16014M	8mm	4,00

(continued)

(TT HT HPV BT Form B/AD continued)

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

TT HT HPV IN-BT Form B/AD


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3615474	BT50BHPVTTH050394	1/2	.95	1.26	3.94	2.44	—	1.42	.39	TTSS10014M	5mm	8.21
3615475	BT50BHPVTTH050787	1/2	.95	1.26	7.87	2.48	6.38	1.42	.39	TTSS10014M	5mm	9.87
3615476	BT50BHPVTTH062394	5/8	1.06	1.34	3.94	2.44	—	1.54	.39	TTSS12014M	6mm	8.28
3615477	BT50BHPVTTH062787	5/8	1.06	1.34	7.87	2.20	6.38	1.54	.39	TTSS12014M	6mm	10.14
3615479	BT50BHPVTTH075394	3/4	1.30	1.61	3.94	2.44	—	1.61	.39	TTSS16014M	8mm	8.55
3615480	BT50BHPVTTH075787	3/4	1.30	1.65	7.87	2.72	6.38	1.61	.39	TTSS16014M	8mm	11.17
3615481	BT50BHPVTTH088394	7/8	1.30	1.61	3.94	2.44	—	1.61	.39	TTSS16014M	8mm	8.46
3615482	BT50BHPVTTH088787	7/8	1.30	1.65	7.87	2.72	6.38	1.61	.39	TTSS16014M	8mm	11.08
3615483	BT50BHPVTTH100394	1	1.73	2.05	3.94	2.44	—	1.85	.39	TTSS16014M	8mm	9.14
3615484	BT50BHPVTTH100787	1	1.73	2.08	7.87	2.72	6.38	1.85	.39	TTSS16014M	8mm	13.21
3615485	BT50BHPVTTH125394	1 1/4	1.73	2.05	3.94	2.44	—	2.01	.39	TTSS16014M	8mm	8.82
3615486	BT50BHPVTTH125787	1 1/4	1.73	2.08	7.87	2.72	6.38	2.01	.39	TTSS16014M	8mm	12.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

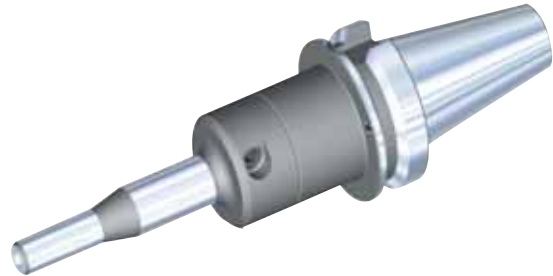
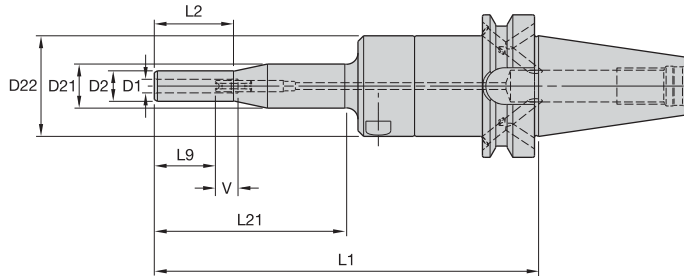
Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

BT50 Shank Tools

 Form AD					
 Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT50 Shank Tools

ERICKSON

■ HC Slim-T MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019242	BT50BHCSLT06200M	6	13,5	19,5	44	200	35	85	27	10	4,55
3019243	BT50BHCSLT08200M	8	15,5	19,5	44	200	35	85	27	10	4,56
3019244	BT50BHCSLT10200M	10	17,5	44,5	—	200	85	162	31	10	4,55

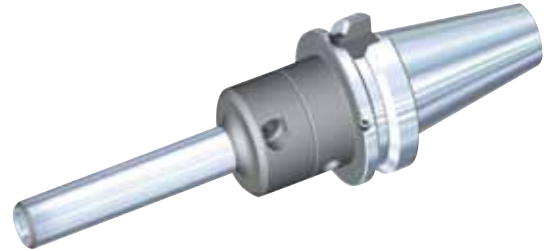
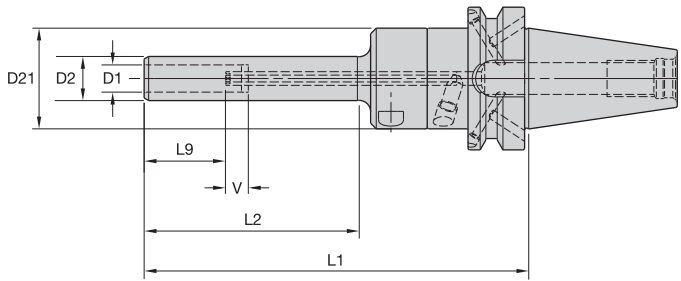
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw
BT50BHCSLT06200M	170.135	5mm	170.002	2,5mm
BT50BHCSLT08200M	170.135	5mm	170.002	2,5mm
BT50BHCSLT10200M	170.135	5mm	170.003	3mm

(continued)

(HC Slim BT continued)



BT50 Shank Tools

■ HC Slim MM-BT Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634540	BT50BHCSL12200M	12	19,5	44,5	200	95	36	10	4,34
2634541	BT50BHCSL14200M	14	21,5	52,5	200	95	36	10	4,66
2634542	BT50BHCSL16200M	16	23,5	52,5	200	95	39	10	4,68
2634573	BT50BHCSL18200M	18	25,5	52,5	200	95	39	10	4,73
2634574	BT50BHCSL20200M	20	27,5	52,5	200	95	41	10	4,77

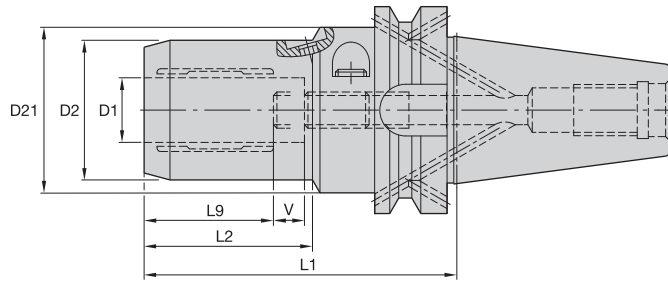
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
BT50BHCSL12200M	170.135	5mm	170.002	2,5mm
BT50BHCSL14200M	170.135	5mm	170.002	2,5mm
BT50BHCSL16200M	170.135	5mm	170.002	2,5mm
BT50BHCSL18200M	170.135	5mm	170.002	2,5mm
BT50BHCSL20200M	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrenches must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



BT50 Shank Tools

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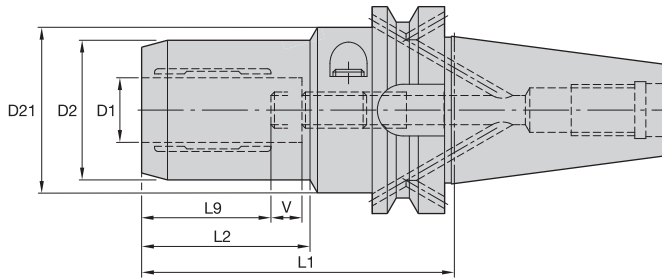
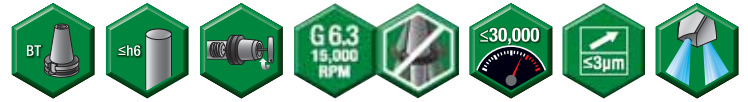
■ HC MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	kg
1315352	BT50BHC06090M	6	25,7	50	90	33	27	10	170.135	5mm	170.002	2,5mm	2,50
1315353	BT50BHC08090M	8	27,7	50	90	34	27	10	170.135	5mm	170.002	2,5mm	2,50
1315354	BT50BHC10095M	10	29,7	50	95	39	31	10	170.135	5mm	170.002	2,5mm	2,50
1315355	BT50BHC12100M	12	31,6	50	100	45	36	10	170.135	5mm	170.002	2,5mm	2,50
1315356	BT50BHC14100M	14	33,6	50	100	42	36	10	170.135	5mm	170.003	3mm	3,00
1315357	BT50BHC16100M	16	37,6	50	100	47	39	10	170.135	5mm	170.003	3mm	3,00
1315358	BT50BHC18100M	18	39,6	50	100	47	39	10	170.135	5mm	170.003	3mm	3,00
1315359	BT50BHC20105M	20	41,6	50	105	48	41	10	170.135	5mm	170.003	3mm	3,00
1315360	BT50BHC25115M	25	49,6	63	115	51	46	10	170.136	6mm	170.004	4mm	4,00
1315778	BT50BHC32120M	32	59,9	63	120	59	50	10	170.136	6mm	170.004	4mm	4,00

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



BT50 Shank Tools

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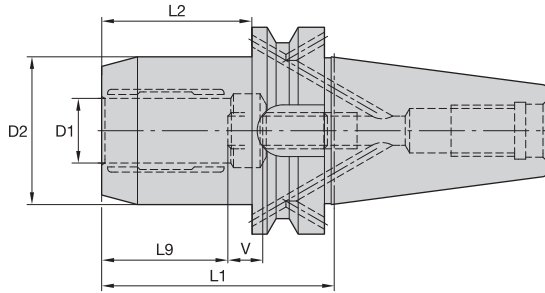
■ HC Trend IN-HSK Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	lbs
2263123	BT50BHCT025354	1/4	1.01	1.96	3.54	1.38	1.06	.39	170.135	5mm	170.003	3mm	8.39
2263124	BT50BHCT038374	3/8	1.17	1.96	3.74	1.50	1.22	.39	170.135	5mm	170.003	3mm	8.57
2263125	BT50BHCT050394	1/2	1.24	1.96	3.94	1.57	1.42	.39	170.135	5mm	170.003	3mm	8.70
2263126	BT50BHCT062394	5/8	1.48	1.96	3.94	1.83	1.54	.39	170.135	5mm	170.003	3mm	8.78
2263127	BT50BHCT075413	3/4	1.64	1.96	4.13	1.89	1.61	.39	170.135	5mm	170.005	5mm	9.03
2263128	BT50BHCT100453	1	1.96	2.47	4.53	2.01	1.85	.39	170.136	6mm	170.005	5mm	10.01
2263129	BT50BHCT125472	1 1/4	2.35	2.47	4.72	2.32	2.01	.39	170.136	6mm	170.005	5mm	10.66

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

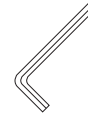
Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT50 Shank Tools

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■ HC Basic MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	kg
1599688	BT50BHCB20105M	20	49,9	105	67	41	10	170.135	5mm	170.005	5mm	4,30

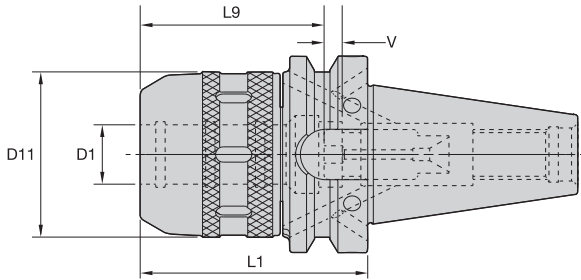
■ HC Basic IN-BT Form B/AD



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	lbs
2263082	BT50BHCB075413	3/4	1.96	4.13	2.64	1.61	.39	170.135	5mm	170.005	5mm	9.52

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrenches must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

	Form AD				
	Form B			40 (2x) MS2221S	2,5mm
				50 (2x) MS1296S	3mm



BT50 Shank Tools

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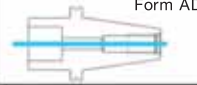








■ HPMC MM-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578563	BT50BHPMC20105M	20	53	105	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	4,40
3578564	BT50BHPMC20165M	20	53	165	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	5,30
3578565	BT50BHPMC25105M	25	61	105	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	4,60
3578566	BT50BHPMC25165M	25	61	165	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	5,80
3578567	BT50BHPMC32105M	32	74	105	75	20	PSW68M	MCSS16040M	2,5mm & 5mm	4,90
3578568	BT50BHPMC32165M	32	74	165	75	20	PSW68M	MCSS16040M	2,5mm & 5mm	6,50

■ HPMC IN-BT Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100418	BT50BHPMC075413	3/4	2.09	4.13	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	9.70
3100419	BT50BHPMC100413	1	2.40	4.13	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	10.20
3100420	BT50BHPMC125413	1 1/4	2.91	4.13	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	11.80

NOTE: Milling chuck technical section, see page K64.
 Supplied with locknut and stop screw.
 Locknut wrench not included.
 Optional M6-1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
 Reduction sleeves are available and must be ordered separately; see page I6.
 For retention knobs, see page J33.

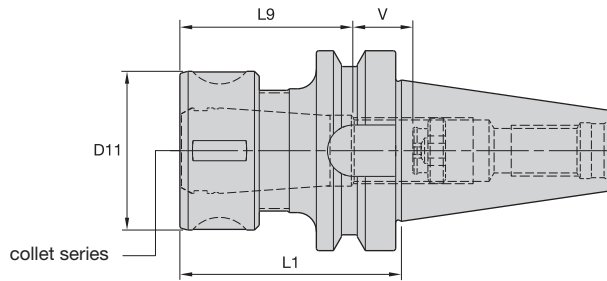
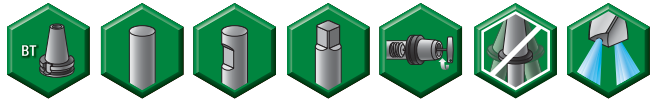
					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT50 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



BT50 Shank Tools

Collet Capacity

TG collet series	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2



■ TG Round-BT Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156372	BT50TG100090M	TG100	60	90	70	53	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	3,96
1188173	BT50TG100150M	TG100	60	150	70	88	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	5,11
1188172	BT50TG100200M	TG100	60	200	70	88	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	6,08
1191801	BT50TG150100M	TG150	85	100	83	39	LNA150M	HSW80M	271	SS162062G	4mm & 5/32	4,42
1258570	BT50TG150150M	TG150	85	150	83	69	LNA150M	HSW80M	271	SS162062G	4mm & 5/32	6,42

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

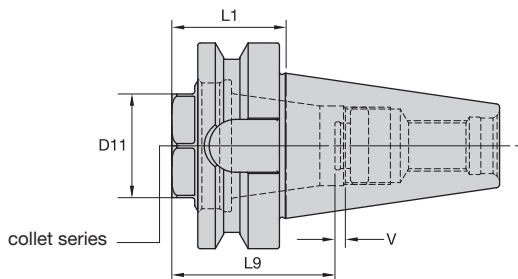
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

- Grip (2:1 advantage).



BT50 Shank Tools

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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■ ER Short-BT Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2978766	BT50SER32046M	ER32	36	46	50	28	LNECSER32M	OEW32M	136	SS094041G	4mm & 5/32	3,37
2978767	BT50SER40046M	ER40	46	46	57	21	LNECSER40M	OEW168	176	SS112041G	4mm & 5/32	3,19

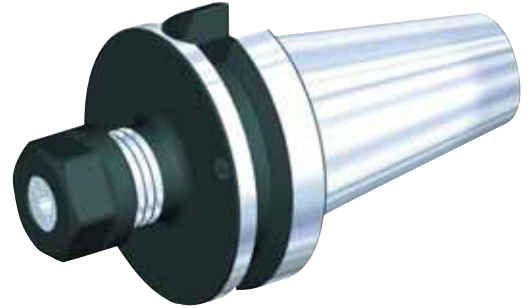
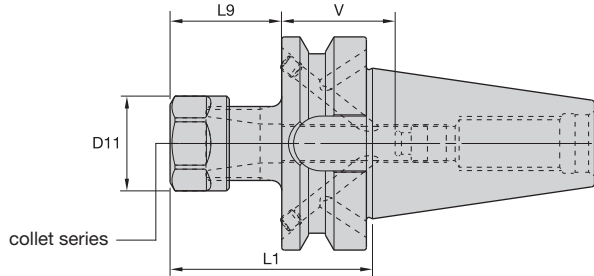
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 For retention knobs, see page J33.

BT50 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



BT50 Shank Tools

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ER Hex-BT Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1586520	BT50BER16100M	ER16	28	100	32	48	3,76
1871539	BT50BER16150M	ER16	28	150	32	48	3,93
3847515	BT50BER20100M	ER20	34	100	37	43	3,81
3847516	BT50BER20150M	ER20	34	150	37	63	4,07

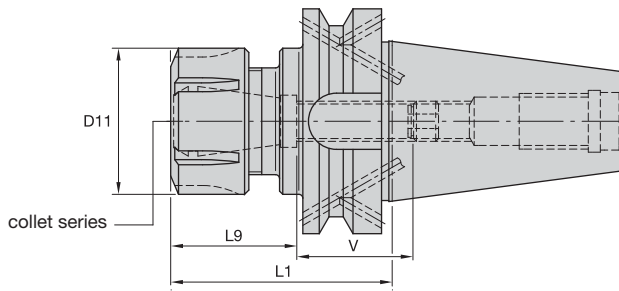
Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BT50BER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BT50BER16150M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BT50BER20100M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BT50BER20150M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER BT Form B/AD continued)



BT50 Shank Tools

■ ER Round-BT Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1871540	BT50BER25070M	ER25	42	70	40	60	3,67
1871541	BT50BER25150M	ER25	42	150	40	60	4,36
1587031	BT50BER32070M	ER32	50	70	46	38	3,65
1729881	BT50BER32150M	ER32	50	150	46	54	4,64
1556433	BT50BER40080M	ER40	63	80	52	48	3,79
1187371	BT50BER40150M	ER40	63	150	52	48	5,32
3847517	BT50BER40200M	ER40	63	200	52	48	6,33

■ Spare Parts

catalog number	locknut	wrench	stop screw	wrench size stop screw
BT50BER25070M	LNSER25M	ER25WM	SS075041G	4mm & 5/32
BT50BER25150M	LNSER25M	ER25WM	SS075041G	4mm & 5/32
BT50BER32070M	LNSER32M	ER32WM	SS094041G	4mm & 5/32
BT50BER32150M	LNSER32M	ER32WM	SS094041G	4mm & 5/32
BT50BER40080M	LNSER40M	ER40WM	SS112041G	4mm & 5/32
BT50BER40150M	LNSER40M	ER40WM	SS112041G	4mm & 5/32
BT50BER40200M	LNSER40M	ER40WM	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

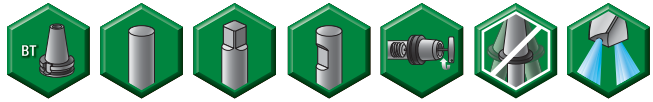
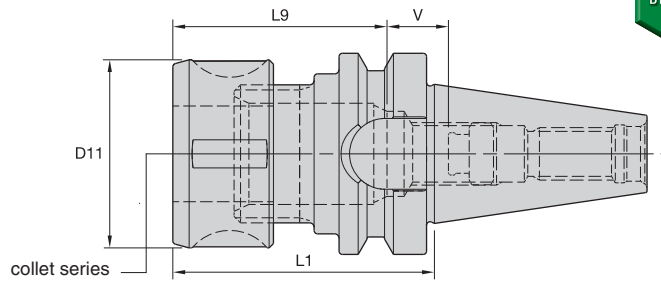
Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT50 Shank Tools

DA 08 Series Double-Angle Collet Chucks • Drill Chucks



• Grip 1:1.



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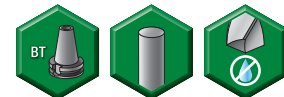
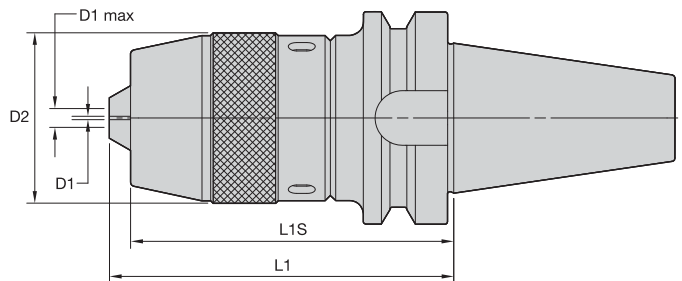
■ DA Round-BT form AD

order number	catalog number	collet series	D11	L1	L9	V	kg	Collet Capacity			
								mm		inch	
								min	max	min	max
1258441	BT50DA188200M	DA180	1.69	7.87	1.97	1.81	5,00	2,2	20	1/64	3/4
1197722	BT50DA188150M	DA180	1.69	5.91	1.97	1.81	4,50				
1191767	BT50DA188070M	DA180	1.69	2.76	1.97	1.85	3,70				

■ Spare Parts

catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
BT50DA188200M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32
BT50DA188150M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32
BT50DA188070M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.



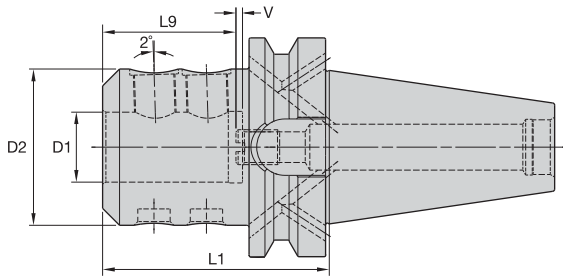
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■ DC-BT Form A

order number	catalog number	D1		D1 max		D2	L1	L1S	wrench	Nm	kg
		mm	in	mm	in						
3583294	BT50DC13110M	1,0	.039	13,0	.512	51	122	110	PSW45M	55	4,44

NOTE: Tighten to the recommended tightening torque.
 Locking wrench not supplied.
 For retention knobs, see page J33.

BT50 Shank Tools



BT50 Shank Tools

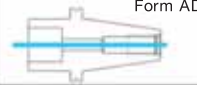










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■ WN MM-BT Form B/AD



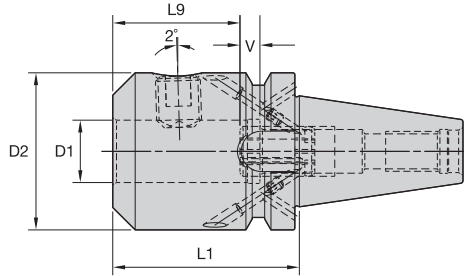
order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1175468	BT50BWN06063M	6	25	63	30	10	SS03M012	3mm	7	571.060	2,5mm	3,63
1300426	BT50BWN08063M	8	28	63	30	10	SS03M014	4mm	15	571.067	3mm	3,64
1137510	BT50BWN10063M	10	35	63	35	10	SS03M018	5mm	25	571.068	4mm	3,69
1137518	BT50BWN12080M	12	42	80	40	10	SS03M023	6mm	35	571.074	5mm	3,92
1137526	BT50BWN14080M	14	44	80	40	10	SS03M023	6mm	35	571.074	5mm	3,95
1137535	BT50BWN16080M	16	48	80	43	10	SS03M025	6mm	50	571.075	6mm	4,02
1137543	BT50BWN18080M	18	50	80	43	10	SS03M025	6mm	50	571.075	6mm	4,05
1137550	BT50BWN20080M	20	52	80	45	10	SS03M026	8mm	95	571.076	6mm	4,06
1137558	BT50BWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.076	6mm	4,80
1137576	BT50BWN32105M	32	72	105	54	10	SS03M029	10mm	160	571.076	6mm	5,15

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BT50 Shank Tools

Tap Chuck Adapters Whistle Notch™ Short • Tap Chuck Adapters



BT50 Shank Tools

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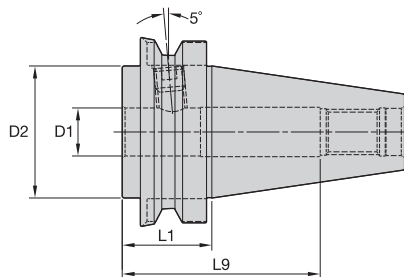
■ SWN MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1134607	BT50BSWN25075M	25	65	75	44	15	SS03M027	10mm	135	571.066	10mm	4,23
1134608	BT50BSWN32075M	32	72	75	46	17	SS03M029	10mm	160	571.066	10mm	4,31

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrenches not included.
 For retention knobs, see page J33.

Form AD	✓				
Form B				40	(2x) MS2221S
				50	(2x) MS1296S



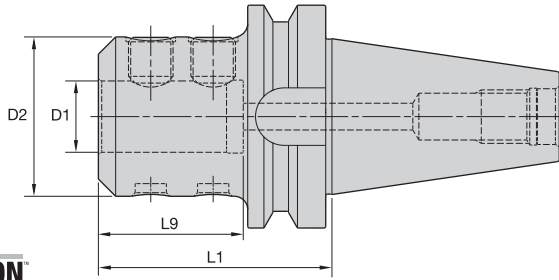
ERICKSON™

■ Tap Chuck Adapter



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	lbs
1017939	BT50TA1187	1	2.75	1.88	4.13	ELS062050PKG	5/16	8.09

NOTE: Do not overtighten drawbar screw.
 Supplied with drawbar screw.
 Draw bar screw wrench not included.
 For retention knobs, see page J33.



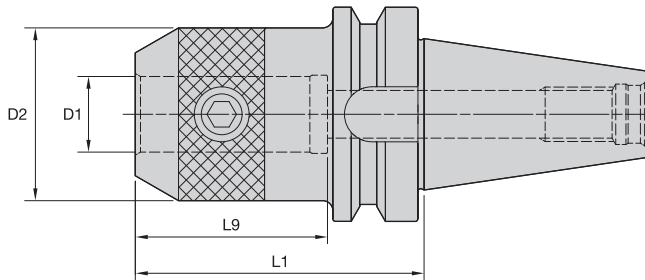
ERICKSON



■ EM MM-BT Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1191769	BT50EM06063M	6	25	63	119	SS03M012	3mm	7	3,57
1258446	BT50EM06150M	6	25	150	206	SS03M012	3mm	7	3,87
1191770	BT50EM08063M	8	28	63	119	SS03M014	4mm	15	3,59
1191771	BT50EM10080M	10	35	80	136	SS03M018	5mm	25	3,82
1258453	BT50EM10100M	10	35	100	156	SS03M018	5mm	25	3,88
1191772	BT50EM12080M	12	42	80	136	SS03M023	6mm	35	3,85
1191773	BT50EM16080M	16	48	80	136	SS03M025	6mm	50	3,96
1191774	BT50EM20080M	20	52	80	136	SS03M026	8mm	95	4,01
1191776	BT50EM25105M	25	65	105	60	SS03M027	10mm	135	4,88
1156369	BT50EM32105M	32	72	105	65	SS03M029	10mm	160	5,11
1191777	BT50EM40120M	40	90	120	75	SS03M029	10mm	160	6,66
1258473	BT50EM50130M	50	100	130	85	—	12mm	200	7,60



■ EM IN-BT Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1258444	BT50EM050295	1/2	1.38	2.95	5.16	ELS044038PKG	7/32	20	8.14
1258447	BT50EM075295	3/4	1.75	2.95	5.16	ELS062050PKG	5/16	70	8.36
1258450	BT50EM100413	1	2.00	4.13	4.49	ELS075056PKG	3/8	110	9.11
1258451	BT50EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	110	10.51
1258456	BT50EM125413	1 1/4	2.50	4.13	2.51	ELS075062PKG	3/8	110	10.23
1258457	BT50EM125600	1 1/4	2.50	6.00	2.51	ELS075062PKG	3/8	110	12.54
1258459	BT50EM150413	1 1/2	2.75	4.13	2.93	ELS075062PKG	3/8	110	10.41
1232393	BT50EM200531	2	3.75	5.31	3.53	ELS100088PKG	1/2	150	16.00

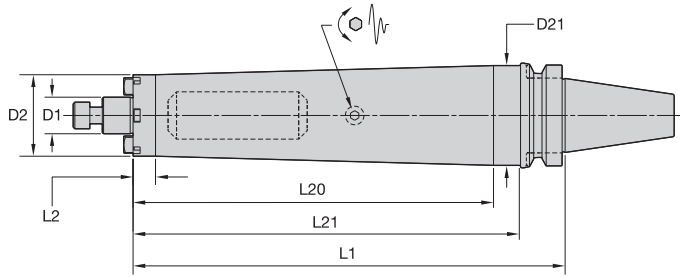
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



BT50 Shank Tools

BT50 Shank Tools

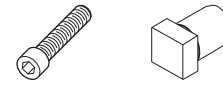
Tunable Shell Mill Adapters with Through Coolant



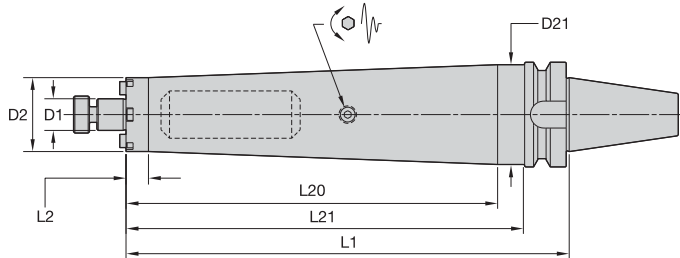
BT50 Shank Tools

ERICKSON

■ SMC TD Cap MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135491	BT50BTDSMC22260M	22	49	70	260	13,5	211,8	222	MS1234	KDK22M	8mm	8,21



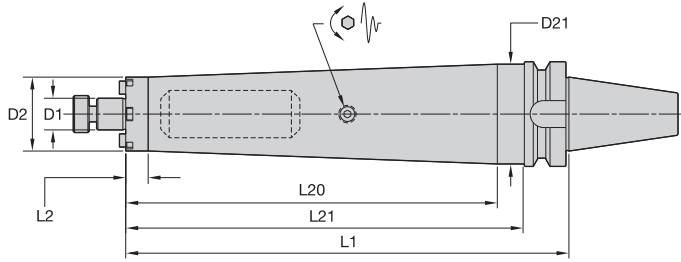
■ SMC TD Lock MM-BT Form B/AD



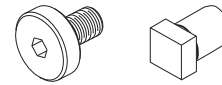
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135492	BT50BTDSMC27320M	27	61	80	320	285	271,8	282	KLSS27M	—	10mm	11,83
4135493	BT50BTDSMC32330M	32	78	—	330	292	—	—	KLSS32M	KDK32M	14mm	16,16

(continued)

(SMC BT Form B/AD continued)



■ SMC TD Lock IN-BT Form A



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135494	BT50BTDSMC0751050	3/4	1.75	2.56	10.5	.53	8.6	9	KLS07	KDK05	1/4	16.73
4135495	BT50BTDSMC1001250	1	2.75	—	12.5	11.00	—	—	KLS10	KDK06	5/16	25.46
4135496	BT50BTDSMC1251300	1 1/4	2.88	—	13.0	11.50	—	—	KLS12	KDK08	5/16	32.71

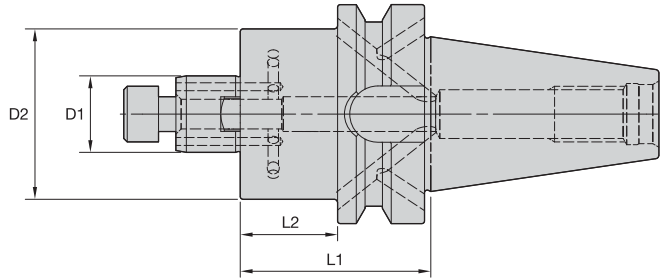
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

BT50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BT50 Shank Tools

Shell Mill Adapters with Through Coolant



BT50 Shank Tools

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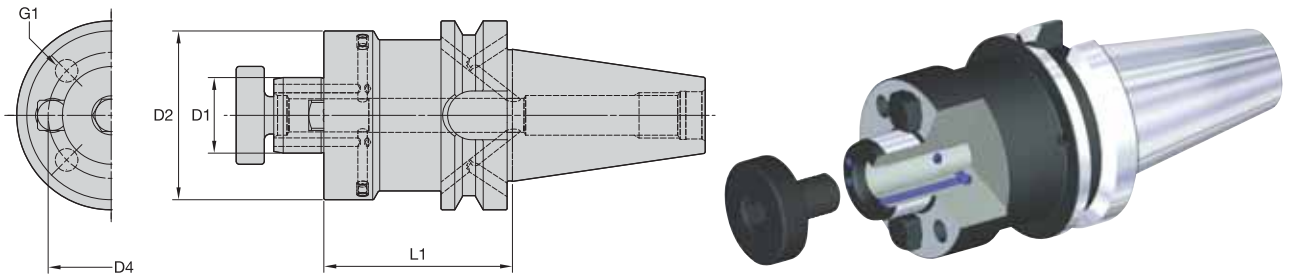
■ SMC Cap MM-BT Form B/AD



order number	catalog number	D1	D2	L1	L2	lock screw	wrench size lock screw	drive key	kg
3750032	BT50BSM2C16045M	16	38	45	7	MS1294	6mm	KDK16M	3,62
3750034	BT50BSM2C16100M	16	38	100	62	MS1294	6mm	KDK16M	4,01
3750036	BT50BSM2C16150M	16	38	150	112	MS1294	6mm	KDK16M	4,41
3750031	BT50BSMC16045M	16	44	45	7	MS1294	6mm	KDK16M	3,63
3750033	BT50BSMC16100M	16	44	100	62	MS1294	6mm	KDK16M	4,18
3750035	BT50BSMC16150M	16	44	150	112	MS1294	6mm	KDK16M	4,71
3750038	BT50BSM2C22045M	22	42	45	7	MS1234	8mm	—	3,63
3750040	BT50BSM2C22100M	22	42	100	62	MS1234	8mm	—	4,12
3750042	BT50BSM2C22150M	22	42	150	112	MS1234	8mm	—	4,56
3750037	BT50BSMC22045M	22	49	45	7	MS1234	8mm	KDK22M	3,66
3750039	BT50BSMC22100M	22	49	100	62	MS1234	8mm	KDK22M	4,37
3750041	BT50BSMC22150M	22	49	150	112	MS1234	8mm	KDK22M	5,00

(continued)

(SMC BT Form B/AD continued)



■ SMC Lock MM-BT Form B/AD



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	kg
3750043	BT50BSMC27045M	27	60	—	—	45	KLSS27M	KDK27M	3,76
3750044	BT50BSMC27100M	27	60	—	—	100	KLSS27M	KDK27M	4,86
3750045	BT50BSMC27150M	27	60	—	—	150	KLSS27M	KDK27M	5,85
3750046	BT50BSMC32045M	32	78	—	—	45	KLSS32M	KDK32M	3,94
3750047	BT50BSMC32100M	32	78	—	—	100	KLSS32M	KDK32M	5,87
3750048	BT50BSMC32150M	32	78	—	—	150	KLSS32M	KDK32M	7,62
3750049	BT50BSMC40050M	40	89	66,7	M12 X 1.75	50	KLSS40M	KDK40M	4,36
3750050	BT50BSMC40100M	40	89	66,7	M12 X 1.75	100	KLSS40M	KDK40M	6,40
3750051	BT50BSMC40150M	40	89	66,7	M12 X 1.75	150	KLSS40M	KDK40M	8,26
3750052	BT50BSMC60090M	60	129	101,6	M16 X 2.0	90	—	KDK60M	8,53

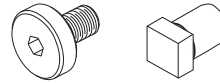
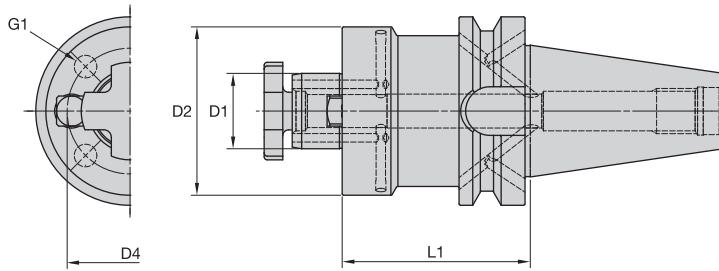
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BT50 Shank Tools

Shell Mill Adapters with Through Coolant



(SMC BT Form B/AD continued)



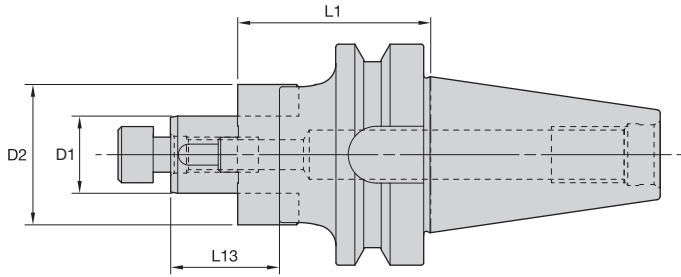
BT50 Shank Tools

SMC Lock IN-BT Form B/AD

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3653805	BT50BSM2C050400	1/2	1.20	—	—	4.00	KLS05	KDK04	3/16	8.50
3653772	BT50BSMC050177	1/2	1.44	—	—	1.77	KLS05	KDK04	3/16	7.87
3653804	BT50BSMC050400	1/2	1.44	—	—	4.00	KLS05	KDK04	3/16	8.81
3653809	BT50BSM2C075400	3/4	1.46	—	—	4.00	KLS07	—	1/4	8.80
3653806	BT50BSMC075177	3/4	1.75	—	—	1.77	KLS07	KDK05	1/4	7.98
3653808	BT50BSMC075400	3/4	1.75	—	—	4.00	KLS07	KDK05	1/4	9.34
3653813	BT50BSM2C100400	1	2.19	—	—	4.00	KLS10	KDK06	5/16	10.22
3653810	BT50BSMC100177	1	2.75	—	—	1.77	KLS10	KDK06	5/16	8.32
3653812	BT50BSMC100400	1	2.75	—	—	4.00	KLS10	KDK06	5/16	11.77
3653814	BT50BSMC100600	1	2.75	—	—	6.00	KLS10	KDK06	5/16	14.86
3653815	BT50BSMC125177	1 1/4	2.88	—	—	1.77	KLS12	KDK08	5/16	8.60
3653816	BT50BSMC125400	1 1/4	2.88	—	—	4.00	KLS12	KDK08	5/16	12.46
3653817	BT50BSMC125600	1 1/4	2.88	—	—	6.00	KLS12	KDK08	5/16	15.92
3653818	BT50BSMC150177	1 1/2	3.63	—	—	1.77	KLS15	KDK10	3/8	9.21
3653819	BT50BSMC150400	1 1/2	3.81	—	—	4.00	KLS15	KDK10	3/8	16.36
3653820	BT50BSMC150600	1 1/2	3.81	—	—	6.00	KLS15	KDK10	3/8	22.68
3653823	BT50BSMC250236	2 1/2	4.88	4.00	.625-11 UNC	2.36	KLS25	KDK16	9/16	14.02
3653821	BT50BSMC200236	2	4.88	—	—	2.36	KLS20	KDK12	9/16	13.20
3653824	BT50BSMC250400	2 1/2	4.88	4.00	.625-11 UNC	4.00	KLS25	KDK16	9/16	19.92
3653822	BT50BSMC200400	2	4.88	4.00	.625-11 UNC	4.00	KLS20	KDK12	9/16	19.01

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knob, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

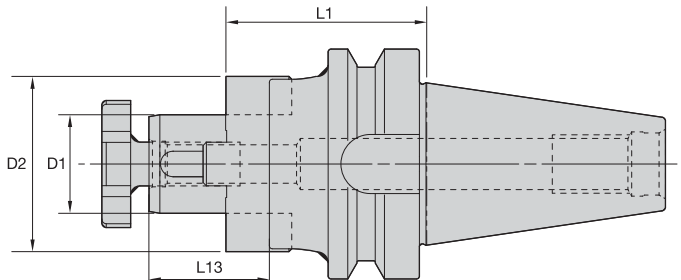


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■ CS Cap MM-BT Form AD



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1258428	BT50CS16070M	16	32	70	27	MS1294	6mm	CDR16M	CDK16M	3,72
1258431	BT50CS16150M	16	32	150	27	MS1294	6mm	CDR16M	CDK16M	4,19
1191760	BT50CS22070M	22	40	70	31	MS1234	8mm	CDR22M	CDK22M	3,87
1258433	BT50CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	4,58
1191761	BT50CS22200M	22	40	200	31	MS1234	8mm	CDR22M	CDK22M	5,05



■ CS Lock MM-BT Form AD

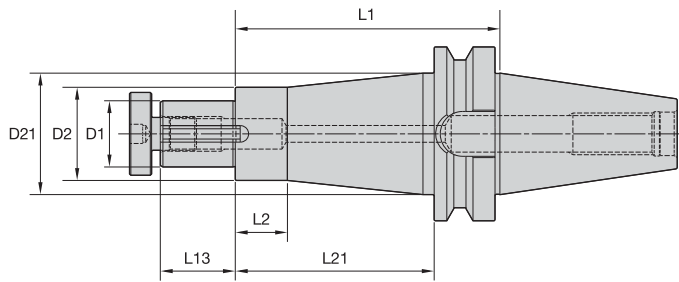


order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key	kg
1191763	BT50CS32070M	32	58	70	38	KLS32M	SMW32M	CDR32M	CDK32M	4,33
1258437	BT50CS32150M	32	58	150	38	KLS32M	SMW32M	CDR32M	CDK32M	5,86
1191764	BT50CS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	4,78
1191765	BT50CS40150M	40	70	150	41	KLS40M	SMW40M	CDR40M	CDK40M	7,17
1258438	BT50CS40200M	40	70	200	41	KLS40M	SMW40M	CDR40M	CDK40M	8,90
1258439	BT50CS50075M	50	90	75	46	KLS50M	SMW50M	CDR50M	CDK50M	7,90
1191766	BT50CS50150M	50	90	150	46	KLS50M	SMW50M	CDR50M	CDK50M	9,20

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.

BT50 Shank Tools

Slotting Cutter Adapters • Screw-On Adapters for Modular Milling Cutters



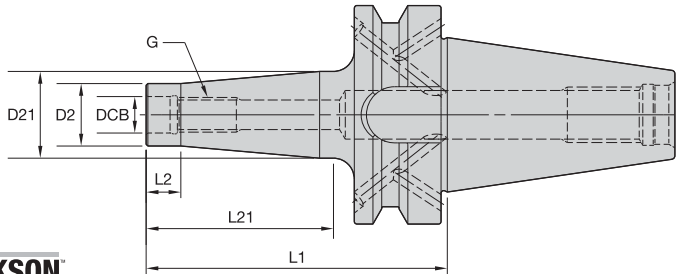
ERICKSON

SA IN-BT Form A



order number	catalog number	D1	D2	D21	L1	L2	L13	L21	lock screw	wrench size lock screw	drive key	lbs
1026221	BT50SA125600	1 1/4	1.86	2.75	6.00	1.10	1.09	4.50	KLS12	5/16	DWG SDK125119	13.22
1026340	BT50SA150600	1 1/2	2.11	2.75	6.00	1.18	1.70	4.50	KLS15	3/8	DWG SDK150175	14.27

NOTE: Do not overtighten lock screw.
 Supplied with lock screw, drive key, and spacer.
 Lock screw wrench not included.
 For retention knobs, see page J33.



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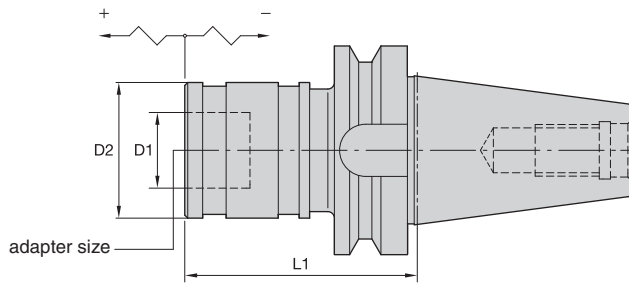
ST-BT Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4067906	BT50BST12087M	12,5	M12	21	24	87	10	43	3,67
4067907	BT50BST12137M	12,5	M12	21	31	137	10	93	3,97
4067908	BT50BST12187M	12,5	M12	21	39	187	10	143	4,34
4067909	BT50BST16087M	17,0	M16	21	34	87	10	43	3,79
4067910	BT50BST16137M	17,0	M16	29	39	137	10	93	4,11
4067911	BT50BST16187M	17,0	M16	29	39	187	10	143	4,53
4067912	BT50BST16237M	17,0	M16	29	49	237	10	193	5,40

NOTE: For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

BT50 Shank Tools

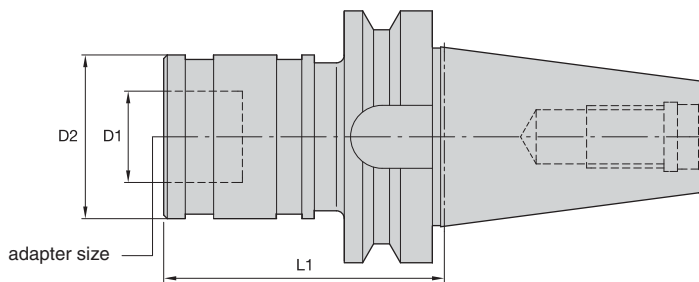


ERICKSON

■ RC-BT Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	tension	compression	kg
			mm	in						
1778908	BT50RC1075M	1	M1 - M14	#0 - 9/16	19	36	73	7,5	7,5	3,10
1127889	BT50RC2102M	2	M5 - M24	5/16 - 7/8	31	53	102	12,5	12,5	3,90
1135816	BT50RC3141M	3	M14 - M27	13/16 - 1 3/8	48	78	141	20,0	20,0	4,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page 176.
For retention knobs, see page J33.



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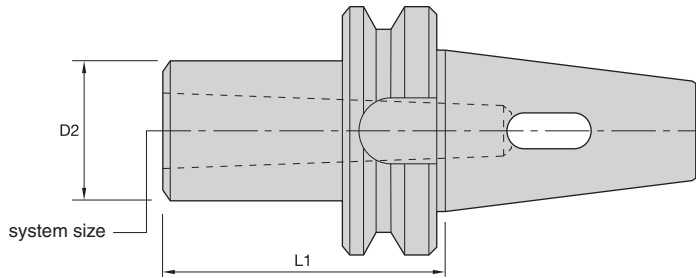
■ STRC-BT Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	kg
			mm	in				
1778974	BT50STRC1074M	1	M1 - M14	#0 - 9/16	19	36	74	3,80
1778975	BT50STRC2089M	2	M5 - M24	5/16 - 7/8	31	53	89	4,00

NOTE: Quick-change tap adapters are available and must be ordered separately; see page 176.
For retention knobs, see page J33.

BT50 Shank Tools

Morse Taper Adapters • Jacobs Taper Adapters



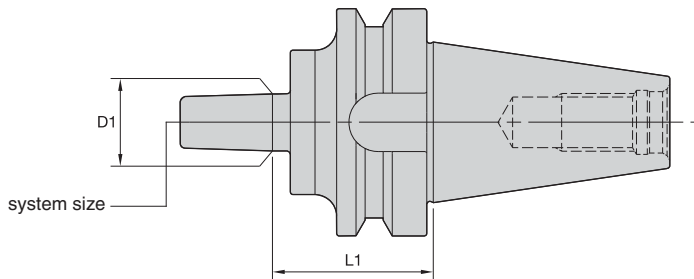
BT50 Shank Tools

ERICKSON

■ MT-BT Form A

order number	catalog number	system size	D2	L1	kg
1191785	BT50MT5105M	5	70	105	4,28

NOTE: For retention knobs, see page J33.

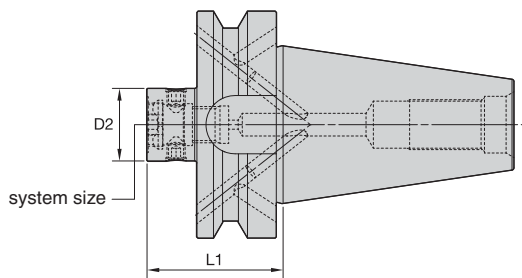
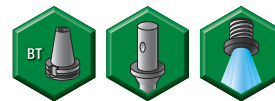


ERICKSON

■ JT-BT Form A

order number	catalog number	system size	D1	L1	kg
1258492	BT50JT33041M	33	15,85	41	3,70

NOTE: For retention knobs, see page J33.

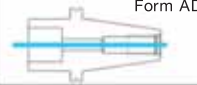









BT50 Shank Tools

■ RFX-BT Form B/AD

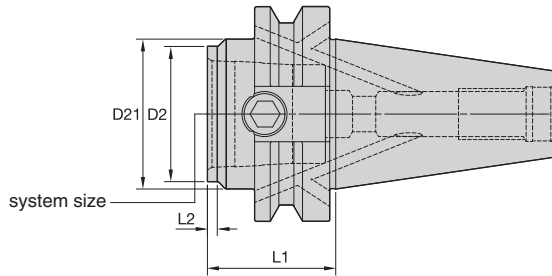
order number	catalog number	system size	D2 L1		wrench size clamp screw	Nm	kg
			D2	L1			
3860681	BT50BRFX320060M	RFX320	32	60	4mm	12	3,50
3860682	BT50BRFX420060M	RFX420	42	60	5mm	20	3,90
3860693	BT50BRFX550065M	RFX550	55	65	6mm	25	4,20
3860694	BT50BRFX720070M	RFX720	72	70	6mm	25	4,50

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

BT50 Shank Tools

KM™ Modular Adapters



BT50 Shank Tools



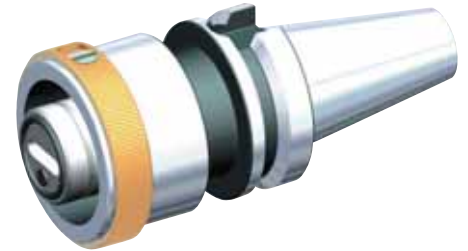
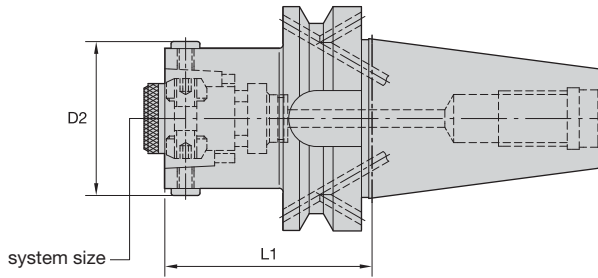
■ KM-BT Form B/AD



order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3783950	BT50BKM32040M	KM32	32	—	40	2	KM32PKG3L	5mm	8-11	3,50
3783951	BT50BKM32090M	KM32	32	—	90	52	KM32PKG3S	5mm	8-11	3,74
3783952	BT50BKM40060M	KM40	40	48	60	4	KM40PKG3L	6mm	12-16	3,72
3783953	BT50BKM40100M	KM40	40	—	100	62	KM40PKG3S	6mm	12-16	3,98
3783954	BT50BKM50060M	KM50	50	63	60	4	KM50PKG3L	10mm	27-34	3,80
3783955	BT50BKM50120M	KM50	50	—	120	82	KM50PKG3S	10mm	27-34	4,51
3783956	BT50BKM63060M	KM63	63	70	60	5	KM63PKG3L	12mm	47-54	3,78
3783957	BT50BKM63140M	KM63	63	—	140	102	KM63PKG3S	12mm	47-54	5,50
3783958	BT50BKM80080M	KM80	80	—	80	42	KM80PKG3S	14mm	79-85	4,50

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.
 These products only available in the U.S., Canada, and Japan.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



BT50 Shank Tools

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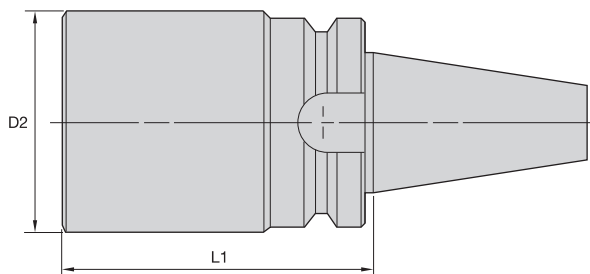
■ HSK-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519708	BT50BHSK40060M	HSK40	45	60	3mm	8	3,70
1519709	BT50BHSK50065M	HSK50	55	65	4mm	15	3,80
1510763	BT50BHSK63075M	HSK63	70	75	5mm	20	4,00

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

- Machinable front 20–30 RW C.



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■ BB-BT

order number	catalog number	D2	L1	kg
1258384	BT50BB104350M	104	350	24,3
1258386	BT50BB134250M	134	250	26,5

NOTE: For retention knobs, see page J33.



CV Shank Tools

CAT40(CV)	E2-E37
CAT50(CV)	E38-E79



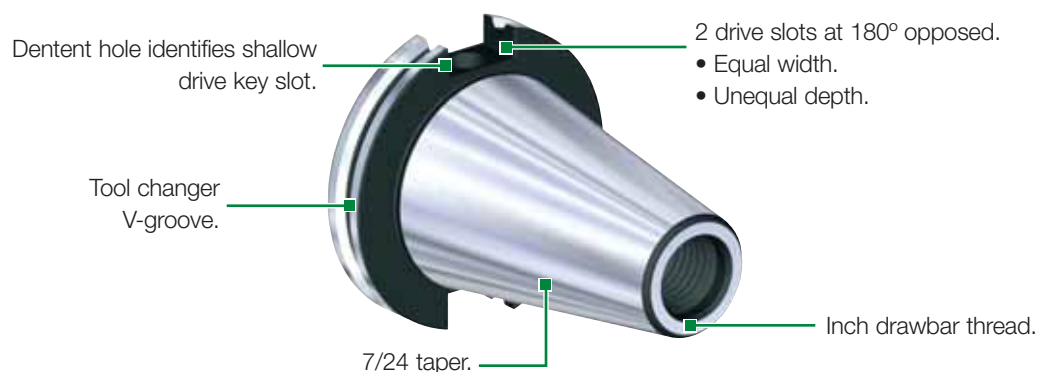
Erickson™ CAT V-Flange Shank Tooling System • CV40 Series

Erickson V-Flange CAT Taper Tooling is manufactured from premium materials and meets or exceeds the latest ANSI B5.50 and ISO-1947 taper accuracy of AT3 specification standards. CV40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



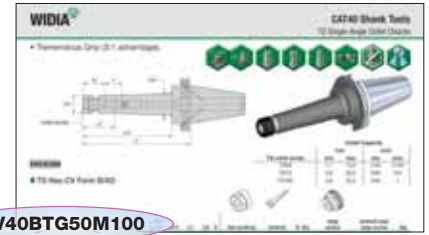
CAT40(CV)

- ANSI B5.50 7/24 taper.
- Standard 5/8-11 drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



CV40BTG50M100

CV

CAT Shank Style

ANSI B5.50

40

Shank Taper Size

40 = 40
50 = 50

B

Special Feature (optional)

B = DIN form B coolant feature, tool shipped to AD specifications (design allows conversion to form B style)

Z = Deviates from ANSI — B5.50 standard — no hub in front of V flange

(blank) = (no "B" or "Z") — tool built to DIN form A/AD coolant style

CH = Coolant form AD — high pressure

HPV = High performance and balanceable

TD = Tunable

TG

Toolholder Style

50

Toolholder Size

M

Special Feature

M = previous 2/3 numbers are metric values (this is an exception where there is a metric bore on an inch shank style)

100

Tool Length

(Gage line on taper to front of tool)

inch
xxx = x.xx

TG = Collet series xx (50), xxx (100)

EM = I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM = O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

BB = Bar blank
DA = Double-angle collet chuck
DC = Drill chuck
EM = End mill adapter
ER = DIN 6499 single-angle collet chuck
HC = Hydraulic chuck — Standard Line
HCB = Hydraulic chuck — Basic Line
HCSL = Hydraulic chuck — Slim Line
HCSLT = Hydraulic chuck — Slim Line — Trend
HCT = Hydraulic chuck — Trend Line
HPMC = Bearing milling chuck — high performance
HSK = HSK adapter
JT = Jacobs taper adapter
KM = KM™ adapter

MT = Morse taper adapter
RC = Rapid Change — T&C tapping adapter chuck
RFX = ROTAFLEX™ boring adapters
SA = Slotting cutter adapter
SER = DIN 6499 single-angle collet chuck — short with internal locknut
SM2C = Shell mill adapter with coolant and small diameter
SMC = Shell mill adapter with coolant
SS = Adapter for straight shanks (drills)
SSF = Adapter for straight shanks with flat (drills)
ST = Screw-on adapters
STRC = Rapid Change — solid tapping adapter chuck

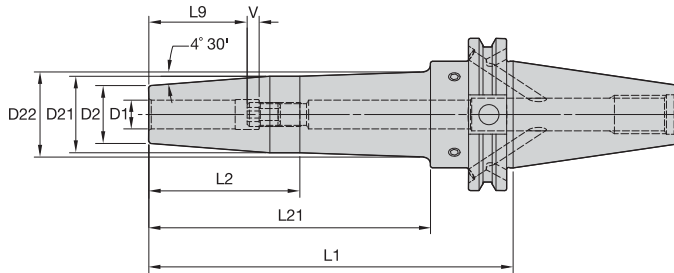
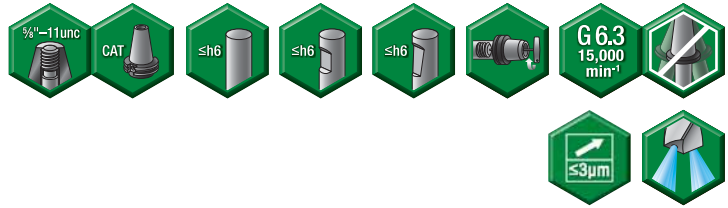
SWN = Whistle Notch™ 2° — short — (not to DIN standard)
TA = Tap chuck adapter
TCRC = Rapid Change — T&C tapping adapter chuck
TG = Tremendous Grip single-angle collet chuck
TGF = Tremendous Grip single-angle collet chuck — flush face
TT = Shrink Fit thermo toolholder
TTHT = Shrink Fit thermo toolholder — high torque
WD = Whistle Notch with drive
WNA = Whistle Notch — NAS 5° inch
WN = Whistle Notch (2° metric; 5° inch)

CAT40 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

CAT40 Shank Tools



■ TT GP HPV MM-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3683482	CV40BHPVTT06M350	6	21	27	—	89	54	—	26	10	TTSS05014M	2,5mm	1,16
3683493	CV40BHPVTT06M600	6	21	27	32	152	50	117	26	10	TTSS05014M	2,5mm	1,48
3683494	CV40BHPVTT08M350	8	21	27	—	89	54	—	26	10	TTSS06014M	3mm	1,15
3683495	CV40BHPVTT08M600	8	21	27	32	152	50	117	26	10	TTSS06014M	3mm	1,48
3683496	CV40BHPVTT10M375	10	24	32	—	95	60	—	31	10	TTSS08014M	4mm	1,24
3683497	CV40BHPVTT10M600	10	24	32	36	152	63	117	31	10	TTSS08014M	4mm	1,63
3615213	CV40BHPVTT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	1,22
3615214	CV40BHPVTT12M600	12	24	32	36	152	63	117	36	10	TTSS10014M	5mm	1,57
3615215	CV40BHPVTT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	1,27
3615216	CV40BHPVTT14M600	14	27	34	38	152	63	117	36	10	TTSS10014M	5mm	1,66
3615217	CV40BHPVTT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	1,24
3615218	CV40BHPVTT16M600	16	27	34	38	152	63	117	39	10	TTSS12014M	6mm	1,64
3615219	CV40BHPVTT18M400	18	34	44	—	102	83	—	39	10	TTSS12014M	6mm	1,48
3615220	CV40BHPVTT18M600	18	33	42	—	152	117	—	39	10	TTSS12014M	6mm	1,95
3615221	CV40BHPVTT20M400	20	34	44	—	102	83	—	41	10	TTSS16014M	8mm	1,44
3615222	CV40BHPVTT20M600	20	33	42	—	152	117	—	41	10	TTSS16014M	8mm	1,89
3615223	CV40BHPVTT25M400	25	44	53	—	102	83	—	47	10	TTSS16014M	8mm	1,71
3615224	CV40BHPVTT25M600	25	44	53	—	152	133	—	47	10	TTSS16014M	8mm	2,52
3615225	CV40BHPVTT32M400	32	44	53	—	102	83	—	51	10	TTSS16014M	8mm	1,55
3615226	CV40BHPVTT32M600	32	44	53	—	152	133	—	51	10	TTSS16014M	8mm	2,36

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

■ TT GP HPV IN-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3683474	CV40BHPVTT025350	1/4	.83	1.06	—	3.50	2.13	—	1.02	.39	TTSS05014M	2,5mm	2.55
3683476	CV40BHPVTT025600	1/4	.83	1.06	1.24	6.00	1.97	4.63	1.02	.39	TTSS05014M	2,5mm	3.27
3683477	CV40BHPVTT031350	5/16	.83	1.06	—	3.50	2.13	—	1.02	.39	TTSS06014M	3mm	2.54
3683478	CV40BHPVTT031600	5/16	.83	1.06	1.24	6.00	1.97	4.63	1.02	.39	TTSS06014M	3mm	3.25
3683479	CV40BHPVTT038375	3/8	.95	1.26	—	3.75	2.38	—	1.22	.39	TTSS08014M	4mm	2.73
3683480	CV40BHPVTT038600	3/8	.95	1.26	1.41	6.00	2.48	4.63	1.22	.39	TTSS08014M	4mm	3.59
3683481	CV40BHPVTT044375	7/16	.95	1.26	—	3.75	2.38	—	1.42	.39	TTSS10014M	5mm	2.70
3615175	CV40BHPVTT050375	1/2	.95	1.26	—	3.75	2.38	—	1.42	.39	TTSS10014M	5mm	2.68
3615176	CV40BHPVTT050600	1/2	.95	1.26	1.41	6.00	2.48	4.63	1.42	.39	TTSS10014M	5mm	3.44
3615177	CV40BHPVTT056375	9/16	1.06	1.34	—	3.75	2.38	—	1.42	.39	TTSS10014M	5mm	2.79
3615178	CV40BHPVTT062375	5/8	1.06	1.34	—	3.75	2.38	—	1.54	.39	TTSS12014M	6mm	2.74
3615179	CV40BHPVTT062600	5/8	1.06	1.34	1.48	6.00	2.48	4.63	1.54	.39	TTSS12014M	6mm	3.61
3615180	CV40BHPVTT068400	11/16	1.34	1.75	—	4.00	3.25	—	1.54	.39	TTSS12014M	6mm	3.28
3615182	CV40BHPVTT075600	3/4	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8mm	4.24
3615181	CV40BHPVTT075400	3/4	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8mm	3.22
3615184	CV40BHPVTT088600	7/8	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8mm	4.15
3615183	CV40BHPVTT088400	7/8	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8mm	3.14
3615185	CV40BHPVTT100400	1	1.73	2.08	—	4.00	3.25	—	1.85	.39	TTSS16014M	8mm	3.76
3615186	CV40BHPVTT100600	1	1.73	2.08	—	6.00	5.25	—	1.85	.39	TTSS16014M	8mm	5.06
3615187	CV40BHPVTT125400	1 1/4	1.73	2.08	—	4.00	3.25	—	2.01	.39	TTSS16014M	8mm	3.43
3615188	CV40BHPVTT125600	1 1/4	1.73	2.08	—	6.00	5.25	—	2.01	.39	TTSS16014M	8mm	4.74

CAT40 Shank Tools

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

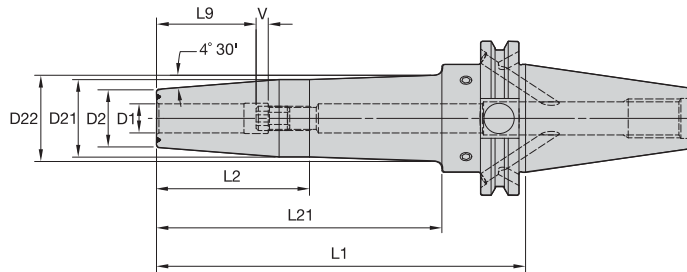
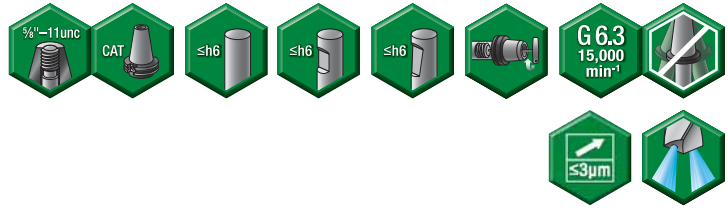
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CAT40 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

CAT40 Shank Tools

ERICKSON

■ TT HT HPV MM-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3618030	CV40BHPVTHT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	1,22
3618031	CV40BHPVTHT12M600	12	24	32	36	152	63	117	36	10	TTSS10014M	5mm	1,57
3618032	CV40BHPVTHT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	1,27
3618033	CV40BHPVTHT14M600	14	27	34	38	152	63	117	36	10	TTSS10014M	5mm	1,66
3618034	CV40BHPVTHT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	1,24
3618035	CV40BHPVTHT16M600	16	27	34	38	152	63	117	39	10	TTSS12014M	6mm	1,64
3618036	CV40BHPVTHT18M400	18	34	44	—	102	83	—	39	10	TTSS12014M	6mm	1,48
3618037	CV40BHPVTHT18M600	18	33	42	—	152	117	—	39	10	TTSS12014M	6mm	1,95
3618038	CV40BHPVTHT20M400	20	34	44	—	102	83	—	41	10	TTSS16014M	8mm	1,44
3618039	CV40BHPVTHT20M600	20	33	42	—	152	117	—	41	10	TTSS16014M	8mm	1,89
3618040	CV40BHPVTHT25M400	25	44	53	—	102	83	—	47	10	TTSS16014M	8mm	1,71
3618041	CV40BHPVTHT25M600	25	44	53	—	152	133	—	47	10	TTSS16014M	8mm	2,52
3618042	CV40BHPVTHT32M400	32	44	53	—	102	83	—	51	10	TTSS16014M	8mm	1,55
3618043	CV40BHPVTHT32M600	32	44	53	—	152	133	—	51	10	TTSS16014M	8mm	2,36

(continued)

(TT HT HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, & 1-1/4	.0000/- .0005

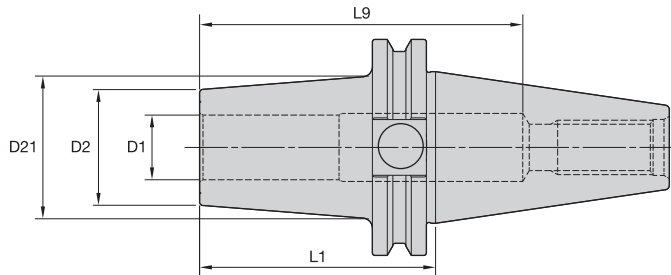
■ TT HT HPV IN-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3617952	CV40BHPVTTHT050375	1/2	.95	1.26	—	3.75	2.38	—	1.42	.39	TTSS10014M	5 mm	2.68
3618003	CV40BHPVTTHT050600	1/2	.95	1.26	1.41	6.00	2.48	4.63	1.42	.39	TTSS10014M	5 mm	3.44
3618004	CV40BHPVTTHT056375	9/16	1.06	1.34	—	3.75	2.38	—	1.42	.39	TTSS10014M	5 mm	2.79
3618005	CV40BHPVTTHT062375	5/8	1.06	1.34	—	3.75	2.38	—	1.54	.39	TTSS12014M	6 mm	2.74
3618006	CV40BHPVTTHT062600	5/8	1.06	1.34	1.48	6.00	2.48	4.63	1.54	.39	TTSS12014M	6 mm	3.61
3618007	CV40BHPVTTHT068400	11/16	1.34	1.75	—	4.00	3.25	—	1.54	.39	TTSS12014M	6 mm	3.28
3618009	CV40BHPVTTHT075600	3/4	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8 mm	4.24
3618008	CV40BHPVTTHT075400	3/4	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8 mm	3.22
3618011	CV40BHPVTTHT088600	7/8	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8 mm	4.15
3618010	CV40BHPVTTHT088400	7/8	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8 mm	3.13
3618012	CV40BHPVTTHT100400	1	1.73	2.08	—	4.00	3.25	—	1.85	.39	TTSS16014M	8 mm	3.76
3618013	CV40BHPVTTHT100600	1	1.73	2.08	—	6.00	5.25	—	1.85	.39	TTSS16014M	8 mm	5.06
3618014	CV40BHPVTTHT125400	1 1/4	1.73	2.08	—	4.00	3.25	—	2.01	.39	TTSS16014M	8 mm	3.43
3618015	CV40BHPVTTHT125600	1 1/4	1.73	2.08	—	6.00	5.25	—	2.01	.39	TTSS16014M	8 mm	4.74

CAT40 Shank Tools

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



■ TT HT HPV IN-CV Z Form AD

order number	catalog number	D1	D2	D21	L1	L9	lbs
3683514	CV40ZTTHT050275	1/2	.95	1.26	2.75	4.26	2.16
3683516	CV40ZTTHT075275	3/4	1.34	1.65	2.75	3.74	2.34

NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.

Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

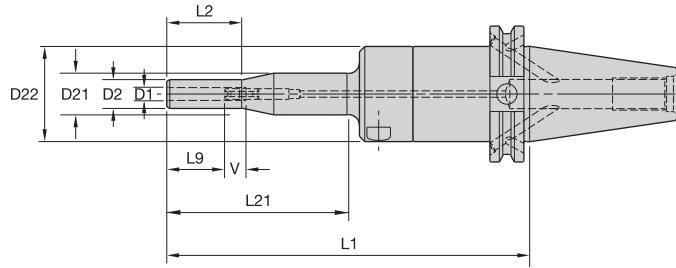
Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.



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■ HC Slim T MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019245	CV40BHCSLT06M669	6	13,5	19,5	44,5	170	35	85	27	10	1,64
3019246	CV40BHCSLT08M669	8	15,5	19,5	44,5	170	35	85	27	10	1,65
3019247	CV40BHCSLT10M669	10	17,5	44,5	—	170	85	151	31	10	1,65

■ Spare Parts

catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSLT06M669	170.135	5mm	170.002	2,5mm
CV40BHCSLT08M669	170.135	5mm	170.002	2,5mm
CV40BHCSLT10M669	170.135	5mm	170.003	3mm

■ HC Slim T IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	lbs
3019257	CV40BHCSLT025669	.25	.54	.77	44,45	6.69	1.38	85,00	1.06	.39	3.64
3019258	CV40BHCSLT038669	.38	.69	1.75	—	6.69	3.35	150,95	1.22	.39	3.64

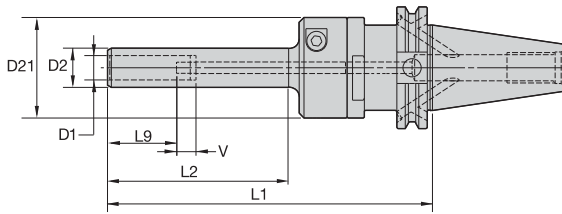
■ Spare Parts

catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSLT025669	170.135	5mm	170.002	2,5mm
CV40BHCSLT038669	170.135	5mm	170.003	3mm

(continued)

CAT40 Shank Tools

(HC Slim Form B/AD continued)



■ HC Slim MM-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2495136	CV40BHCSL12M669	12	19,5	44,5	170	95	36	10	1,56
3019248	CV40BHCSL14M669	14	21,5	52,5	170	95	36	10	1,75
3019249	CV40BHCSL16M669	16	23,5	52,5	170	95	39	10	1,78
3019250	CV40BHCSL18M669	18	25,5	52,5	170	95	39	10	1,82
2495141	CV40BHCSL20M669	20	27,5	52,5	170	95	41	10	1,83

■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSL12M669	170.135	5mm	170.002	2,5mm
CV40BHCSL14M669	170.135	5mm	170.002	2,5mm
CV40BHCSL16M669	170.135	5mm	170.002	2,5mm
CV40BHCSL18M669	170.135	5mm	170.002	2,5mm
CV40BHCSL20M669	170.135	5mm	170.002	2,5mm

■ HC Slim IN-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508153	CV40BHCSL050669	.50	.81	2.07	6.69	3.74	1.42	.39	3.84
3019259	CV40BHCSL062669	.63	.93	2.07	6.69	3.74	1.54	.39	3.92
2508154	CV40BHCSL075669	.75	1.06	2.07	6.69	3.74	1.61	.39	4.08

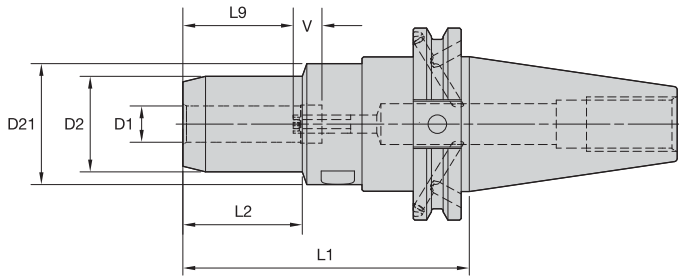
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSL050669	170.135	5mm	170.002	2,5mm
CV40BHCSL062669	170.135	5mm	170.002	2,5mm
CV40BHCSL075669	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

Form AD	Form B	Wrench Size	Stop Screw
		40	(2x) MS2221S
		50	(2x) MS1296S



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■ HC MM -CV Form B/AD

CAT40 Shank Tools



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1605145	CV40BHC06M350	6	25,7	40	88,9	33	27	10	170.135	5mm	170.002	2,5mm	1,24
1605149	CV40BHC08M350	8	27,7	40	88,9	33	27	10	170.135	5mm	170.002	2,5mm	1,25
1605150	CV40BHC10M375	10	29,7	40	95,3	39	31	10	170.135	5mm	170.002	2,5mm	1,30
2079279	CV40BHC12M375	12	31,6	40	95,3	40	36	10	170.135	5mm	170.002	2,5mm	1,32
2079280	CV40BHC14M400	14	33,6	50	101,6	46	41	10	170.135	5mm	170.003	3mm	1,45
2079281	CV40BHC16M400	16	37,6	50	101,6	47	41	10	170.135	5mm	170.003	3mm	1,52
2079282	CV40BHC18M400	18	39,6	50	101,6	47	41	10	170.135	5mm	170.003	3mm	1,54
2079523	CV40BHC20M400	20	41,6	50	101,6	48	41	10	170.135	5mm	170.003	3mm	1,56
1605216	CV40BHC25M462	25	49,9	63	117,5	51	51	10	170.136	6mm	170.004	4mm	2,13
1605217	CV40BHC32M462	32	59,9	63	117,5	59	51	10	170.136	6mm	170.004	4mm	2,31

(continued)

(HC CV Form B/AD continued)

■ HC IN -CV Form B/AD

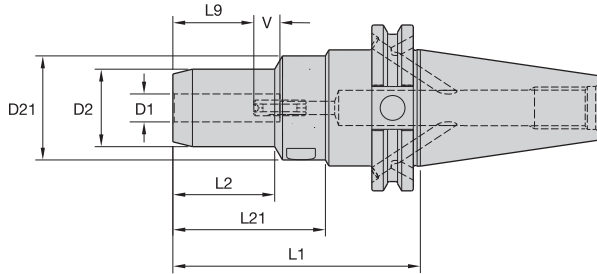


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
1605101	CV40BHC025350	1/4	1.01	1.57	3.50	1.30	1.06	.39	170.135	5mm	170.002	2,5mm	2.7
1605102	CV40BHC038375	3/8	1.17	1.57	3.75	1.54	1.22	.39	170.135	5mm	170.002	2,5mm	2.9
1605103	CV40BHC050375	1/2	1.24	1.57	3.75	1.57	1.42	.39	170.135	5mm	170.002	2,5mm	2.9
1605104	CV40BHC062400	5/8	1.48	1.97	4.00	1.83	1.54	.39	170.135	5mm	170.003	3mm	3.2
1605105	CV40BHC075400	3/4	1.64	1.97	4.00	1.89	1.61	.39	170.135	5mm	170.003	3mm	3.4
1605106	CV40BHC100462	1	1.96	2.48	4.63	2.01	1.81	.39	170.136	6mm	170.004	4mm	4.7
1605107	CV40BHC125462	1 1/4	2.36	2.48	4.63	2.32	1.97	.39	170.136	6mm	170.004	4mm	5.1

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

CAT40 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



CAT40 Shank Tools

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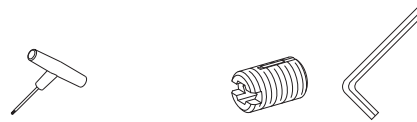
■ HC Trend MM-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	kg
2979257	CV40BHCT06M350	6	26	40	89	33	53	27	10	170.135	5 mm	571.061	170.003	3 mm	1,25
2982160	CV40BHCT06M600	6	26	40	152	100	117	27	10	170.135	5 mm	571.061	170.003	3 mm	1,49
2979258	CV40BHCT08M350	8	28	40	89	33	53	27	10	170.135	5 mm	571.061	170.003	3 mm	1,27
2982161	CV40BHCT08M600	8	28	40	152	100	117	27	10	170.135	5 mm	571.061	170.003	3 mm	1,55
2979259	CV40BHCT10M375	10	30	40	95	39	58	31	10	170.135	5 mm	571.061	170.003	3 mm	1,32
2982162	CV40BHCT10M600	10	30	40	152	100	117	31	10	170.135	5 mm	571.061	170.003	3 mm	1,62
2979260	CV40BHCT12M375	12	32	40	95	40	60	36	10	170.135	5 mm	571.061	170.003	3 mm	1,32
2982163	CV40BHCT12M600	12	32	40	152	100	117	36	10	170.135	5 mm	571.061	170.003	3 mm	1,67
2979261	CV40BHCT14M400	14	34	50	102	46	65	41	10	170.135	5 mm	571.063	170.005	5 mm	1,47
2982164	CV40BHCT14M600	14	34	50	152	100	116	36	10	170.135	5 mm	—	170.005	5 mm	1,79
2979262	CV40BHCT16M400	16	38	50	102	47	65	41	10	170.135	5 mm	571.063	170.005	5 mm	1,54
2982165	CV40BHCT16M600	16	38	50	152	100	116	39	10	170.135	5 mm	571.063	170.005	5 mm	1,95
2979263	CV40BHCT18M400	18	40	50	102	47	65	41	10	170.135	5 mm	571.063	170.005	5 mm	1,56
2982166	CV40BHCT18M600	18	40	50	152	100	116	39	10	170.135	5 mm	571.063	170.005	5 mm	2,02
2979264	CV40BHCT20M400	20	42	50	102	48	65	41	10	170.135	5 mm	571.063	170.005	5 mm	1,58
2982167	CV40BHCT20M600	20	42	50	152	100	116	41	10	170.135	5 mm	571.063	170.005	5 mm	2,10
2979265	CV40BHCT25M462	25	50	63	117	51	81	51	10	170.136	6 mm	571.063	170.005	5 mm	2,15
2979266	CV40BHCT32M462	32	60	63	117	59	81	51	10	170.136	6 mm	—	170.005	5 mm	2,33

(continued)

(HC Trend CV Form B/AD continued)

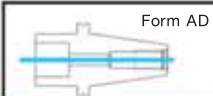








■ HC Trend IN-CV Form B/AD

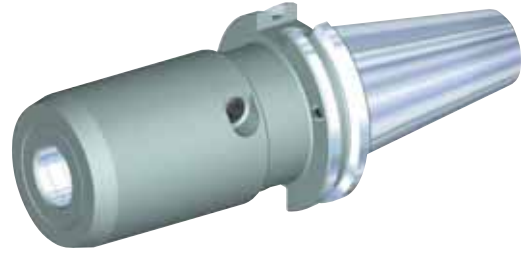
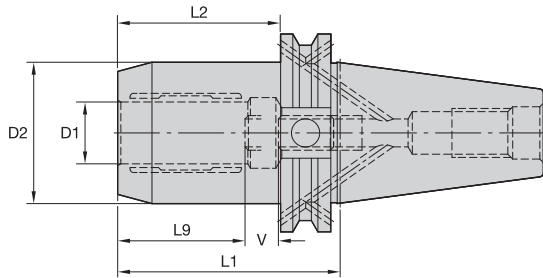


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2979230	CV40BHCT025350	1/4	1.012	1.569	3.500	1.299	1.063	.39	170.135	5mm	571.061	170.003	3mm	2.76
2982155	CV40BHCT025600	1/4	1.012	1.569	6.000	3.937	1.063	.39	170.135	5mm	571.061	170.003	3mm	3.28
2979231	CV40BHCT038375	3/8	1.169	1.569	3.750	1.535	1.221	.39	170.135	5mm	571.061	170.003	3mm	2.91
2982156	CV40BHCT038600	3/8	1.169	1.569	6.000	3.937	1.221	.39	170.135	5mm	571.061	170.003	3mm	3.57
2979232	CV40BHCT050375	1/2	1.244	1.569	3.750	1.575	1.417	.39	170.135	5mm	571.061	170.003	3mm	2.91
2982157	CV40BHCT050600	1/2	1.244	1.569	6.000	3.937	1.417	.39	170.135	5mm	571.061	170.003	3mm	3.68
2979253	CV40BHCT062400	5/8	1.480	1.963	4.000	1.831	1.535	.39	170.135	5mm	571.063	170.005	5mm	3.40
2982158	CV40BHCT062600	5/8	1.479	1.963	6.000	3.937	1.535	.39	170.135	5mm	571.063	170.005	5mm	4.30
2979254	CV40BHCT075400	3/4	1.638	1.963	4.000	1.890	1.614	.39	170.135	5mm	571.063	170.005	5mm	3.53
2982159	CV40BHCT075600	3/4	1.873	1.963	6.000	3.937	1.614	.39	170.135	5mm	571.063	170.005	5mm	4.65
2979255	CV40BHCT100462	1	1.961	2.474	4.625	2.008	1.811	.39	170.136	6mm	571.063	170.005	5mm	4.76
2979256	CV40BHCT125462	1 1/4	2.354	2.474	4.625	2.323	1.969	.39	170.136	6mm	571.063	170.005	5mm	5.18

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

CAT40 Shank Tools

 <p>Form AD</p>					
 <p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>



CAT40 Shank Tools

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■ HC Basic MM-CV Form B/AD

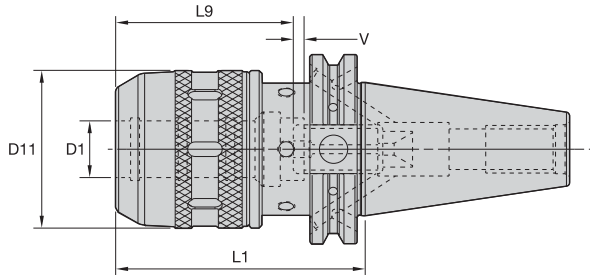
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
2001975	CV40BHCB20M400	20	49,9	102	83	41	10		5mm		5mm	1,81

■ HC Basic IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
2001976	CV40BHCB075400	3/4	1.96	4.00	3.25	1.61	.39		5mm		5mm	4.01

*NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.*

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



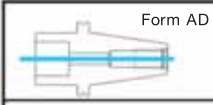








CAT40 Shank Tools

ERICKSON

■ HPMC IN-CV Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100356	CV40BHPMC075335	3/4	2.09	3.35	4.73	.79	PSW52M	MCSS16040M	2,5mm & 5mm	3.40
3100358	CV40BHPMC075591	3/4	2.09	5.91	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	5.70
3100359	CV40BHPMC100374	1	2.40	3.74	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	4.20
3100360	CV40BHPMC100591	1	2.40	5.91	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	6.45
3100362	CV40BHPMC125472	1 1/4	2.76	4.72	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	5.65
3100361	CV40BHPMC125591	1 1/4	2.76	5.91	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	7.20

NOTE: Milling chuck technical section, see page K64.
 Supplied with locknut and stop screw.
 Locknut wrench not included.
 Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
 Reduction sleeves are available and must be ordered separately; see page I6.
 For retention knobs, see page J33.

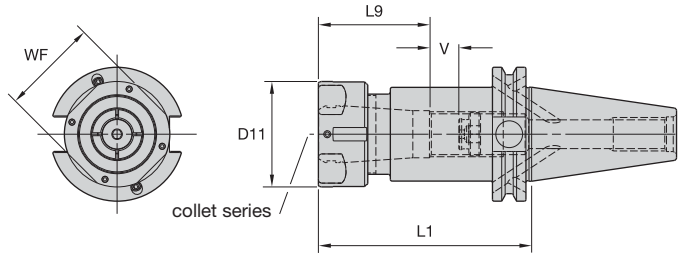
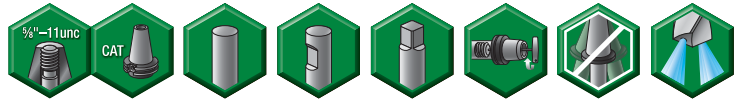
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CAT40 Shank Tools

TG Flush Face Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).
- Totally flush face, locknut to collet.



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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■ TG Flush Face-CV Form B/AD



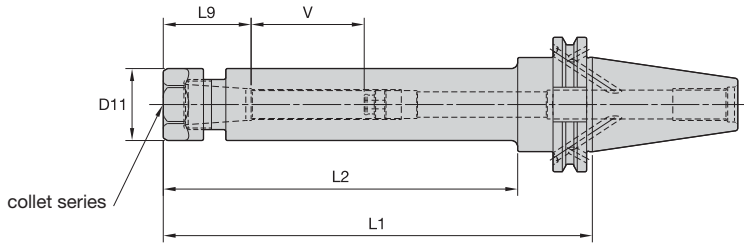
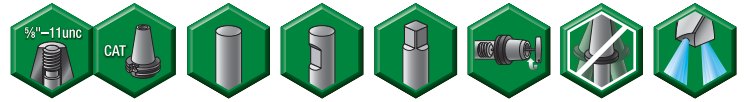
order number	catalog number	collet series	D11	L1	L9	V	locknut	WF	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2987290	CV40BTGF050250	TG50	1.50	2.50	1.46	.70	LNATGF050M	34	HSW34M	50	SS056041G	4mm & 5/32	2.37
2987291	CV40BTGF050400	TG50	1.50	4.00	1.46	2.20	LNATGF050M	34	HSW34M	50	SS056041G	4mm & 5/32	2.76
2987292	CV40BTGF050600	TG50	1.50	6.00	1.46	2.48	LNATGF050M	34	HSW34M	50	SS056041G	4mm & 5/32	3.36
2987303	CV40BTGF075250	TG75	1.97	2.50	1.89	.95	LNATGF075M	46	HSW45M	100	SS081041G	4mm & 5/32	2.43
2987304	CV40BTGF075400	TG75	1.97	4.00	1.89	1.30	LNATGF075M	46	HSW45M	100	SS081041G	4mm & 5/32	3.31
2987305	CV40BTGF075600	TG75	1.97	6.00	1.89	3.31	LNATGF075M	46	HSW45M	100	SS081041G	4mm & 5/32	4.41
2987306	CV40BTGF100275	TG100	2.36	2.75	2.44	.55	LNATGF100M	55	HSW58M	150	SS112041G	4mm & 5/32	2.55
2987307	CV40BTGF100400	TG100	2.36	4.00	2.44	.71	LNATGF100M	55	HSW58M	150	SS112041G	4mm & 5/32	3.42
2987308	CV40BTGF100600	TG100	2.36	6.00	2.44	2.68	LNATGF100M	55	HSW58M	150	SS112041G	4mm & 5/32	4.50

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Locknut disk sealing cap is available and must be ordered separately; see page J22.
 Coolant disks for sealing cap are available and must be ordered separately; see page J7.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



• Tremendous Grip (3:1 advantage).

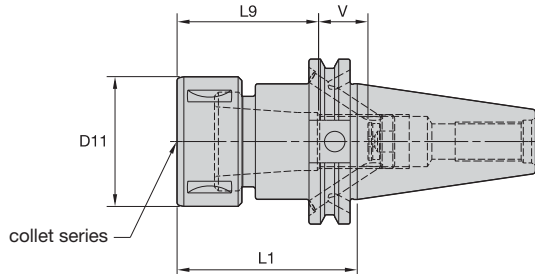


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■ TG Hex-CV Form B/AD

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

order number	catalog number	collet series	D11	L1	L2	L9	V	hex locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
4135683	CV40BTG050300	TG50	1.34	3.00	1.59	1.50	1	LN050M	OEW30M	50	SS056041G	4 mm & 5/32	2.49
4135684	CV40BTG050500	TG50	1.34	5.00	3.59	1.50	2	LN050M	OEW30M	50	SS056041G	4 mm & 5/32	3.16
4135685	CV40BTG050800	TG50	1.34	8.00	6.59	1.50	2	LN050M	OEW30M	50	SS056041G	4 mm & 5/32	4.20
4135686	CV40BTG0501000	TG50	1.34	10.00	8.59	1.50	2	LN050M	OEW30M	50	SS056041G	4 mm & 5/32	4.90



■ TG Round-CV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1261621	CV40BTG075275G	TG75	1.97	2.75	1.93	.75	LNA075M	HSW45M	100	SS081041G	4mm & 5/32	2.63
1261622	CV40BTG075600G	TG75	1.97	6.00	1.93	4.01	LNA075M	HSW45M	100	SS081041G	4mm & 5/32	4.50
1261623	CV40BTG100300G	TG100	2.36	3.00	2.64	.67	LNA100M	HSW58M	150	SS094041G	4mm & 5/32	2.91
1261624	CV40BTG100600G	TG100	2.36	6.00	2.64	2.95	LNA100M	HSW58M	150	SS094041G	4mm & 5/32	4.82

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque. Collet chuck technical section, see page K74. Supplied with locknut and stop screw. Locknut wrench must be ordered separately. Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6. Stop screw coolant caps are available and must be ordered separately; see page J22. Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3. TG standard straight-bore collets, see page I10. TG tap collets, see page I10. For retention knobs, see page J33.

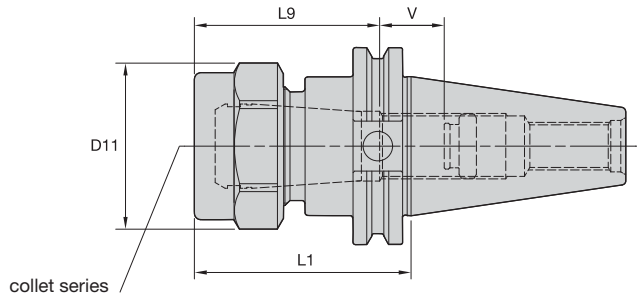
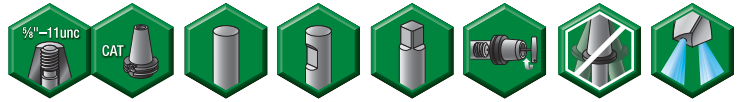
Form AD	✓	✗	✗	✗	✗
Form B					
		40	(2x) MS2221S	2,5mm	
		50	(2x) MS1296S	3mm	

CAT40 Shank Tools

TG Single-Angle Collet Chucks



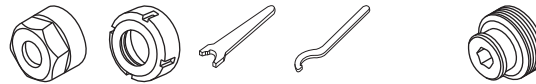
- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

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■ TG Hex-CV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut	locknut wrench	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025600	CV40TG075600	TG75	2.09	6.00	2.16	3.84	NPA075	—	OEW188	—	100	SS081041G	4mm & 5/32	4.40
1025799	CV40TG075275	TG75	2.09	2.75	2.28	1.18	NPA075	—	OEW188	—	100	SS081041G	4mm & 5/32	2.41
1025771	CV40TG100300	TG100	2.44	3.00	2.95	.51	NPA100	—	OEW225	—	150	SS112041G	4mm & 5/32	2.77
1025772	CV40TG100600	TG100	2.44	6.00	2.94	3.38	NPA100	—	OEW225	—	150	SS112041G	4mm & 5/32	5.40
1025773	CV40TG100400	TG100	2.44	4.00	2.95	1.54	NPA100	—	OEW225	—	150	SS112041G	4mm & 5/32	3.28
1013532	CV40TG150488	TG150	3.50	4.88	3.27	1.23	—	NPA150	—	PSW350	200	SS125050G	4mm & 5/32	5.72

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J4.

Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

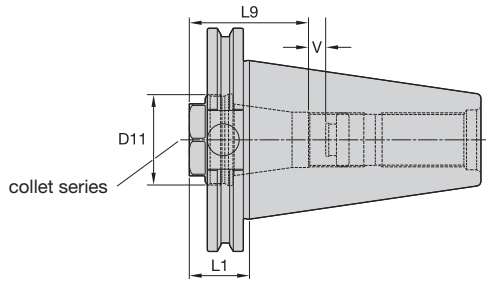
TG tap collets, see page I10.

For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>



- Grip (2:1 advantage).



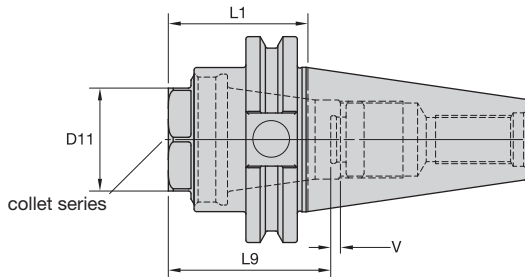
ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81

ERICKSON

■ ER Short-CV Z Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978739	CV40ZSER32106	ER32	1.41	1.06	1.97	.20	LNECSER32M	OEW32M	100	SS094041G	4mm & 5/32	1.35



■ ER Short-CV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978740	CV40SER32169	ER32	1.41	1.69	1.97	.43	LNECSER32M	OEW32M	100	SS094041G	4mm & 5/32	1.70

NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.

Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Stop screw coolant caps are available and must be ordered separately; see page J22.

ER standard straight-bore collets, see page I50.

ER tap collets, see page I58.

ER TCT tension-only tap collets, see page I60.

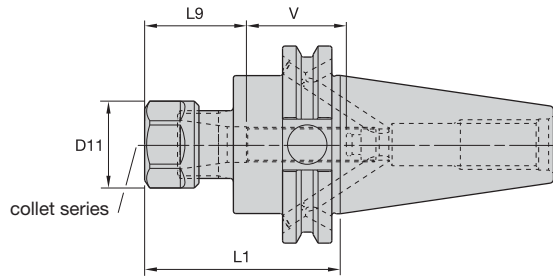
For retention knobs, see page J33.

CAT40 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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■ ER Hex-CV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1901019	CV40BER16250	ER16	1.10	2.50	1.26	1.30	2.30
1901046	CV40BER16500	ER16	1.10	5.00	1.26	1.58	2.85
1261618	CV40BER20250	ER20	1.34	2.50	1.42	1.73	2.32
2249531	CV40BER20600	ER20	1.34	6.00	1.42	1.73	3.47

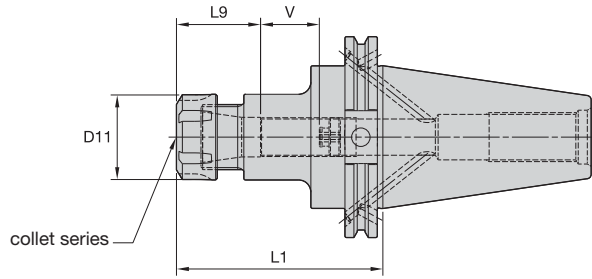
■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40BER16250	LNHSER16M	OEW25M	30	SS044038G	4mm & 5/32
CV40BER16500	LNHSER16M	OEW25M	30	SS044038G	4mm & 5/32
CV40BER20250	LNHSER20M	OEW30M	24	SS056041G	4mm & 5/32
CV40BER20600	LNHSER20M	OEW30M	24	SS056041G	4mm & 5/32

(continued)

(ER continued)



■ ER Round-CV Form B/AD









order number	catalog number	collet series	D11	L1	L9	V	lbs
2249532	CV40BER25250	ER25	1.65	2.50	1.57	.75	2.35
2249703	CV40BER25600	ER25	1.65	6.00	1.57	2.37	4.13
1261619	CV40BER32275	ER32	1.97	2.75	1.81	1.65	2.34
1901045	CV40BER32600	ER32	1.97	6.00	1.81	2.13	4.26
2249704	CV40BER40300	ER40	2.48	3.00	2.05	.47	2.78
2249705	CV40BER40600	ER40	2.48	6.00	2.05	1.89	4.44

■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40BER25250	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32
CV40BER25600	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32
CV40BER32275	LNSER32M	ER32WM	100	SS094041G	4mm & 5/32
CV40BER32600	LNSER32M	ER32WM	100	SS094041G	4mm & 5/32
CV40BER40300	LNSER40M	ER40WM	130	SS112041G	4mm & 5/32
CV40BER40600	LNSER40M	ER40WM	130	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

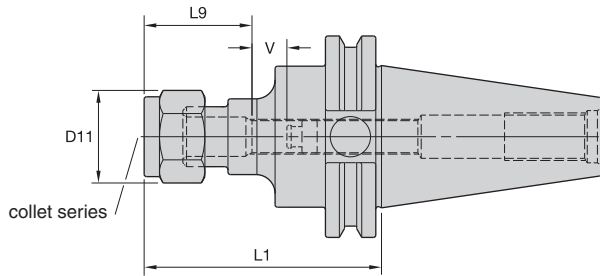
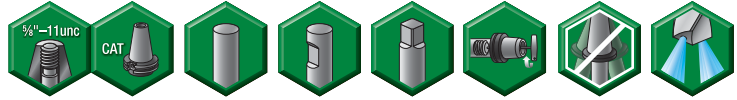
Form AD	✓				
				40 (2x) MS2221S	2,5mm
				50 (2x) MS1296S	3mm

CAT40 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64
DA180	2,2	20	1/64	3/4

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■ DA Hex-CV Form AD

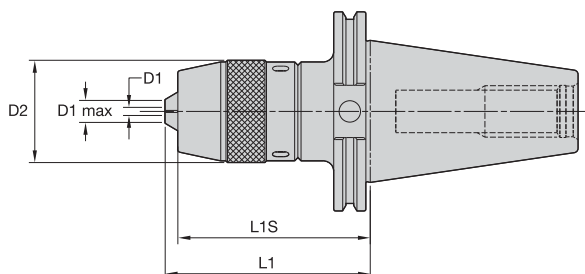
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015515	CV40DA208300	DA200	1.15	3.00	1.62	1.38	2.41
1015305	CV40DA208500	DA200	1.15	5.00	1.62	3.38	3.05
1015304	CV40DA188600	DA180	1.73	6.00	1.94	3.94	3.60
1015596	CV40DA188300	DA180	1.73	3.00	1.94	.81	2.42

■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40DA208500	NPA208	OEW100	40	SS044038G	4mm & 5/32
CV40DA208300	NPA208	OEW100	40	SS044038G	4mm & 5/32
CV40DA188600	NPA188	OEW150	75	SS081041G	4mm & 5/32
CV40DA188300	NPA188	OEW150	75	SS081041G	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.



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■ DC-CV Form A

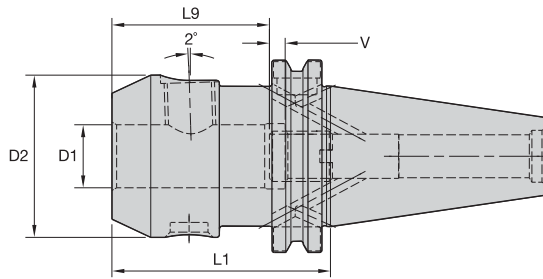
order number	catalog number	D1		D1 max		D2	L1	L1S	wrench	lbs
		mm	in	mm	in					
2262967	CV40DC13M421	1,0	.039	13,0	.512	1.969	4.210	3.726	HSW45M	3.84

NOTE: Tighten to the recommended tightening torque.
 Locking wrench not supplied.
 For retention knobs, see page J33.

CAT40 Shank Tools

CAT40 Shank Tools

Whistle Notch™ Adapters



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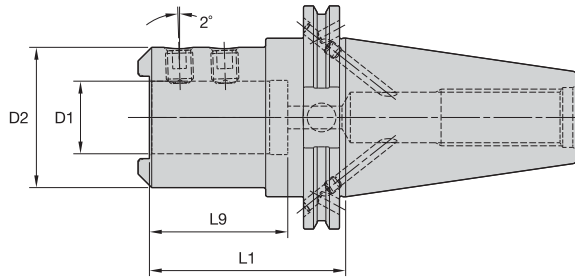
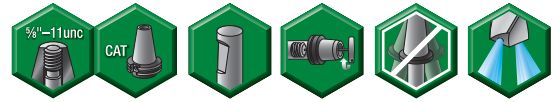
■ WN MM-CV Form B/AD

CAT40 Shank Tools

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1549300	CV40BWN06M244	6	25	62	30	10	SS03M012	3mm	7	571.060	2,5mm	1,09
1549315	CV40BWN08M244	8	28	62	26	10	SS03M014	4mm	15	571.067	3mm	1,10
1549317	CV40BWN10M244	10	35	62	35	10	SS03M018	5mm	25	571.068	4mm	1,15
1549320	CV40BWN12M260	12	42	66	40	10	SS03M023	6mm	35	571.074	5mm	1,25
1549326	CV40BWN14M260	14	44	66	40	10	SS03M023	6mm	35	571.074	5mm	1,26
1549328	CV40BWN16M275	16	48	70	43	10	SS03M025	6mm	50	571.075	6mm	1,35
1549329	CV40BWN18M275	18	50	70	43	10	SS03M025	6mm	50	571.075	6mm	1,36
1549342	CV40BWN20M275	20	52	70	45	10	SS03M026	8mm	95	571.076	6mm	1,38
1549330	CV40BWN25M375	25	65	95	50	10	SS03M027	10mm	135	571.077	6mm	2,17
1549341	CV40BWN32M388	32	72	99	54	10	SS03M029	10mm	160	571.076	6mm	2,45

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and stop screw.
 Lock screw and stop screw wrenches not included.
 For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



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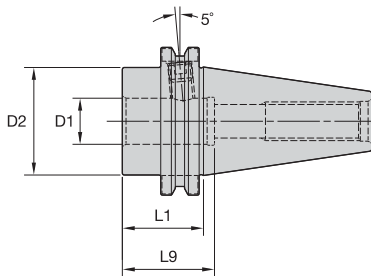
■ **WD MM-CV Form B/AD**



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	kg
1749276	CV40BWD32M343	32	60	87	63	SS03M023	6mm	—	1,74

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Clamp screw wrenches not included.
 For retention knobs, see page J33.

CAT40 Shank Tools



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■ **SWN IN-CV Form AD (Tap Chuck Adapter)**

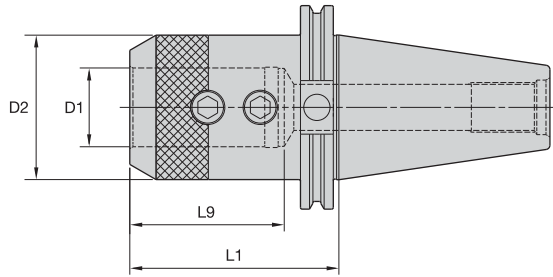


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018054	CV40TA7137	.75	1.75	1.38	1.50	ELS038031PKG	3/16	15	2.20
1017938	CV40TA1137	1.00	1.75	1.38	2.81	ELS038031PKG	3/16	15	1.79

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

CAT40 Shank Tools

End Mill Adapters



ERICKSON™

EM IN-CV Form AD



CAT40 Shank Tools

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1026404	CV40ZEM012138	1/8	.69	1.38	2.89	S1045PKG	3/32	3	1.79
1026405	CV40EM012450	1/8	.69	4.50	6.01	S1045PKG	3/32	3	2.41
1026406	CV40ZEM018138	3/16	.69	1.38	2.89	S1045PKG	3/32	3	1.79
1025921	CV40EM018250	3/16	.69	2.50	4.01	S1045PKG	3/32	3	2.22
1026407	CV40EM018450	3/16	.69	4.50	6.01	S1045PKG	3/32	3	2.41
1026408	CV40ZEM025138	1/4	.78	1.38	2.89	ELS025025PKG	1/8	5	1.82
1018427	CV40EM025250	1/4	1.00	2.50	4.01	ELS025025PKG	1/8	5	2.35
1026409	CV40EM025450	1/4	.78	4.50	6.01	ELS025025PKG	1/8	5	2.51
1026410	CV40ZEM031138	5/16	1.00	1.38	2.89	ELS031031PKG	5/32	11	1.85
1026411	CV40EM031450	5/16	1.00	4.50	6.01	ELS031031PKG	5/32	11	2.76
1026412	CV40ZEM038138	3/8	1.00	1.38	2.89	ELS038031PKG	3/16	15	1.85
1026338	CV40EM038250	3/8	1.00	2.50	4.01	ELS038031PKG	3/16	15	2.32
1013350	CV40EM038450	3/8	1.00	4.50	6.01	ELS038031PKG	3/16	15	2.69
1013351	CV40EM038650	3/8	1.00	6.50	8.01	ELS038031PKG	3/16	15	3.17
1013352	CV40ZEM044175	7/16	1.25	1.76	3.26	ELS044038PKG	7/32	20	2.00
1013353	CV40EM044450	7/16	1.25	4.50	6.01	ELS044038PKG	7/32	20	3.04
1026380	CV40ZEM050175	1/2	1.75	1.75	3.26	ELS044038PKG	7/32	20	2.27
1025922	CV40EM050262	1/2	1.38	2.62	4.13	ELS044038PKG	7/32	20	2.52
1013374	CV40EM050462	1/2	1.25	4.62	3.07	ELS044038PKG	7/32	20	3.06
1013375	CV40EM050662	1/2	1.25	6.62	8.13	ELS044038PKG	7/32	20	3.83
1026381	CV40ZEM062175	5/8	1.75	1.75	3.56	ELS056050PKG	1/4	40	2.19
1025923	CV40EM062375	5/8	1.50	3.75	3.56	DWG ELS056038	1/4	40	2.96
1013376	CV40EM062575	5/8	1.63	5.75	3.56	ELS056050PKG	1/4	40	4.21
1026382	CV40ZEM075175	3/4	1.75	1.75	2.40	ELS062050PKG	5/16	70	2.09
1025944	CV40EM075375	3/4	1.75	3.75	3.94	ELS062050PKG	5/16	70	3.21
1013377	CV40EM075575	3/4	1.75	5.75	3.94	ELS062050PKG	5/16	70	4.44
1013378	CV40ZEM088175	7/8	1.88	1.75	2.27	ELS062050PKG	5/16	70	2.13
1025945	CV40EM088400	7/8	2.00	4.00	4.19	ELS062050PKG	5/16	70	3.65
1013424	CV40EM088600	7/8	1.88	6.00	4.19	ELS062050PKG	5/16	70	4.86
1026383	CV40ZEM100175	1	1.75	1.75	2.64	DWG ELS075044	3/8	110	1.78
1025946	CV40EM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	110	3.39
1013425	CV40EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	110	5.04
1013426	CV40ZEM125200	1 1/4	2.25	2.00	2.35	DWG ELS075050	3/8	110	2.25
1025947	CV40EM125425	1 1/4	2.50	4.25	2.39	ELS075062PKG	3/8	110	4.96
1013427	CV40EM125625	1 1/4	2.50	6.25	2.39	ELS075062PKG	3/8	110	7.47
1025986	CV40EM150462	1 1/2	2.75	4.63	2.82	ELS075069PKG	3/8	110	5.80
1013428	CV40EM150662	1 1/2	2.75	6.62	2.82	ELS075069PKG	3/8	110	8.76

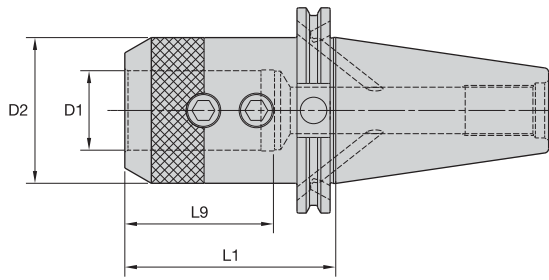
NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.

Do not overtighten lock screw; use torque recommendations above.

Supplied with lock screw.

Lock screw wrench not included.

For retention knobs, see page J33.



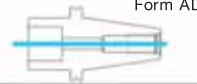










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■ EM IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1261613	CV40BEM050262	1/2	1.38	2.62	4.13	ELS044038PKG	7/32	20	2.48
1261614	CV40BEM062375	5/8	1.50	3.75	3.56	ELS056050PKG	1/4	40	2.95
1261615	CV40BEM075375	3/4	1.75	3.75	3.94	ELS062050PKG	5/16	70	3.18
1261616	CV40BEM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	110	3.37
1261617	CV40BEM125425	1 1/4	2.50	4.25	2.39	ELS075062PKG	3/8	110	4.97

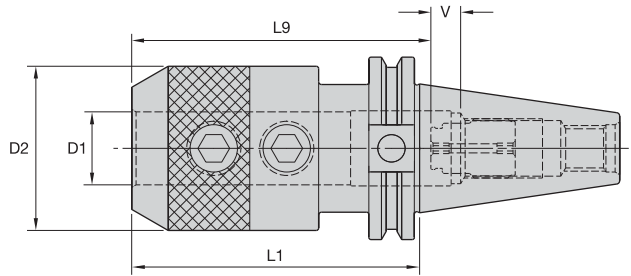
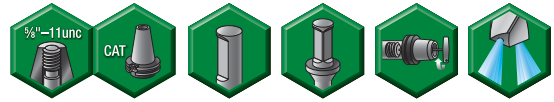
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

CAT40 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CAT40 Shank Tools

Straight Shank Adapters • Straight Shank with Flat Adapters



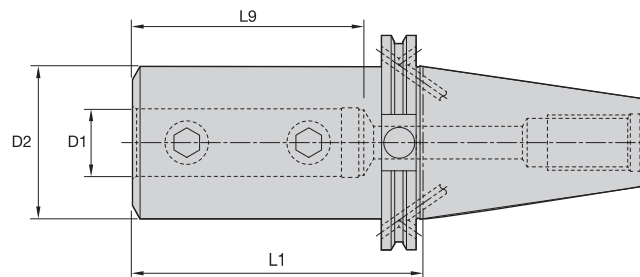
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■ SS IN-CV Form AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	ft. lbs.	stop screw	wrench size stop screw	lbs
1018426	CV40SS100400	1	2.25	4.00	3.75	.63	ELS075062PKG	3/8	110	CSS081125	1/8	4.06

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screws and stop screw.
 Lock screw and stop screw wrench not included.
 For retention knobs, see page J33.



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■ SSF IN-CV Form B/AD

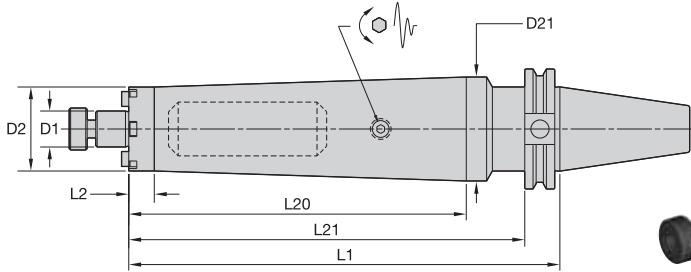


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749368	CV40BSSF075275	3/4	1.75	2.75	2.25	ELS062050PKG	5/16	70	2.78
1749369	CV40BSSF100450	1	2.00	4.50	3.25	DWG ELS075050	3/8	110	4.12
1749370	CV40BSSF125475	1 1/4	2.50	4.75	3.50	ELS075056PKG	3/8	110	5.44
1749471	CV40BSSF150575	1 1/2	2.75	5.75	4.00	ELS075056PKG	3/8	110	7.01

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

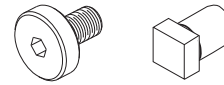
Form AD	✓				
Form B					
	40	(2x) MS2221S	2,5mm		
	50	(2x) MS1296S	3mm		

CAT40 Shank Tools



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■ SMC TD Lock IN-CV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136187	CV40BTDSMC0750900	3/4	1.75	2.17	9.00	.53	7.03	8.25	KLS07	KDK05	1/4	8.34
4136188	CV40BTDSMC1000900	1	2.19	—	9.00	8.25	—	—	KLS10	KDK06	5/16	9.99

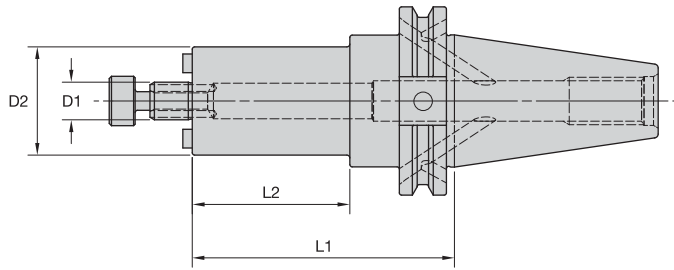
NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

CAT40 Shank Tools

	Form AD						
	Form B				40	(2x) MS2221S	2,5mm
					50	(2x) MS1296S	3mm

CAT40 Shank Tools

Shell Mill Adapters with Through Coolant



CAT40 Shank Tools

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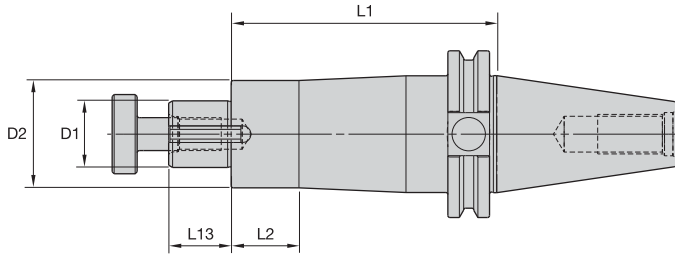
■ SMC Lock IN-CV Form B/AD



order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	lbs
3641491	CV40BSM2C050350	1/2	1.20	3.50	2.09	KLS05	KDK04	3/16	2.80
3641490	CV40BSMC050350	1/2	1.44	3.50	2.09	KLS05	KDK04	3/16	3.05
3641514	CV40BSM2C075350	3/4	1.46	3.50	2.09	KLS07	—	1/4	3.12
3641516	CV40BSM2C075600	3/4	1.46	6.00	5.25	KLS07	—	1/4	4.14
3641489	CV40BSMC050138	1/2	1.75	1.38	.63	KLS05	KDK04	3/16	2.18
3641492	CV40BSMC075138	3/4	1.75	1.38	.63	KLS07	KDK05	1/4	2.25
3641513	CV40BSMC075350	3/4	1.75	3.50	2.09	KLS07	KDK05	1/4	3.56
3641515	CV40BSMC075600	3/4	1.75	6.00	5.25	KLS07	KDK05	1/4	5.10
3641518	CV40ZBSM2C100100	1	2.19	1.00	.25	KLS10	KDK06	5/16	2.21
3641520	CV40BSM2C100206	1	2.19	2.06	1.31	KLS10	KDK06	5/16	2.98
3641522	CV40BSM2C100400	1	2.19	4.00	3.25	KLS10	KDK06	5/16	4.30
3641524	CV40BSM2C100600	1	2.19	6.00	5.25	KLS10	KDK06	5/16	5.59
3641517	CV40ZBSMC100100	1	2.75	1.00	.25	KLS10	KDK06	5/16	2.33
3641519	CV40BSMC100206	1	2.75	2.06	1.31	KLS10	KDK06	5/16	3.28
3641521	CV40BSMC100400	1	2.75	4.00	3.25	KLS10	KDK06	5/16	4.70
3641523	CV40BSMC100600	1	2.75	6.00	5.25	KLS10	KDK06	5/16	5.99
3641525	CV40BSMC125212	1 1/4	2.88	2.12	1.37	KLS12	KDK08	5/16	3.79
3641526	CV40BSMC125400	1 1/4	2.88	4.00	3.25	KLS12	KDK08	5/16	5.08
3641527	CV40BSMC150241	1 1/2	3.81	2.41	1.66	KLS15	KDK10	3/8	5.36
3641528	CV40BSMC150400	1 1/2	3.81	4.00	3.25	KLS15	KDK10	3/8	6.85

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



ERICKSON

■ SA IN-CV Form AD



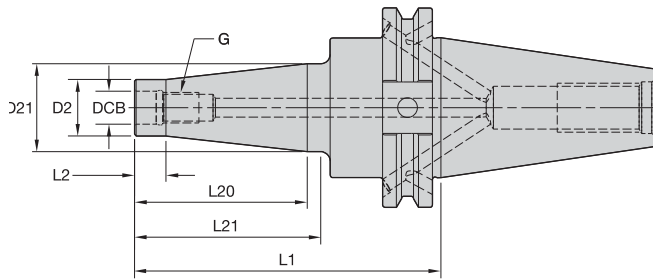
order number	catalog number	D1	D2	L1	L13	L2	lock screw	wrench size lock screw	drive key	lbs
1261699	CV40SA062400	5/8	1.25	4.00	.78	2.63	KLS07	1/4	DWG SDK062088	3.10
1026215	CV40SA100400	1	1.61	4.00	.94	1.00	KLS10	5/16	DWG SDK100106	3.97
1026216	CV40SA125400	1 1/4	1.86	4.00	1.09	3.25	KLS12	5/16	DWG SDK125119	4.97

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.

CAT40 Shank Tools

CAT40 Shank Tools

Screw-On Adapters for Modular Milling Cutters



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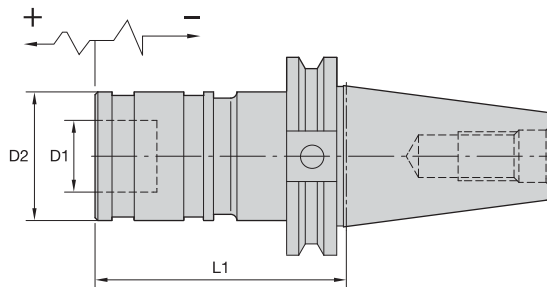
■ ST-CV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4073528	CV40BST06M228	6,5	M6	10	13	58	10	18	19	1,00
4073529	CV40BST06M386	6,5	M6	10	23	98	10	55	59	1,07
4073530	CV40BST08M228	8,5	M8	13	15	58	10	18	19	1,00
4073531	CV40BST08M386	8,5	M8	13	23	98	10	55	59	1,07
4073532	CV40BST10M228	10,5	M10	18	20	58	10	18	19	1,04
4073643	CV40BST10M386	10,5	M10	18	28	98	10	55	59	1,19
4073644	CV40BST12M228	12,5	M12	21	24	58	10	18	19	1,05
4073645	CV40BST12M386	12,5	M12	21	31	98	10	55	59	1,22
4073646	CV40BST16M228	17,0	M16	29	—	58	19	—	—	1,07
4073647	CV40BST16M386	17,0	M16	29	34	98	10	55	59	1,32

NOTE: For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT40 Shank Tools



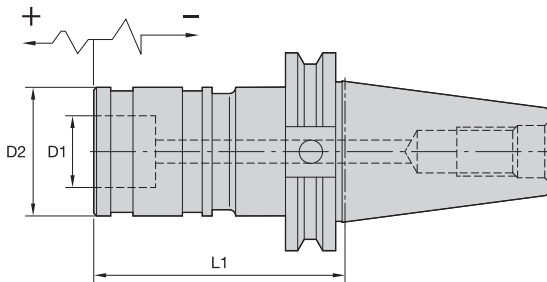
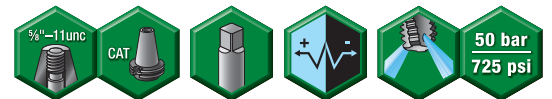
ERICKSON

■ RC-CV Form A

order number	catalog number	adapter size	tap size			D1	D2	L1	tension	compression	kg
			mm	in							
1615978	CV40TCRC1297	1	M1 - M14	#0 - 9/16		19	36	75	15,0	15,0	1,21
1615979	CV40TCRC2393	2	M5 - M24	5/16 - 7/8		31	53	98	25,0	25,0	1,62

NOTE: Quick-change tap adapters are available and must be ordered separately; see page 176.
For retention knobs, see page J33.

CAT40 Shank Tools



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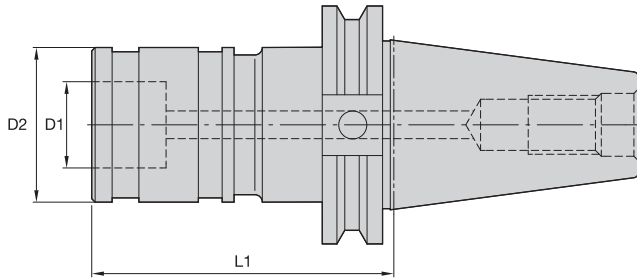
■ RC Cool-CV Form AD

order number	catalog number	adapter size	tap size			D1	D2	L1	tension	compression	kg
			mm	in							
1615986	CV40CHTCRC1382	1	M1 - M14	#0 - 9/16		19	36	97	15,0	15,0	1,41
1615987	CV40CHTCRC2524	2	M5 - M24	5/16 - 7/8		31	53	133	20,0	20,0	2,40

NOTE: Quick-change tap adapters are available and must be ordered separately; see page 176.
For retention knobs, see page J33.

CAT40 Shank Tools

Tap Chucks RC Solid • Morse Taper Adapters



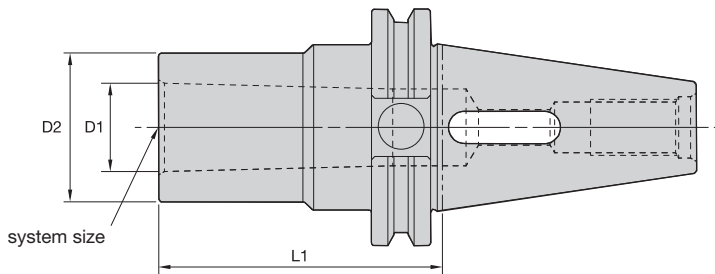
CAT40 Shank Tools

ERICKSON™

■ STRC-CV Form AD

order number	catalog number	adapter size	tap size		D1	D2	L1	lbs
			mm	in				
1615969	CV40CSTRC1290	1	M1 - M14	#0 - 9/16	.75	1.26	2.88	2.60
1615971	CV40CSTRC2350	2	M5 - M24	5/16 - 7/8	1.22	1.97	3.50	3.50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

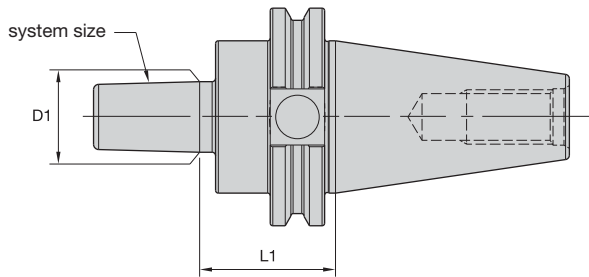


ERICKSON™

■ MT-CV Form A

order number	catalog number	system size	D1	D2	L1	lbs
1025949	CV40MT2244	2	.70	1.26	2.44	2.30
1025950	CV40MT3300	3	.94	1.57	3.00	2.49
1025987	CV40MT4388	4	1.23	1.89	3.88	2.86

NOTE: For retention knobs, see page J33.

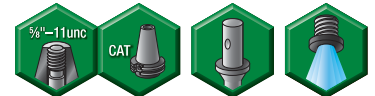
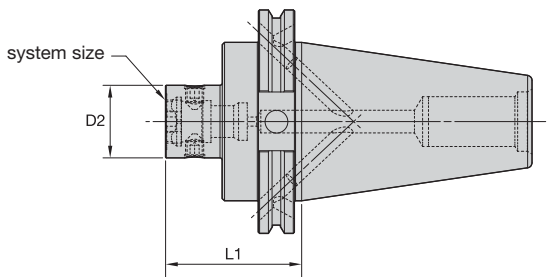


ERICKSON

■ JT-CV Form A

order number	catalog number	system size	D1	L1	lbs
1025951	CV40JT2244	2	.56	1.57	2.33
1025953	CV40JT3278	3	.81	1.56	2.45
1025952	CV40JT33256	33	.62	1.56	2.32

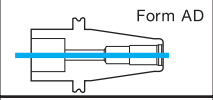





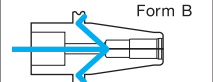


NOTE: For retention knobs, see page J33.



■ RFX-CV Form B/AD

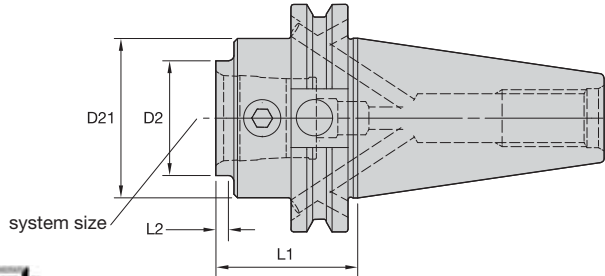
order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860896	CV40BRFX185236	RFX185	18,5	60	3mm	6	1,10
3860897	CV40BRFX245236	RFX245	24,5	60	3mm	8	1,10
3860898	CV40BRFX320236	RFX320	32,0	60	4mm	14	1,10
3860899	CV40BRFX420236	RFX420	42,0	60	5mm	16	1,10
3860900	CV40BRFX550256	RFX550	55,0	65	6mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT40 Shank Tools

KM™ Modular Adapters



CAT40 Shank Tools



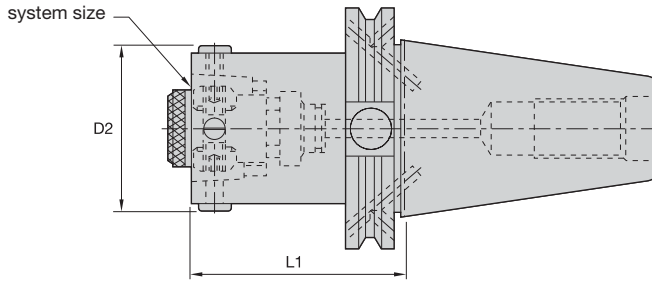
■ KM-CV Form B/AD



order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	ft. lbs.	lbs
2992433	CV40BKM32157	KM32	1.26	1.75	1.58	.37	KM32PKG3L	5mm	6	2.15
2992434	CV40BKM32354	KM32	1.26	1.75	3.54	2.14	KM32PKG3S	5mm	6	2.77
2992435	CV40BKM40157	KM40	1.58	1.75	1.58	.18	KM40PKG3L	6mm	9	2.12
2992436	CV40BKM40394	KM40	1.58	1.75	3.94	2.56	KM40PKG3S	6mm	9	3.29
2992437	CV40BKM50354	KM50	1.97	—	3.54	2.79	KM50PKG3S	10mm	20	3.51
2992438	CV40BKM50472	KM50	1.97	—	4.72	3.97	KM50PKG3S	10mm	20	4.23

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



CAT40 Shank Tools

ERICKSON

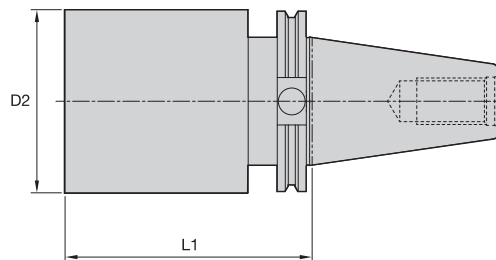
■ HSK-CV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	ft. lbs.	lbs
1533057	CV40BHSK63295	HSK63	2.76	2.95	5mm	15	2.65

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

	Form AD					
	Form B					
				40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

- Machinable front 20–30 HRC.



ERICKSON

■ BB-CV Form A

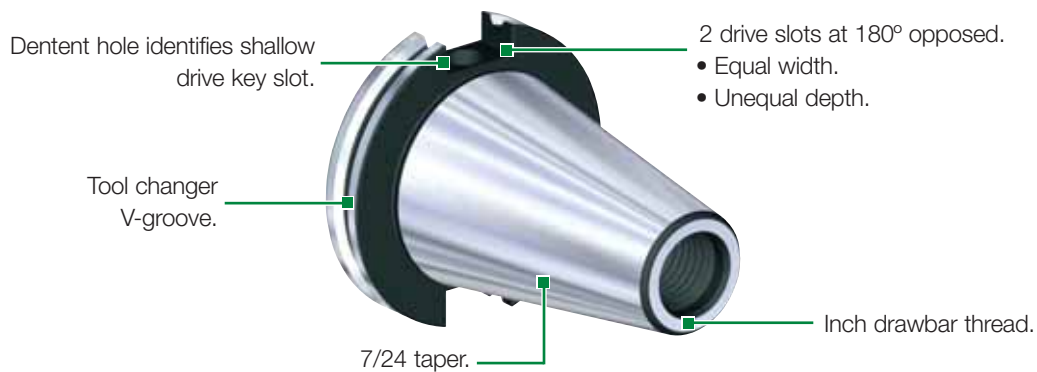
order number	catalog number	D2	L1	lbs
1020634	CV40BB400120	4.00	12.00	39.89
1020563	CV40BB400600	4.00	6.00	18.55

NOTE: For retention knob, see page J33.

Erickson™ CAT V-Flange Shank Tooling System • CV50 Series

Erickson V-Flange CAT Taper Tooling is manufactured from premium materials and meets or exceeds the latest ANSI B5.50 and ISO-1947 taper accuracy of AT3 specification standards. CV50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

CAT50(CV)



For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



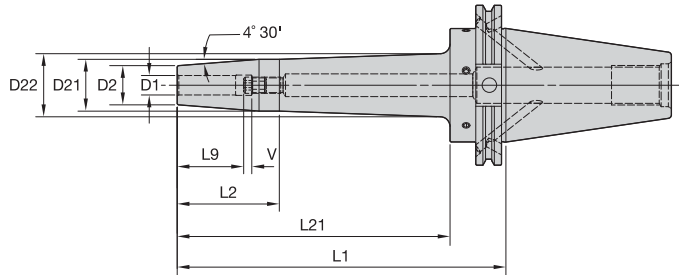
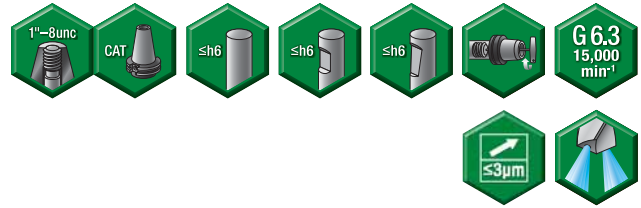
- ANSI B5.50 7/24 taper.
- Standard 1-8 drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

CAT50 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

CAT50 Shank Tools

ERICKSON™

■ TT GP HPV MM-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3683508	CV50BHPVTT06M350	6	21	27	—	89	54	—	26	10	TTSS05014M	2,5mm	3,13
3683509	CV50BHPVTT06M800	6	21	27	35	203	50	168	26	10	TTSS05014M	2,5mm	3,74
3683510	CV50BHPVTT08M350	8	21	27	—	89	54	—	26	10	TTSS06014M	3mm	3,12
3683511	CV50BHPVTT08M800	8	21	27	35	203	50	168	26	10	TTSS06014M	3mm	3,73
3683512	CV50BHPVTT10M375	10	24	32	—	95	60	—	31	10	TTSS08014M	4mm	3,21
3683513	CV50BHPVTT10M800	10	24	32	39	203	63	168	31	10	TTSS08014M	4mm	3,98
3615227	CV50BHPVTT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	3,17
3615228	CV50BHPVTT12M800	12	24	32	39	203	63	168	36	10	TTSS10014M	5mm	3,88
3615229	CV50BHPVTT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	3,22
3615230	CV50BHPVTT14M800	14	27	34	41	203	63	168	36	10	TTSS10014M	5mm	3,98
3615231	CV50BHPVTT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	3,19
3615232	CV50BHPVTT16M800	16	27	34	41	203	63	168	39	10	TTSS12014M	6mm	3,96
3615233	CV50BHPVTT18M400	18	33	42	—	102	67	—	39	10	TTSS12014M	6mm	3,40
3615234	CV50BHPVTT18M800	18	33	42	49	203	70	168	39	10	TTSS12014M	6mm	4,52
3615235	CV50BHPVTT20M400	20	33	42	—	102	67	—	41	10	TTSS16014M	8mm	3,36
3615236	CV50BHPVTT20M800	20	33	42	49	203	70	168	41	10	TTSS16014M	8mm	4,44
3615237	CV50BHPVTT25M400	25	44	53	—	102	67	—	47	10	TTSS16014M	8mm	3,67
3615238	CV50BHPVTT25M800	25	44	53	60	203	70	168	47	10	TTSS16014M	8mm	5,44
3615239	CV50BHPVTT32M400	32	44	53	—	102	67	—	51	10	TTSS16014M	8mm	3,51
3615240	CV50BHPVTT32M800	32	44	53	60	203	70	168	51	10	TTSS16014M	8mm	5,28

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/- .0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/- .0005

■ **TT GP HPV IN-CV Form B/AD**



order number	catalog number	D1	D2	D21	L1	D22	L2	L9	L21	V	stop screw	wrench size stop screw	lbs
3683498	CV50BHPVTT025350	1/4	.83	1.06	3.50	—	2.13	1.02	—	.39	TTSS05014M	2,5mm	6.89
3683499	CV50BHPVTT025800	1/4	.83	1.06	8.00	1.38	1.97	1.02	6.63	.39	TTSS05014M	2,5mm	8.25
3683500	CV50BHPVTT031350	5/16	.83	1.06	3.50	—	2.13	1.02	—	.39	TTSS06014M	3mm	6.88
3683501	CV50BHPVTT031800	5/16	.83	1.06	8.00	1.38	1.97	1.02	6.63	.39	TTSS06014M	3mm	8.23
3683502	CV50BHPVTT038375	3/8	.95	1.26	3.75	—	2.38	1.22	—	.39	TTSS08014M	4mm	7.07
3683503	CV50BHPVTT038800	3/8	.95	1.26	8.00	1.55	2.48	1.22	6.63	.39	TTSS08014M	4mm	8.77
3683504	CV50BHPVTT044375	7/16	.95	1.26	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	7.04
3683505	CV50BHPVTT044800	7/16	.95	1.26	8.00	1.55	2.48	1.42	6.63	.39	TTSS10014M	5mm	8.75
3615189	CV50BHPVTT050375	1/2	.95	1.26	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	6.95
3615190	CV50BHPVTT050800	1/2	.95	1.26	8.00	1.55	2.48	1.42	6.63	.39	TTSS10014M	5mm	8.52
3615191	CV50BHPVTT056375	9/16	1.06	1.34	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	7.06
3615192	CV50BHPVTT062375	5/8	1.06	1.34	3.75	—	2.38	1.54	—	.39	TTSS12014M	6mm	7.01
3615193	CV50BHPVTT062800	5/8	1.06	1.34	8.00	1.62	2.48	1.54	6.63	.39	TTSS12014M	6mm	8.72
3615194	CV50BHPVTT068400	11/16	1.30	1.65	4.00	—	2.63	1.54	—	.39	TTSS12014M	6mm	7.48
3615195	CV50BHPVTT075400	3/4	1.30	1.65	4.00	—	2.63	1.61	—	.39	TTSS16014M	8mm	7.41
3615196	CV50BHPVTT075800	3/4	1.30	1.65	8.00	1.92	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.80
3615197	CV50BHPVTT088400	7/8	1.30	1.65	4.00	—	2.63	1.61	—	.39	TTSS16014M	8mm	7.32
3615198	CV50BHPVTT088800	7/8	1.30	1.65	8.00	1.92	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.71
3615199	CV50BHPVTT100400	1	1.73	2.08	4.00	—	2.63	1.85	—	.39	TTSS16014M	8mm	8.05
3615200	CV50BHPVTT100800	1	1.73	2.08	8.00	2.35	2.76	1.85	6.63	.39	TTSS16014M	8mm	11.97
3615201	CV50BHPVTT125400	1 1/4	1.73	2.08	4.00	—	2.63	2.01	—	.39	TTSS16014M	8mm	7.74
3615202	CV50BHPVTT125800	1 1/4	1.73	2.08	8.00	2.35	2.76	2.01	6.63	.39	TTSS16014M	8mm	11.65
3683506	CV50BHPVTT150450	1 1/2	2.36	2.75	4.50	—	3.75	2.01	—	.39	TTSS20014M	10mm	9.81
3683507	CV50BHPVTT200450	2	2.72	3.11	4.50	—	3.75	2.20	—	.39	TTSS20014M	10mm	10.07

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

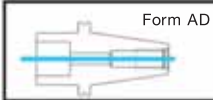








Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

For retention knobs, see page J33.

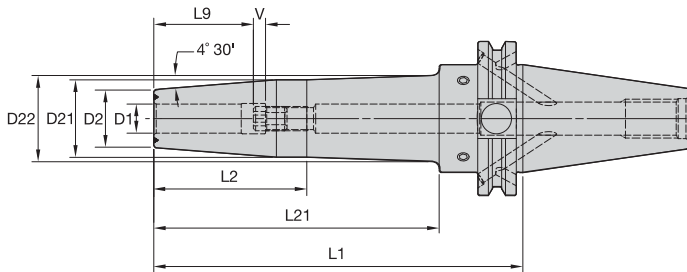
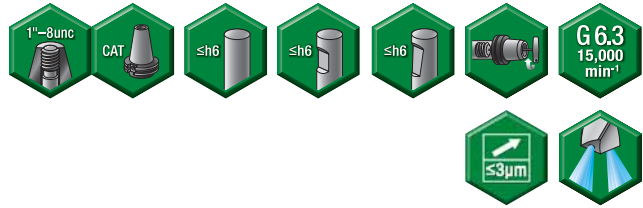
					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT50 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16 & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

CAT50 Shank Tools

ERICKSON™

■ TT HT HPV MM-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3618044	CV50BHPVTHT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	3,17
3618045	CV50BHPVTHT12M800	12	24	32	39	203	63	168	36	10	TTSS10014M	5mm	3,88
3618046	CV50BHPVTHT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	3,21
3618047	CV50BHPVTHT14M800	14	27	34	41	203	63	168	36	10	TTSS10014M	5mm	3,98
3618048	CV50BHPVTHT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	3,19
3618049	CV50BHPVTHT16M800	16	27	34	41	203	63	168	39	10	TTSS12014M	6mm	3,96
3618050	CV50BHPVTHT18M400	18	33	42	—	102	67	—	39	10	TTSS12014M	6mm	3,40
3618051	CV50BHPVTHT18M800	18	33	42	49	203	70	168	39	10	TTSS12014M	6mm	4,52
3618052	CV50BHPVTHT20M400	20	33	42	—	102	67	—	41	10	TTSS16014M	8mm	3,36
3618053	CV50BHPVTHT20M800	20	33	42	49	203	70	168	41	10	TTSS16014M	8mm	4,44
3618054	CV50BHPVTHT25M400	25	44	53	—	102	67	—	47	10	TTSS16014M	8mm	3,67
3618055	CV50BHPVTHT25M800	25	44	53	60	203	70	168	47	10	TTSS16014M	8mm	5,44
3618056	CV50BHPVTHT32M400	32	44	53	—	102	67	—	51	10	TTSS16014M	8mm	3,51
3618057	CV50BHPVTHT32M800	32	44	53	60	203	70	168	51	10	TTSS16014M	8mm	5,28

(continued)

(TT HT HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16, 5/8 & 11/16	.0000/- .0004
3/4, 7/8, 1 & 1-1/4	.0000/- .0005

■ TT HT HPV IN-CV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw	lbs
3618016	CV50BHPVTHT050375	1/2	.95	1.26	—	3.75	2.38	1.42	—	.39	TTSS10014M	5mm	6.95
3618017	CV50BHPVTHT050800	1/2	.95	1.26	1.55	8.00	2.48	1.42	6.63	.39	TTSS10014M	5mm	8.52
3618018	CV50BHPVTHT056375	9/16	1.06	1.34	—	3.75	2.38	1.42	—	.39	TTSS10014M	5mm	7.06
3618019	CV50BHPVTHT062375	5/8	1.06	1.34	—	3.75	2.38	1.54	—	.39	TTSS12014M	6mm	7.01
3618020	CV50BHPVTHT062800	5/8	1.06	1.34	1.62	8.00	2.48	1.54	6.63	.39	TTSS12014M	6mm	8.72
3618021	CV50BHPVTHT068400	11/16	1.30	1.65	—	4.00	2.63	1.54	—	.39	TTSS12014M	6mm	7.48
3618022	CV50BHPVTHT075400	3/4	1.30	1.65	—	4.00	2.63	1.61	—	.39	TTSS16014M	8mm	7.41
3618023	CV50BHPVTHT075800	3/4	1.30	1.65	1.92	8.00	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.80
3618024	CV50BHPVTHT088400	7/8	1.30	1.65	—	4.00	2.63	1.61	—	.39	TTSS16014M	8mm	7.32
3618025	CV50BHPVTHT088800	7/8	1.30	1.65	1.92	8.00	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.72
3618026	CV50BHPVTHT100400	1	1.73	2.08	—	4.00	2.63	1.85	—	.39	TTSS16014M	8mm	8.05
3618027	CV50BHPVTHT100800	1	1.73	2.08	2.35	8.00	2.76	1.85	6.63	.39	TTSS16014M	8mm	11.97
3618028	CV50BHPVTHT125400	1 1/4	1.73	2.08	—	4.00	2.63	2.01	—	.39	TTSS16014M	8mm	7.74
3618029	CV50BHPVTHT125800	1 1/4	1.73	2.08	2.35	8.00	2.76	2.01	6.63	.39	TTSS16014M	8mm	11.65

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

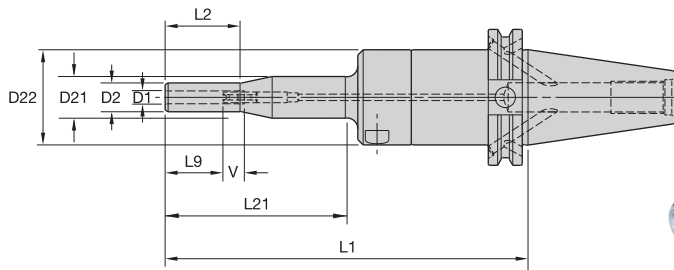
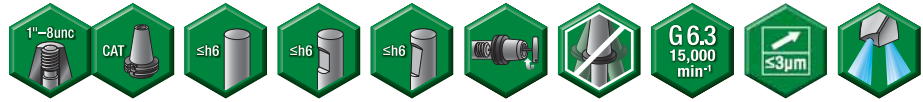
For retention knobs, see page J33.

CAT50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

CAT50 Shank Tools

Hydraulic Chucks Slim Line Trend

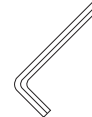


ERICKSON

■ HC Slim T MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019251	CV50BHCSLT06M787	6	13,5	19,5	44	200	35	27	85	10	4,17
3019252	CV50BHCSLT08M787	8	15,5	19,5	44	200	35	27	85	10	4,18
3019253	CV50BHCSLT10M787	10	17,5	44,5	70	200	85	31	141	10	4,17

■ Spare Parts

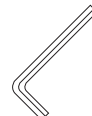


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSLT06M787	170.135	5mm	170.002	2,5mm
CV50BHCSLT08M787	170.135	5mm	170.002	2,5mm
CV50BHCSLT10M787	170.135	5mm	170.003	3mm

■ HC Slim T IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	V	lbs
3019260	CV50BHCSLT025787	.25	.54	.77	1.75	7.87	1.38	1.06	.39	9.22
3019261	CV50BHCSLT038787	.38	.69	1.75	2.75	7.87	3.35	1.22	.39	9.19

■ Spare Parts

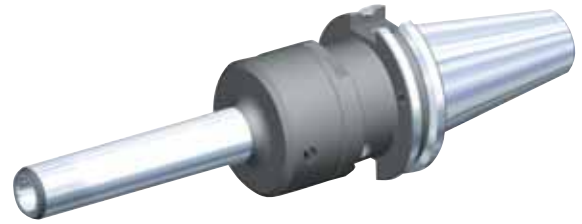
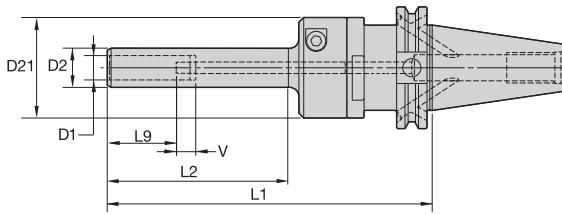


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSLT025787	170.135	5mm	170.002	2,5mm
CV50BHCSLT038787	170.135	5mm	170.003	3mm

(continued)

CAT50 Shank Tools

(HC Slim continued)



■ HC Slim MM-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2508155	CV50BHCSL12M787	12	19,5	44,5	200	95	36	10	3,91
3019254	CV50BHCSL14M787	14	21,5	52,5	200	95	36	10	4,25
3019255	CV50BHCSL16M787	16	23,5	52,5	200	95	39	10	4,27
3019256	CV50BHCSL18M787	18	25,5	52,5	200	95	39	10	4,31
2508156	CV50BHCSL20M787	20	27,5	52,5	200	95	41	10	4,32

■ Spare Parts

catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSL12M787	170.135	5mm	170.002	2,5mm
CV50BHCSL14M787	170.135	5mm	170.002	2,5mm
CV50BHCSL16M787	170.135	5mm	170.002	2,5mm
CV50BHCSL18M787	170.135	5mm	170.002	2,5mm
CV50BHCSL20M787	170.135	5mm	170.002	2,5mm

■ HC Slim IN-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508157	CV50BHCSL050787	.50	.81	2.07	7.87	3.74	1.42	.39	9.28
3019262	CV50BHCSL062787	.63	.93	2.07	7.87	3.74	1.54	.39	9.41
2508158	CV50BHCSL075787	.75	1.06	2.07	7.87	3.74	1.61	.39	9.52

■ Spare Parts

catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSL050787	170.135	5mm	170.002	2,5mm
CV50BHCSL062787	170.135	5mm	170.002	2,5mm
CV50BHCSL075787	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt. Hydraulic chuck technical section, see page K60. Supplied with stop screw and actuation wrench. Unable to use SEFAS™ chamfering rings on this design. Reduction sleeves are available and must be ordered separately; see page I2. For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

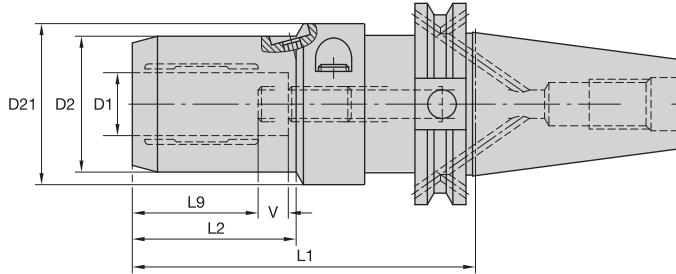
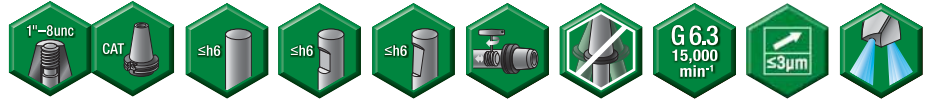
WIDIA™ Victory™ TOP DRILL M1™

The TOP DRILL M1 modular drills offer quality and performance in one versatile, economical package.

Choose the Victory TOP DRILL M1 for:

- Performance — Hole quality and metal removal rates comparable to solid carbide drills and superior to traditional indexable style drills.
- Convenience — Insert is easy to change from the front without any small screws, clamps, or need to remove from the machine.
- Reliability — Replaceable tip design ensures consistent performance without the issues and logistics associated with reconditioning.





ERICKSON

■ **HC MM-CV Form B/AD**

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2079529	CV50BHC06M350	6	25,7	63	89	33	27	10	170.135	5mm	170.002	2,5mm	3,44
2079530	CV50BHC08M350	8	27,7	63	89	33	27	10	170.135	5mm	170.002	2,5mm	3,46
2079531	CV50BHC10M375	10	29,7	63	95	37	31	10	170.135	5mm	170.002	2,5mm	3,54
2079532	CV50BHC12M375	12	31,6	63	95	40	36	10	170.135	5mm	170.002	2,5mm	3,52
2079563	CV50BHC14M400	14	33,6	63	102	46	41	10	170.135	5mm	170.003	3mm	3,56
2079564	CV50BHC16M400	16	37,6	63	102	47	41	10	170.135	5mm	170.003	3mm	3,62
2079565	CV50BHC18M400	18	39,6	63	102	47	41	10	170.135	5mm	170.003	3mm	3,64
2079566	CV50BHC20M400	20	41,6	63	102	48	41	10	170.135	5mm	170.003	3mm	3,67
1605226	CV50BHC25M462	25	49,9	63	117	51	51	10	170.136	6mm	170.004	4mm	4,10
1605227	CV50BHC32M462	32	59,9	63	117	59	51	10	170.136	6mm	170.004	4mm	4,29

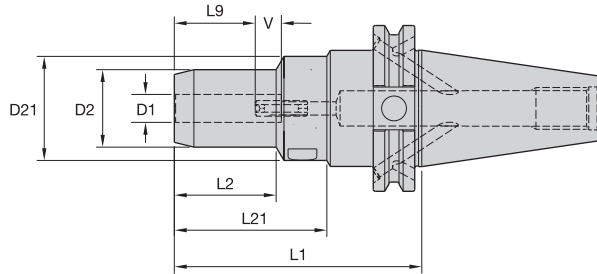
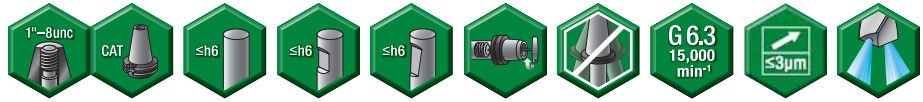
■ **HC IN-CV Form B/AD**

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2079524	CV50BHC025350	1/4	1.01	2.48	3.50	1.30	1.06	.39	170.135	5mm	170.002	2,5mm	7.59
2079525	CV50BHC038375	3/8	1.17	2.48	3.75	1.46	1.22	.39	170.135	5mm	170.002	2,5mm	7.83
2079526	CV50BHC050375	1/2	1.24	2.48	3.75	1.57	1.42	.39	170.135	5mm	170.002	2,5mm	7.74
2079527	CV50BHC062400	5/8	1.48	2.48	4.00	1.83	1.54	.39	170.135	5mm	170.003	3mm	8.00
2079528	CV50BHC075400	3/4	1.64	2.48	4.00	1.89	1.61	.39	170.135	5mm	170.003	3mm	8.11
1605143	CV50BHC100462	1	1.96	2.48	4.63	2.01	1.81	.39	170.136	6mm	170.004	4mm	9.06
1605144	CV50BHC125462	1 1/4	2.36	2.48	4.63	2.32	1.97	.39	170.136	6mm	170.004	4mm	9.50

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

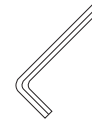
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT50 Shank Tools



ERICKSON

■ HC Trend MM-CV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2977690	CV50BHCT06M350	6	25,7	63	89	33	53	27	10	170.135	6mm	170.003	3mm	3,48
2452778	CV50BHCT06M600	6	25,7	63	152	100	117	27	10	170.135	5mm	170.003	3mm	3,68
2977691	CV50BHCT08M350	8	27,7	63	89	33	53	27	10	170.135	5mm	170.003	3mm	3,55
2452779	CV50BHCT08M600	8	27,7	63	152	100	117	27	10	170.135	5mm	170.003	3mm	3,73
2977692	CV50BHCT10M375	10	29,7	63	95	37	59	31	10	170.135	5mm	170.003	3mm	3,58
2452780	CV50BHCT10M600	10	29,7	63	152	100	117	31	10	170.135	5mm	170.003	3mm	3,80
2977693	CV50BHCT12M375	12	31,6	63	95	40	59	36	10	170.135	5mm	170.003	3mm	3,56
2452781	CV50BHCT12M600	12	31,6	63	152	100	117	36	10	170.135	5mm	170.005	5mm	3,85
2977694	CV50BHCT14M400	14	33,6	63	102	46	66	41	10	170.135	5mm	170.005	5mm	3,60
2452782	CV50BHCT14M600	14	33,6	63	152	100	117	36	10	170.135	5mm	170.005	5mm	3,92
2977695	CV50BHCT16M400	16	37,6	63	102	47	66	41	10	170.135	5mm	170.005	5mm	3,67
2453233	CV50BHCT16M600	16	37,6	63	152	100	117	39	10	170.135	5mm	170.005	5mm	4,08
2977696	CV50BHCT18M400	18	39,6	63	102	47	66	41	10	170.135	5mm	170.005	5mm	3,70
2453234	CV50BHCT18M600	18	39,6	63	152	100	117	39	10	170.135	5mm	170.005	5mm	4,15
2977697	CV50BHCT20M400	20	41,6	63	102	48	66	41	10	170.135	5mm	170.005	5mm	3,71
2453235	CV50BHCT20M600	20	41,6	63	152	100	117	41	10	170.135	5mm	170.005	5mm	4,23
2977698	CV50BHCT25M462	25	49,9	63	117	51	81	51	10	170.136	6mm	170.005	5mm	4,15
2977699	CV50BHCT32M462	32	59,9	63	117	59	81	51	10	170.136	6mm	170.005	5mm	4,33

(continued)

(HC Trend continued)

■ HC Trend IN-CV Form B/AD

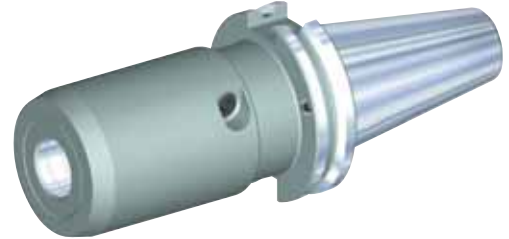
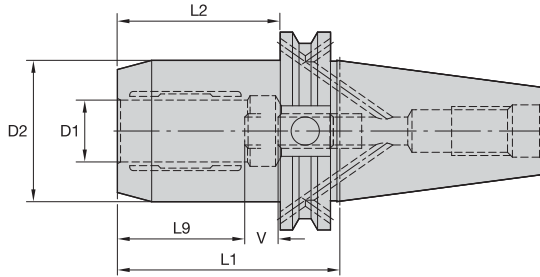
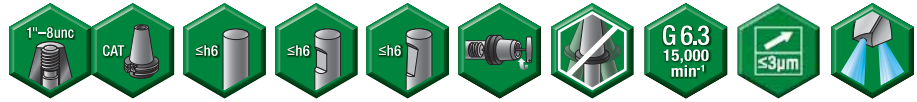


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2977683	CV50BHCT025350	1/4	1.01	2.47	3.50	1.30	2.08	1.06	.39	170.135	5mm	170.003	3mm	7.67
2452210	CV50BHCT025600	1/4	1.01	2.47	6.00	3.94	4.59	1.06	.39	170.135	5mm	170.003	3mm	8.10
2977684	CV50BHCT038375	3/8	1.17	2.47	3.75	1.46	2.33	1.22	.39	170.135	5mm	170.003	3mm	7.89
2452774	CV50BHCT038600	3/8	1.17	2.47	6.00	3.94	4.59	1.22	.39	170.135	5mm	170.003	3mm	8.36
2977685	CV50BHCT050375	1/2	1.24	2.47	3.75	1.57	2.33	1.42	.39	170.135	5mm	170.003	3mm	7.83
2452775	CV50BHCT050600	1/2	1.24	2.47	6.00	3.94	4.59	1.42	.39	170.135	5mm	170.005	5mm	8.47
2977686	CV50BHCT062400	5/8	1.48	2.47	4.00	1.83	2.58	1.54	.39	170.135	5mm	170.005	5mm	8.09
2452776	CV50BHCT062600	5/8	1.48	2.47	6.00	3.94	4.59	1.54	.39	170.135	5mm	170.005	5mm	8.98
2977687	CV50BHCT075400	3/4	1.64	2.47	4.00	1.89	2.58	1.61	.39	170.135	5mm	170.005	5mm	8.20
2452777	CV50BHCT075600	3/4	1.64	2.47	6.00	3.94	4.59	1.61	.39	170.135	5mm	170.005	5mm	9.33
2977688	CV50BHCT100462	1	1.96	2.47	4.63	2.01	3.21	1.81	.39	170.136	6mm	170.005	5mm	9.17
2977689	CV50BHCT125462	1 1/4	2.35	2.47	4.63	2.32	3.21	1.97	.39	170.136	6mm	170.005	5mm	9.57

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

CAT50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



CAT50 Shank Tools

ERICKSON™

■ HC Basic MM-CV Form B/AD

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2001977	CV50BHCB20M400	20	62,9	102	65	41	10	170.135	5 mm	170.005	5 mm	4,38

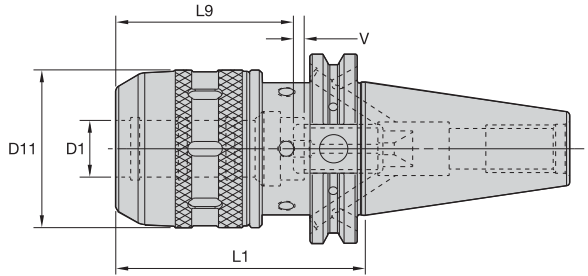
■ HC Basic IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2001978	CV50BHCB075400	3/4	2.47	4.00	2.56	1.61	.39	170.135	5 mm	170.005	5 mm	9.68

*NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.*

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

- Heavy- and fine-milling capabilities.
- Balancable — fine tune with optional M6 set screws.



ERICKSON

■ HPMC IN-CV Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100403	CV50BHPMC075354	3/4	2.09	3.54	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	8.10
3100404	CV50BHPMC075650	3/4	2.09	6.50	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	10.50
3100405	CV50BHPMC100354	1	2.40	3.54	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	8.50
3100406	CV50BHPMC100531	1	2.40	5.32	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	10.50
3100407	CV50BHPMC100650	1	2.40	6.50	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	11.85
3100408	CV50BHPMC125354	1 1/4	2.76	3.54	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	9.00
3100409	CV50BHPMC125531	1 1/4	2.91	5.32	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	11.70
3100410	CV50BHPMC125650	1 1/4	2.91	6.50	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	13.50

NOTE: Milling chuck technical section, see page K64.

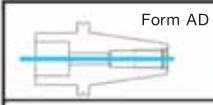




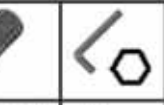



Supplied with locknut and stop screw.

Locknut wrench not included.

Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.

Reduction sleeves are available and must be ordered separately; see page I6.

For retention knobs, see page J33.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

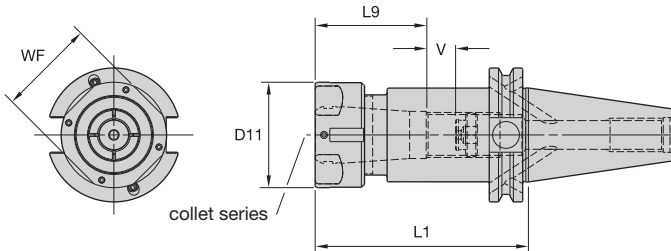
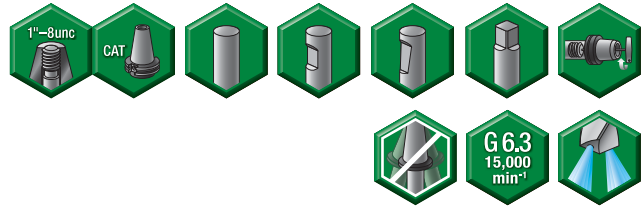
CAT50 Shank Tools

CAT50 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).
- Totally flush face, locknut to collet.
- Locknut uses either open end wrench or spanner wrench.
- Locknut disk sealing cap available for through coolant to prevent collet contamination.



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON™

■ TG Flush-CV Form B/AD



order number	catalog number	collet series	D11	L1	L9	V	WF	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2993251	CV50BTGF075275	TG75	1.97	2.75	1.89	1	2	LNATGF075M	HSW45M	100	SS081041G	4mm & 5/32	7.21
2993247	CV50BTGF050275	TG50	1.50	2.75	1.46	2	1	LNATGF050M	HSW34M	50	SS056041G	4mm & 5/32	7.06
2993255	CV50BTGF100275	TG100	2.36	2.75	2.44	1	2	LNATGF100M	HSW58M	150	SS112041G	4mm & 5/32	7.13
2993248	CV50BTGF050400	TG50	1.50	4.00	1.46	2	1	LNATGF050M	HSW34M	50	SS056041G	4mm & 5/32	7.38
2993256	CV50BTGF100400	TG100	2.36	4.00	2.44	1	2	LNATGF100M	HSW58M	150	SS112041G	4mm & 5/32	8.28
2993252	CV50BTGF075400	TG75	1.97	4.00	1.89	2	2	LNATGF075M	HSW45M	100	SS081041G	4mm & 5/32	8.15
2993253	CV50BTGF075600	TG75	1.97	6.00	1.89	2	2	LNATGF075M	HSW45M	100	SS081041G	4mm & 5/32	9.52
2993249	CV50BTGF050600	TG50	1.50	6.00	1.46	2	1	LNATGF050M	HSW34M	50	SS056041G	4mm & 5/32	7.75
2993257	CV50BTGF100600	TG100	2.36	6.00	2.44	3	2	LNATGF100M	HSW58M	150	SS112041G	4mm & 5/32	10.39
2993250	CV50BTGF050800	TG50	1.50	8.00	1.46	2	1	LNATGF050M	HSW34M	50	SS056041G	4mm & 5/32	8.48
2993258	CV50BTGF100800	TG100	2.36	8.00	2.44	3	2	LNATGF100M	HSW58M	150	SS112041G	4mm & 5/32	12.53
2993254	CV50BTGF075800	TG75	1.97	8.00	1.89	2	2	LNATGF075M	HSW45M	100	SS081041G	4mm & 5/32	11.02

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Disk sealing cap and coolant disks are available and must be ordered separately; see page J7.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

WIN WITH WIDIA™



WIDIA™ M1200 Mini • One Series Meets Every Face Milling Need

For consistent performance, look no further than the WIDIA M1200 Mini. This easy-to-use product ensures great tool life, reduced machining time, and maximum productivity.

- Low cost per edge and high productivity.
- 25% lower cutting forces due to soft cutting action.
- Up to 30% increased Metal Removal Rates (MRR).
- M1200 Mini 15°, 45°, and 60° lead.
- WIDIA premium milling grades.
- Up to 35% better tool life from light to heavy machining.
- Up to 40% shorter machining cycle time.

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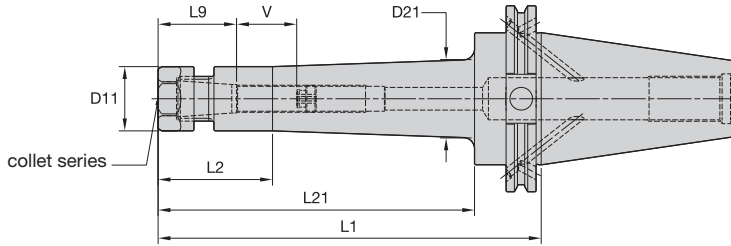
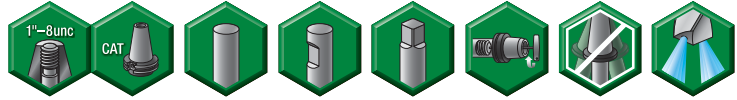
WIDIA
VICTORY
Win with WIDIA™

CAT50 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,3	13,5	1/32	17/32

ERICKSON™

■ TG Hex-CV Form B/AD

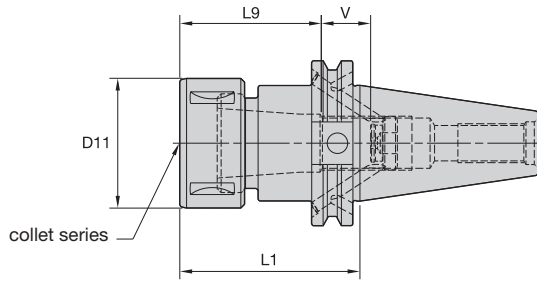


order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size	stop screw	lbs
4135687	CV50BTG050300	TG50	1.34	—	3.00	1.59	—	1.50	1.81	LN050M	OEW30M	50	SS056041G	4mm & 5/32	7.06	
4135688	CV50BTG050500	TG50	1.34	—	5.00	3.59	—	1.50	2.44	LN050M	OEW30M	50	SS056041G	4mm & 5/32	7.58	
4135689	CV50BTG050800	TG50	1.34	1.63	8.00	2.00	6.59	1.50	2.44	LN050M	OEW30M	50	SS056041G	4mm & 5/32	8.93	
4135690	CV50BTG0501000	TG50	1.34	1.70	10.00	3.00	8.59	1.50	2.44	LN050M	OEW30M	50	SS056041G	4mm & 5/32	9.85	
4135691	CV50BTG0501200	TG50	1.34	1.81	12.00	3.50	10.59	1.50	2.44	LN050M	OEW30M	50	SS056041G	4mm & 5/32	10.97	

(continued)

CAT50 Shank Tools

(TG Form B/AD continued)



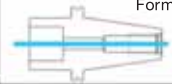







TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

■ TG Round-CV Form B/AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1261786	CV50BTG075300G	TG75	1.97	3.00	1.93	1.46	LNA075M	HSW45M	100	SS081041G	4mm & 5/32	7.34
1261787	CV50BTG075600G	TG75	1.97	6.00	1.93	4.45	LNA075M	HSW45M	100	SS081041G	4mm & 5/32	9.56
1261788	CV50BTG100300G	TG100	2.36	3.00	2.56	.98	LNA100M	HSW58M	150	SS112041G	4mm & 5/32	7.32
1261789	CV50BTG100750G	TG100	2.36	7.50	2.56	5.12	LNA100M	HSW58M	150	SS112041G	4mm & 5/32	11.80

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

 Form AD				
 Form B			40 (2x) MS2221S	2,5mm
			50 (2x) MS1296S	3mm

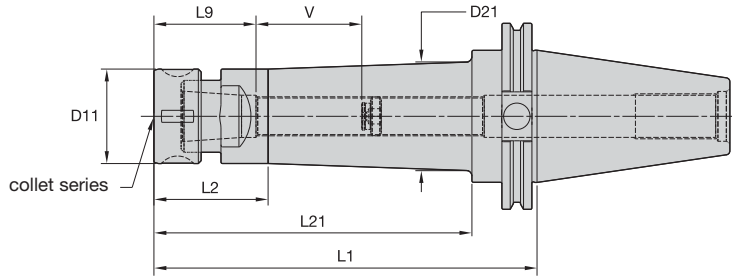
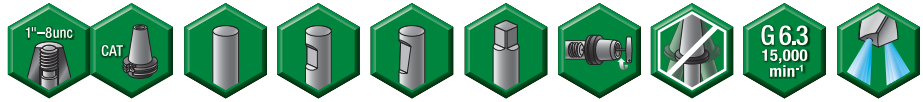
CAT50 Shank Tools

CAT50 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON™

■ TG Round-CV Form AD



order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025603	CV50TG075279G	TG75	1.97	—	2.79	1.42	—	1.93	1.38	LNA075M	HSW45M	100.0000	SS081041G	4mm & 5/32	7.30
1025635	CV50TG075579G	TG75	1.97	2.15	5.79	1.82	4.38	1.93	4.37	LNA075M	HSW45M	100.0000	SS081041G	4mm & 5/32	9.70
1025914	CV50TG075800G	TG75	1.97	2.27	8.00	2.38	6.63	2.09	4.45	LNA075M	HSW45M	100.0000	SS081041G	4mm & 5/32	11.45
1025915	CV50TG0751000G	TG75	1.97	2.40	10.00	2.38	8.63	2.09	4.45	LNA075M	HSW45M	100.0000	SS081041G	4mm & 5/32	13.61
1025916	CV50TG0751200G	TG75	1.97	2.54	12.00	2.40	10.63	1.93	4.57	LNA075M	HSW45M	100.0000	SS081041G	4mm & 5/32	16.50
2636767	CV50TG100276G	TG100	2.36	—	2.76	1.47	—	2.76	1.85	LNA100M	HSW58M	150.0000	SS112041G	4mm & 5/32	7.07
2636768	CV50TG100326G	TG100	2.36	—	3.26	1.69	—	2.76	2.36	LNA100M	HSW58M	150.0000	SS112041G	4mm & 5/32	7.61
2636769	CV50TG100526G	TG100	2.36	—	5.26	3.89	—	2.76	4.33	LNA100M	HSW58M	150.0000	SS112041G	4mm & 5/32	9.50
2636770	CV50TG100726G	TG100	2.36	—	7.26	5.89	—	2.76	5.15	LNA100M	HSW58M	150.0000	SS112041G	4mm & 5/32	11.56

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

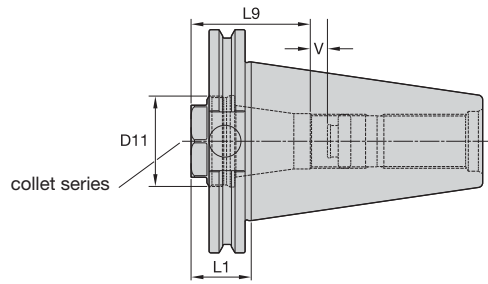
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

- Grip (2:1 advantage).



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

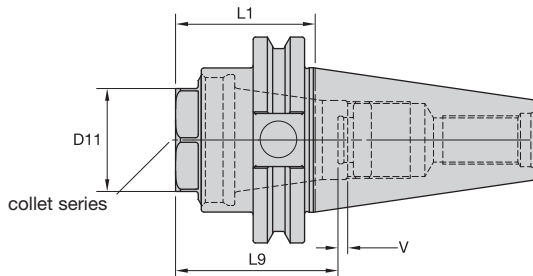
ERICKSON

■ ER Short-CV Z Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978741	CV50ZSER32106	ER32	1.41	1.06	1.97	.67	LNECSER32M	OEW32M	100	SS094041G	4mm & 5/32	5.32
2978763	CV50ZSER40106	ER40	1.81	1.06	2.24	.43	LNECSER40M	OEW168	130	SS112041G	4mm & 5/32	4.94

NOTE: CV50 toolholders deviate from ANSI B5.50 standard. The 2.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ ER Short-CV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978742	CV50SER32169	ER32	1.41	1.69	1.97	1.06	LNECSER32M	OEW32M	100	SS094041G	4mm & 5/32	6.27
2978764	CV50SER40169	ER40	1.81	1.69	2.24	.83	LNECSER40M	OEW168	130	SS112041G	4mm & 5/32	5.86

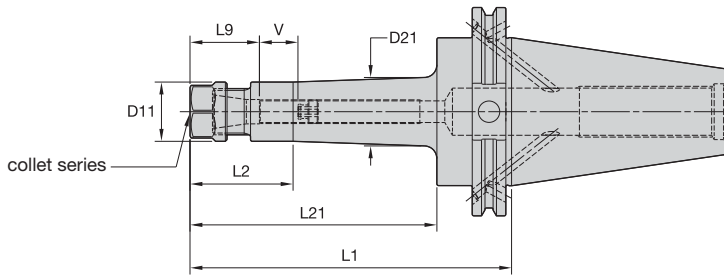
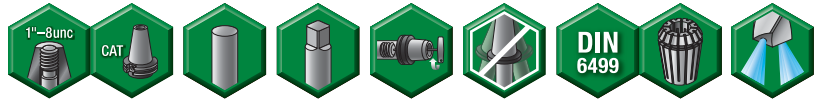
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

CAT50 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



CAT50 Shank Tools

ERICKSON™

■ ER Hex-CV Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	lbs
2249706	CV50BER16250	ER16	1.10	—	2.50	1.13	—	1.26	1.69	6.83
2249707	CV50BER16400	ER16	1.10	—	4.00	2.63	—	1.26	1.50	6.97
2249708	CV50BER16600	ER16	1.10	1.29	6.00	1.92	4.59	1.26	1.50	7.55
2249709	CV50BER20250	ER20	1.34	—	2.50	1.13	—	1.42	1.73	6.84
1261782	CV50BER20400	ER20	1.34	—	4.00	2.63	—	1.42	1.73	7.19
2249710	CV50BER20600	ER20	1.34	—	6.00	4.63	—	1.42	1.73	7.77

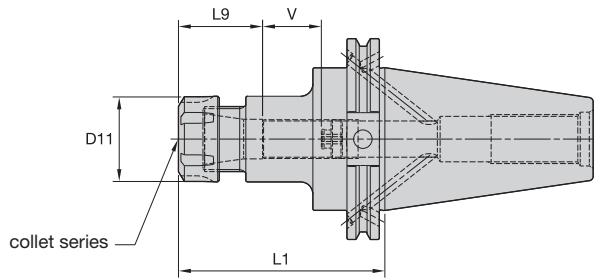
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)	stop screw	wrench size stop screw
CV50BER16250	LNHSER16M	OEW25M	30	42	SS044038G	4mm & 5/32
CV50BER16400	LNHSER16M	OEW25M	30	42	SS044038G	4mm & 5/32
CV50BER16600	LNHSER16M	OEW25M	30	42	SS044038G	4mm & 5/32
CV50BER20250	LNHSER20M	OEW30M	24	59	SS056041G	4mm & 5/32
CV50BER20400	LNHSER20M	OEW30M	24	59	SS056041G	4mm & 5/32
CV50BER20600	LNHSER20M	OEW30M	24	59	SS056041G	4mm & 5/32

(continued)

(ER Form B/AD continued)



■ ER Round-CV Form B/AD








order number	catalog number	collet series	D11	L1	L9	V	lbs
2249711	CV50BER25250	ER25	1.65	2.50	1.57	1	6.85
2249712	CV50BER25400	ER25	1.65	4.00	1.57	2	7.61
2249713	CV50BER25600	ER25	1.65	6.00	1.57	2	8.44
2249714	CV50BER32275	ER32	1.97	2.75	1.81	1	6.91
1261783	CV50BER32400	ER32	1.97	4.00	1.81	1	7.78
2249715	CV50BER32600	ER32	1.97	6.00	1.81	1	9.19
2249716	CV50BER40300	ER40	2.48	3.00	2.05	1	7.21
2249717	CV50BER40600	ER40	2.48	6.00	2.05	4	10.58

■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	stop screw	wrench size stop screw
CV50BER25250	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32
CV50BER25400	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32
CV50BER25600	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32
CV50BER32275	LNSER32M	ER32WM	100	SS094041G	4mm & 5/32
CV50BER32400	LNSER32M	ER32WM	100	SS094041G	4mm & 5/32
CV50BER32600	LNSER32M	ER32WM	100	SS094041G	4mm & 5/32
CV50BER40300	LNSER40M	ER40WM	130	SS112041G	4mm & 5/32
CV50BER40600	LNSER40M	ER40WM	130	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

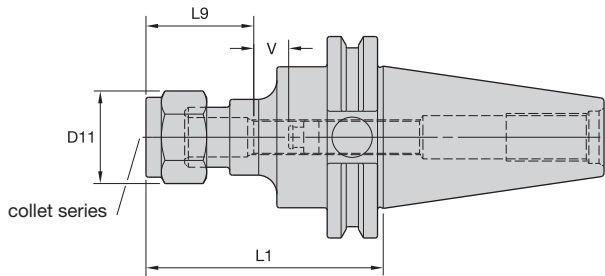
Form AD	✓				
Form B				40 (2x) MS2221S	2,5mm
				50 (2x) MS1296S	3mm

CAT50 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



CAT50 Shank Tools

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■ DA Hex-CV Form AD

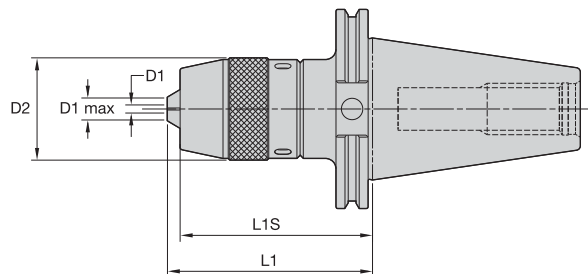
DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA180	2,2	20	1/64	3/4

order number	catalog number	collet series	D11	L1	L9	V	lbs
1015307	CV50DA188600	DA180	1.73	6	1.93	4.65	8.21
1015306	CV50DA188300	DA180	1.73	3	1.93	2.36	7.03

■ Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV50DA188300	NPA188	OEW150	75	SS081041G	4mm & 5/32
CV50DA188600	NPA188	OEW150	75	SS081041G	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.



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■ DC-CV Form A

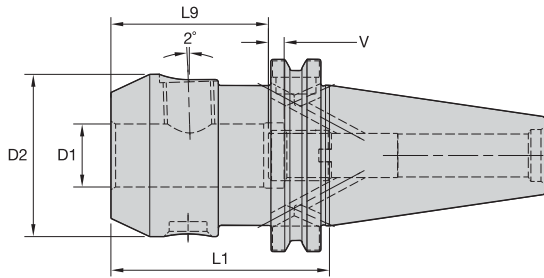
order number	catalog number	D1		D1 max		D2	L1	L1S	locknut wrench	lbs
		mm	in	mm	in					
2262968	CV50DC13M421	1,0	.039	13,0	.512	1.97	4.21	3.72	HSW45M	7.85

NOTE: Locknut wrench is supplied.
For retention knobs, see page J33.

CAT50 Shank Tools

CAT50 Shank Tools

Whistle Notch™ Adapters



CAT50 Shank Tools

ERICKSON™

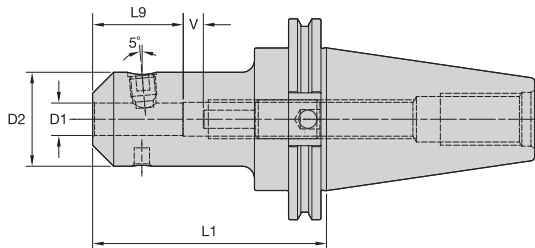
■ WN MM-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1549343	CV50BWN06M244	6	25	62	30	10	SS03M012	3mm	7	571.060	2,5mm	3,14
1549344	CV50BWN08M244	8	28	62	30	10	SS03M014	4mm	15	571.067	3mm	3,10
1549378	CV50BWN10M244	10	35	62	35	10	SS03M018	5mm	25	571.068	4mm	3,21
1549345	CV50BWN12M264	12	42	67	40	10	SS03M023	6mm	35	571.074	5mm	3,32
1549346	CV50BWN14M264	14	44	67	40	10	SS03M023	6mm	35	571.074	5mm	3,30
1549352	CV50BWN16M275	16	48	70	43	10	SS03M025	6mm	50	571.075	6mm	3,41
1549353	CV50BWN18M275	18	50	70	43	10	SS03M025	6mm	50	571.075	6mm	3,43
1549362	CV50BWN20M275	20	52	70	45	10	SS03M026	8mm	95	571.076	6mm	3,43
1804514	CV50BWN20M600	20	52	152	45	10	SS03M026	8mm	95	571.076	6mm	4,67
1549354	CV50BWN25M375	25	65	95	50	10	SS03M027	10mm	135	571.077	6mm	4,23
1804515	CV50BWN25M600	25	65	152	50	10	SS03M027	10mm	135	571.077	6mm	5,52
1549355	CV50BWN32M388	32	72	99	54	10	SS03M029	10mm	160	571.076	6mm	4,51
1804516	CV50BWN32M600	32	72	152	54	10	SS03M029	10mm	160	571.076	6mm	6,06

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw and stop screw.
 Clamp screw or stop screw wrenches not included.
 For retention knobs, see page J33.

Form AD	✓				
Form B					
	40	(2x) MS2221S	2,5mm		
	50	(2x) MS1296S	3mm		

- 5° NAS 987 Whistle Notch cutting toolholders.
- No through-the-toolholder coolant capability (Form A only), unless stop screw is removed.
- Axial adjustment with constant 3/8" drive throughout complete range of adapters.



CAT50 Shank Tools

ERICKSON™

■ WN NAS-CV Form AD • Inch

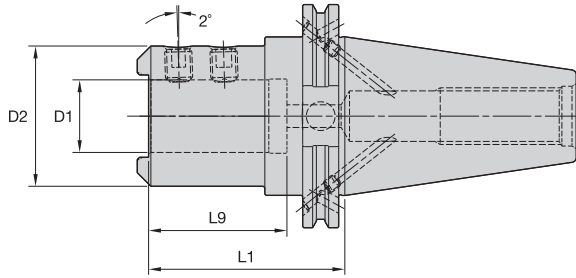


order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	ft. lbs.	wrench size stop screw	lbs
3594645	CV50WNA038282	3/8	1.38	2.82	1.19	.38	—	3/16	15	3/8	7.33
3594646	CV50WNA038469	3/8	1.38	4.69	1.19	.38	—	3/16	15	3/8	7.94
3594647	CV50WNA038669	3/8	1.38	6.69	1.19	.38	—	3/16	15	3/8	8.59
3594648	CV50WNA050273	1/2	1.63	2.73	1.40	.38	—	3/16	15	3/8	7.45
3594649	CV50WNA050460	1/2	1.63	4.60	1.40	.38	—	3/16	15	3/8	8.37
3594650	CV50WNA050660	1/2	1.63	6.60	1.40	.38	—	3/16	15	3/8	9.36
3594651	CV50WNA062266	5/8	1.81	2.66	1.52	.38	—	1/4	60	3/8	7.55
3594652	CV50WNA062453	5/8	1.81	4.53	1.52	.38	—	1/4	60	3/8	8.75
3594653	CV50WNA062653	5/8	1.81	6.53	1.52	.38	—	1/4	60	3/8	10.02
3594654	CV50WNA075263	3/4	2.00	2.63	1.54	.38	—	1/4	60	3/8	7.60
3594655	CV50WNA075450	3/4	2.00	4.50	1.65	.38	—	1/4	60	3/8	9.14
3594656	CV50WNA075650	3/4	2.00	6.50	1.65	.38	—	1/4	60	3/8	10.73
3594657	CV50WNA088263	7/8	2.25	2.63	1.53	.38	—	1/4	60	3/8	7.78
3594658	CV50WNA088450	7/8	2.25	4.50	1.64	.38	—	1/4	60	3/8	9.74
3594659	CV50WNA088650	7/8	2.25	6.50	1.64	.38	—	1/4	60	3/8	11.88
3594660	CV50WNA100300	1	2.63	3.00	1.90	.38	S-1820	3/8	110	3/8	8.57
3594661	CV50WNA100450	1	2.63	4.50	1.90	.38	S-1820	3/8	110	3/8	10.75
3594662	CV50WNA100650	1	2.63	6.50	1.90	.38	S-1820	3/8	110	3/8	13.68
3594663	CV50WNA125300	1 1/4	2.88	3.00	1.90	.38	S-1820	3/8	110	3/8	8.80
3594664	CV50WNA125450	1 1/4	2.88	4.50	1.90	.38	S-1820	3/8	110	3/8	11.44
3594665	CV50WNA125650	1 1/4	2.88	6.50	1.90	.38	S-1820	3/8	110	3/8	14.98
3594666	CV50WNA150400	1 1/2	3.13	4.00	1.90	.38	S-1820	3/8	110	3/8	10.95
3594667	CV50WNA200535	2	4.00	5.35	3.01	.38	S-1820	3/8	110	3/8	16.44
3594668	CV50WNA200735	2	4.00	7.35	3.01	.38	S-1820	3/8	110	3/8	23.42
3594669	CV50WNA250535	2 1/2	5.00	5.35	3.01	.38	—	3/8	110	3/8	22.44
3594670	CV50WNA250735	2 1/2	5.00	7.35	3.01	.38	—	3/8	110	3/8	26.77
3594671	CV50ZWNA200375	2	3.75	3.75	3.01	.38	S-1820	3/8	110	3/8	11.48

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw and stop screw (3/4"-10 RH x 2.25lg).
 Clamp screw or stop screw wrenches not included.
 For retention knobs, see page J33.

CAT50 Shank Tools

Whistle Notch™ Adapters Short



ERICKSON

WD MM-CV Form B/AD

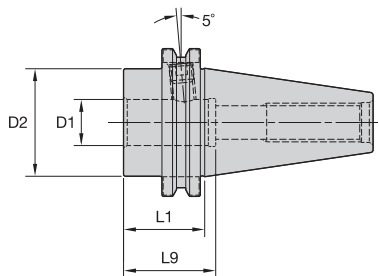


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1749279	CV50BWD32M343	32	63	87	61	SS03M023	6mm	35	3,84
1749283	CV50BWD40M343	40	70	87	71	SS03M023	6mm	35	3,88
1749284	CV50BWD50M343	50	80	87	69	SS03M023	6mm	35	4,04

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw.
 Lock screw wrenches not included.
 For retention knobs, see page J33.

CAT50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



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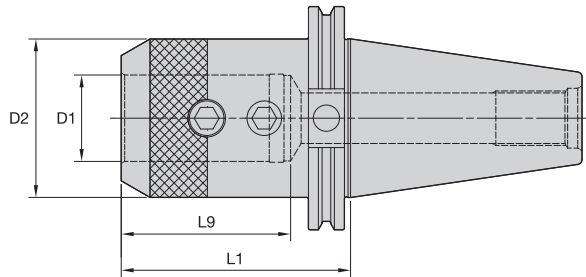
■ SWN IN-CV Form AD (Tap Chuck Adapter)



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1064539	CV50TA1137	1.00	2.75	1.38	3.63	ELS062050PKG	5/16	70	6.53
1017996	CV50TA15200	1.50	2.75	2.00	3.80	ELS050050PKG	1/4	60	6.38

*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.*

CAT50 Shank Tools



ERICKSON™

EM IN-CV Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1013379	CV50EM018250	3/16	.69	2.50	4.69	S1045PKG	3/32	6.55	3
1013408	CV50EM018450	3/16	.69	4.50	6.69	S1045PKG	3/32	6.84	3
1013409	CV50EM018650	3/16	.69	6.50	8.69	S1045PKG	3/32	7.05	3
1013380	CV50EM025250	1/4	.78	2.50	4.69	ELS025025PKG	1/8	6.55	5
1013410	CV50EM025450	1/4	.78	4.50	6.69	ELS025025PKG	1/8	7.17	5
1013411	CV50EM025650	1/4	.78	6.50	7.68	ELS025025PKG	1/8	7.19	5
1013381	CV50EM031250	5/16	1.00	2.50	4.69	ELS031031PKG	5/32	6.61	11
1013412	CV50EM031450	5/16	1.00	4.50	6.69	ELS031031PKG	5/32	7.15	11
1013413	CV50EM031650	5/16	1.00	6.50	8.69	ELS031031PKG	5/32	7.60	11
1026020	CV50EM038250	3/8	1.00	2.50	4.69	ELS038031PKG	3/16	6.63	15
1026286	CV50EM038450	3/8	1.00	4.50	6.69	ELS038031PKG	3/16	7.07	15
1026093	CV50EM038650	3/8	1.00	6.50	8.69	ELS038031PKG	3/16	7.45	15
1013382	CV50EM038850	3/8	1.00	8.50	10.70	ELS038031PKG	3/16	8.27	15
1013383	CV50EM044250	7/16	1.25	2.50	4.69	ELS044038PKG	7/32	6.78	20
1026021	CV50EM050262	1/2	1.38	2.62	4.81	ELS044038PKG	7/32	6.82	20
1026114	CV50EM050462	1/2	1.38	4.62	6.81	ELS044038PKG	7/32	7.52	20
1026115	CV50EM050662	1/2	1.38	6.62	8.81	ELS044038PKG	7/32	8.21	20
1013404	CV50EM050850	1/2	1.25	8.50	10.69	ELS044038PKG	7/32	9.03	20
1026022	CV50EM062375	5/8	1.63	3.75	5.94	ELS056050PKG	1/4	7.53	40
1026116	CV50EM062575	5/8	1.63	5.75	7.94	ELS056050PKG	1/4	8.63	40
1026117	CV50EM062775	5/8	1.63	7.75	9.94	ELS056050PKG	1/4	9.48	40
1026250	CV50EM075375	3/4	1.75	3.75	5.94	ELS062050PKG	5/16	7.65	70
1026118	CV50EM075575	3/4	1.75	5.75	7.94	ELS062050PKG	5/16	8.67	70
1026119	CV50EM075775	3/4	1.75	7.75	7.91	ELS062050PKG	5/16	9.81	70
1013405	CV50EM0751000	3/4	1.75	10.00	12.19	ELS062050PKG	5/16	12.25	70
1026023	CV50EM088375	7/8	2.00	3.75	4.19	ELS062050PKG	5/16	7.65	70
1026120	CV50EM088575	7/8	2.00	5.75	4.19	ELS062050PKG	5/16	9.44	70
1026121	CV50EM088775	7/8	2.00	7.75	4.19	ELS062050PKG	5/16	10.85	70
1026044	CV50EM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	7.94	110
1026287	CV50EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	9.39	110

(continued)

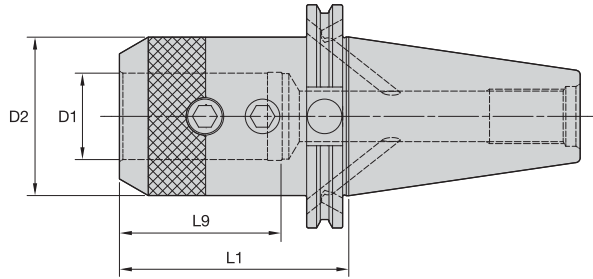
(EM IN-CV Form AD continued)



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1026122	CV50EM100800	1	2.00	8.00	4.49	ELS075056PKG	3/8	10.82	110
1013406	CV50EM1001000	1	2.00	10.00	4.49	ELS075056PKG	3/8	13.37	110
1026045	CV50EM125400	1 1/4	2.50	4.00	2.39	ELS075062PKG	3/8	8.98	110
1026123	CV50EM125600	1 1/4	2.50	6.00	2.39	ELS075062PKG	3/8	11.42	110
1026288	CV50EM125800	1 1/4	2.50	8.00	2.39	ELS075062PKG	3/8	13.85	110
1013407	CV50EM1251000	1 1/4	2.50	10.00	2.39	ELS075062PKG	3/8	16.28	110
1026284	CV50EM150400	1 1/2	2.75	4.00	2.82	ELS075069PKG	3/8	9.19	110
1026289	CV50EM150600	1 1/2	2.75	6.00	2.82	ELS075069PKG	3/8	12.21	110
1026144	CV50EM150800	1 1/2	2.75	8.00	2.82	ELS075069PKG	3/8	15.25	110
1026046	CV50EM200562	2	3.75	5.62	3.38	ELS100088PKG	1/2	15.96	150
1026145	CV50EM200762	2	3.75	7.62	3.38	ELS100088PKG	1/2	19.01	150
1026290	CV50EM200962	2	3.75	9.62	3.38	ELS100088PKG	1/2	22.08	150

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

CAT50 Shank Tools



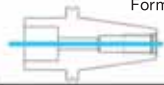








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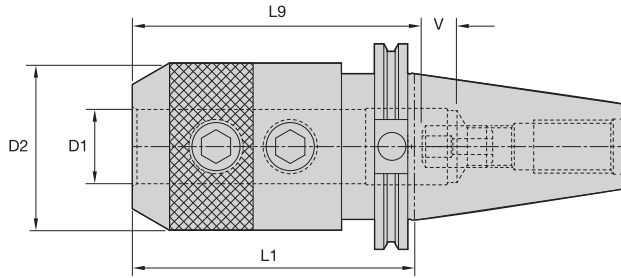
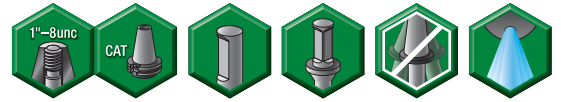
EM IN-CV Form B/AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1261776	CV50BEM050462	1/2	1.38	4.62	6.81	ELS044038PKG	7/32	7.53	20
1261777	CV50BEM062375	5/8	1.62	3.75	5.94	ELS056050PKG	1/4	7.48	40
1261778	CV50BEM075375	3/4	1.75	3.75	5.94	ELS062050PKG	5/16	7.62	70
1261779	CV50BEM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	7.90	110
1261780	CV50BEM125400	1 1/4	2.50	4.00	2.39	ELS075062PKG	3/8	8.94	110
1261781	CV50BEM150400	1 1/2	2.75	4.00	2.82	ELS075069PKG	3/8	9.17	110

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

 Form AD					
 Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



CAT50 Shank Tools

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■ SS-CV Form AD • Inch

order number	catalog number	D1	D2	L1	L9	V	lbs
1018311	CV50SS100400	1	2.25	4.00	3.75	.63	8.74
1018312	CV50SS100600	1	2.25	6.00	3.75	.63	10.66
1018313	CV50SS100800	1	2.25	8.00	3.75	.63	12.57
1018357	CV50SS150400	1 1/2	2.75	4.00	3.25	1.25	8.83
1018358	CV50SS150600	1 1/2	2.75	6.00	3.25	1.25	11.85
1018359	CV50SS150800	1 1/2	2.75	8.00	3.25	1.25	14.87
1018354	CV50SS125400	1 1/4	2.50	4.00	3.25	1.25	8.80
1018355	CV50SS125600	1 1/4	2.50	6.00	3.25	1.25	11.24
1018356	CV50SS125800	1 1/4	2.50	8.00	3.25	1.25	13.67
1018360	CV50SS175400	1 3/4	3.13	4.00	2.75	1.25	9.51
1018361	CV50SS200562	2	3.69	5.62	3.25	1.25	14.99
1018362	CV50SS200762	2	3.69	7.62	3.25	1.25	20.70
1018425	CV50SS250800	2 1/2	4.00	8.00	4.25	1.25	21.50
1018424	CV50SS225650	2 1/4	4.00	6.50	3.75	1.25	18.64

■ Spare Parts

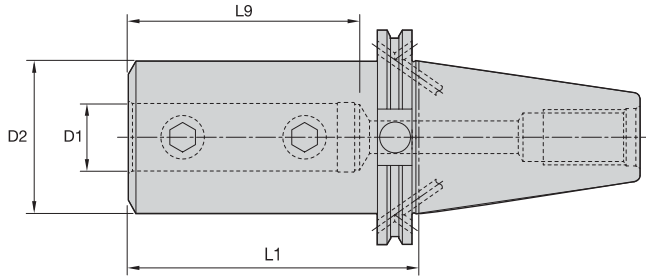


catalog number	lock screw	wrench size clamp screw	ft. lbs.	stop screw	wrench size stop screw
CV50SS100400	ELS075062PKG	3/8	110	CSS081125	1/8
CV50SS100600	ELS075062PKG	3/8	110	CSS081125	1/8
CV50SS125400	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS125600	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS150400	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS150600	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS175400	ELS075069PKG	3/8	110	CSS112175PKG	3/16
CV50SS200562	ELS100088PKG	1/2	150	CSS112175PKG	3/16
CV50SS250800	ELS100062	1/2	150	CSS112175PKG	3/16

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screws and stop screw.
 Clamp screw or stop screw wrench not included.
 For retention knobs, see page J33.

CAT50 Shank Tools

Straight Shanks with Flat Adapters



CAT50 Shank Tools

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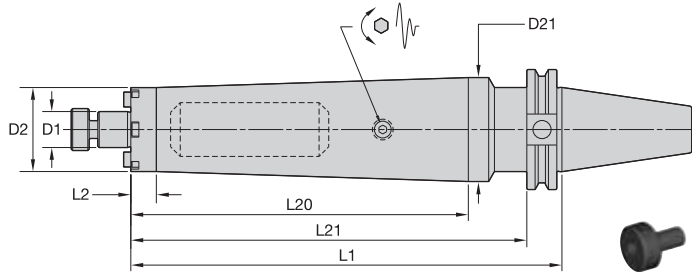
■ SSF IN-CV Form B/AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749472	CV50BSSF075275	3/4	1.75	2.75	2.25	ELS062050PKG	5/16	70	7.21
1749473	CV50BSSF100400	1	2.00	4.00	3.25	DWG ELS075050	3/8	110	8.05
1749474	CV50BSSF125400	1 1/4	2.50	4.00	3.50	ELS075056PKG	3/8	110	8.86
1749475	CV50BSSF150450	1 1/2	2.75	4.50	4.00	ELS075056PKG	3/8	110	9.67
1749209	CV50BSSF200550	2	3.75	5.50	4.25	ELS100088PKG	1/2	150	15.23

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

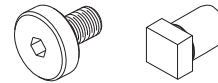
	Form AD				
	Form B			40	(2x) MS2221S 2,5mm
				50	(2x) MS1296S 3mm



CAT50 Shank Tools

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■ SMC TD Lock IN-CV Form A



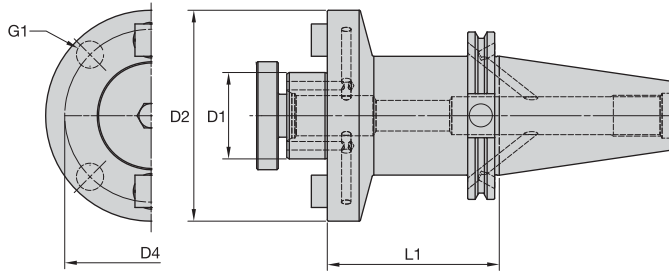
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136189	CV50BTDSMC0751050	3/4	1.75	2.75	10.50	.53	9.09	9.75	KLS07	KDK05	1/4	16.53
4136190	CV50BTDSMC1001250	1	2.75	—	12.50	11.75	—	—	KLS10	KDK06	5/16	24.62
4136191	CV50BTDSMC1251300	1 1/4	2.88	—	13.00	12.25	—	—	KLS12	KDK08	5/16	31.97

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

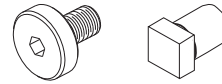
CAT50 Shank Tools

Shell Mill Adapters with Through Coolant



ERICKSON

■ SMC Lock IN-CV Form B/AD

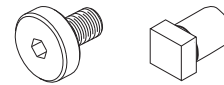


CAT50 Shank Tools

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3640130	CV50BSM2C050150	1/2	1.20	—	—	1.50	KLS05	KDK04	3/16	6.80
3640132	CV50BSM2C050350	1/2	1.20	—	—	3.50	KLS05	KDK04	3/16	7.10
3640194	CV50BSM2C050550	1/2	1.20	—	—	5.50	KLS05	KDK04	3/16	7.64
3640129	CV50BSMC050150	1/2	1.44	—	—	1.50	KLS05	KDK04	3/16	6.81
3640131	CV50BSMC050350	1/2	1.44	—	—	3.50	KLS05	KDK04	3/16	7.39
3640193	CV50BSMC050550	1/2	1.44	—	—	5.50	KLS05	KDK04	3/16	8.21
3640196	CV50BSM2C075150	3/4	1.46	—	—	1.50	KLS07	—	1/4	6.80
3640198	CV50BSM2C075350	3/4	1.46	—	—	3.50	KLS07	—	1/4	7.41
3640200	CV50BSM2C075550	3/4	1.46	—	—	5.50	KLS07	—	1/4	8.17
3640195	CV50BSMC075150	3/4	1.75	—	—	1.50	KLS07	KDK05	1/4	6.94
3640197	CV50BSMC075350	3/4	1.75	—	—	3.50	KLS07	KDK05	1/4	7.85
3640199	CV50BSMC075550	3/4	1.75	—	—	5.50	KLS07	KDK05	1/4	9.04
3640201	CV50BSMC075700	3/4	1.75	—	—	7.00	KLS07	KDK05	1/4	10.51
3640202	CV50BSMC075900	3/4	1.75	—	—	9.00	KLS07	KDK05	1/4	12.39
3640204	CV50BSM2C100200	1	2.19	—	—	2.00	KLS10	KDK06	5/16	7.26
3640206	CV50BSM2C100400	1	2.19	—	—	4.00	KLS10	KDK06	5/16	9.12
3640208	CV50BSM2C100600	1	2.19	—	—	6.00	KLS10	KDK06	5/16	10.98
3640203	CV50BSMC100200	1	2.75	—	—	2.00	KLS10	KDK06	5/16	7.63
3640205	CV50BSMC100400	1	2.75	—	—	4.00	KLS10	KDK06	5/16	10.72
3640207	CV50BSMC100600	1	2.75	—	—	6.00	KLS10	KDK06	5/16	13.81
3640209	CV50BSMC100800	1	2.75	—	—	8.00	KLS10	KDK06	5/16	16.89
3640210	CV50BSMC1001000	1	2.75	—	—	10.00	KLS10	KDK06	5/16	19.98
3640211	CV50BSMC125150	1 1/4	2.75	—	—	1.50	KLS12	KDK08	5/16	7.10
3640212	CV50BSMC125350	1 1/4	2.88	—	—	3.50	KLS12	KDK08	5/16	10.24
3640213	CV50BSMC125550	1 1/4	2.88	—	—	5.50	KLS12	KDK08	5/16	13.27
3640214	CV50BSMC125700	1 1/4	2.88	—	—	7.00	KLS12	KDK08	5/16	15.22
3640215	CV50BSMC125900	1 1/4	2.88	—	—	9.00	KLS12	KDK08	5/16	18.57
3640216	CV50BSMC150240	1 1/2	3.81	—	—	2.40	KLS15	KDK10	3/8	9.88
3640217	CV50BSMC150400	1 1/2	3.81	—	—	4.00	KLS15	KDK10	3/8	12.53
3640218	CV50BSMC150600	1 1/2	3.81	—	—	6.00	KLS15	KDK10	3/8	15.72
3640219	CV50BSMC150800	1 1/2	3.81	—	—	8.00	KLS15	KDK10	3/8	18.90
3640220	CV50BSMC200240	2	4.88	4.00	5/8-11 UNC	2.40	KLS20	KDK12	9/16	11.95

(continued)

(SMC Lock IN-CV Form B/AD continued)

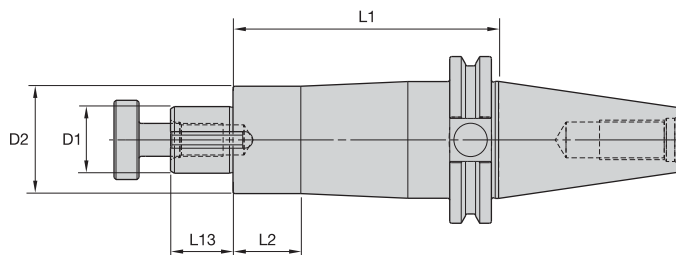


order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3640221	CV50BSMC200400	2	4.88	4.00	5/8-11 UNC	4.00	KLS20	KDK12	9/16	14.94
3640222	CV50BSMC200600	2	4.88	4.00	5/8-11 UNC	6.00	KLS20	KDK12	9/16	18.18
3640223	CV50BSMC200800	2	4.88	4.00	5/8-11 UNC	8.00	KLS20	KDK12	9/16	21.43
3640224	CV50BSMC250240	2 1/2	4.88	4.00	5/8-11 UNC	2.40	—	KDK16	—	12.87
3640225	CV50BSMC250400	2 1/2	4.88	4.00	5/8-11 UNC	4.00	—	KDK16	—	15.80

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knob, see page J33.

Form AD	✓				
Form B					

CAT50 Shank Tools



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SA IN-CV Form A

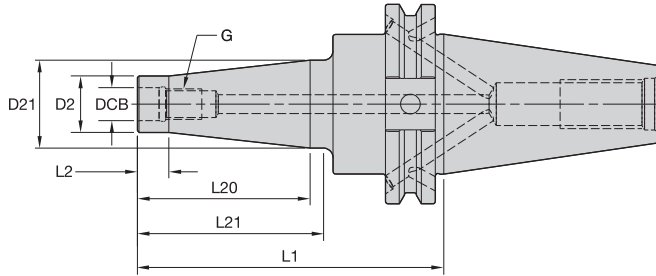


order number	catalog number	D1	D2	L1	L2	L13	lock screw	wrench size lock screw	drive key	lbs
1261878	CV50SA062400	5/8	1.25	4.00	2.63	.78	KLS07	1/4	DWG SDK062088	7.96
1026217	CV50SA100400	1	1.56	4.00	2.63	.94	KLS10	5/16	DWG SDK100106	8.59
2461123	CV50SA100600	1	1.56	6.00	.87	.94	KLS10	5/16	DWG SDK100106	11.60
2461124	CV50SA125400	1 1/4	1.88	4.00	2.63	1.09	KLS12	5/16	DWG SDK125119	9.56
1026218	CV50SA125600	1 1/4	1.88	6.00	1.06	1.09	KLS12	5/16	DWG SDK125119	12.60
2461125	CV50SA150400	1 1/2	2.00	4.00	2.63	1.70	KLS15	3/8	DWG SDK150175	10.35
1026223	CV50SA150600	1 1/2	2.00	6.00	1.06	1.70	KLS15	3/8	DWG SDK150175	13.44
1026244	CV50SA200600	2	2.75	6.00	5.25	1.70	KLS20	9/16	SDK200169	16.67

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive key.
 Lock screw wrench not included.
 For retention knobs, see page J33.

CAT50 Shank Tools

Screw-On Adapters for Modular Milling Cutters



ERICKSON

ST-CV Form B/AD

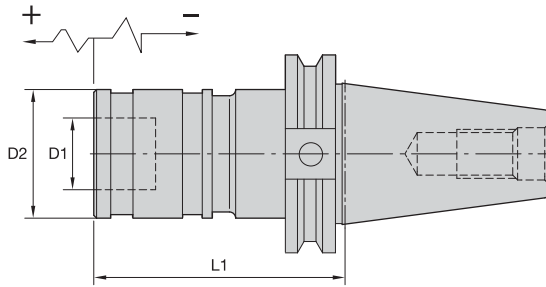
order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	lbs
4073648	CV50BST12M343	.5	M12	.83	.94	3.43	.39	1.77	1.83	7.06
4073649	CV50BST12M539	.5	M12	.83	1.22	5.39	.39	3.54	3.75	7.62
4073650	CV50BST12M736	.5	M12	.83	1.54	7.36	.39	5.71	5.72	8.51
4073651	CV50BST16M343	.7	M16	1.14	1.34	3.43	.39	1.77	1.79	7.35
4073652	CV50BST16M539	.7	M16	1.14	1.54	5.39	.39	3.54	3.75	8.23
4073653	CV50BST16M739	.7	M16	1.14	1.54	7.36	.39	5.51	5.72	8.98
4073654	CV50BST16M933	.7	M16	1.14	1.93	9.33	.39	7.48	7.69	10.81

NOTE: For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT50 Shank Tools

- Rapid Change style.



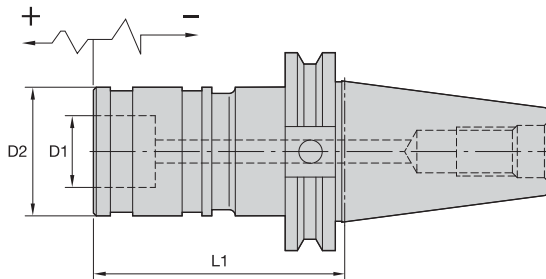
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■ RC-CV Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	lbs
			mm	in				
1615981	CV50TCRC1297	1	M1 - M14	#0 - 9/16	.75	1.42	2.96	7.22
1615982	CV50TCRC2393	2	M5 - M24	5/16 - 7/8	1.22	2.09	3.86	8.00
1615983	CV50TCRC3516	3	M14 - M27	13/16 - 1 3/8	1.89	3.07	5.16	9.60

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

- Rapid Change style.
- High-pressure coolant capability through the chuck.



ERICKSON

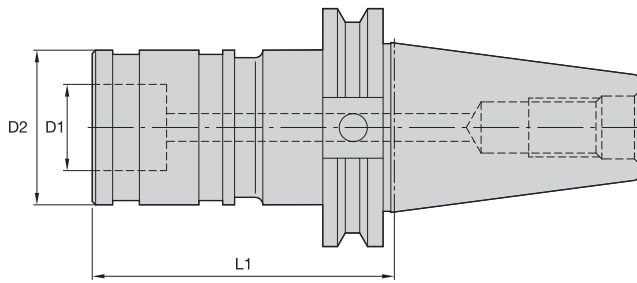
■ RC Coolant-CV Form AD

order number	catalog number	adapter size	tap size		D1	D2	L1	lbs
			mm	in				
1615989	CV50CHTCRC1382	1	M1 - M14	#0 - 9/16	.75	1.42	3.82	7.70
1615990	CV50CHTCRC2524	2	M5 - M24	5/16 - 7/8	1.22	2.09	5.23	10.30
1616001	CV50CHTCRC3717	3	M14 - M27	13/16 - 1 3/8	1.89	3.07	7.17	16.30

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

CAT50 Shank Tools

Tap Chucks RC Solid • Morse Taper Adapters



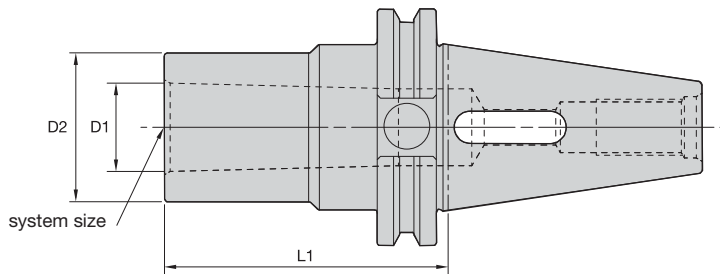
ERICKSON

STRC-CV Form AD

order number	catalog number	adapter size	tap size		D1	D2	L1	lbs
			mm	in				
1615973	CV50CSTRC1290	1	M1 - M14	#0 - 9/16	.75	1.26	3	7.20
1615974	CV50CSTRC2350	2	M5 - M24	5/16 - 7/8	1.22	1.97	4	8.00
1615976	CV50CSTRC3481	3	M14 - M27	13/16 - 1 3/8	1.89	2.81	5	10.60

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

CAT50 Shank Tools

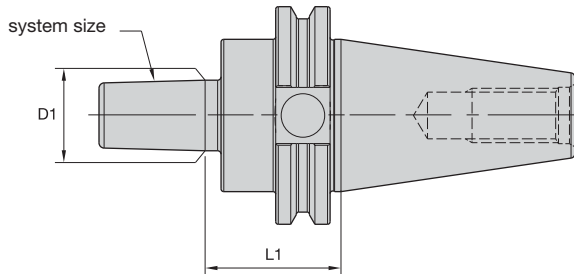


ERICKSON

MT-CV Form A

order number	catalog number	system size	D1	D2	L1	lbs
1026049	CV50MT1150	1	.47	2.75	1.50	6.77
1026050	CV50MT2200	2	.70	2.75	2.00	7.43
1026051	CV50MT3250	3	.94	1.57	2.50	6.73
1026052	CV50MT4338	4	1.23	1.89	3.38	6.90
1026091	CV50MT5375	5	1.75	2.75	3.75	7.55

NOTE: For retention knobs, see page J33.

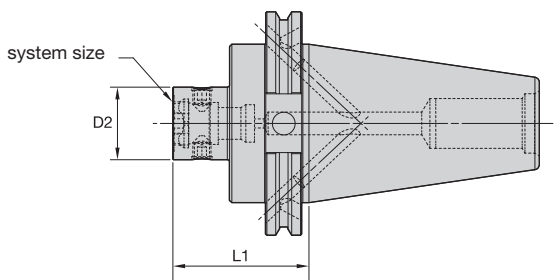


ERICKSON

■ JT-CV Form A

order number	catalog number	system size	D1	L1	lbs
1026379	CV50JT3268	3	.81	1.46	6.97

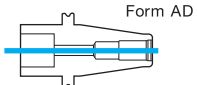





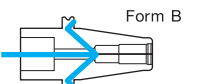


NOTE: For retention knobs, see page J33.



■ RFX-CV Form B/AD

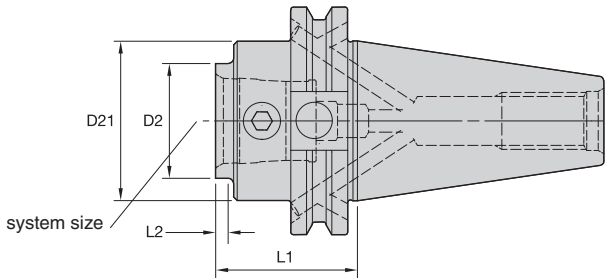
order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
3860901	CV50BRFX320236	RFX320	32	60	4mm	12	3,10
3860902	CV50BRFX420236	RFX420	42	60	5mm	20	3,20
3860903	CV50BRFX550236	RFX550	55	60	6mm	25	3,40
3860904	CV50BRFX720276	RFX720	72	70	6mm	25	3,60

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

CAT50 Shank Tools

KM™ Modular Adapters



CAT50 Shank Tools



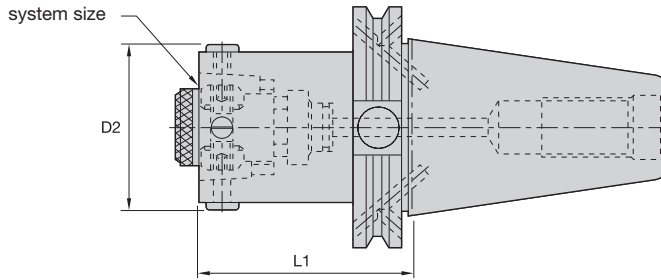
■ KM-CV Form B/AD



order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	ft. lbs.	lbs
2992484	CV50BKM32157	KM32	1.26	2.75	1.58	.12	KM32PKG3L	5mm	6	6.60
2992485	CV50BKM32354	KM32	1.26	2.75	3.54	1.89	KM32PKG3S	5mm	6	7.10
2992486	CV50BKM40157	KM40	1.57	2.75	1.58	.12	KM40PKG3L	6mm	9	6.61
2992487	CV50BKM40394	KM40	1.57	2.75	3.94	2.28	KM40PKG3S	6mm	9	7.63
2992488	CV50BKM50236	KM50	1.97	2.75	2.36	.16	KM50PKG3L	10mm	20	7.59
2992489	CV50BKM50472	KM50	1.97	2.75	4.72	3.07	KM50PKG3S	10mm	20	8.83
2992490	CV50BKM50630	KM50	1.97	2.75	6.30	4.65	KM50PKG3S	10mm	20	9.95
2992491	CV50BKM63236	KM63	2.48	2.75	2.36	.20	KM63PKG3L	12mm	35	7.39
2992492	CV50BKM63551	KM63	2.48	2.75	5.51	4.06	KM63PKG3S	12mm	35	11.04
2992493	CV50BKM63709	KM63	2.48	2.75	7.09	5.63	KM63PKG3S	12mm	35	13.12
2992494	CV50BKM80319	KM80	3.15	—	3.19	—	KM80PKG3S	14mm	58	9.04

NOTE: These products only available in the U.S., Canada, and Japan.
 Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.

			40	(2x) MS2221S
			50	(2x) MS1296S
				2,5mm
				3mm



CAT50 Shank Tools

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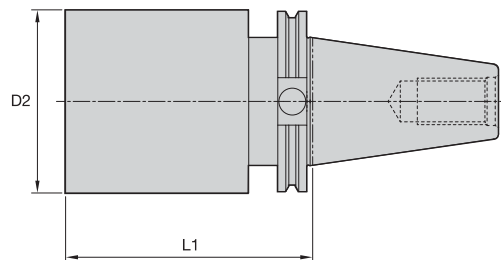
■ HSK-CV Form BA/D

order number	catalog number	system size	D2	L1	wrench size actuation screw	ft. lbs.	lbs
1533058	CV50BHSK50197	HSK50	2.17	1.97	4mm	11	6.39
1533059	CV50BHSK63236	HSK63	2.76	2.36	5mm	15	6.83

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

- Machinable front 20–30 HRC.

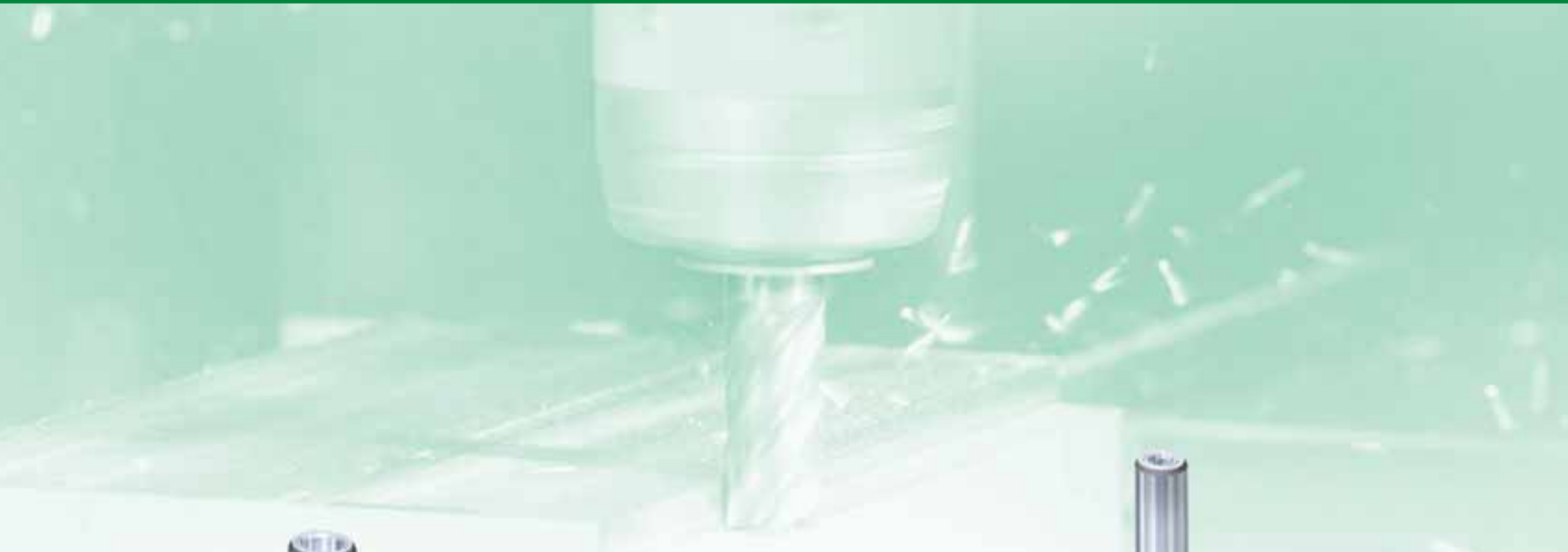


ERICKSON

■ BB-CV Form B/AD

order number	catalog number	D2	L1	lbs
1065951	CV50BB400120	4.00	12.00	44.56
1020558	CV50BB400600	4.00	6.00	23.23
1020560	CV50BB600120	6.00	12.00	91.40
1020559	CV50BB600600	6.00	6.00	43.50

NOTE: For retention knobs, see page J33.



DV Shank Tools

DV40 .....	.F2-F37
DV50 .....	.F38-F71



Erickson™ DV V-Flange Shank Tooling System • DV40 Series

Erickson V-Flange DV Taper Tooling is manufactured from premium materials and meets or exceeds the latest DIN 69871 specification and ISO-1947 taper accuracy of AT3 specification standards. DV40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



DV40

- DIN 69871 7/24 taper.
- Standard M16 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

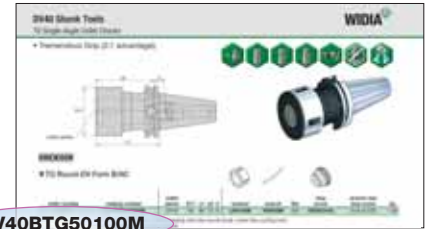


DV DIN 69871 Form B/AD Shank

NOTE: Inherent out-of-balance conditions due to notch and unequal depth of drive slots.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



DV40BTG50100M

DV

Shank Style

DIN
69871

40

Shank Taper Size

40 = 40
50 = 50

B

Special Feature
(optional)

B =
DIN form B coolant feature,
tool shipped to AD specifications
(design allows conversion to form B style)

(blank) =
(no "B" or "Z") — tool built to DIN
form A/AD coolant style

CH =
Coolant form AD — high pressure

HPV =
High performance and balanceable

TD =
Tunable

TG

Toolholder Style

50

Toolholder Size

100

Tool Length

(Taper gage line to front of tool)

metric
xxx = xxx

inch
xxx = x.xx

M

Identification Values

M =
Tool built to metric values and has
metric retention thread

- | | |
|---|---|
| BB = Bar blank | SM2C = Shell mill adapter with coolant and small diameter |
| DA = Double-angle collet chuck | SMC = Shell mill adapter with coolant |
| DC = Drill chuck | SS = Adapter for straight shanks (drills) |
| EM = End mill adapter | SSF = Adapter for straight shanks with flat (drills) |
| ER = DIN 6499 single-angle collet chuck | ST = Screw-on adapters |
| HC = Hydraulic chuck — Standard Line | STRC = Rapid Change — solid tapping adapter chuck |
| HCB = Hydraulic chuck — Basic Line | SWN = Whistle Notch™ 2° — short — (not to DIN standard) |
| HCSL = Hydraulic chuck — Slim Line | TA = Tap chuck adapter |
| HCSLT = Hydraulic chuck — Slim Line — Trend | TCRC = Rapid Change — T&C tapping adapter chuck |
| HCT = Hydraulic chuck — Trend Line | TG = Tremendous Grip single-angle collet chuck |
| HPMC = Bearing milling chuck — high performance | TGF = Tremendous Grip single-angle collet chuck — flush face |
| HSK = HSK adapter | TT = Shrink Fit thermo toolholder |
| JT = Jacobs taper adapter | TTHT = Shrink Fit thermo toolholder — high torque |
| KM = KM™ adapter | WD = Whistle Notch with drive |
| MT = Morse taper adapter | WN = Whistle Notch (2° metric; 5° inch) |
| RC = Rapid Change — T&C tapping adapter chuck | |
| SA = Slotting cutter adapter | |
| RFX = ROTAFLEX™ boring adapters | |
| SER = DIN 6499 single-angle collet chuck — short with internal locknut | |

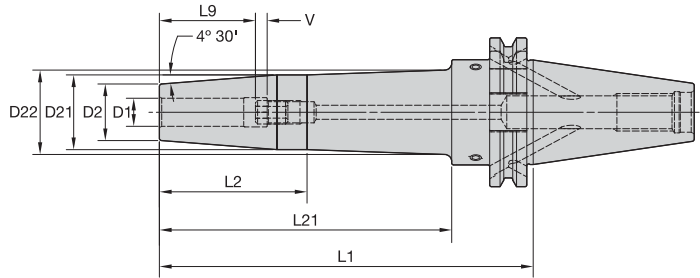
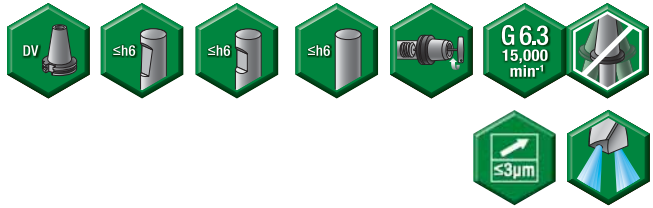
- TG** =
Collet series xx (50), xxx (100)
- EM** =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)
- SM** =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

DV40 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-DV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3790097	DV40BHPVTT06080M	6	21	27	—	80	61	—	26	10	TTSS05014M	2,5mm	0,99
3790098	DV40BHPVTT06120M	6	21	27	—	120	85	—	26	10	TTSS05014M	2,5mm	1,28
3790099	DV40BHPVTT06160M	6	21	27	32	160	50	125	26	10	TTSS05014M	2,5mm	1,52
3790100	DV40BHPVTT08080M	8	21	27	—	80	61	—	26	10	TTSS06014M	3mm	0,99
3790101	DV40BHPVTT08120M	8	21	27	—	120	85	—	26	10	TTSS06014M	3mm	1,28
3790102	DV40BHPVTT08160M	8	21	27	32	160	50	125	26	10	TTSS06014M	3mm	1,52
3790203	DV40BHPVTT10080M	10	24	32	—	80	61	—	31	10	TTSS08014M	4mm	1,05
3790204	DV40BHPVTT10120M	10	24	32	—	120	85	—	31	10	TTSS08014M	4mm	1,38
3790205	DV40BHPVTT10160M	10	24	32	36	160	63	125	31	10	TTSS08014M	4mm	1,68
3617617	DV40BHPVTT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	1,03
3617642	DV40BHPVTT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	1,37
3617643	DV40BHPVTT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	1,66
3617644	DV40BHPVTT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	1,08
3617645	DV40BHPVTT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	1,43
3617646	DV40BHPVTT14160M	14	27	34	38	160	63	125	36	10	TTSS10014M	5mm	1,76
3617647	DV40BHPVTT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	1,05
3617648	DV40BHPVTT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	1,40
3617649	DV40BHPVTT16160M	16	27	34	38	160	63	125	39	10	TTSS12014M	6mm	1,73
3617650	DV40BHPVTT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	1,19
3617651	DV40BHPVTT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	1,63
3617652	DV40BHPVTT18160M	18	33	42	—	160	125	—	39	10	TTSS12014M	6mm	2,05
3617653	DV40BHPVTT20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	1,16

(continued)

DV40 Shank Tools

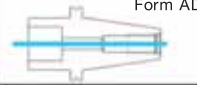










(TT GP HPV continued)



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617654	DV40BHPVTT20120M	20	33	42	—	120	85	—	41	10	TTSS16014M	8mm	1,59
3617655	DV40BHPVTT20160M	20	33	42	—	160	125	—	41	10	TTSS16014M	8mm	2,00
3617656	DV40BHPVTT25100M	25	44	53	—	100	81	—	47	10	TTSS16014M	8mm	1,65
3617657	DV40BHPVTT25160M	25	44	53	—	160	141	—	47	10	TTSS16014M	8mm	2,65
3617658	DV40BHPVTT32100M	32	44	53	—	100	81	—	51	10	TTSS16014M	8mm	1,49
3617659	DV40BHPVTT32160M	32	44	53	—	160	141	—	51	10	TTSS16014M	8mm	2,48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.

DV40 Shank Tools

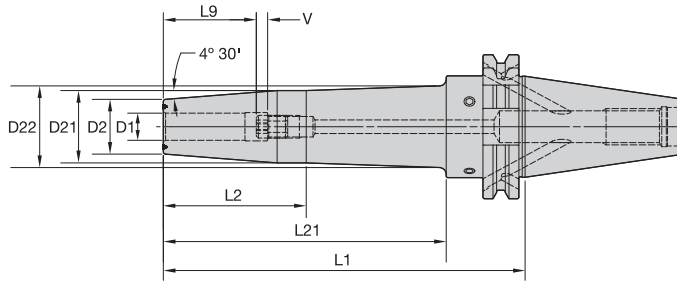
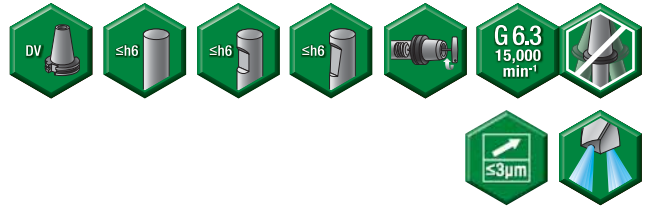
	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

DV40 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016



■ TT HT HPV MM-DV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617591	DV40BHPVTTH12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	1,03
3617592	DV40BHPVTTH12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	1,37
3617605	DV40BHPVTTH12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	1,66
3617606	DV40BHPVTTH14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	1,08
3617607	DV40BHPVTTH14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	1,43
3617608	DV40BHPVTTH14160M	14	27	34	38	160	63	125	36	10	TTSS10014M	5mm	1,76
3617609	DV40BHPVTTH16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	1,05
3617610	DV40BHPVTTH16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	1,40
3617611	DV40BHPVTTH16160M	16	27	34	38	160	63	125	39	10	TTSS12014M	6mm	1,73
3617612	DV40BHPVTTH18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	1,19
3617613	DV40BHPVTTH18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	1,63
3617614	DV40BHPVTTH18160M	18	33	42	—	160	125	—	39	10	TTSS12014M	6mm	2,05
3617615	DV40BHPVTTH20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	1,16
3617616	DV40BHPVTTH20120M	20	33	42	—	120	85	—	41	10	TTSS16014M	8mm	1,59

(continued)

DV40 Shank Tools

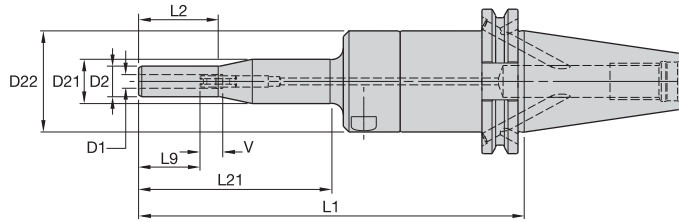
(TT HT HPV continued)



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617618	DV40BHPVTHT20160M	20	33	42	—	160	125	—	41	10	TTSS16014M	8mm	2,00
3617619	DV40BHPVTHT25100M	25	44	53	—	100	81	—	47	10	TTSS16014M	8mm	1,65
3617620	DV40BHPVTHT25160M	25	44	53	—	160	141	—	47	10	TTSS16014M	8mm	2,65
3617621	DV40BHPVTHT32100M	32	44	53	—	100	81	—	51	10	TTSS16014M	8mm	1,49
3617622	DV40BHPVTHT32160M	32	44	53	—	160	141	—	51	10	TTSS16014M	8mm	2,48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



Cutting Tool Shank Requirements
metric (ISO standard)

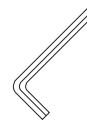
cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON™

■ HC Slim-T MM-DV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019233	DV40BHCSLT06170M	6	13,5	19,5	44,5	170	35	27	85	10	1,64
3019234	DV40BHCSLT08170M	8	15,5	19,5	44,5	170	35	27	85	10	1,65
3019235	DV40BHCSLT10170M	10	17,5	44,5	—	170	85	31	151	10	1,64

■ Spare Parts

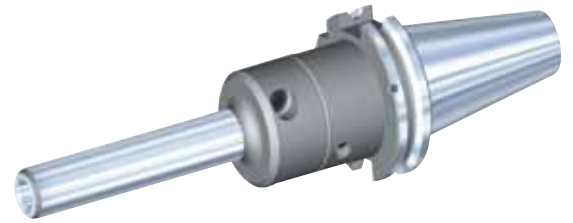
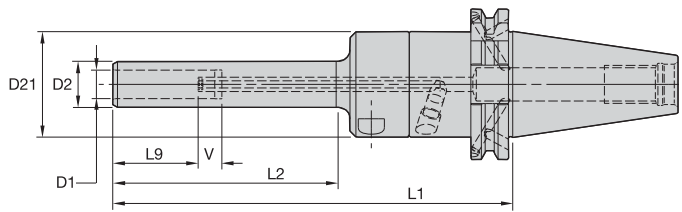


catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
DV40BHCSLT06170M	170.135	5mm	170.002	2,5mm
DV40BHCSLT08170M	170.135	5mm	170.002	2,5mm
DV40BHCSLT10170M	170.135	5mm	170.003	3mm

(continued)

DV40 Shank Tools

(Slim Line continued)



■ HC Slim MM-DV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634535	DV40BHCSL12170M	12	19,5	44,5	170	95	36	10	1,55
2634536	DV40BHCSL14170M	14	21,5	52,5	170	95	36	10	1,78
2634537	DV40BHCSL16170M	16	23,5	52,5	170	95	39	10	1,80
2634538	DV40BHCSL18170M	18	25,5	52,5	170	95	39	10	1,85
2634539	DV40BHCSL20170M	20	27,5	52,5	170	95	41	10	1,89

■ Spare Parts



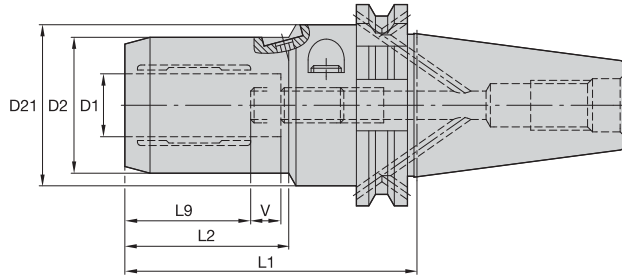
catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
DV40BHCSL12170M	170.135	5mm	170.002	2,5mm
DV40BHCSL14170M	170.135	5mm	170.002	2,5mm
DV40BHCSL16170M	170.135	5mm	170.002	2,5mm
DV40BHCSL18170M	170.135	5mm	170.002	2,5mm
DV40BHCSL20170M	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw and actuation wrench.
 Unable to use SEFAS™ chamfering rings on this design.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

DV40 Shank Tools

Hydraulic Chucks Standard HP Line



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

DV40 Shank Tools

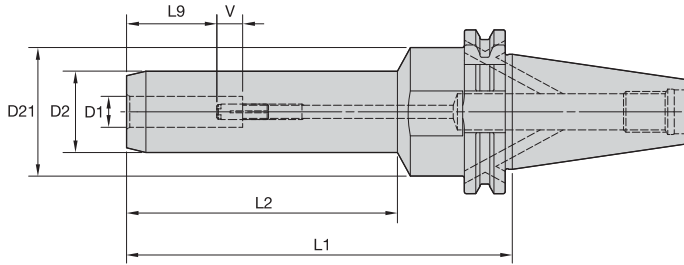
ERICKSON

■ HC MM-DV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245443	DV40BHC06072M	6	25,7	50	72	33	30	10	170.135	5mm	170.002	2,5mm	1,12
1245444	DV40BHC08072M	8	27,7	50	72	34	30	10	170.135	5mm	170.002	2,5mm	1,13
1245445	DV40BHC10077M	10	29,7	50	77	39	35	10	170.135	5mm	170.002	2,5mm	1,17
1237451	DV40BHC12077M	12	31,6	50	77	40	35	10	170.135	5mm	170.002	2,5mm	1,18
1245446	DV40BHC14082M	14	33,6	50	82	46	40	10	170.135	5mm	170.003	3mm	1,22
1237452	DV40BHC16082M	16	37,6	50	82	47	40	10	170.135	5mm	170.003	3mm	1,28
1245447	DV40BHC18082M	18	39,6	50	82	47	40	10	170.135	5mm	170.003	3mm	1,31
1191013	DV40BHC20082M	20	41,6	50	82	48	40	10	170.135	5mm	170.003	3mm	1,33
1245448	DV40BHC25117M	25	49,8	63	117	51	51	10	170.136	6mm	170.004	4mm	2,16
1245449	DV40BHC32117M	32	59,8	63	117	59	51	10	170.136	6mm	170.004	4mm	2,34

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

	Form AD				
	Form B			40	(2x) MS2221S
				50	(2x) MS1296S
					2,5mm
					3mm


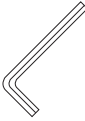


Cutting Tool Shank Requirements
metric (ISO standard)

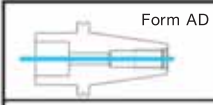








cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

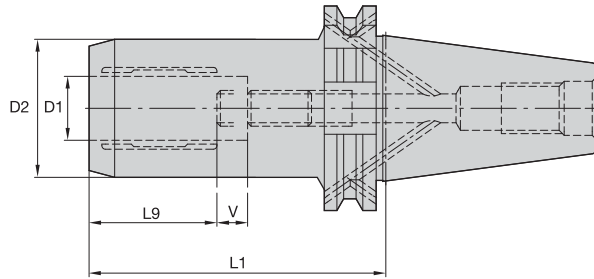
ERICKSON

■ HC Trend In-DV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1809973	DV40BHCT06150M	6	26	50	150	105	30	10		5 mm		3 mm	1,50
1809974	DV40BHCT08150M	8	28	50	150	105	30	10	170.135	5 mm	170.003	3 mm	1,56
1809975	DV40BHCT10150M	10	30	50	150	105	35	10	170.135	5 mm	170.003	3 mm	1,63
1809976	DV40BHCT12150M	12	32	50	150	105	35	10	170.135	5 mm	170.003	3 mm	1,69
1809977	DV40BHCT14150M	14	34	50	150	105	40	10	170.135	5 mm	170.005	5 mm	1,73
1809978	DV40BHCT16150M	16	38	50	150	105	40	10	170.135	5 mm	170.005	5 mm	1,90
1809979	DV40BHCT18150M	18	40	50	150	105	40	10	170.135	5 mm	170.005	5 mm	1,98
1809980	DV40BHCT20150M	20	42	50	150	105	40	10	170.135	5 mm	170.005	5 mm	2,07

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



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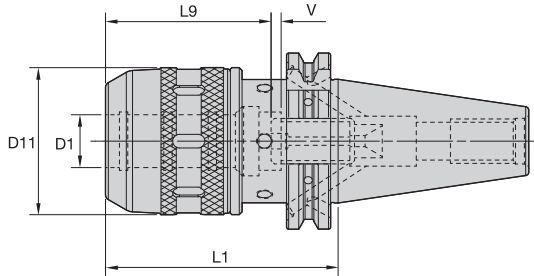
■ HC Basic MM-DV Form B/AD

DV40 Shank Tools

order number	catalog number	D1	D2	L1	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1599399	DV40BHCB20082M	20	49,9	82	41	10		5mm		5mm	1,57

*NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.*

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



ERICKSON

■ HPMC MM-DV Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3523084	DV40BHPMC20085M	20	53	85	44	20	PSW52M	MCSS16040M	2,5mm & 5mm	1,54
3523085	DV40BHPMC20150M	20	53	150	49	20	PSW52M	MCSS16040M	2,5mm & 5mm	2,59
3523086	DV40BHPMC25095M	25	61	95	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	1,91
3523087	DV40BHPMC25150M	25	61	150	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	2,93
3523088	DV40BHPMC32120M	32	70	120	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	2,56
3523089	DV40BHPMC32150M	32	70	150	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	3,27

NOTE: Milling chuck technical section, see page K64.
 Supplied with locknut and stop screw.
 Locknut wrench not included.
 Optional M6-1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
 Reduction sleeves are available and must be ordered separately; see page I6.
 For retention knobs, see page J33.

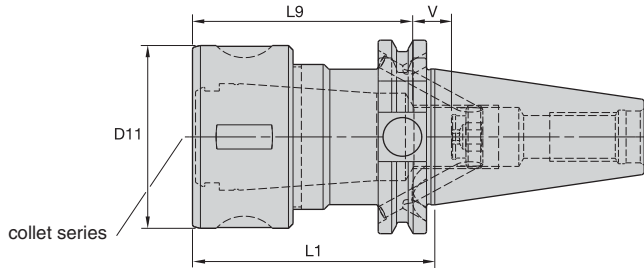
DV40 Shank Tools

DV40 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



DV40 Shank Tools

ERICKSON™

■ TG Round-DV Form B/AD



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1237204	DV40BTG100080M	DV40	60	80	70	8	LNA100M	HSW58M	203	SS081041G	4mm & 5/32	1,38

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

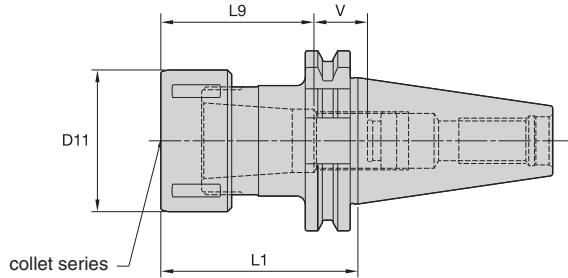
TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

ERICKSON

■ TG Round-DV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1191962	DV40TG075070M	TG75	50	70	54	14	LNA075M	HSW45M	136	SS081041G	4mm & 5/32	1,14
1156385	DV40TG100080M	TG100	60	80	70	23	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,30
1263986	DV40TG100100M	TG100	60	100	70	43	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,49
1191963	DV40TG100150M	TG100	60	150	70	70	LNA100M	HSW58M	203	SS112041G	4mm & 5/32	1,99
1191964	DV40TG150125M	TG150	85	125	86	52	LNA150M	HSW80M	271	SS112041G	4mm & 5/32	2,57

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

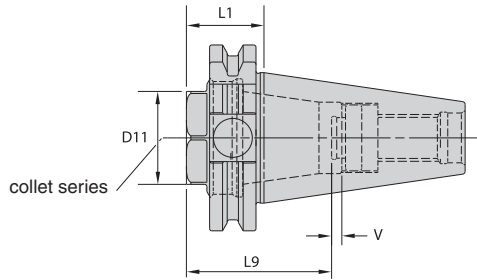
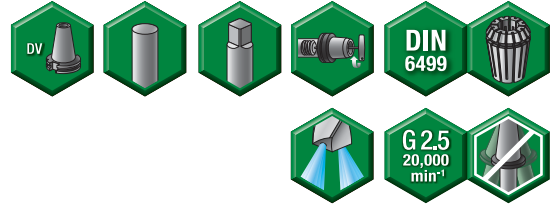
DV40 Shank Tools

DV40 Shank Tools

ER Single-Angle Collet Chucks Short



- Grip (2:1 advantage).



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81

ERICKSON

ER Short-DV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3479819	DV40SER32027M	ER32	36	27	50	5	LNECSER32M	OEW32M	136	SS094041G	4mm & 5/32	0,60

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 ER standard straight-bore collets, see page I50.
 ER tap collets, see page I58.
 ER TCT tension-only tap collets, see page I60.
 For retention knobs, see page J33.

DV40 Shank Tools

KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

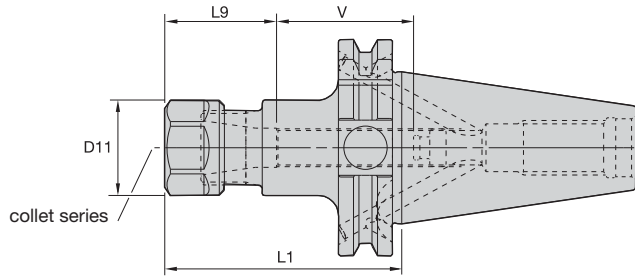


DV40 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



DV40 Shank Tools

ERICKSON™

■ ER Hex-DV Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1770957	DV40BER16070M	ER16	28	70	32	48	0,96
1770958	DV40BER16120M	ER16	28	120	32	48	1,14

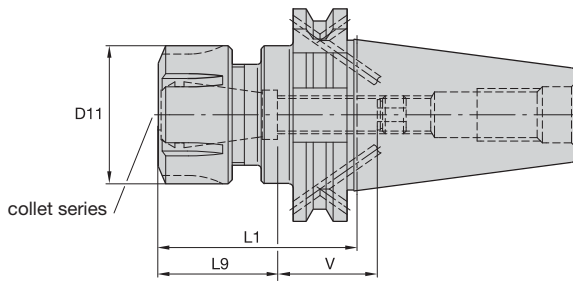
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
DV40BER16070M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
DV40BER16120M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32

(continued)

(ER continued)



■ ER Round-DV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1263807	DV40BER25065M	ER25	42	65	40	35	1,04
1263808	DV40BER25120M	ER25	42	120	40	60	1,51
1263809	DV40BER32070M	ER32	50	70	46	33	1,08
1263810	DV40BER32120M	ER32	50	120	46	54	1,55
1263811	DV40BER40080M	ER40	63	80	52	34	1,22
1263812	DV40BER40120M	ER40	63	120	52	48	1,57

■ Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
DV40BER25065M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
DV40BER25120M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
DV40BER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
DV40BER32120M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
DV40BER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
DV40BER40120M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

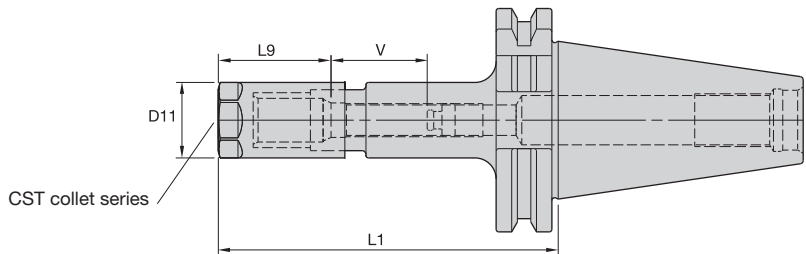
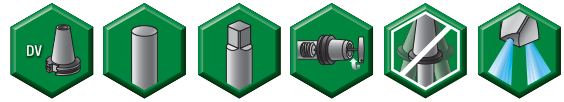
Form AD	✓				
Form B				40	(2x) MS2221S 2,5mm
				50	(2x) MS1296S 3mm

DV40 Shank Tools

DA 04 Series Double-Angle Collet Chucks



- Grip 1:1.
- Balanced-by-design.
- Through-the-toolholder coolant capability – form AD.



DV40 Shank Tools

ERICKSON™

■ DA Style 04-DV Form AD • Hex Locknut • Metric

DA 08 collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64

order number	catalog number	CST collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	Nm	kg
1156381	DV40DA204100M	DA200	21	100	38	30	LNA204M	OEW19M	54	SS038031G	2mm & 5/64	54	1,10
1191927	DV40DA204150M	DA200	21	150	38	30	LNA204M	OEW19M	54	SS038031G	2mm & 5/64	54	1,06



NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.

WIN WITH WIDIA™



WIDIA™ TOP DRILL S+™ 12 x D • Superior Deep Hole Drilling

The versatile TOP DRILL S+ provides reliable performance across a broad scope of applications, including alloyed and unalloyed steel, cast iron, and some stainless steels and high-temperature alloys. TDS+ is now available in 12 x D, adding to its already wide range of options from 3–8 x D.

TDS+ 12 x D is capable of drilling an array of materials. The 4-margin land configuration offers stability, minimizes chipping and jamming, and promotes chip evacuation. Because TDS+ 12 x D does not require a pilot drill, it increases efficiency by reducing the number of steps required for basic applications.

- 12 x D fits the gap between 8 x D and 15 x D.
- One drill that covers all materials.
- Can be used without a pilot.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

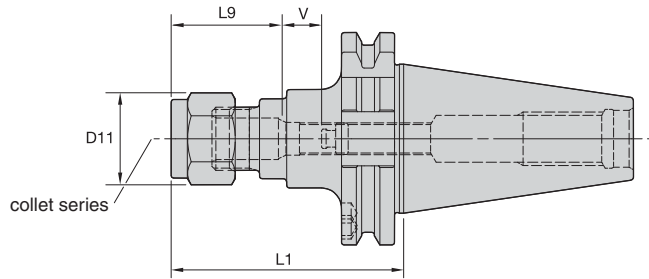
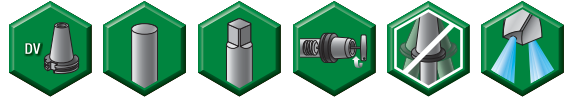
WIDIA 

DV40 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



ERICKSON

■ DA Hex-DV Form AD

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

order number	catalog number	collet series	D11	L1	L9	V	lbs
1156382	DV40DA208070M	DA200	1.08	2.76	1.50	1.26	2.11
1191924	DV40DA108070M	DA100	1.44	2.76	1.77	1.58	2.19

■ Spare Parts

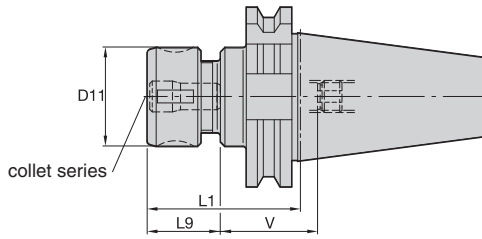


catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
DV40DA208070M	LNA208M	OEW24M	44	SS038031G	2mm & 5/64
DV40DA108070M	LNA108M	OEW32M	55	SS056041G	4mm & 5/32

(continued)

DV40 Shank Tools

(DA continued)



■ **DA Round-DV form AD**

order number	catalog number	collet series	D11	L1	L9	V	lbs
1156380	DV40DA188070M	DA180	1.69	2.76	1.96	.67	2.65
1191925	DV40DA188100M	DA180	1.69	3.94	1.96	1.86	3.09
1191926	DV40DA188150M	DA180	1.69	5.91	1.96	1.86	3.97

■ **Spare Parts**



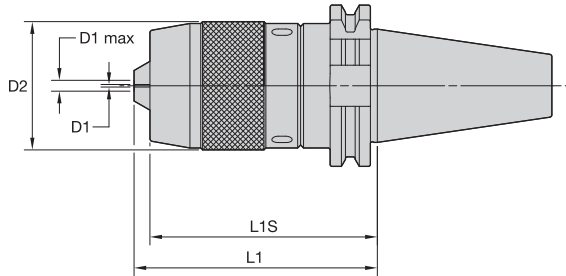
catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
DV40DA188070M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32
DV40DA188100M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32
DV40DA188150M	LNA188M	HSW45M	100	SS081041G	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

DV40 Shank Tools

DV40 Shank Tools

Drill Chucks



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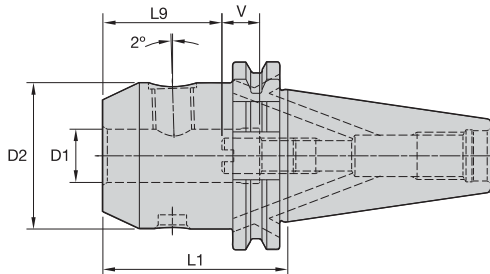
■ DC-DV Form A



order number	catalog number	D1		D1 max		D2	L1	L1S	locknut wrench	ft. lbs.	lbs
		mm	in	mm	in						
3583505	DV40DC13090M	1,0	.039	13,0	.512	50,5	102,3	90	PSW45M	40	3.48

NOTE: Tighten to the recommended tightening torque.
 Locking wrench not supplied.
 For retention knobs, see page J33.

DV40 Shank Tools



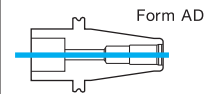





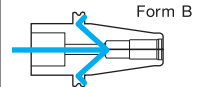


ERICKSON

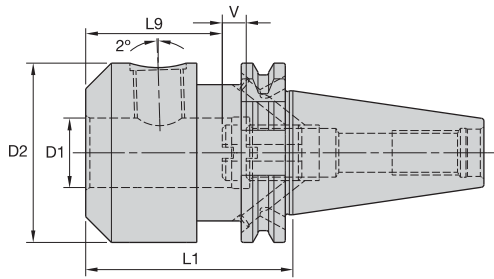
■ WN MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1135194	DV40BWN06050M	6	25	50	30	10	SS03M012	3mm	7	571.060	2,5mm	0,89
1135203	DV40BWN08050M	8	28	50	30	10	SS03M014	4mm	15	571.067	3mm	0,92
1135210	DV40BWN10050M	10	35	50	35	10	SS03M018	5mm	25	571.068	4mm	0,98
1135219	DV40BWN12050M	12	42	50	40	10	SS03M023	6mm	35	571.074	5mm	1,05
1135227	DV40BWN14050M	14	44	50	40	10	SS03M023	6mm	35	571.074	5mm	1,07
1135245	DV40BWN16063M	16	48	63	43	10	SS03M025	6mm	50	571.075	6mm	1,27
1135255	DV40BWN18063M	18	50	63	43	10	SS03M025	6mm	50	571.075	6mm	1,31
1135265	DV40BWN20063M	20	52	63	45	10	SS03M026	8mm	95	571.076	6mm	1,29
1135273	DV40BWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.076	6mm	2,26
1135282	DV40BWN32100M	32	72	100	54	10	SS03M029	10mm	160	571.076	6mm	2,48

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.

DV40 Shank Tools

 <p>Form AD</p>					
 <p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>



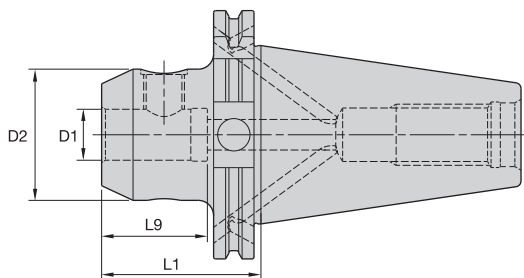
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■ SWN MM-DV Form B/AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1134537	DV40BSWN25075M	25	65	75	44	15	SS03M027	10mm	135	571.066	10mm	1,71
1134538	DV40BSWN32075M	32	72	75	46	17	SS03M029	10mm	160	571.066	10mm	1,80

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.



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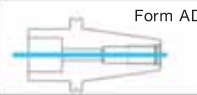








■ EM MM-DV Form B/AD

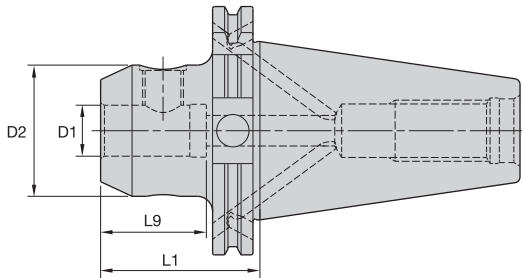


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1263781	DV40BEM06050M	6	25	50	40	SS03M012	3mm	7	0,88
1263784	DV40BEM08050M	8	28	50	40	SS03M014	4mm	15	0,93
1263787	DV40BEM10050M	10	35	50	45	SS03M018	5mm	25	0,96
1263790	DV40BEM12050M	12	42	50	50	SS03M023	6mm	35	1,03
1886608	DV40BEM14050M	14	44	50	50	SS03M023	6mm	35	1,06
1263796	DV40BEM16063M	16	48	63	53	SS03M025	6mm	50	1,25
1263799	DV40BEM20063M	20	50	63	55	SS03M026	8mm	95	1,25
1156378	DV40BEM25100M	25	65	100	60	SS03M027	10mm	135	2,27
1237816	DV40BEM32100M	32	72	100	65	SS03M029	10mm	160	2,48

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

DV40 Shank Tools

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



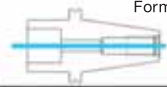











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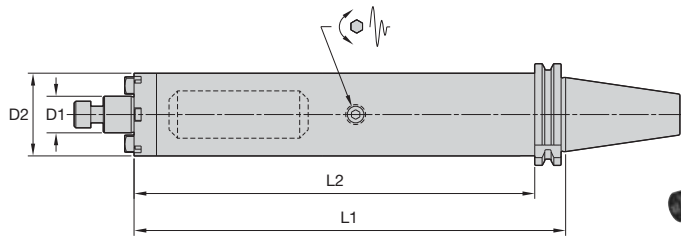
■ SEM MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9
1263821	DV40BSEM25045M	25	44,45	45	60
1263822	DV40BSEM32070M	32	65,50	70	—

NOTE: Do not overtighten clamp screw.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.

DV40 Shank Tools

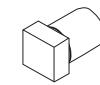
	Form AD					
	Form B					
			40	(2x) MS2221S	2,5mm	
			50	(2x) MS1296S	3mm	



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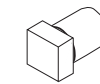
■ SMC TD Cap MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135132	DV40BTDSMC22260M	22	49	260	13,5	MS1234	KDK22M	8mm	4,30



■ SMC TD Lock MM-DV Form B/AD

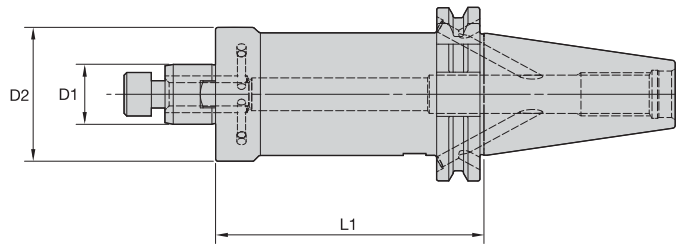
order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135483	DV40BTDSMC27260M	27	61	260	241,0	KLSS27M	—	10mm	5,88



NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.
 For retention knobs, see page J33.

DV40 Shank Tools

Shell Mill Adapters with Through Coolant



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■ SMC Cap MM-DV Form B/AD

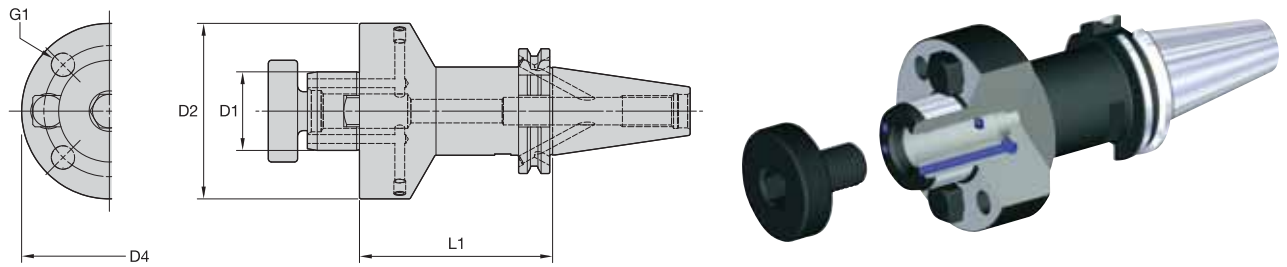


order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3767816	DV40BSM2C16035M	16	38	35	MS1294	KDK16M	6mm	0,94
3767818	DV40BSM2C16100M	16	38	100	MS1294	KDK16M	6mm	1,46
3767815	DV40BSMC16035M	16	44	35	MS1294	KDK16M	6mm	0,98
3767817	DV40BSMC16100M	16	44	100	MS1294	KDK16M	6mm	1,70
3767820	DV40BSM2C22035M	22	42	35	MS1234	—	8mm	1,00
3767822	DV40BSM2C22100M	22	42	100	MS1234	—	8mm	1,65
3767819	DV40BSMC22035M	22	49	35	MS1234	KDK22M	8mm	1,06
3767821	DV40BSMC22100M	22	49	100	MS1234	KDK22M	8mm	1,81

(continued)

DV40 Shank Tools

(SMC continued)



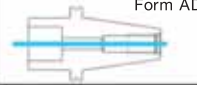







■ SMC Lock MM-DV Form B/AD

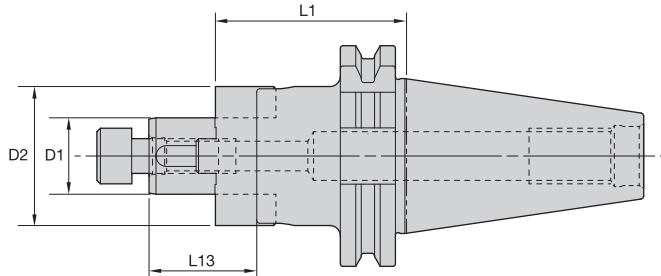


order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3767833	DV40BSMC27035M	27	50,0	35	—	—	KLSS27M	KDK27M	10mm	1,14
3767834	DV40BSMC27100M	27	60,0	100	—	—	KLSS27M	KDK27M	10mm	2,05
3767835	DV40BSMC32050M	32	78,0	50	—	—	KLSS32M	KDK32M	14mm	1,77
3767836	DV40BSMC32100M	32	78,0	100	—	—	KLSS32M	KDK32M	14mm	2,54
3767837	DV40BSMC40050M	40	89,3	50	M12 X 1.75	67	KLSS40M	KDK40M	17mm	2,01
3767838	DV40BSMC40100M	40	89,3	100	M12 X 1.75	67	KLSS40M	KDK40M	17mm	3,23

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.

DV40 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm



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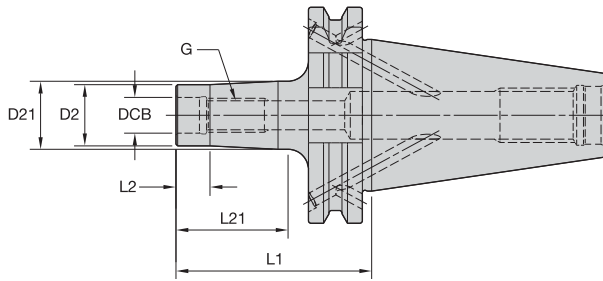
■ CS MM-DV Form AD • Cap Screw Design

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1263828	DV40CS16055M	16	32	55	27	MS1294	6mm	CDR16M	CDK16M	1,02
1191920	DV40CS16100M	16	32	100	27	MS1294	6mm	CDR16M	CDK16M	1,25
1236436	DV40CS22055M	22	40	55	31	MS1234	8mm	CDR22M	CDK22M	1,18
1191921	DV40CS22100M	22	40	100	31	MS1234	8mm	CDR22M	CDK22M	1,56

■ CS MM-DV Form AD • Lock Screw Design

order number	catalog number	D1	D2	L1	L13	lock screw	wrench	combi driver ring	combi drive key	kg
1156379	DV40CS27055M	27	48	55	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,36
1263832	DV40CS27100M	27	48	100	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,94
1263833	DV40CS27150M	27	48	150	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	2,59
1191922	DV40CS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,65
1263835	DV40CS32100M	32	58	100	38	KLS32M	SMW32M	CDR32M	CDK32M	2,43
1191923	DV40CS40060M	40	70	60	41	KLS40M	SMW40M	CDR40M	CDK40M	2,06

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



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■ ST-DV Form B/AD

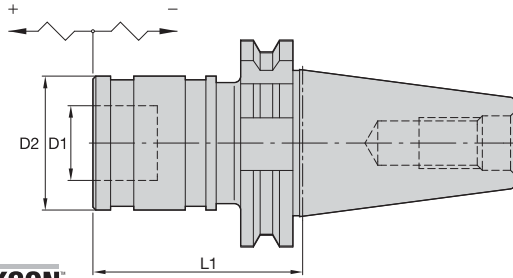
order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4066108	DV40BST06038M	6,5	M6	10	—	38	13	—	0,82
4066109	DV40BST06058M	6,5	M6	10	13	58	10	33	0,80
4066110	DV40BST06078M	6,5	M6	10	20	78	10	53	0,85
4066111	DV40BST06098M	6,5	M6	10	23	98	10	73	0,90
4066112	DV40BST08038M	8,5	M8	13	—	38	13	—	0,82
4066123	DV40BST08058M	8,5	M8	13	15	58	10	33	0,81
4066124	DV40BST08078M	8,5	M8	13	23	78	10	53	0,88
4066125	DV40BST08098M	8,5	M8	13	23	98	10	73	0,91
4066126	DV40BST10038M	10,5	M10	18	—	38	13	—	0,83
4066127	DV40BST10058M	10,5	M10	18	20	58	10	33	0,87
4066128	DV40BST10078M	10,5	M10	18	25	78	10	53	0,91
4066129	DV40BST10098M	10,5	M10	18	28	98	10	73	0,99
4066130	DV40BST12038M	12,5	M12	21	—	38	13	—	0,83
4066131	DV40BST12058M	12,5	M12	21	24	58	10	33	0,88
4066132	DV40BST12078M	12,5	M12	21	24	78	10	53	0,91
4066133	DV40BST12098M	12,5	M12	21	31	98	10	73	1,05
4066134	DV40BST12118M	12,5	M12	21	31	118	10	93	1,12
4066135	DV40BST16038M	17,0	M16	29	—	38	13	—	0,86
4066136	DV40BST16058M	17,0	M16	29	—	58	33	—	0,95
4066137	DV40BST16078M	17,0	M16	29	34	78	10	53	1,09
4066138	DV40BST16098M	17,0	M16	29	34	98	10	73	1,20
4066139	DV40BST16118M	17,0	M16	29	39	118	10	93	1,42

NOTE: For retention knobs, see page J33.

	Form AD						
	Form B						
				40	(2x) MS2221S	2,5mm	
				50	(2x) MS1296S	3mm	

DV40 Shank Tools

Tap Chucks RC Tension and Compression • Solid



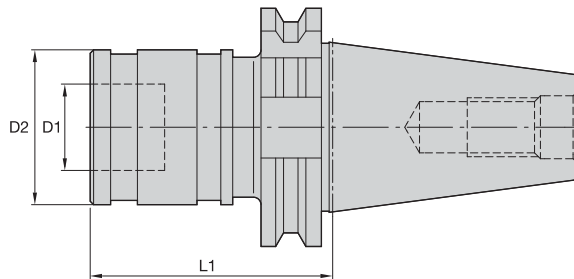
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RC-DV Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	tension	compression	kg
			mm	in						
1777397	DV40RC1060M	1	M1 - M14	#0 - 9/16	19	36	60	7,5	7,5	1,80
1777380	DV40RC2098M	2	M5 - M24	5/16 - 7/8	31	53	98	12,5	12,5	2,00
1777381	DV40RC3150M	3	M14 - M27	13/16 - 1 3/8	48	78	150	20,0	20,0	2,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

DV40 Shank Tools

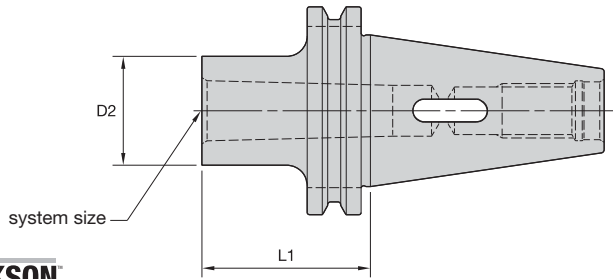


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STRC-DV Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	kg
			mm	in				
1777541	DV40STRC1074M	1	M1 - M14	#0 - 9/16	19	36	74	1,20
1778012	DV40STRC2089M	2	M5 - M24	5/16 - 7/8	31	53	89	1,50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

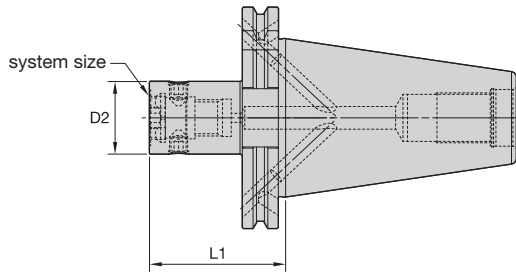


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■ **MT-DV Form A**

order number	catalog number	system size	D2	L1	kg
1191946	DV40MT1050M	1	25	50	1,03
1156384	DV40MT2050M	2	32	50	1,01
1191947	DV40MT3070M	3	40	70	1,03
1191948	DV40MT4095M	4	48	95	1,25










NOTE: For retention knobs; see page J33.



■ **RFX-DV Form B/AD**

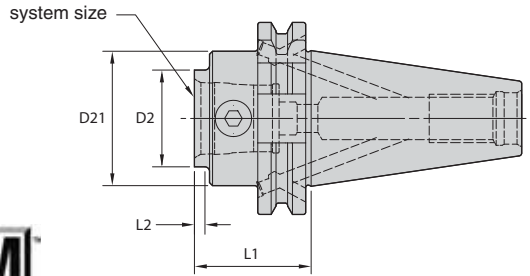
order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860696	DV40BRFX185060M	RFX185	18,5	60	3mm	6	1,10
3860697	DV40BRFX245060M	RFX245	24,5	60	3mm	8	1,10
3860698	DV40BRFX320060M	RFX320	32,0	60	4mm	14	1,10
3860699	DV40BRFX420060M	RFX420	42,0	60	5mm	16	1,10
3860700	DV40BRFX550065M	RFX550	55,0	65	6mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

DV40 Shank Tools

KM™ Modular Adapters



■ KM-DV Form B/AD

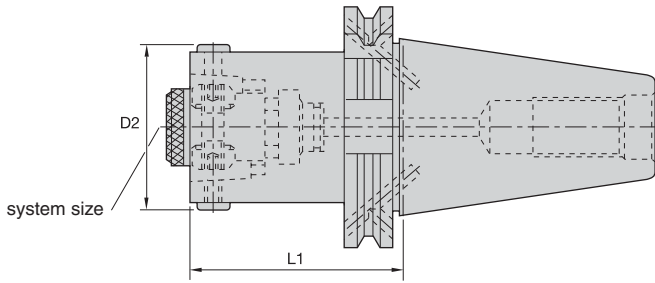


order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
1974735	DV40BKM32040M	KM32	32	44,5	40	5	KM32PKG3L	5mm	8-11	0,97
1974736	DV40BKM32090M	KM32	32	44,5	90	55	KM32PKG3S	5mm	8-11	1,23
1974737	DV40BKM40040M	KM40	40	44,5	40	5	KM40PKG3L	6mm	12-16	0,95
1974738	DV40BKM40100M	KM40	40	44,5	100	65	KM40PKG3S	6mm	12-16	1,47
1974739	DV40BKM50060M	KM50	50	—	60	41	KM50PKG3S	10mm	27-34	1,22
1974740	DV40BKM50120M	KM50	50	—	120	101	KM50PKG3S	10mm	27-34	2,07

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.

DV40 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm






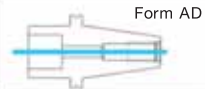





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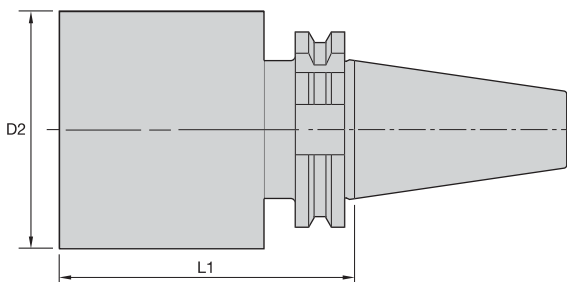
■ HSK-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519665	DV40BHSK40060M	HSK40	45	60	3mm	8	1,00
1519668	DV40BHSK50065M	HSK50	55	65	4mm	15	1,00
1320683	DV40BHSK63075M	HSK63	70	75	5mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

Form AD					
					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

- Machinable front 20–30 HRC.



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■ BB-DV Form A

order number	catalog number	D2	L1	kg
1263773	DV40BB063280M	63	280	7,00
1263774	DV40BB082280M	82	280	11,15
1263775	DV40BB104200M	104	200	11,99

NOTE: For retention knobs, see page J33.

Erickson™ DV V-Flange Shank Tooling System • **DV50 Series**

Erickson V-Flange DV Taper Tooling is manufactured from premium materials and meets or exceeds the latest DIN 69871 specification and ISO-1947 taper accuracy of AT3 specification standards. The DV50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

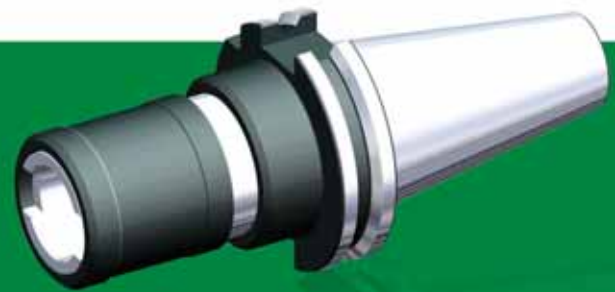
DV50



DV DIN 69871 Form B/AD Shank

NOTE: Inherent out-of-balance conditions due to notch and unequal depth of drive slots.

For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



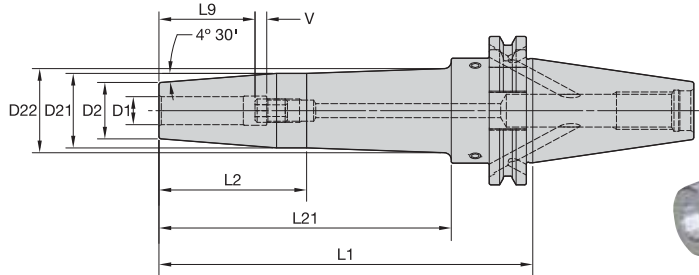
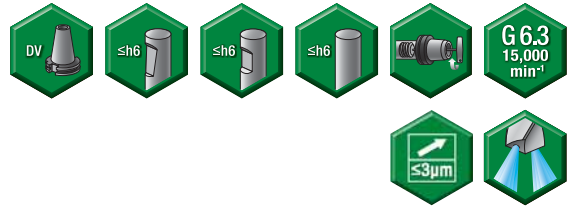
- DIN 69871 7/24 taper.
- Standard M24 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

DV50 Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT GP HPV MM-DV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3790206	DV50BHPVTT06080M	6	21	27	—	80	61	—	26	10	TTSS05014M	2,5mm	2,72
3790207	DV50BHPVTT06120M	6	21	27	—	120	85	—	26	10	TTSS05014M	2,5mm	3,30
3790208	DV50BHPVTT06160M	6	21	27	32	160	50	125	26	10	TTSS05014M	2,5mm	3,54
3790209	DV50BHPVTT08080M	8	21	27	—	80	61	—	26	10	TTSS06014M	3mm	2,71
3790210	DV50BHPVTT08120M	8	21	27	—	120	85	—	26	10	TTSS06014M	3mm	3,29
3790211	DV50BHPVTT08160M	8	21	27	32	160	50	125	26	10	TTSS06014M	3mm	3,53
3790212	DV50BHPVTT10080M	10	24	32	—	80	61	—	31	10	TTSS08014M	4mm	2,78
3790213	DV50BHPVTT10120M	10	24	32	—	120	85	—	31	10	TTSS08014M	4mm	3,40
3790214	DV50BHPVTT10160M	10	24	32	36	160	63	125	31	10	TTSS08014M	4mm	3,70
3617660	DV50BHPVTT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	2,76
3617661	DV50BHPVTT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	3,38
3617662	DV50BHPVTT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	3,68
3617663	DV50BHPVTT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	2,81
3617664	DV50BHPVTT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	3,45
3617665	DV50BHPVTT14160M	14	27	34	39	160	57	125	36	10	TTSS10014M	5mm	3,79
3617666	DV50BHPVTT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	2,80
3617667	DV50BHPVTT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	3,42
3617668	DV50BHPVTT16160M	16	27	34	39	160	57	125	39	10	TTSS12014M	6mm	3,76
3617669	DV50BHPVTT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	2,93
3617670	DV50BHPVTT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	3,65

(continued)

DV50 Shank Tools

(TT GP HPV MM-DV Form B/AD continued)



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617671	DV50BHPVTT18160M	18	33	42	46	160	69	125	39	10	TTSS12014M	6mm	4,13
3617672	DV50BHPVTT20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	2,90
3617673	DV50BHPVTT20120M	20	33	42	—	120	85	—	41	10	TTSS16014M	8mm	3,61
3617674	DV50BHPVTT20160M	20	33	42	46	160	69	125	41	10	TTSS16014M	8mm	4,08
3617675	DV50BHPVTT25100M	25	44	53	—	100	81	—	47	10	TTSS16014M	8mm	3,48
3617676	DV50BHPVTT25160M	25	44	53	—	160	120	—	47	10	TTSS16014M	8mm	4,74
3617677	DV50BHPVTT32100M	32	44	53	—	100	81	—	51	10	TTSS16014M	8mm	3,32
3617678	DV50BHPVTT32160M	32	44	53	—	160	120	—	51	10	TTSS16014M	8mm	4,58

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS127PKG and must be ordered separately.
 For retention knobs, see page J33.

DV50 Shank Tools

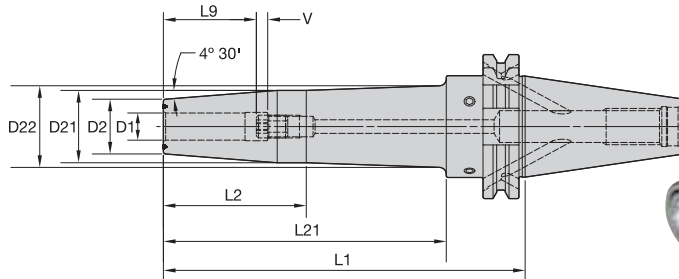
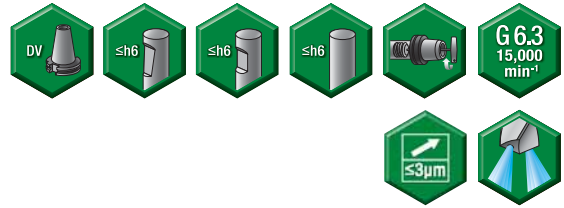
	Form AD					
	Form B					
		40	(2x) MS2221S	2,5mm		
		50	(2x) MS1296S	3mm		

DV50 Shank Tools

Shrink Fit Toolholders High Torque (HT)



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

DV50 Shank Tools

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■ TT HT HPV MM-DV Form B/AD



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617623	DV50BHPVTTH12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	2,76
3617624	DV50BHPVTTH12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	3,38
3617625	DV50BHPVTTH12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	3,68
3617626	DV50BHPVTTH14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	2,81
3617627	DV50BHPVTTH14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	3,45
3617628	DV50BHPVTTH14160M	14	27	34	39	160	57	125	36	10	TTSS10014M	5mm	3,79
3617629	DV50BHPVTTH16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	2,80
3617630	DV50BHPVTTH16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	3,42
3617631	DV50BHPVTTH16160M	16	27	34	39	160	57	125	39	10	TTSS12014M	6mm	3,76
3617632	DV50BHPVTTH18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	2,93
3617633	DV50BHPVTTH18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	3,65
3617634	DV50BHPVTTH18160M	18	33	42	46	160	69	125	39	10	TTSS12014M	6mm	4,13

(continued)

(TT HT HPV MM-DV Form B/AD continued)



order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617635	DV50BHPVTTHT20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	2,90
3617636	DV50BHPVTTHT20120M	20	33	42	—	120	85	—	41	10	TTSS16014M	8mm	3,61
3617637	DV50BHPVTTHT20160M	20	33	42	46	160	69	125	41	10	TTSS16014M	8mm	4,08
3617638	DV50BHPVTTHT25100M	25	44	53	—	100	81	—	47	10	TTSS16014M	8mm	3,48
3617639	DV50BHPVTTHT25160M	25	44	53	—	160	125	—	47	10	TTSS16014M	8mm	4,74
3617640	DV50BHPVTTHT32100M	32	44	53	—	100	81	—	51	10	TTSS16014M	8mm	3,32
3617641	DV50BHPVTTHT32160M	32	44	53	—	160	125	—	51	10	TTSS16014M	8mm	4,58

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Shrink Fit technical section, see page K56.

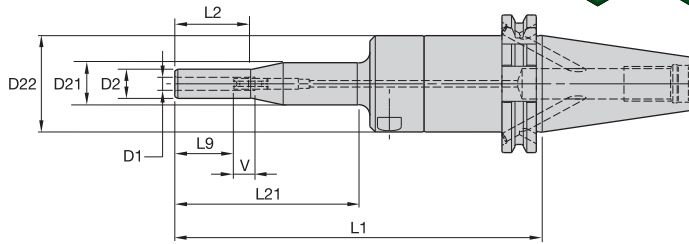
Supplied with stop screw.

Adjusting stop screw gage, see page K59.

Optional M6-1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is M51276PKG and must be ordered separately.

For retention knobs, see page J33.

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

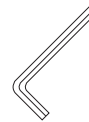


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■ HC Slim T MM-DV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019239	DV50BHCSLT06200M	6	13,5	19,5	44	200	35	27	85	10	3,81
3019240	DV50BHCSLT08200M	8	15,5	19,5	44	200	35	27	85	10	3,82
3019241	DV50BHCSLT10200M	10	17,5	44,5	—	200	85	31	181	10	3,81

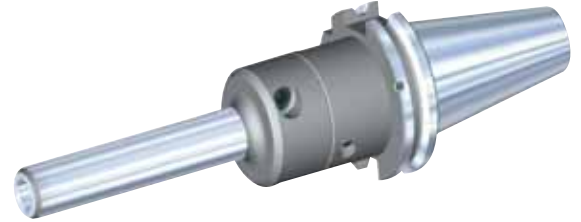
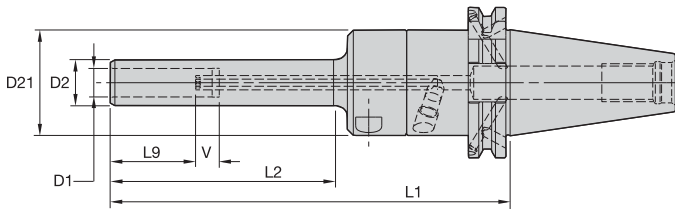
■ Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
DV50BHCSLT06200M	170.135	5mm	170.002	2,5mm
DV50BHCSLT08200M	170.135	5mm	170.002	2,5mm
DV50BHCSLT10200M	170.135	5mm	170.003	3mm

(continued)

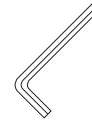
(HC Slim continued)



■ **HC Slim MM-DV Form B/AD**







order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634420	DV50BHCSL12200M	12	19,5	44,5	200	95	36	10	3,57
2634421	DV50BHCSL14200M	14	21,5	52,5	200	95	36	10	3,99
2634422	DV50BHCSL16200M	16	23,5	52,5	200	95	39	10	4,01
2634533	DV50BHCSL18200M	18	25,5	52,5	200	95	39	10	4,05
2634534	DV50BHCSL20200M	20	27,5	52,5	200	95	41	10	4,09

■ **Spare Parts**



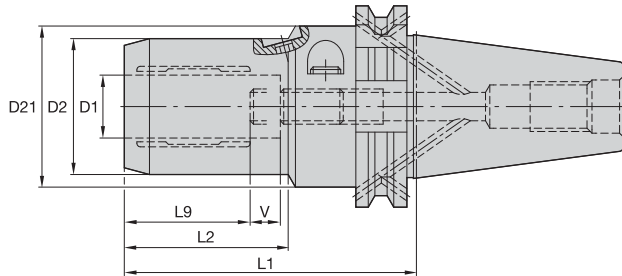
catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
DV50BHCSL12200M	170.135	5mm	170.002	2,5mm
DV50BHCSL14200M	170.135	5mm	170.002	2,5mm
DV50BHCSL16200M	170.135	5mm	170.002	2,5mm
DV50BHCSL18200M	170.135	5mm	170.002	2,5mm
DV50BHCSL20200M	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

DV50 Shank Tools

Hydraulic Chucks Standard HP Line



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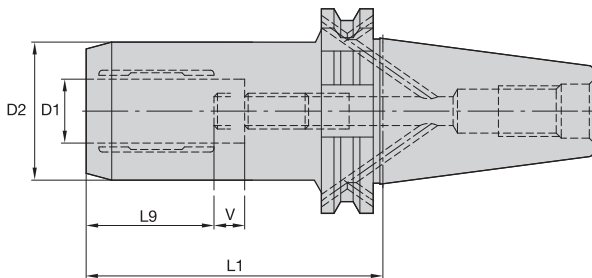
■ HC MM-DV Form B/AD

DV50 Shank Tools

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245450	DV50BHC06072M	6	25,7	50	72	33	30	10	170.135	5mm	170.002	2,5mm	2,87
1245451	DV50BHC08072M	8	27,7	50	72	34	30	10	170.135	5mm	170.002	2,5mm	2,90
1191014	DV50BHC10077M	10	29,7	50	77	39	35	10	170.135	5mm	170.002	2,5mm	2,92
1191015	DV50BHC12077M	12	31,6	50	77	40	35	10	170.135	5mm	170.002	2,5mm	2,93
1245452	DV50BHC14082M	14	33,6	50	82	46	40	10	170.135	5mm	170.003	3mm	2,96
1245453	DV50BHC16082M	16	37,6	50	82	47	40	10	170.135	5mm	170.003	3mm	3,02
1245454	DV50BHC18082M	18	39,6	50	82	47	40	10	170.135	5mm	170.003	3mm	3,04
1191016	DV50BHC20082M	20	41,6	50	82	48	40	10	170.135	5mm	170.003	3mm	3,06
1245455	DV50BHC25117M	25	49,8	63	117	51	51	10	170.136	6mm	170.004	4mm	4,03
1197514	DV50BHC32117M	32	59,8	63	117	59	51	10	170.136	6mm	170.004	4mm	4,21


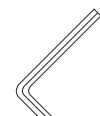
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
 Hydraulic chuck technical section, see page K60.
 Supplied with stop screw.
 Actuation wrench must be ordered separately.
 Reduction sleeves are available and must be ordered separately; see page I2.
 For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



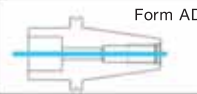








ERICKSON

■ HC Basic MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1599686	DV50BHCB20082M	20	49,9	82	41	10		5mm		5mm	3,30

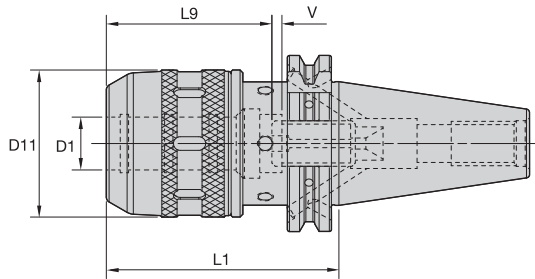
NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

DV50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

DV50 Shank Tools

HPMC High-Performance Milling Chucks



DV50 Shank Tools

ERICKSON™

■ HPMC MM-DV Form B/AD



order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3523090	DV50BHPMC20090M	20	53	90	49	20	PSW52M	MCSS16040M	2,5mm & 5mm	3,67
3523091	DV50BHPMC20165M	20	53	165	49	20	PSW52M	MCSS16040M	2,5mm & 5mm	4,76
3523092	DV50BHPMC25090M	25	61	90	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	3,86
3523093	DV50BHPMC25165M	25	61	165	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	5,37
3523094	DV50BHPMC32090M	32	70	90	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	4,08
3523095	DV50BHPMC32165M	32	74	165	75	20	PSW68M	MCSS16040M	2,5mm & 5mm	6,12

NOTE: Milling chuck technical section, see page K64.

Supplied with locknut and stop screw.

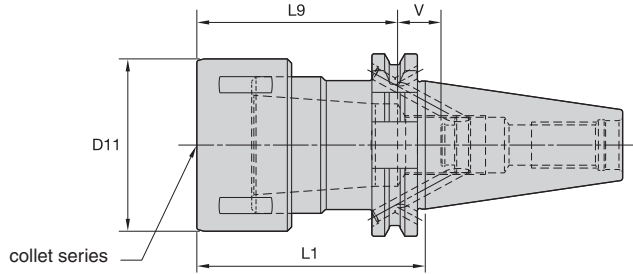
Locknut wrench not included.

Optional M6-1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.

Reduction sleeves are available and must be ordered separately; see page I6.

For retention knobs, see page J33.

- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1

ERICKSON

■ TG Round-DV Form B/AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	kg
1125523	DV50BTG100085M	TG100	60	85	70	18	LNA100M	HSW58M	SS112041G	4mm & 5/32	3,00
1264147	DV50BTG100150M	TG100	60	150	70	80	LNA100M	HSW58M	SS112041G	4mm & 5/32	4,50

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

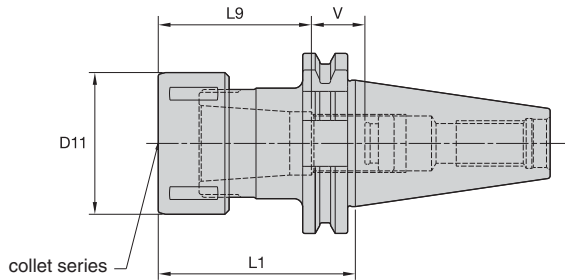
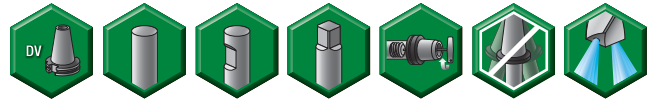
Form AD	✓			
Form B			40	(2x) MS2221S
			50	(2x) MS1296S
				2,5mm
				3mm

DV50 Shank Tools

TG Single-Angle Collet Chucks



- Tremendous Grip (3:1 advantage).



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

DV50 Shank Tools

ERICKSON

■ TG Round-DV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	kg
1156402	DV50TG100085M	TG100	60	85	70	38	LNA100M	HSW58M	SS112041G	4mm & 5/32	3,36
1156403	DV50TG100150M	TG100	60	150	70	80	LNA100M	HSW58M	SS112041G	4mm & 5/32	4,54
1264353	DV50TG100200M	TG100	60	200	70	80	LNA100M	HSW58M	SS112041G	4mm & 5/32	5,51
1252592	DV50TG150090M	TG150	85	90	83	27	LNA150M	HSW80M	SS162062G	4mm & 5/32	3,73
1228270	DV50TG150150M	TG150	85	150	83	67	LNA150M	HSW80M	SS162062G	4mm & 5/32	4,94

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

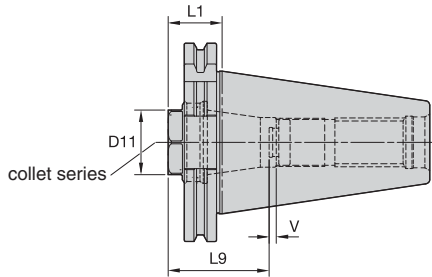
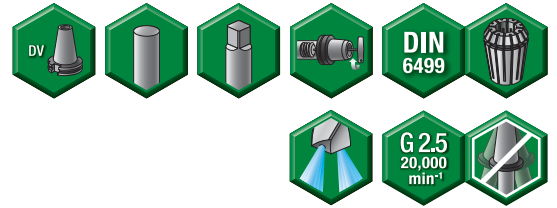
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

- Grip (2:1 advantage).



ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

■ ER Short-DV Form AD



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3479820	DV50SER32027M	ER32	36	27	50	17	LNECSER32M	OEW32M	136	SS094041G	4mm & 5/32	2,41
3479821	DV50SER40027M	ER40	46	27	57	11	LNECSER40M	OEW168	176	SS112041G	4mm & 5/32	2,24

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

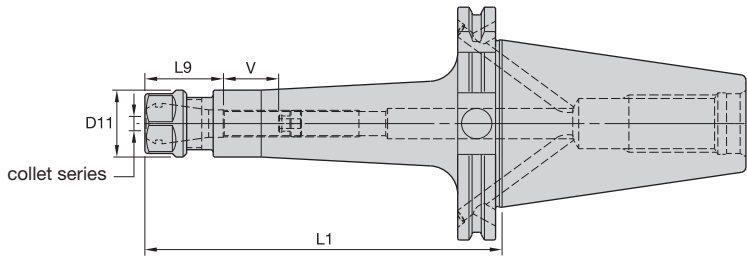
DV50 Shank Tools

DV50 Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



DV50 Shank Tools

ERICKSON™

■ ER Hex-DV Form B/AD

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

order number	catalog number	collet series	D11	L1	L9	V	kg
1748235	DV50BER16100M	ER16	28	100	32	48	2,81
1972537	DV50BER16150M	ER16	28	150	32	48	3,13

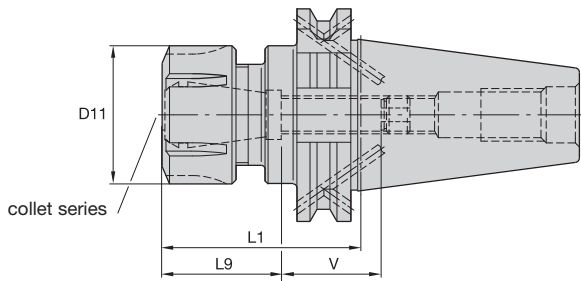
■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
DV50BER16100M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
DV50BER16150M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32

(continued)

(ER DV Form B/AD continued)



■ ER Round-DV Form B/AD








order number	catalog number	collet series	D11	L1	L9	V	kg
1264126	DV50BER25070M	ER25	42	70	40	50	2,87
1264127	DV50BER25150M	ER25	42	150	40	60	3,53
1264128	DV50BER32070M	ER32	50	70	46	54	2,91
1264129	DV50BER32150M	ER32	50	150	46	54	3,89
1264130	DV50BER40080M	ER40	63	80	52	48	3,25
1264132	DV50BER40150M	ER40	63	150	52	48	4,66

■ Spare Parts



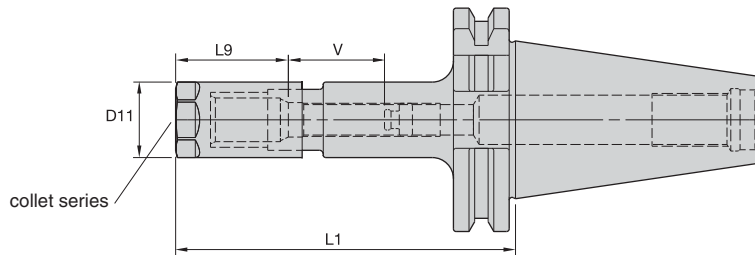
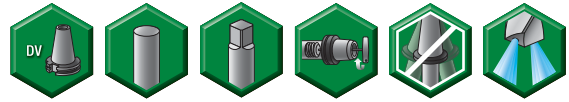
catalog number	locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
DV50BER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
DV50BER25150M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
DV50BER32070M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
DV50BER32150M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
DV50BER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32
DV50BER40150M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

Form AD	✓				
Form B				40	(2x) MS2221S 2,5mm
				50	(2x) MS1296S 3mm

DV50 Shank Tools

DA 04 Series Double-Angle Collet Chucks



DA 08 collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA200	0,2	10	1/64	25/64

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■ DA 04 Hex-DV Form AD

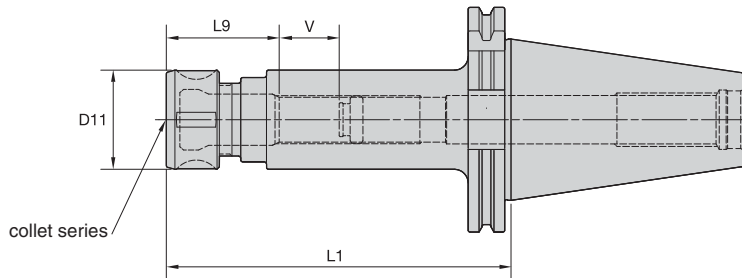


order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1264197	DV50DA204100M	DA200	21,46	100	38	32	LNA204M	OEW19M	54	SS038031G	2mm & 5/64	3,00
1264198	DV50DA204150M	DA200	21,46	150	38	32	LNA204M	OEW19M	54	SS038031G	2mm & 5/64	3,20

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.

DV50 Shank Tools

- Grip 1:1.



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA180	2,2	20	1/64	3/4

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■ DA 08 Round-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V
1179333	DV50DA188070M	DA180	43	70	50	49
1156389	DV50DA188150M	DA180	43	150	50	50
1136821	DV50DA188200M	DA180	43	200	50	50

■ Spare Parts

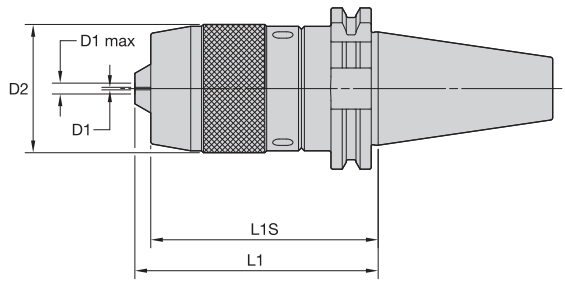


catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
DV50DA188070M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32
DV50DA188150M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32
DV50DA188200M	LNA188M	HSW45M	136	SS081041G	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.

DV50 Shank Tools

Drill Chucks



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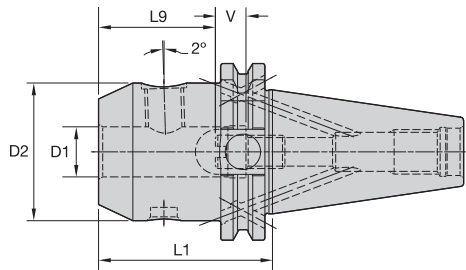
■ DC-DV Form A



order number	catalog number	D1		D1 max		D2	L1	L1S	locknut wrench	Nm	kg
		mm	in	mm	in						
3583506	DV50DC13090M	1,0	.039	13,0	.512	50,5	102,3	90	PSW45M	55	3,50

NOTE: Tighten to the recommended tightening torque.
 Locking wrench not supplied.
 For retention knobs, see page J33.

DV50 Shank Tools



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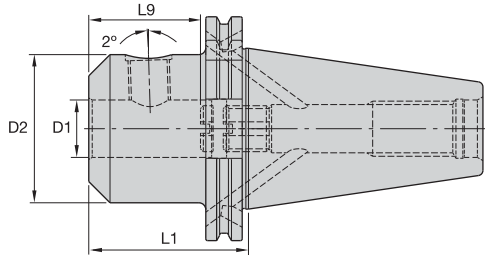
■ WN MM-DV Form B/AD



order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1136755	DV50BWN06063M	6	25	63	30	10	SS03M012	3 mm	7	571.060	2.5 mm	2,67
1136774	DV50BWN08063M	8	28	63	28	12	SS03M014	4 mm	15	571.067	3 mm	2,71
1136783	DV50BWN10063M	10	35	63	35	10	SS03M018	5 mm	25	571.068	4 mm	2,83
1191334	DV50BWN12063M	12	42	63	40	10	SS03M023	6 mm	35	571.074	5 mm	2,96
1136800	DV50BWN14063M	14	44	63	40	10	SS03M023	6 mm	35	571.074	5 mm	2,98
1136806	DV50BWN16063M	16	48	63	43	10	SS03M025	6 mm	50	571.075	6 mm	3,05
1136814	DV50BWN18063M	18	50	63	41	12	SS03M025	6 mm	50	571.075	6 mm	3,10
1136823	DV50BWN20063M	20	52	63	45	10	SS03M026	8 mm	95	571.076	6 mm	3,12
1136842	DV50BWN25080M	25	65	80	50	10	SS03M027	10 mm	135	571.076	6 mm	3,82
1136851	DV50BWN32100M	32	72	100	54	10	SS03M029	10 mm	160	571.076	6 mm	4,59

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.

Form AD	✓				
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



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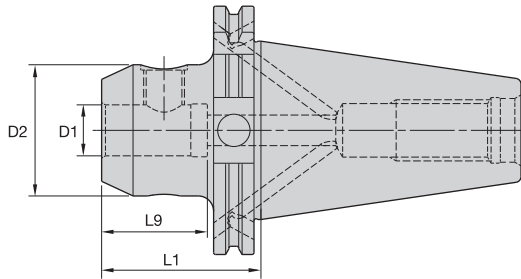
■ SWN IN-DV Form B/AD



order number	catalog number	D1	D2	L1	L9	lock screw	Nm	wrench size lock screw	kg
1134539	DV50BSWN25070M	25	65	70	44	SS03M027	135	10mm	3,59
1134540	DV50BSWN32070M	32	70	70	46	SS03M029	160	10mm	3,69

*NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.*

DV50 Shank Tools



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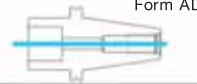







■ EM MM-DV Form B/AD

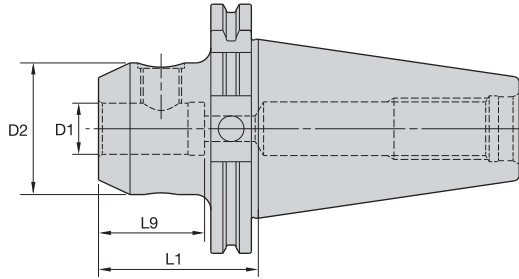


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1264102	DV50BEM16063M	16	48	63	53	SS03M025	6mm	50	3,00
1264107	DV50BEM20063M	20	52	63	55	SS03M026	8mm	95	3,06
1156387	DV50BEM25080M	25	65	80	60	SS03M027	10mm	135	3,72
1156388	DV50BEM32100M	32	72	100	65	SS03M029	10mm	160	4,48
1264122	DV50BEM40110M	40	90	110	75	SS03M032	10mm	160	5,76
1264125	DV50BEM50120M	50	100	120	85	SS03M030	12mm	250	6,63

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.

DV50 Shank Tools

	Form AD				
	Form B			40	(2x) MS2221S 2,5mm
				50	(2x) MS1296S 3mm



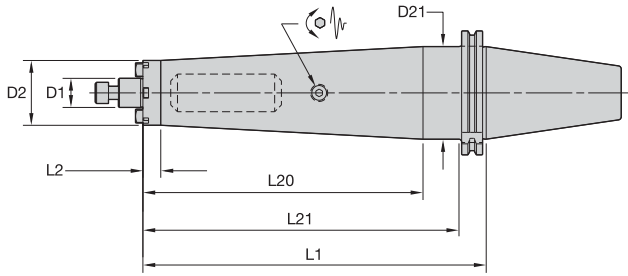
ERICKSON™

EM MM-DV Form AD



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1264207	DV50EM06063M	6	25	63	40	SS03M012	3mm	7	2,67
1264208	DV50EM06150M	6	25	150	40	SS03M012	3mm	7	2,96
1264210	DV50EM08063M	8	28	63	40	SS03M014	4mm	15	2,71
1264212	DV50EM08150M	8	28	150	40	SS03M014	4mm	15	3,05
1264214	DV50EM10063M	10	35	63	45	SS03M018	5mm	25	2,84
1264216	DV50EM10150M	10	35	150	45	SS03M018	5mm	25	3,39
1191975	DV50EM12063M	12	42	63	50	SS03M023	6mm	35	3,02
1264219	DV50EM12150M	12	42	150	50	SS03M023	6mm	35	3,77
1189666	DV50EM16150M	16	48	150	53	SS03M025	6mm	50	4,13
1152193	DV50EM20150M	20	52	150	55	SS03M026	8mm	95	4,44

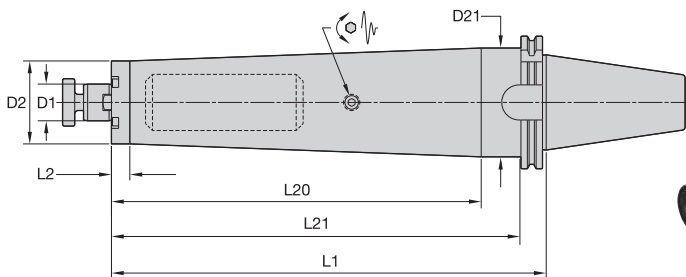
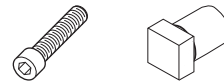
NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.



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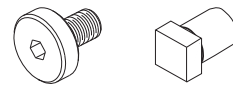
■ SMC TD Cap MM-DV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135484	DV50BTDSMC22260M	22	49	70	260	13,5	211,8	241	MS1234	KDK22M	8mm	7,83



■ SMC TD Lock MM-DV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135485	DV50BTDSMC27320M	27	61	80	320	13,5	271,8	301	KLSS27M	—	10mm	11,63
4135486	DV50BTDSMC32330M	32	78	—	330	311,0	—	—	KLSS32M	KDK32M	14mm	15,91

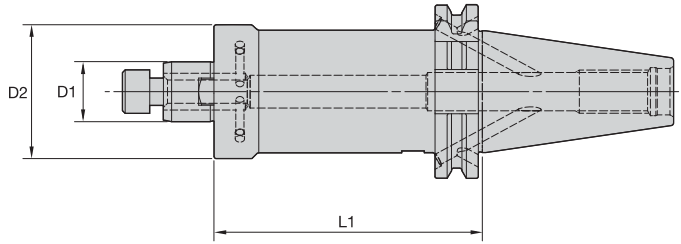


NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.
 For retention knobs, see page J33.

			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

DV50 Shank Tools

Shell Mill Adapters with Through Coolant



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■ SMC Cap MM-DV Form B/AD

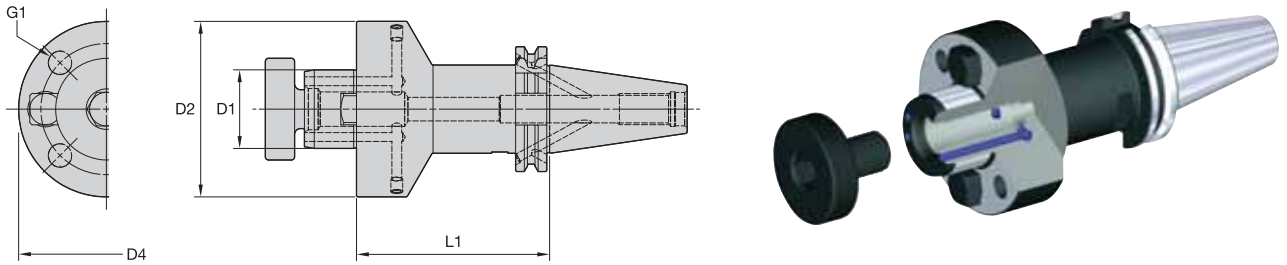


order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3767840	DV50BSM2C16035M	16	38	35	MS1294	KDK16M	6mm	2,73
3767842	DV50BSM2C16100M	16	38	100	MS1294	KDK16M	6mm	3,17
3767839	DV50BSMC16035M	16	44	35	MS1294	KDK16M	6mm	2,76
3767841	DV50BSMC16100M	16	44	100	MS1294	KDK16M	6mm	3,39
3767844	DV50BSM2C22035M	22	42	35	MS1234	—	8mm	2,76
3767846	DV50BSM2C22100M	22	42	100	MS1234	—	8mm	3,31
3767848	DV50BSM2C22150M	22	42	150	MS1234	—	8mm	3,75
3767843	DV50BSMC22035M	22	49	35	MS1234	KDK22M	8mm	2,82
3767845	DV50BSMC22100M	22	49	100	MS1234	KDK22M	8mm	3,63
3767847	DV50BSMC22150M	22	49	150	MS1234	KDK22M	8mm	4,26

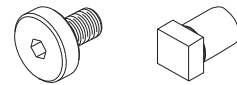
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DV50 Shank Tools

(SMC continued)



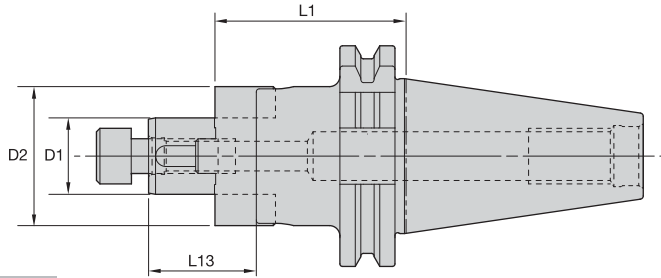
■ SMC Lock MM-DV Form B/AD



order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3767849	DV50BSMC27035M	27	60,0	35	—	—	KLSS27M	KDK27M	10mm	2,98
3767850	DV50BSMC27100M	27	60,0	100	—	—	KLSS27M	KDK27M	10mm	4,26
3767851	DV50BSMC27150M	27	60,0	150	—	—	KLSS27M	KDK27M	10mm	5,24
3767852	DV50BSMC32035M	32	78,0	35	—	—	KLSS32M	KDK32M	14mm	3,31
3767853	DV50BSMC32100M	32	78,0	100	—	—	KLSS32M	KDK32M	14mm	5,17
3767854	DV50BSMC32150M	32	78,0	150	—	—	KLSS32M	KDK32M	14mm	6,58
3767855	DV50BSMC40050M	40	89,3	50	M12 X 1.75	66,7	KLSS40M	KDK40M	17mm	4,18
3767856	DV50BSMC40100M	40	89,3	100	M12 X 1.75	66,7	KLSS40M	KDK40M	17mm	5,76
3767857	DV50BSMC40150M	40	89,3	150	M12 X 1.75	66,7	KLSS40M	KDK40M	17mm	7,12
3767858	DV50BSMC60070M	60	129,0	70	M16 X 2.0	101,6	—	KDK60M	—	6,24

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.
 For retention knobs, see page J33.

Form AD					
Form B			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

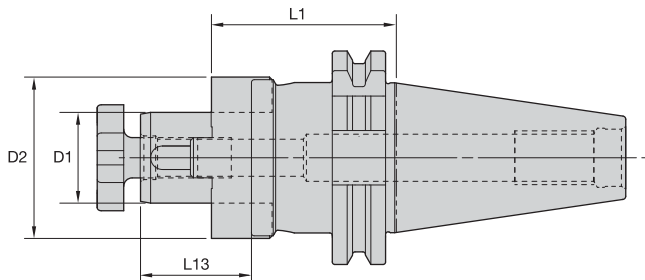


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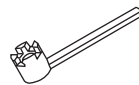
■ CS-DV Form AD • Cap Screw Design



order number	catalog number	D1	D2	L1	L13	lock screw	wrench size retention screw	combi driver ring	combi drive key	kg
1264174	DV50CS16055M	16	32	55	27	MS1294	6mm	CDR16M	CDK16M	2,78
1191972	DV50CS22055M	22	40	55	31	MS1234	8mm	CDR22M	CDK22M	2,93
1264181	DV50CS22100M	22	40	100	31	MS1234	8mm	CDR22M	CDK22M	3,36
1236218	DV50CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	3,83

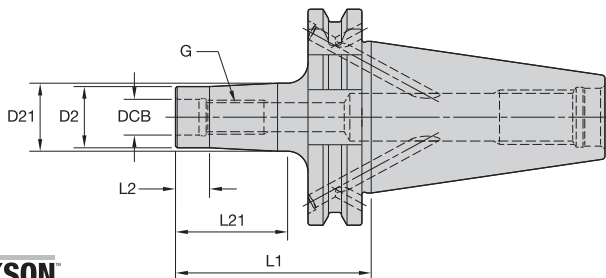


■ CS-DV Form AD • Lock Screw Design



order number	catalog number	D1	D2	L1	L13	lock screw	lock screw wrench	Nm	combi driver ring	combi drive key	kg
1191973	DV50CS27055M	27	48	55	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	3,11
1264185	DV50CS27100M	27	48	100	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	3,75
1264186	DV50CS27150M	27	48	150	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	4,27
1191974	DV50CS32055M	32	58	55	38	KLS32M	SMW32M	95	CDR32M	CDK32M	3,41
1264188	DV50CS32100M	32	58	100	38	KLS32M	SMW32M	95	CDR32M	CDK32M	4,29
1264189	DV50CS32150M	32	58	150	38	KLS32M	SMW32M	95	CDR32M	CDK32M	5,18
1188351	DV50CS40055M	40	70	55	41	KLS40M	SMW40M	100	CDR40M	CDK40M	3,91
1232559	DV50CS40100M	40	70	100	41	KLS40M	SMW40M	100	CDR40M	CDK40M	5,17
1264192	DV50CS40150M	40	70	150	41	KLS40M	SMW40M	100	CDR40M	CDK40M	6,57
1264194	DV50CS50075M	50	90	75	46	KLS50M	SMW50M	135	CDR50M	CDK50M	7,20
1264195	DV50CS50150M	50	90	150	46	KLS50M	SMW50M	135	CDR50M	CDK50M	8,50

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



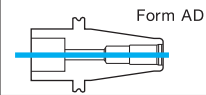





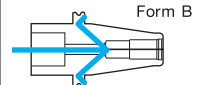


ERICKSON

■ ST-DV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4067827	DV50BST12087M	12,5	M12	21	24	87	10	62	2,77
4067828	DV50BST12137M	12,5	M12	21	31	137	10	112	3,05
4067829	DV50BST12187M	12,5	M12	21	39	187	10	162	3,50
4067830	DV50BST16087M	17,0	M16	29	34	87	10	62	2,96
4067831	DV50BST16137M	17,0	M16	29	39	137	10	112	3,38
4067832	DV50BST16187M	17,0	M16	29	39	187	10	162	3,71
4067863	DV50BST16237M	17,0	M16	29	49	237	10	212	4,62

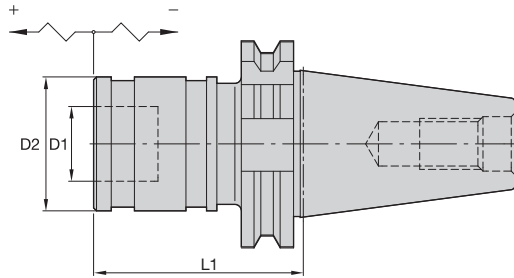
NOTE: For retention knobs, see page J33.

DV50 Shank Tools

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm

DV50 Shank Tools

Tap Chucks RC Tension and Compression

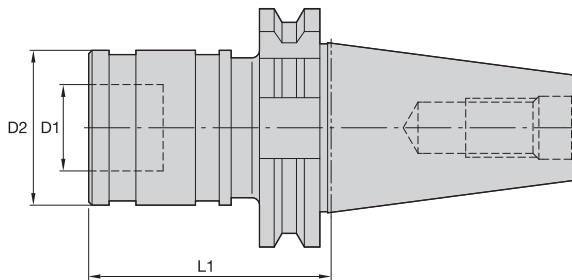


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RC-DV Form A

order number	catalog number	adapter size	tap size		D1	D2	L1	tension	compression	kg
			mm	in						
1777453	DV50RC1075M	1	M1 - M14	#0 - 9/16	19	36	75	7,5	7,5	2,90
1777455	DV50RC2084M	2	M5 - M24	5/16 - 7/8	31	53	85	12,5	12,5	3,70
1777540	DV50RC3139M	3	M14 - M27	13/16 - 1 3/8	48	78	139	20,0	20,0	4,50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



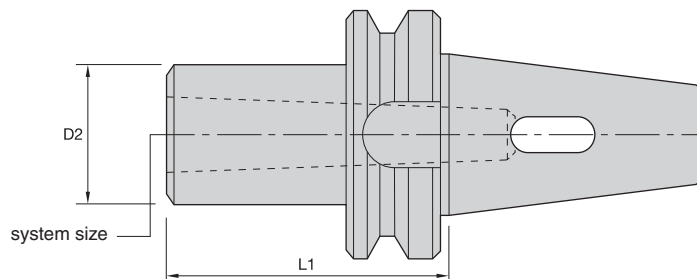
ERICKSON

■ STRC-DV Form AD

order number	catalog number	adapter size	tap size		D1	D2	L1	kg
			mm	in				
1778243	DV50STRC1074M	1	M1 - M14	#0 - 9/16	19	36	74	3,60
1778244	DV50STRC2089M	2	M5 - M24	5/16 - 7/8	31	53	89	3,80

NOTE: Quick-change tap adapters are available and must be ordered separately; see page 176.
For retention knobs, see page J33.

DV50 Shank Tools

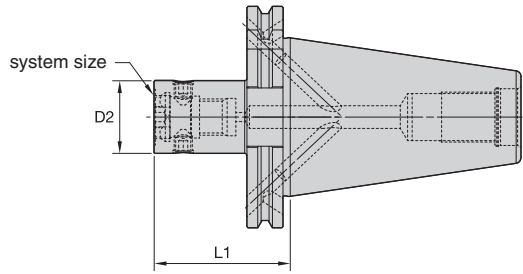


ERICKSON

■ MT-DV Form A

order number	catalog number	system size	D2	L1	kg
1191989	DV50MT5105M	5	69,9	105	3,75

NOTE: For retention knobs; see page J33.

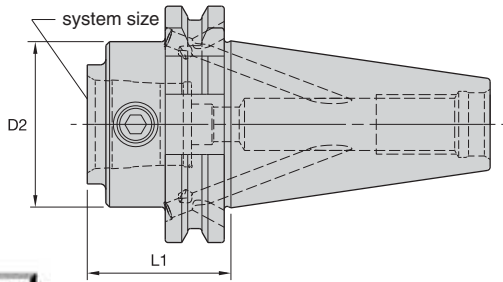


■ RFX-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
3860701	DV50BRFX320060M	RFX320	32	60	4mm	12	3,10
3860702	DV50BRFX420060M	RFX420	42	60	5mm	20	3,20
3860853	DV50BRFX550060M	RFX550	55	60	6mm	25	3,40
3860854	DV50BRFX720065M	RFX720	72	65	6mm	25	3,60

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

<p>Form AD</p>					
<p>Form B</p>			<p>40</p>	<p>(2x) MS2221S</p>	<p>2,5mm</p>
			<p>50</p>	<p>(2x) MS1296S</p>	<p>3mm</p>



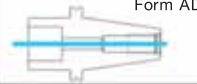




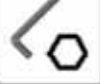



■ KM-DV Form B/AD

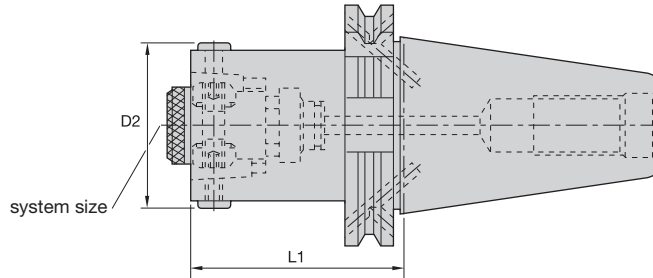


order number	catalog number	system size	D2	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1974741	DV50BKM32040M	KM32	32	40,0	KM32PKG3S	5mm	8-11	2,64
1974742	DV50BKM32090M	KM32	32	90,0	KM32PKG3S	5mm	8-11	2,91
1974813	DV50BKM40040M	KM40	40	40,0	KM40PKG3L	6mm	12-16	3,00
1974814	DV50BKM40100M	KM40	40	100,0	KM40PKG3S	6mm	12-16	3,18
1974815	DV50BKM50060M	KM50	50	60,0	KM50PKG3S	10mm	27-34	2,99
1974816	DV50BKM50120M	KM50	50	120,0	KM50PKG3S	10mm	27-34	3,79
1974817	DV50BKM63060M	KM63	63	60,0	KM63PKG3S	12mm	47-54	3,18
1974818	DV50BKM63140M	KM63	63	140,0	KM63PKG3S	12mm	47-54	4,95
1974819	DV50BKM80080M	KM80	80	80,0	KM80PKG3S	14mm	79-85	4,23

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with KM actuation mechanism.
 For retention knobs, see page J33.

DV50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm












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■ HSK-DV Form B/AD

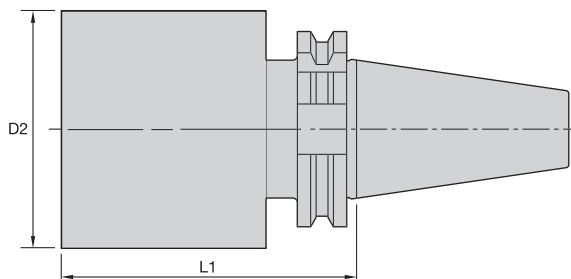
order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519669	DV50BHSK32055M	HSK32	37	55	3mm	6	2,70
1519670	DV50BHSK40060M	HSK40	45	60	3mm	8	2,80
1124343	DV50BHSK50065M	HSK50	55	65	4mm	15	2,90
1126202	DV50BHSK63075M	HSK63	70	75	5mm	20	3,10

NOTE: Do not overtorque actuation screw; use torque recommendations above.
 Supplied with actuation mechanism and sealing ring.
 For retention knobs, see page J33.

DV50 Shank Tools

	Form AD					
	Form B			40	(2x) MS2221S	2,5mm
				50	(2x) MS1296S	3mm

- Machinable front 20–30 RW C.



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■ BB-DV Form A

order number	catalog number	D2	L1	kg
1264076	DV50BB104350M	104	350	24,08
1123987	DV50BB134250M	134	250	26,86

NOTE: For retention knobs, see page J33.

DV50 Shank Tools



QC and R8 Shank Tools

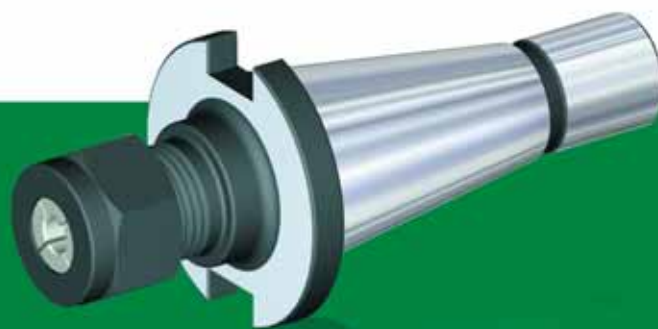
QC30 Shank Tools .....	.G2–G9
QC40 Shank Tools .....	.G10–G17
QC50 Shank Tools .....	.G18–G22
R8 Shank Tools .....	.G24–G27



Erickson™ Quick Change Flange Shank Tooling System •

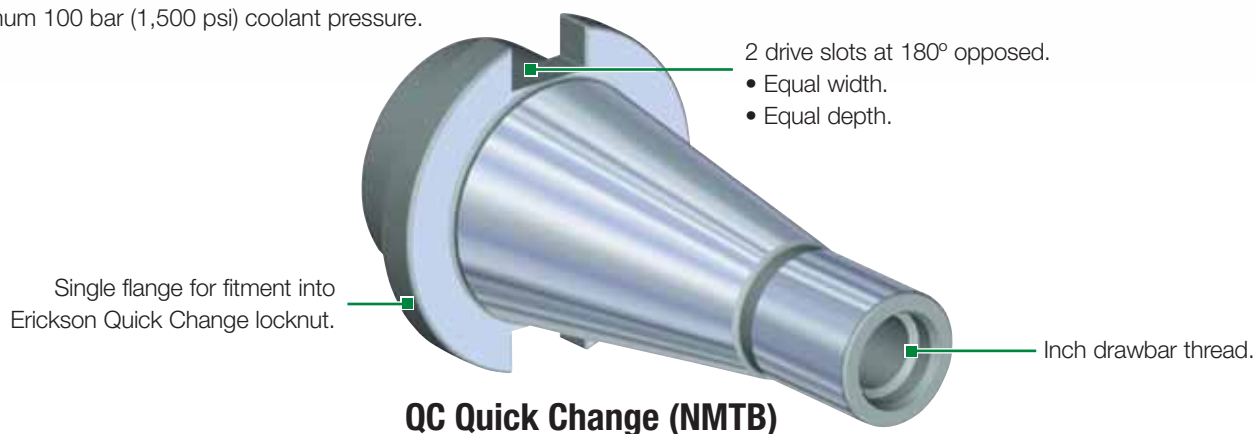
QC30 Series

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC30 tools are balanced-by-design and will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.



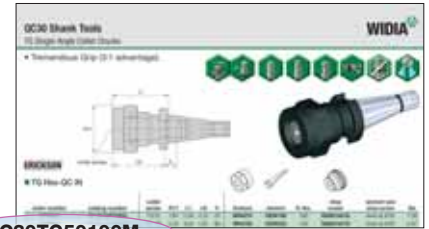
QC30

- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 1/2" – 13 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



QC30TG50100M

QC

Shank Style

30

Shank Taper Size

30 = 30
40 = 40
50 = 50

TG

Toolholder Style

DA = Double-angle collet chuck
EM = End mill adapter
MS = Morse taper adapter
SA = Slotting cutter adapter
SM = Shell mill adapter
TA = Tap chuck adapter
TG = Tremendous Grip single-angle collet chuck

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

50

Toolholder Size

100

Tool Length

(Taper gage line to from of tool)

inch
xxx = x.xx

M

Tool Length

M = Tool built to metric values and has metric retention thread

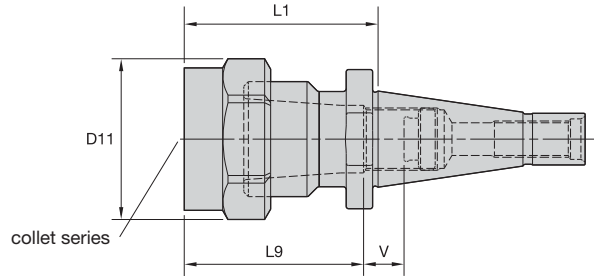
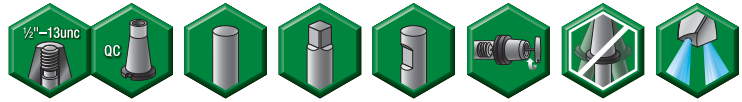
(blank) = Tool built to inch values and has inch retention thread

QC30 Shank Tools

TG Single-Angle Collet Chucks



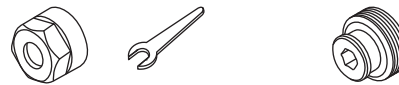
- Tremendous Grip (3:1 advantage).



ERICKSON™

■ TG Hex-QC IN

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025640	QC30TG075253	TG75	1.81	2.53	2.31	.37	NPA075	OEW188	100	SS081041G	4mm & 5/32	1.26
1025641	QC30TG100394	TG100	2.44	3.94	2.91	.83	NPA100	OEW225	150	SS081041G	4mm & 5/32	2.57

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.

Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

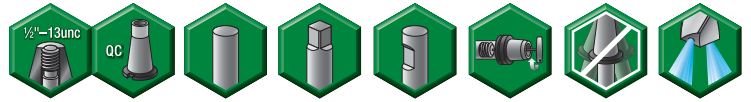
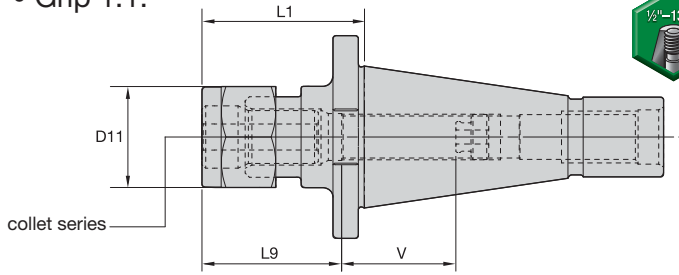
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

For retention knobs, see page J33.

• Grip 1:1.



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

ERICKSON

■ DA Hex-QC IN

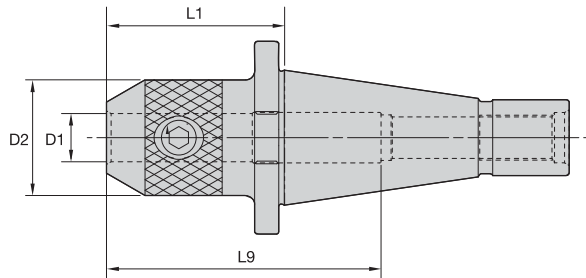
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015552	QC30DA308162	DA300	.77	1.62	1.34	1.38	.73
1015546	QC30DA208181	DA200	1.15	1.81	1.42	1.49	.82
1015595	QC30DA188206	DA180	1.73	2.06	1.93	.47	.90
1015544	QC30DA108200	DA100	1.44	2.00	1.65	1.10	.90

■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
QC30DA308162	LNA308M	—	20	SS031031G	2mm & 5/64
QC30DA208181	NPA208	OEW100	40	SS044038G	2mm & 5/64
QC30DA188206	NPA188	OEW150	75	SS081041G	4mm & 5/32
QC30DA108200	LNA108M	OEW32M	55	SS056041G	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.



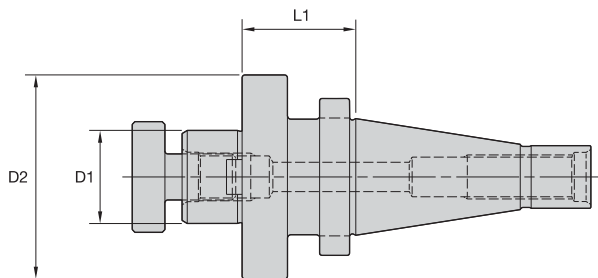
ERICKSON™

■ EM IN-QC IN



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018668	QC30EM018175	3/16	.69	1.75	3.40	S1045PKG	3/32	3	.73
1018669	QC30EM038175	3/8	1.00	1.75	3.40	ELS038031PKG	3/16	15	.84
1018671	QC30EM062175	5/8	1.44	1.75	2.14	DWG ELS056038	1/4	40	.96
1018242	QC30EM025175	1/4	1.00	1.75	3.40	ELS025025PKG	1/8	5	.86
1018670	QC30EM050175	1/2	1.25	1.75	3.07	ELS044038PKG	7/32	20	.90
1018672	QC30EM075213	3/4	1.75	2.13	2.27	ELS062050PKG	5/16	70	1.28
1018714	QC30EM100269	1	2.00	2.69	2.51	ELS075056PKG	3/8	110	1.73
1018715	QC30EM125363	1 1/4	2.50	3.63	2.51	ELS075062PKG	3/8	110	3.65

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.



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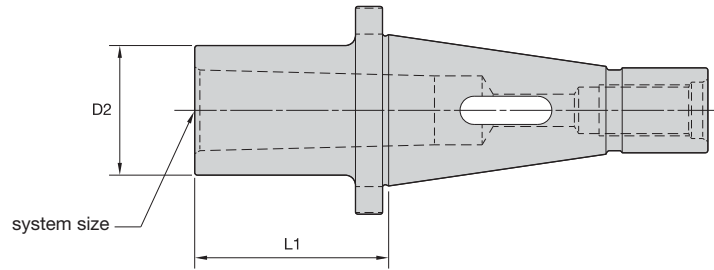
■ SM IN-QC IN



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	lbs
1018716	QC30SM050125	1/2	1.44	1.25	KLS05	KDK04	3/16	1
1018717	QC30SM075131	3/4	1.75	1.31	KLS07	KDK05	1/4	1
1018718	QC30SM100131	1	2.19	1.31	KLS10	KDK06	5/16	2
1018719	QC30SM125144	1 1/4	2.88	1.44	KLS12	KDK08	5/16	2
1018720	QC30SM150156	1 1/2	3.81	1.56	KLS15	KDK10	3/8	4

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knobs, see page J33.

QC30 Shank Tools

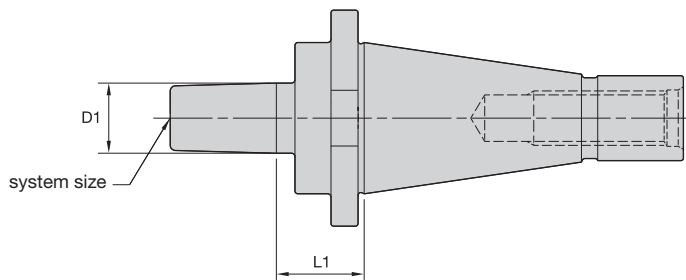


ERICKSON™

■ MT-QC IN

order number	catalog number	system size	D2	L1	kg
1018721	QC30MT1100	1	25	25,40	0,31
1018722	QC30MT2212	2	32	53,85	0,44
1018723	QC30MT3281	3	40	71,37	0,54

NOTE: For retention knobs, see page J33.



ERICKSON

■ JT-QC IN

order number	catalog number	system size	D1	L1	lbs
1018774	QC30JT1159	1	.38	.93	.80
1018775	QC30JT2181	2	.56	.94	.84
1018776	QC30JT3219	3	.81	.97	.95
1018779	QC30JT33197	33	.62	.97	.86
1018777	QC30JT4262	4	1.12	.96	1.25
1018778	QC30JT6197	6	.68	.97	.89

NOTE: For retention knobs, see page J33.

QC30 Shank Tools

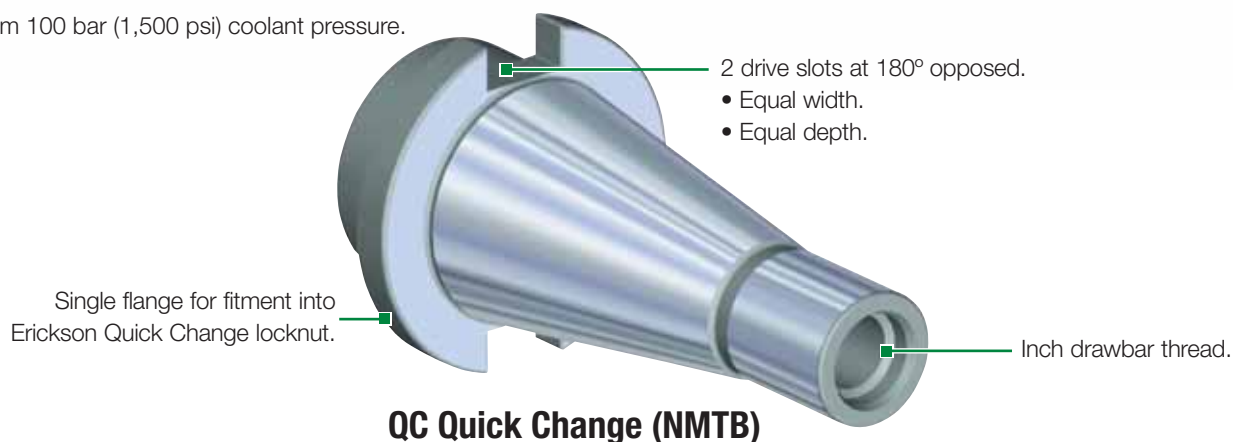
Erickson™ Quick Change Flange Shank Tooling System • QC40 Series

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC40 tools are balanced-by-design and will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.

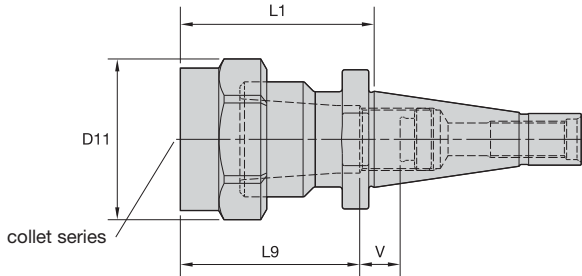
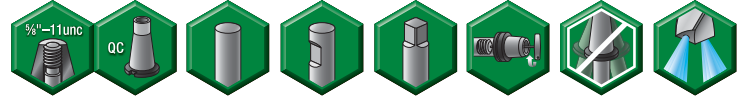


QC40

- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 5/8" – 11 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- Tremendous Grip (3:1 advantage).



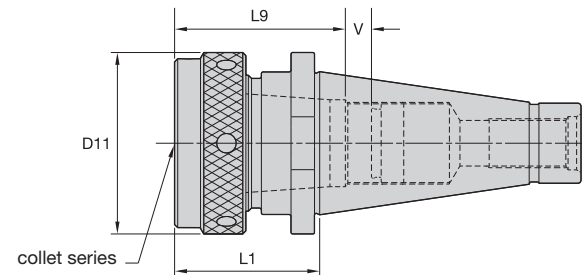
TG collet series	mm		inch	
	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

ERICKSON

■ TG Hex-QC IN



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	lbs
1025642	QC40TG075211	TG75	2.09	2.11	2.31	1.04	NPA075	OEW188	SS081041G	4mm & 5/32	2.07
1025643	QC40TG100255	TG100	2.50	2.55	2.72	.41	NPA100	OEW225	SS112041G	4mm & 5/32	2.56



TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG150	11,6	40,0	23/64	1-1/2

■ TG Round-QC IN



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	lbs
1013525	QC40TG150450	TG150	3.48	4.50	3.22	1.24	NPA150	PSW350	SS125050G	4mm & 5/32	5.75

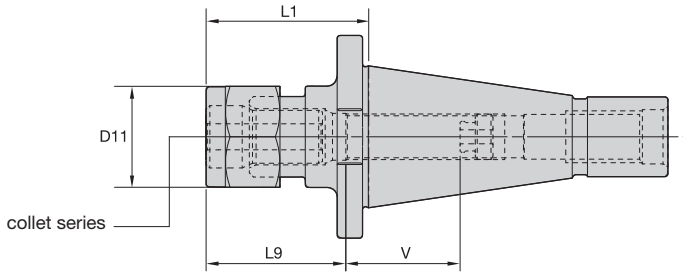
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

QC40 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

ERICKSON™

■ DA Hex-QC IN

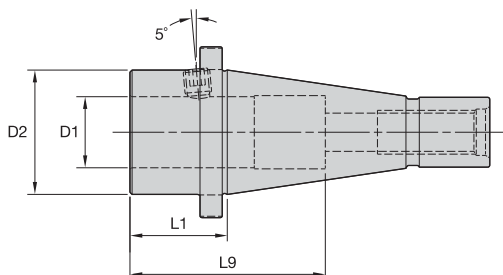
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015413	QC40DA308163	DA300	.77	1.63	1.30	1.30	1.69
1015412	QC40DA208181	DA200	1.15	1.81	1.46	2.04	1.79
1015410	QC40DA108200	DA100	1.44	2.00	1.65	2.05	1.87
1015411	QC40DA188206	DA180	1.73	2.06	1.93	1.73	1.82

■ Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
QC40DA308163	LNA308M	—	20.00	SS031031G	2mm & 5/64
QC40DA208181	NPA208	OEW100	40.00	SS044038G	4mm & 5/32
QC40DA108200	LNA108M	OEW32M	55.00	SS056041G	4mm & 5/32
QC40DA188206	NPA188	OEW150	75.00	SS081041G	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.
 For retention knobs, see page J33.

- Through-the-toolholder coolant capability — form AD.
- 1" — 8 UNC drawbar thread.
- Suitable for Whistle Notch straight-shank-style tap chucks.



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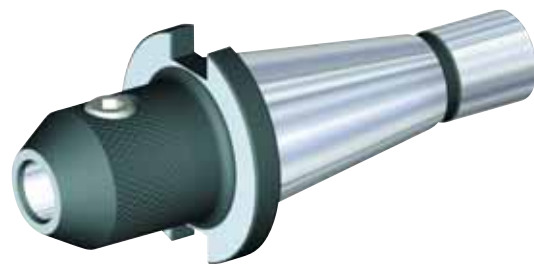
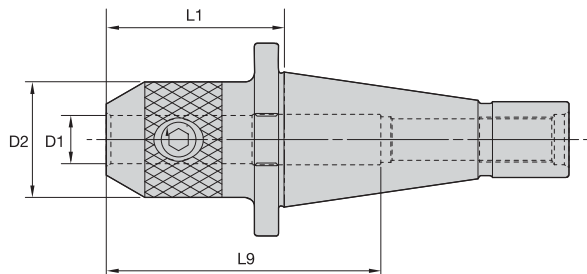
■ SWN IN-QC IN



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1017943	QC40TA1137	1.00	1.75	1.38	2.75	—	3/16	15	1.68

*NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.*

QC40 Shank Tools



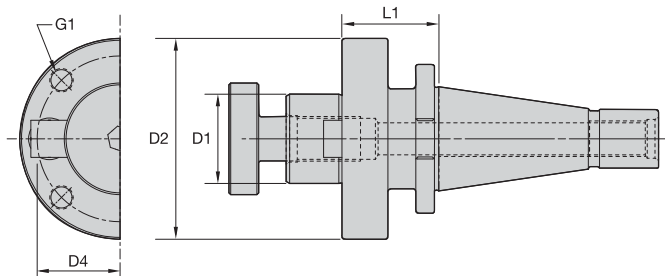
ERICKSON™

■ EM IN-QC IN



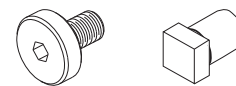
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018781	QC40EM018231	.19	.69	2.31	4.84	S1045PKG	3/32	3	1.74
1018667	QC40EM025138	.25	1.00	1.38	3.91	ELS025025PKG	1/8	5	1.73
1018782	QC40EM038231	.38	1.00	2.31	4.84	ELS038031PKG	3/16	15	1.86
1018783	QC40EM050231	.50	1.25	2.31	4.84	ELS044038PKG	7/32	20	2.02
1018844	QC40EM062231	.63	1.50	2.31	3.56	ELS056050PKG	1/4	40	2.18
1018845	QC40EM075231	.75	1.75	2.31	3.94	ELS062050PKG	5/16	70	2.46
1018846	QC40EM088294	.88	2.00	2.94	4.19	ELS062050PKG	5/16	70	2.80
1018847	QC40EM100338	1.00	2.00	3.38	4.49	ELS075056PKG	3/8	110	3.00
1018848	QC40EM125369	1.25	2.50	3.69	2.39	ELS075062PKG	3/8	110	4.63
1019099	QC40EM150395	1.50	2.75	3.95	2.82	ELS075062PKG	3/8	110	5.29

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.



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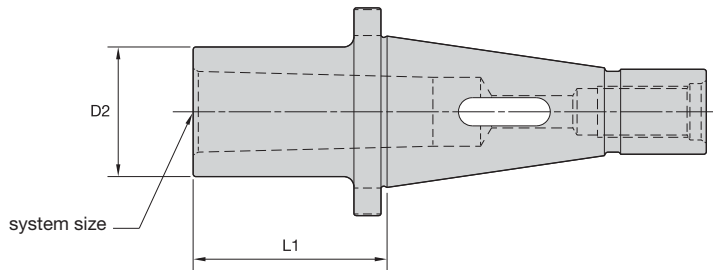
■ SM IN-QC IN



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
1018849	QC40SM050088	1/2	1.44	—	—	.88	KLS05	KDK04	3/16	1.90
1018850	QC40SM075088	3/4	1.75	—	—	.88	KLS07	KDK05	1/4	2.02
1018851	QC40SM100131	1	2.19	—	—	1.31	KLS10	KDK06	5/16	2.57
1018852	QC40SM125150	1 1/4	2.88	—	—	1.50	KLS12	KDK08	5/16	3.47
1018853	QC40SM150163	1 1/2	3.38	—	—	1.63	KLS15	KDK10	3/8	4.58
1018904	QC40SM200163	2	4.88	4.00	5/8-11 UNC	1.63	KLS20	KDK12	9/16	6.85

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knob, see page J33.

QC40 Shank Tools

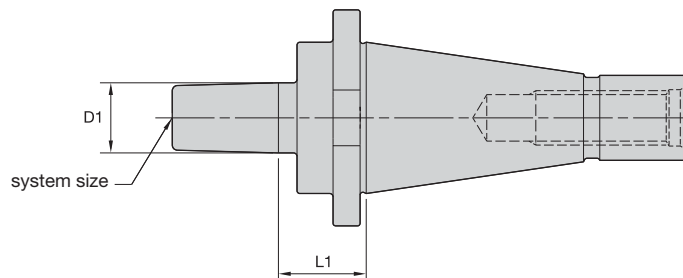


ERICKSON™

■ MT-QC IN

order number	catalog number	system size	D2	L1	lbs
1018905	QC40MT1094	1	1.00	.94	1.64
1018906	QC40MT2206	2	1.25	2.06	1.93
1018907	QC40MT3225	3	1.50	2.25	1.95
1018908	QC40MT4306	4	1.88	3.06	2.33
1019097	QC40MT5700	5	2.38	7.00	5.57

NOTE: For retention knobs, see page J33.



ERICKSON

■ JT-QC IN

order number	catalog number	system size	D1	L1	lbs
1018909	QC40JT2188	2	.56	1.01	2.02
1018910	QC40JT3225	3	.81	1.03	2.11
1018913	QC40JT33194	33	.62	.94	2.00
1018911	QC40JT4269	4	1.12	1.03	2.44
1018912	QC40JT6194	6	.68	.94	2.02

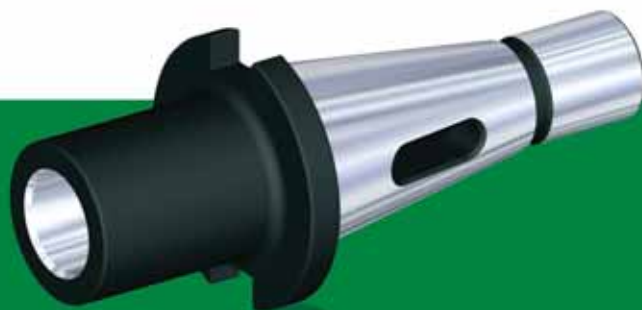
NOTE: For retention knobs, see page J33.

QC40 Shank Tools

Erickson™ Quick Change Flange Shank Tooling System •

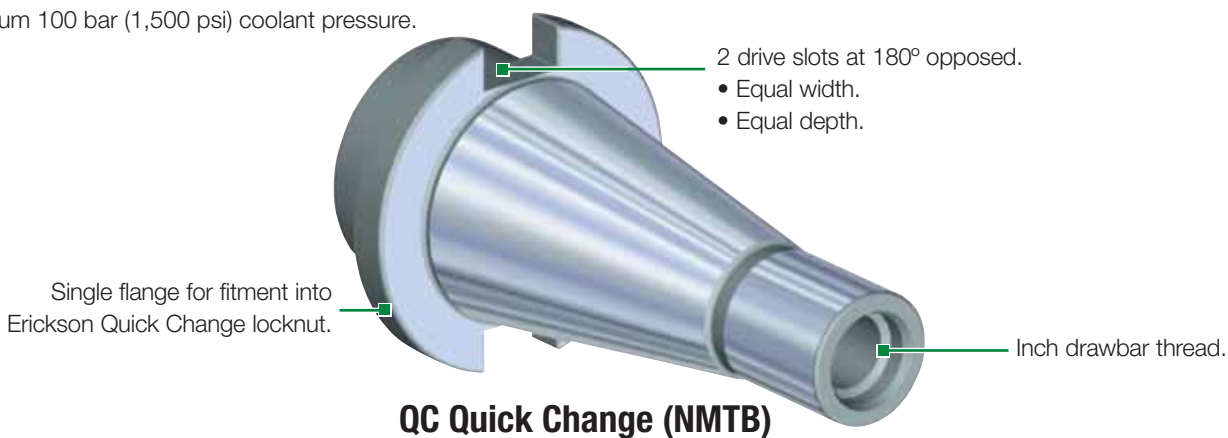
QC50 Series

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC50 tools are balanced-by-design that will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.

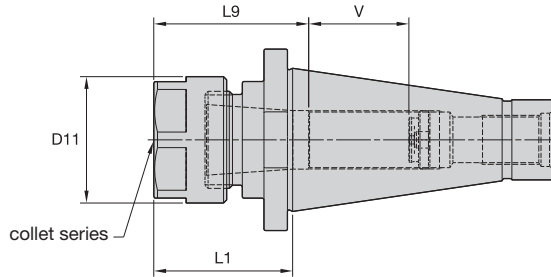
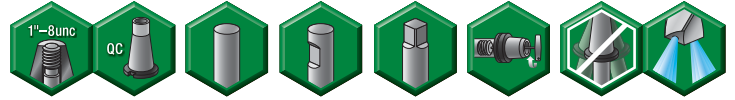


QC50

- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 1" – 8 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



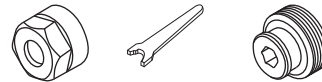
- Tremendous Grip (3:1 advantage).



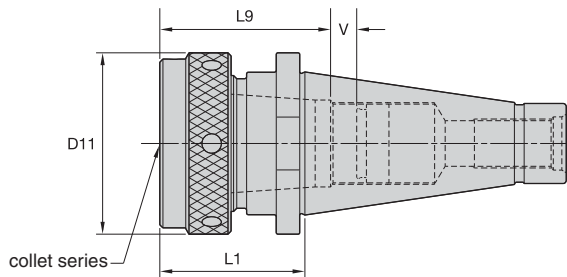
TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

ERICKSON

■ TG Hex-QC IN



order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	ft. lbs.	lbs
1025798	QC50TG100272	TG100	2.44	2.72	2.76	2.28	NPA100	OEW225	SS112041G	4mm & 5/32	150	6.45



■ TG Round-QC IN

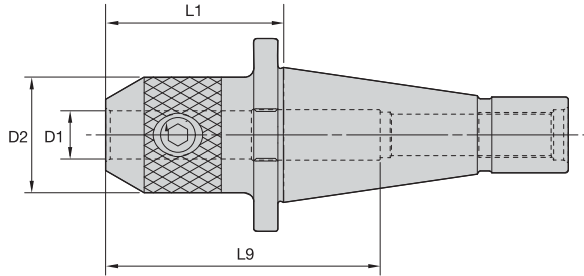
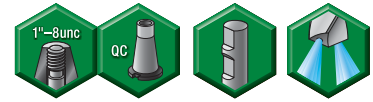


order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	ft. lbs.	lbs
1013526	QC50TG150284	TG150	3.50	2.84	3.15	1.26	NPA150	PSW350	SS162062G	4 mm & 5/32	200	7.14

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
 TG standard straight-bore collets, see page I10.
 TG tap collets, see page I10.
 For retention knobs, see page J33.

QC50 Shank Tools

End Mill Adapters



ERICKSON™

EM IN-QC IN

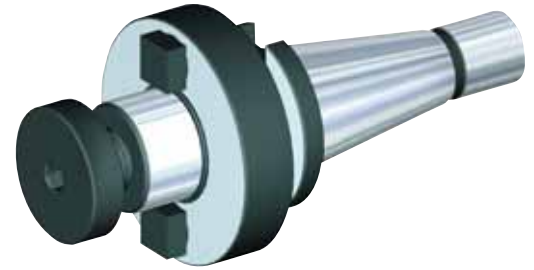
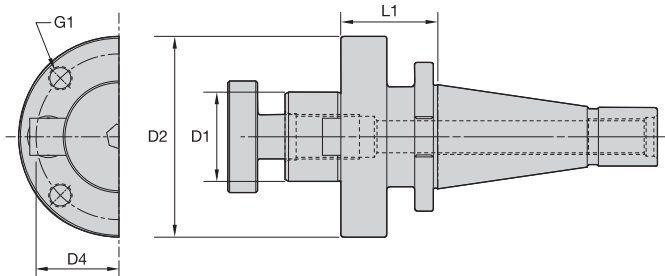


order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1019096	QC50EM038275	3/8	1.00	2.75	5.96	ELS038031PKG	3/16	15	5.81
1018979	QC50EM050275	1/2	1.38	2.75	5.96	ELS044038PKG	7/32	20	6.07
1019101	QC50EM062275	5/8	1.63	2.75	5.96	ELS056050PKG	1/4	40	6.18
1019100	QC50EM075275	3/4	1.75	2.75	5.96	ELS062050PKG	5/16	70	6.30
1018980	QC50EM088200	7/8	2.00	2.00	4.19	ELS062050PKG	5/16	70	6.05
1018981	QC50EM100306	1	2.00	3.06	4.49	ELS075056PKG	3/8	110	6.58
1019102	QC50EM125306	1-1/4	2.50	3.06	2.39	ELS075062PKG	3/8	110	7.57
1019145	QC50EM150350	1-1/2	2.75	3.50	2.82	ELS075069PKG	3/8	110	8.42
1018982	QC50EM200475	2	3.75	4.75	3.38	ELS100088PKG	1/2	150	13.67

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw.
 Lock screw wrench not included.
 For retention knobs, see page J33.

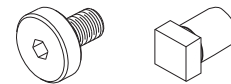
QC50 Shank Tools





ERICKSON

■ SM IN-QC IN



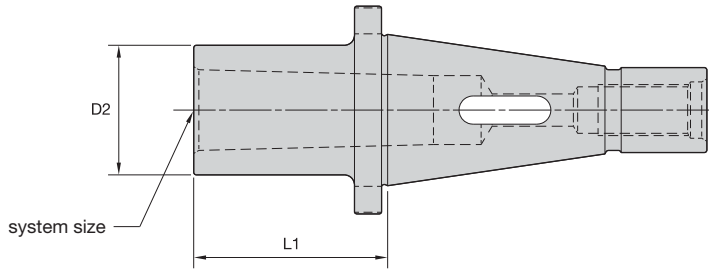
order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
1925520	QC50SM050125	1/2	1.44	—	—	1.25	KLS05	KDK04	3/16	5.71
1018983	QC50SM075125	3/4	1.75	—	—	1.25	KLS07	KDK05	1/4	5.78
1019273	QC50SM075600	3/4	1.75	—	—	6.00	KLS07	KDK05	1/4	9.40
1019024	QC50SM100188	1	2.19	—	—	1.88	KLS10	KDK06	5/16	7.28
1019334	QC50SM100600	1	2.19	—	—	6.00	KLS10	KDK06	5/16	11.57
1019335	QC50SM100800	1	2.19	—	—	8.00	KLS10	KDK06	5/16	14.36
1019336	QC50SM125600	1-1/4	2.75	—	—	6.00	KLS12	KDK08	5/16	14.45
1019337	QC50SM1251000	1-1/4	2.75	—	—	10.00	KLS12	KDK08	5/16	20.66
1019025	QC50SM125188	1-1/4	2.88	—	—	1.88	KLS12	KDK08	5/16	14.78
1019146	QC50SM150188	1-1/2	3.38	—	—	1.88	KLS15	KDK10	3/8	8.99
1019095	QC50SM200188	2	4.88	4.00	5/8-11 UNC	1.88	KLS20	KDK12	9/16	11.04
1019026	QC50SM250200	2-1/2	4.88	4.00	5/8-11 UNC	2.00	—	KDK16	1/2	11.94

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
 Lock screw wrench not included.
 For retention knob, see page J33.

QC50 Shank Tools

QC50 Shank Tools

Morse Taper Adapters • Slotting Cutter Adapters



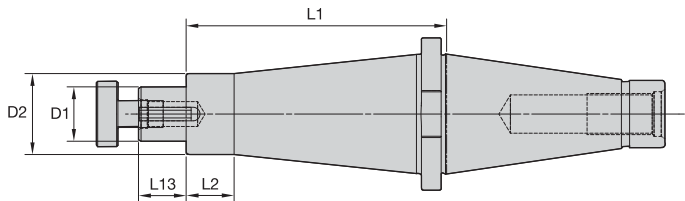
ERICKSON™

■ MT-QC IN

order number	catalog number	system size	D2	L1	lbs
1019027	QC50MT2188	2	1.25	1.88	5.61
1019028	QC50MT3238	3	1.62	2.38	5.67
1019029	QC50MT4325	4	2.00	3.25	6.44
1019030	QC50MT5462	5	2.75	4.62	8.74

NOTE: For retention knobs, see page J33.

QC50 Shank Tools



ERICKSON™

■ SA IN-QC IN

order number	catalog number	D1	D2	L1	L2	L13	lock screw	wrench size lock screw	drive key	lbs
1026342	QC50SA125600	1-1/4	1.86	6.00	1.10	1.09	KLS12	5/16	DWG SDK125119	12.27
1026343	QC50SA150600	1-1/2	2.11	6.00	1.25	1.70	KLS15	3/8	DWG SDK150175	13.49
1026222	QC50SA200600	2	2.75	6.00	5.41	1.70	KLS20	9/16	SDK200169	16.72

NOTE: Do not overtighten lock screw.
 Supplied with lock screw and drive key.
 Lock screw wrench not included.
 For retention knobs, see page J33.



WIN WITH WIDIA™



WIDIA™ VariDrill™

WIDIA is pleased to announce the new VariDrill for a wide range of materials

The most extensive solid carbide drill line on the market today.

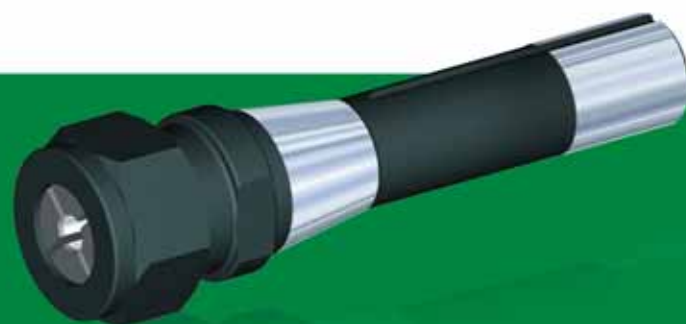
The VariDrill line is available as non-coolant drills in 3 x D and 5 x D, coolant drills in 3 x D, 5 x D, and 8 x D. "A" and "F" shanks available.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

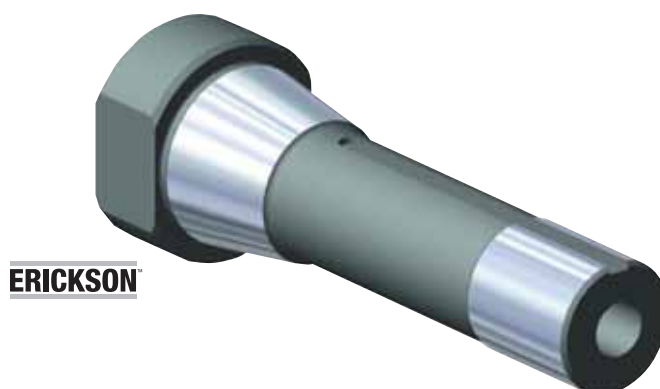
Shank Tooling System • R8 Shank Tooling

R8 Shank Toolholders are designed with a locking groove that aligns into a locking mechanism when inserted into the spindle. A milling machine drawbar bolt pulls the tool into the spindle for a secure connection. If the toolholder assembly is properly balanced and application conditions are appropriate, R8 shanks can operate effectively up to 8,000 RPM.



R8

- All non-critical surfaces are black oxide.
- Design enables coolant as a standard feature.
- Clean components prior to assembly.
- To avoid destroying the toolholder, never overtighten toolholders or neglect surface damage.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



R8DA188181

R8

Shank
Style

DA

Toolholder
Style

188

Toolholder
Size

181

Tool
Length

DA = Double-angle collet chuck
EM = End mill adapter
SM = Shell mill adapter

(Tool gage line to front of tool)

inch
XXX = X.XX

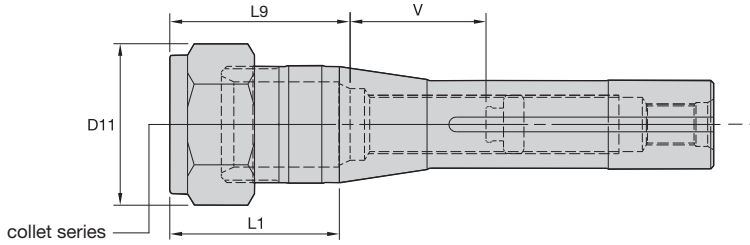
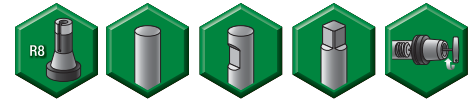
DA =
Collet series xxx (188)
EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)
SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

R8 Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.



ERICKSON™

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA180	2,2	20	1/64	3/4

■ DA 08 Hex-R8

order number	catalog number	collet series	D11	L1	L9	V	lbs
1015548	R8DA188181	DA180	1.73	1.81	2.29	2.36	1.01

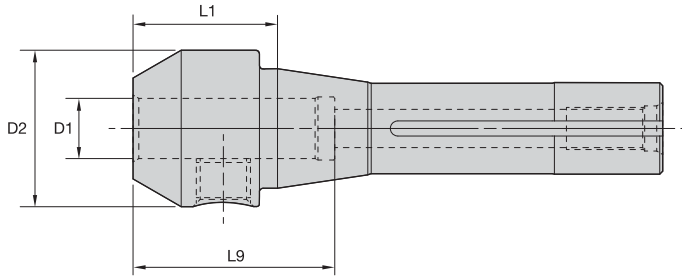
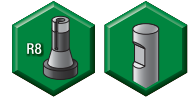
■ Spare Parts



catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
R8DA188181	NPA188	OEW150	75	SS062041G	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I62.
 DA non-pullout collets, see page I65.

R8 Shank Tools



ERICKSON

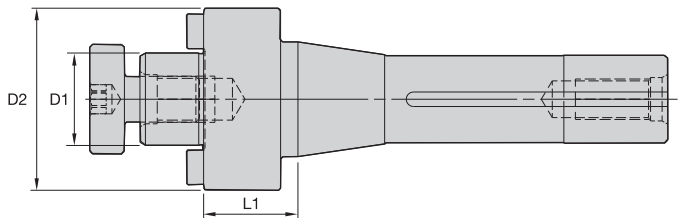
■ EM IN-R8



order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1286048	R8EM018112	3/16	.69	1.13	1.01	S1045PKG	3/32	5	.86
1286049	R8EM038100	3/8	1.00	1.00	1.73	ELS038031PKG	3/16	15	.90
1286050	R8EM050112	1/2	1.24	1.13	1.73	ELS044038PKG	7/32	20	.95
1286051	R8EM062150	5/8	1.63	1.50	2.09	ELS056050PKG	1/4	40	1.29
1229174	R8EM075262	3/4	1.75	2.63	2.22	ELS062050PKG	5/16	70	2.04
1286052	R8EM088306	7/8	2.00	3.06	2.22	ELS062050PKG	5/16	70	2.80
1286053	R8EM100306	1	2.00	3.06	2.46	ELS075056PKG	3/8	110	2.64
1286054	R8EM125306	1-1/4	2.50	3.06	2.51	ELS075056PKG	3/8	110	3.72

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.

R8 Shank Tools



ERICKSON

■ SM Lock IN-R8



order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
1286058	R8SM050102	1/2	1.28	1.02	KLS05	KDK04	3/16	1.23
1286059	R8SM075102	3/4	1.63	1.02	KLS07	KDK05	1/4	1.50
1286060	R8SM100102	1	1.97	1.02	KLS10	KDK06	5/16	1.85
1286061	R8SM125102	1-1/4	2.50	1.02	KLS12	KDK08	5/16	2.51

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.



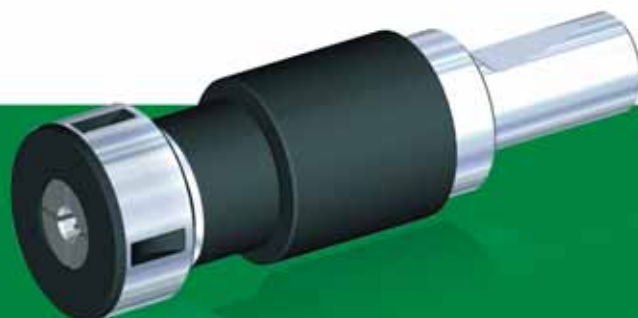
Straight Shanks

Shrink Fit Toolholders .....	.H4–H5
Single-Angle Collet Chucks .....	.H6–H11
Double-Angle Collet Chucks .....	.H12–H22
Screw-On Adapters for Modular Milling Cutters .....	.H23–H25
Weldon Shank Tools .....	.H26
Slotting Cutter Adapters .....	.H27



Shank Tooling System • **Straight Shank Tools**

Straight Shank Toolholders are ideal for extending tool length to reach difficult-to-machine areas. These toolholders are intended for use in combination with other toolholder and adapter systems. When the toolholder assembly is properly balanced and application conditions are appropriate, Straight Shank Toolholders can effectively operate at speeds up to 8,000 RPM.



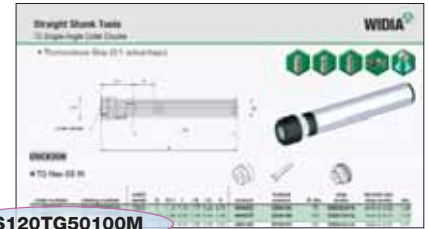
Straight Shank

- All non-critical surfaces are black oxide.
- Design enables coolant as a standard feature on most designs.
- Clean components prior to assembly.
- To avoid destroying the toolholder, never overtighten toolholders or neglect surface damage.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



ERICKSON

SS120TG50100M

SS

Shank Style

120

Shank Taper Size

TG

Toolholder Style

50

Toolholder Size

100

Tool Length

M

Identification Value

- 120 = 12mm
- 125 = 12,5mm
- 160 = 16mm
- 190 = 19mm
- 200 = 20mm
- 250 = 25mm
- 038 = 3/8"
- 050 = 1/2"
- 062 = 5/8"
- 075 = 3/4"
- 100 = 1"
- 125 = 1-1/4"
- 150 = 1-1/2"
- 175 = 1-3/4"
- 200 = 2"

- DA** = Double-angle collet chuck
- DP** = Double pin, floating holder
- ER** = DIN 6499 single-angle collet chuck
- FC** = Fully floating holder
- SA** = Slotting cutter adapter
- STL** = DAL — tapping adapter, solid
- TCJ** = DAJ — tapping adapter, tension and compression
- TCK** = DAK — tapping adapter, tension and compression
- TCL** = DAL — tapping adapter, tension and compression
- TCTG** = TG — tapping adapter, tension and compression
- TG** = Tremendous Grip single-angle collet chuck
- TOJ** = DAJ — tapping adapter, tension only
- TOK** = DAK — tapping adapter, tension only
- TOL** = DAL — tapping adapter, tension only
- TT** = Shrink Fit thermo toolholder

(Flange face to front of tool)

metric
xxx = xxx

inch
xxx = x.xx

M = Tool built to metric values
(blank) = Tool built to inch values

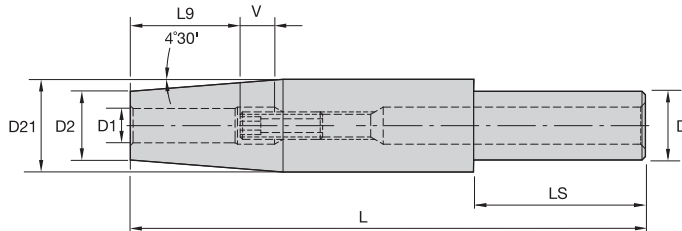
- TG** = Collet series xx (50), xxx (100)
- EM** = I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)
- SM** = O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

Straight Shank Tools

Shrink Fit Toolholders General Purpose (GP)



- Suitable for carbide and HSS cutting tools (requirements below).
- Slim design for extending adapters, collet chucks, and toolholders.
- 10mm (3/8") axial adjustment.



Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12	h6	0,000/-0,011

Straight Shank Tools

ERICKSON

■ TT GP MM-SS MM



order number	catalog number	D	D1	D2	D21	L	LS	L9	V	stop screw	wrench size stop screw	kg
2264458	SS160TT03110M	16	3	9	15	110	50	15	10	TTSS05014M	2,5mm	0,11
2456194	SS160TT04110M	16	4	9	15	110	50	15	10	TTSS05014M	2,5mm	0,12
1801299	SS200TT04150M	20	4	9	15	150	60	15	10	TTSS05014M	2,5mm	0,22
1801300	SS200TT05150M	20	5	9	15	150	60	15	10	TTSS06014M	3mm	0,22
1801301	SS200TT06150M	20	6	15	—	150	118	26	10	TTSS05014M	2,5mm	0,30
1801302	SS200TT08150M	20	8	15	—	150	118	26	10	TTSS06014M	3mm	0,30
1801413	SS200TT10150M	20	10	20	27	150	50	31	10	TTSS08014M	4mm	0,46
1801414	SS200TT12150M	20	12	20	27	150	50	36	10	TTSS10014M	5mm	0,44

(continued)

(TT GP continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/8 & 3/16	-.0001/- .0003
1/4, 5/16, & 3/8	-.0001/- .0004
7/16, 1/2, 9/16, & 5/8	.0000/- .0004

■ TT GP IN-SS IN



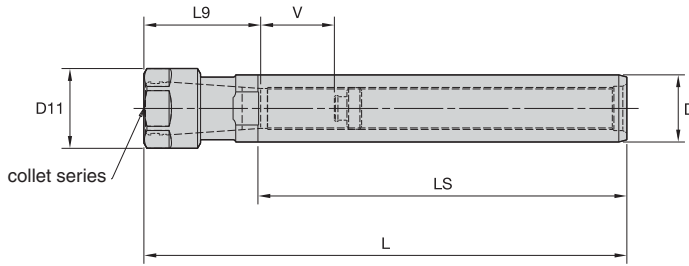
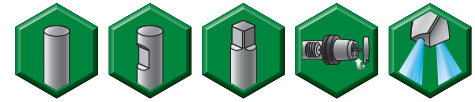
order number	catalog number	D	D1	D2	D21	L	LS	L9	V	stop screw	wrench size stop screw	lbs
1794109	SS050TT012600	1/2	1/8	.35	.50	6.00	5.07	.61	.39	TTSS05014M	2,5mm	.26
1794110	SS050TT018600	1/2	3/16	.35	.50	6.00	5.07	.61	.39	TTSS06014M	3mm	.25
1794111	SS075TT025600	3/4	1/4	.59	.75	6.00	4.98	1.02	.39	TTSS05014M	2,5mm	.62
1794112	SS075TT031600	3/4	5/16	.59	.75	6.00	4.98	1.02	.39	TTSS06014M	3mm	.61
1794233	SS075TT038600	3/4	3/8	.79	1.06	6.00	1.50	1.22	.39	TTSS08014M	4mm	1.07
1794234	SS075TT044600	3/4	—	.79	1.06	6.00	1.50	1.42	.39	TTSS10014M	4mm	1.05
1794235	SS075TT050600	3/4	1/2	.79	1.06	6.00	1.50	1.42	.39	TTSS10014M	5mm	1.02
1794236	SS100TT056700	1	9/16	.95	1.26	7.00	1.75	1.42	.39	TTSS10014M	4mm	1.72
1794237	SS100TT062700	1	5/8	.95	1.26	7.00	1.75	1.54	.39	TTSS12014M	6mm	1.68

Straight shank toolholders are a great complement to the Shrink Fit program. Use caution to not overheat the Slim Line design. Overheating can cause warping or permanent damage. The life cycle of the toolholders will be drastically reduced if the activating heat is not controlled. The Slim Line design permits only a limited number of heat shrinks. Testing has shown more than 300 heat shrinks can be performed with the straight shank extensions when the activation heat is controlled to less than 426 °C (800 °F).

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Shrink Fit technical section, see page K56.
 Supplied with stop screw.
 Adjusting stop screw gage, see page K59.
 Shrink Fit accessories, see page J2.

Straight Shank Tools

- Tremendous Grip (3:1 advantage).



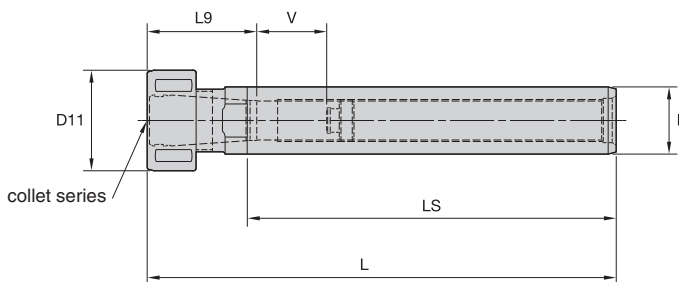
TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON™

■ TG Hex-SS IN



order number	catalog number	collet series	D	D11	L	L9	LS	V	locknut	wrench	ft. lbs.	stop screw	wrench size	stop screw	lbs
1082537	SS100TG050719	TG50	1	1.19	7.19	1.77	5.49	4.73	NPA050	OEW106	75	SS062041G	4mm & 5/32		1.03
1025794	SS125TG075850	TG75	1 1/4	2.09	8.50	2.06	6.00	3.56	NPA075	OEW188	100	SS081041G	4mm & 5/32		2.28
2636807	SS125TG100925	TG100	1 1/4	2.44	9.25	2.88	6.00	3.63	NPA100	OEW225	150	SS081041G	4mm & 5/32		3.27
1025797	SS150TG075775	TG75	1 1/2	2.09	7.75	2.06	6.00	5.00	NPA075	OEW188	100	SS081041G	4mm & 5/32		2.97
1025638	SS150TG100925	TG100	1 1/2	2.44	9.25	2.63	6.00	5.93	NPA100	OEW225	150	SS112041G	4mm & 5/32		3.52
1025796	SS175TG100819	TG100	1 3/4	2.44	8.19	2.63	6.02	4.87	NPA100	OEW225	150	SS112041G	4mm & 5/32		4.15
1025795	SS200TG100819	TG100	2	2.44	8.19	2.76	6.00	4.74	NPA100	OEW225	150	SS112041G	4mm & 5/32		5.38



■ TG Round-SS IN



order number	catalog number	collet series	D	D11	L	L2	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size	stop screw	lbs
1025637	SS100TG050698G	TG50	1	1.50	6.98	1.49	1.77	4.53	LNA050M	HSW34M	50	SS062041G	4mm & 5/32		1.15

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.

Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.

Locknut wrench must be ordered separately.

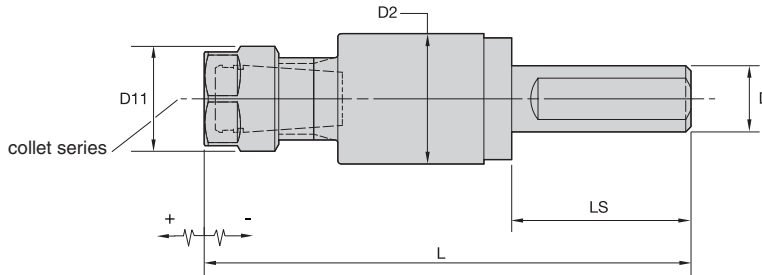
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

Stop screw coolant caps are available and must be ordered separately; see page J22.

TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

- Tremendous Grip (3:1 advantage).
- Anti-friction drive.
- Compact design.
- Adjustment hard start.



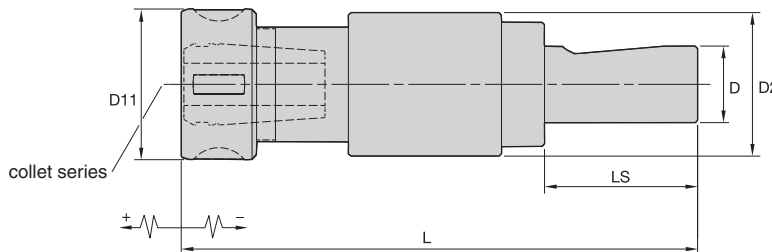
TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON

■ TG Hex Tap T&C-SS IN



order number	catalog number	collet series	D	D11	D2	L	LS	tension	compression	hex assembly	OEW	ft. lbs.	lbs
1288221	SS075TCTG050	TG50	3/4	1.22	1.48	5.48	2.00	.25	.30	NPA050	OEW106	75	.68



■ TG Round Tap T&C-SS IN



order number	catalog number	collet series	D	D11	D2	L	LS	tension	compression	locknut	wrench	ft. lbs.	lbs
1288256	SS100TCTG075	TG75	1	1.97	1.88	6.79	2.20	.40	.43	LNA075M	HSW45M	100	1.50
1017625	SS150TCTG100756	TG100	1 1/2	2.36	2.50	7.56	2.68	.50	.13	LNA100M	HSW58M	150	2.12

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.

Supplied with locknut.

Locknut wrench must be ordered separately.

Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.

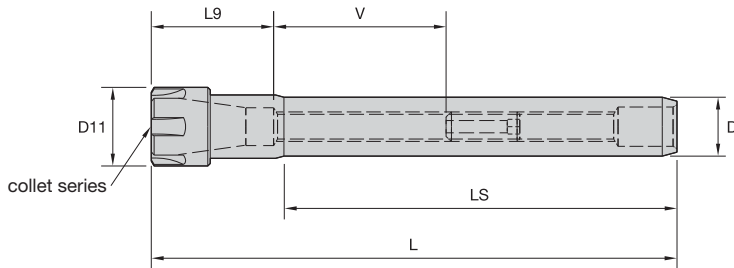
TG standard straight-bore collets, see page I10.

TG tap collets, see page I10.

Straight Shank Tools

ER Single-Angle Collet Chucks

- Grip (2:1 advantage).



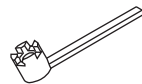
ERICKSON™

ER Slim-SS MM

ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER11	0,5	7,0	.02	.28
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	1,0	20,0	.04	.79

order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1288261	SS120ER11107M	ER11	12	16	107	80	24	56	0,08
1288285	SS160ER11132M	ER11	16	16	132	100	24	56	0,16
1125015	SS200ER16182M	ER16	20	22	182	140	32	68	0,32
1288321	SS250ER20190M	ER20	25	28	190	150	36	64	0,55

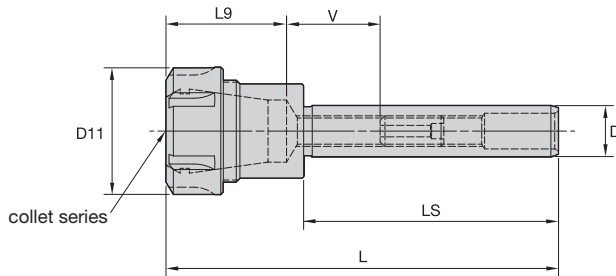
Spare Parts



catalog number	locknut	locknut wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
SS120ER11107M	LER11M	ER11WEM	12	16	CSS0615M	3mm
SS200ER16182M	LER16M	ER16WEM	24	24	CSS1020M	5mm
SS250ER20190M	LER20M	ER20WEM	28	28	CSS1225M	6mm

(continued)

(ER continued)



■ ER Round-SS MM

order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1288303	SS200ER25146M	ER25	20	42	146	100	42	58	0,38
1288304	SS200ER32154M	ER32	20	50	154	100	49	51	0,51

■ Spare Parts



catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
SS200ER25146M	LNSER25M	ER25WM	104	CSS1225M	6mm
SS200ER32154M	LNSER32M	ER32WM	136	CSS1225M	6mm

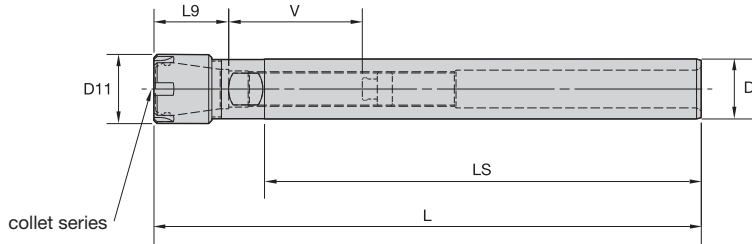
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page 150.
ER tap collets, see page 158.
ER TCT tension-only tap collets, see page 160.

Straight Shank Tools

ER Single-Angle Collet Chucks



- Grip (2:1 advantage).



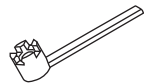
ER collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
ER8	0,5	0,5	.02	.20
ER11	0,5	7,0	.02	.28
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63

ERICKSON™

ER Slim-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021460	SS038ER08500	ER8	3/8	.47	5.00	4.15	.71	1.42	.10
1021462	SS050ER11700	ER11	1/2	.63	7.00	5.96	.95	3.23	.26
1021494	SS075ER16700	ER16	3/4	.87	7.00	5.47	1.30	2.24	.56

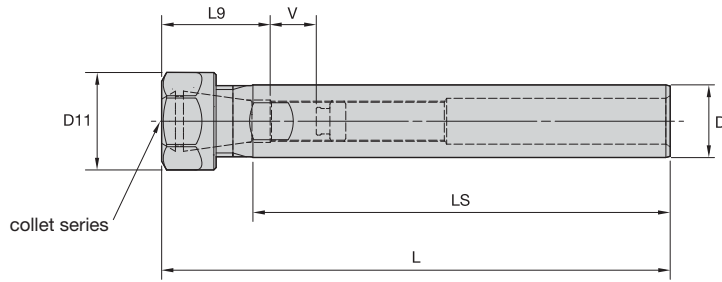
Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
SS038ER08500	LER08M	ER08WEM	4.8	SS025031PKG	—
SS050ER11700	LER11M	ER11WEM	12.0	SS031031G	2mm & 5/64
SS075ER16700	LER16M	ER16WEM	24.0	SS044038G	4mm & 5/32

(continued)

(ER continued)



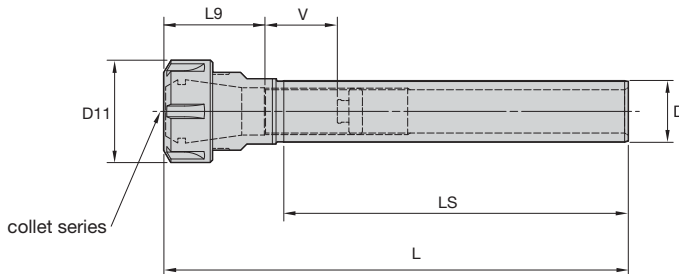
■ ER Hex-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021496	SS100ER20700	ER20	1.00	1.34	7.00	5.70	1.30	2.20	1.07

■ Spare Parts



catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)	stop screw	wrench size stop screw
SS100ER20700	LNHSER20M	OEW30M	24	59	SS056041G	4mm & 5/32



■ ER Round-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021498	SS100ER25750	ER25	1.00	1.65	7.50	5.69	1.58	1.97	1.13

■ Spare Parts



catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS100ER25750	LNSER25M	ER25WM	77	SS075041G	4mm & 5/32

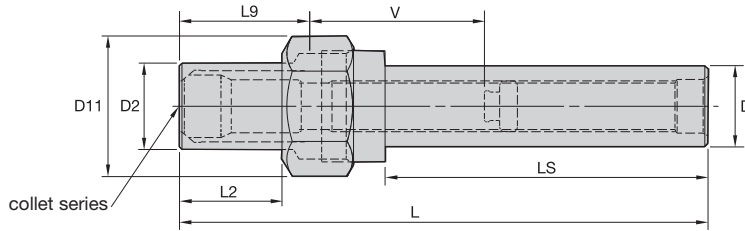
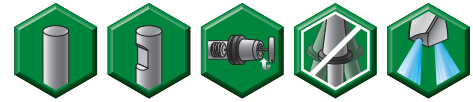
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

Straight Shank Tools

DA 01 Series Double-Angle Collet Chucks



- Grip 1:1.



ERICKSON

■ DA 01-SS IN

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4





Straight Shank Tools

order number	catalog number	collet series	D	D2	D11	L	L2	LS	L9	V	lbs
1015309	SS050DA301544	DA300	1/2	.50	.87	5.44	.62	3.98	1.25	2.9370	.23
1015312	SS062DA301319	DA300	5/8	.50	.87	3.19	.62	1.73	1.21	1.4800	.21
1015313	SS062DA301544	DA300	5/8	.50	.87	5.44	.62	3.98	1.25	2.9410	.36
1015736	SS062DA201325	DA200	5/8	.81	1.44	3.25	.91	1.26	1.30	1.4600	.45
1015522	SS062DA201600	DA200	5/8	.81	1.44	6.00	.91	4.01	1.42	2.7559	.60
1015483	SS075DA301344	DA300	3/4	.50	.86	3.44	.61	—	1.22	1.7300	.30
1015695	SS075DA301544	DA300	3/4	.50	.86	5.44	—	3.96	1.26	3.5400	.51
1015669	SS075DA201600	DA200	3/4	.81	1.44	6.00	.91	4.01	1.11	3.0120	.71
1015601	SS075DA101650	DA100	3/4	1.06	1.73	6.50	—	3.96	1.57	4.1800	.98
1015666	SS100DA301544	DA300	1	.50	.86	5.44	.62	3.96	1.22	3.0300	.89
1015340	SS100DA201600	DA200	1	.81	1.44	6.00	.88	4.01	1.50	2.5980	1.10
1015520	SS100DA101650	DA100	1	1.06	1.73	6.50	1.26	3.96	1.69	4.0200	1.24
1015625	SS100DA181638	DA180	1	1.32	2.02	6.38	—	3.96	1.69	4.0160	1.33
1015375	SS125DA181838	DA180	1 1/4	1.32	2.02	8.38	2.42	5.96	1.73	3.9800	2.12
1015378	SS150DA201600	DA200	1 1/2	.81	1.44	6.00	—	4.01	1.50	2.6300	2.21
1015597	SS150DA181838	DA180	1 1/2	1.32	2.02	8.38	—	5.96	1.50	4.2100	3.03
1015764	SS200DA201800	DA200	2	.81	1.44	8.00	.91	6.01	1.50	2.6378	5.45
1015765	SS200DA101850	DA100	2	1.06	1.73	8.50	1.26	5.97	1.70	4.0160	5.46
1015631	SS200DA181838	DA180	2	1.32	2.02	8.38	.99	5.98	1.88	5.9060	5.41

(continued)

(DA 01-SS IN continued)

■ Spare Parts

catalog number	 nose piece	 hex locknut	 locknut wrench	ft. lbs.	 stop screw	wrench size stop screw
SS050DA301544	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS062DA301319	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS062DA301544	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS062DA201325	NP201	LN201	OEW125	40	SS038031G	2mm & 5/64
SS062DA201600	NP201	LN201	OEW125	40	SS038031G	2mm & 5/64
SS075DA301344	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS075DA301544	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS075DA201600	NP201	LN201	OEW125	40	SS044038G	4mm & 5/32
SS075DA101650	NP101	LN101	OEW150	45	SS050038G	4mm & 5/32
SS100DA301544	NP301	LN301	OEW075	20	SS031031G	2mm & 5/64
SS100DA201600	NP201	LN201	OEW125	40	SS044038G	4mm & 5/32
SS100DA101650	NP101	LN101	OEW150	45	SS062041G	4mm & 5/32
SS100DA181638	NP181	LN181	OEW175	75	SS075041G	4mm & 5/32
SS125DA181838	NP181	LN181	OEW150	75	SS081041G	4mm & 5/32
SS150DA201600	NP201	LN201	OEW125	40	SS044038G	4mm & 5/32
SS150DA181838	NP181	LN181	OEW175	75	SS081041G	4mm & 5/32
SS200DA201800	NP201	LN201	OEW125	40	SS044038G	4mm & 5/32
SS200DA101850	NP101	LN101	OEW150	45	SS062041G	4mm & 5/32
SS200DA181838	NP181	LN181	OEW175	75	SS081041G	4mm & 5/32

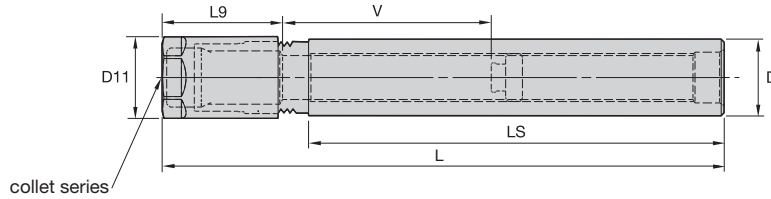
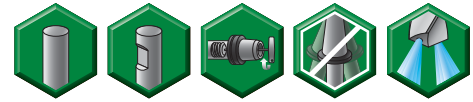
NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

Straight Shank Tools

DA 04 Series Double-Angle Collet Chucks



- Grip 1:1.
- Small outside diameter clearance is ideal for machining centers, close center-distance, and fixture problems.



ERICKSON™

■ DA 04-SS MM

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA000	0,65	4	—	—
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

Straight Shank Tools

order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1015043	SS080DA000132M	DA000	8,0	10,1	132	100	—	—	0,05
1015037	SS125DA304109M	DA300	12,5	14,2	109	72	33	63	0,07
1015038	SS125DA304173M	DA300	12,5	14,2	173	136	34	126	0,11
1015034	SS190DA204117M	DA200	19,1	21,5	117	74	37	65	0,19
1015013	SS190DA204181M	DA200	19,1	21,5	181	138	42	124	0,29
1015035	SS200DA204117M	DA200	20,0	21,5	117	74	38	65	0,21
1015036	SS200DA204181M	DA200	20,0	21,5	181	138	37	128	0,32
1015011	SS250DA104122M	DA100	25,0	27,0	122	73	46	61	0,29
1015012	SS250DA104186M	DA100	25,0	27,0	186	137	46	124	0,45

■ Spare Parts



catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
SS080DA000132M	LN000M	OEW9M	41	—	—
SS125DA304109M	LNA304M	OEW13M	27	SS031031G	2mm & 5/64
SS125DA304173M	LNA304M	OEW13M	27	SS031031G	2mm & 5/64
SS190DA204117M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS190DA204181M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS200DA204117M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS200DA204181M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS250DA104122M	LNA104M	OEW24M	61	SS062041G	4mm & 5/32
SS250DA104186M	LNA104M	OEW24M	61	SS062041G	4mm & 5/32

(continued)

(DA 04-SS continued)

■ DA 04-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1015308	SS050DA304438	DA300	1/2	.56	4.38	2.93	1.34	2.60	.17
1015311	SS050DA304681	DA300	1/2	.56	6.81	5.36	1.27	2.98	.24
1015334	SS075DA204469	DA200	3/4	.84	4.69	3.00	1.50	2.63	.42
1015337	SS075DA204712	DA200	3/4	.84	7.13	5.44	1.50	3.27	.62
1015338	SS100DA104488	DA100	1	1.06	4.88	2.95	1.69	2.56	.66
1015342	SS100DA104731	DA100	1	1.06	7.31	5.38	1.73	4.96	1.02
1015517	SS125DA184738	DA180	1 1/4	1.44	7.38	5.38	1.89	4.76	1.61
1015594	SS125DA184988	DA180	1 1/4	1.44	9.88	7.86	1.89	7.20	2.15
1015737	SS150DA404104	DA400	1 1/2	1.87	10.40	7.96	2.20	7.25	2.80
1015545	SS150DA404791	DA400	1 1/2	1.88	7.91	5.18	2.19	4.81	2.22

■ Spare Parts



catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS050DA304438	LNA304M	OEW050	20	SS031031G	2mm & 5/64
SS050DA304681	LNA304M	OEW050	20	SS031031G	2mm & 5/64
SS075DA204469	LNA204M	OEW075	40	SS044038G	4mm & 5/32
SS075DA204712	LNA204M	OEW075	40	SS044038G	4mm & 5/32
SS100DA104488	LNA104M	OEW094	45	SS062041G	4mm & 5/32
SS100DA104731	LNA104M	OEW094	45	SS062041G	4mm & 5/32
SS125DA184738	LNA184M	OEW119	60	SS081041G	4mm & 5/32
SS125DA184988	LNA184M	OEW119	60	SS081041G	4mm & 5/32
SS150DA404104	LNA404M	OEW168	64	SS112041G	4mm & 5/32
SS150DA404791	LNA404M	OEW168	64	SS112041G	4mm & 5/32

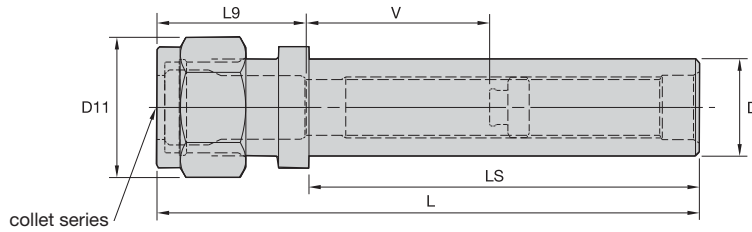
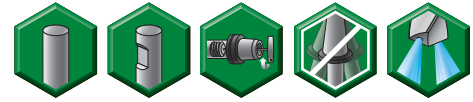
NOTE: Tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

Straight Shank Tools

DA 08 Series Double-Angle Collet Chucks



- Grip 1:1.
- Heavy-duty design.



ERICKSON™

■ DA 08-SS-IN

DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

Straight Shank Tools

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1015310	SS050DA308516	DA300	1/2	.79	5.16	3.98	1.34	2.91	.22
1015519	SS062DA308516	DA300	5/8	.77	5.16	3.98	1.38	2.80	.35
1015694	SS062DA208569	DA200	5/8	1.15	5.69	4.00	1.38	2.87	.44
1015336	SS075DA308516	DA300	3/4	.79	5.16	4.24	1.97	2.62	.50
1015335	SS075DA208531	DA200	3/4	1.15	5.31	3.96	1.45	2.68	.52
1015518	SS075DA108588	DA100	3/4	1.44	5.88	4.00	1.73	3.62	.67
1015696	SS100DA308516	DA300	1	.77	5.16	3.98	1.38	2.76	.88
1015734	SS100DA208431	DA200	1	1.15	4.31	2.96	1.50	2.24	.73
1015341	SS100DA208531	DA200	1	1.15	5.31	3.95	1.46	2.68	.91
1015698	SS100DA108556	DA100	1	1.44	5.56	3.99	1.75	3.21	.90
1015339	SS100DA188638	DA180	1	1.73	6.38	4.00	1.97	3.82	1.04
1015703	SS125DA208531	DA200	1-1/4	1.15	5.31	3.96	1.50	2.59	1.40
1015343	SS125DA108556	DA100	1-1/4	1.44	5.56	3.99	1.77	3.19	1.40
1015374	SS125DA108756	DA100	1-1/4	1.44	7.56	5.99	1.77	3.94	1.92
1015376	SS125DA188762	DA180	1-1/4	1.73	7.63	5.91	1.93	5.04	1.76
1015379	SS150DA208531	DA200	1-1/2	1.15	5.31	3.96	1.50	3.22	2.02
1015629	SS150DA208731	DA200	1-1/2	1.15	7.31	5.96	1.46	2.67	2.91
1015380	SS150DA108756	DA100	1-1/2	1.44	7.56	5.99	1.77	3.94	2.83
1015381	SS150DA188762	DA180	1-1/2	1.73	7.63	5.91	1.93	5.08	2.64
1015404	SS175DA188762	DA180	1-3/4	1.73	7.63	5.91	1.93	5.08	3.70
1015405	SS200DA188762	DA180	2	1.73	7.63	5.91	1.89	5.22	4.92

(continued)

(DA 08-SS IN continued)

■ Spare Parts



catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS050DA308516	LNA308M	OEW068	20	SS031031G	2mm & 5/64
SS062DA308516	LNA308M	OEW068	20	SS031031G	2mm & 5/64
SS062DA208569	NPA208	OEW100	40	SS038031G	2mm & 5/64
SS075DA308516	LNA308M	OEW068	20	SS031031G	2mm & 5/64
SS075DA208531	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS075DA108588	LNA108M	OEW125	55	SS050038G	4mm & 5/32
SS100DA308516	LNA308M	OEW068	20	SS031031G	2mm & 5/64
SS100DA208431	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS100DA208531	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS100DA108556	LNA108M	OEW125	55	SS062041G	4mm & 5/32
SS100DA188638	NPA188	OEW150	75	SS075041G	4mm & 5/32
SS125DA208531	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS125DA108556	LNA108M	OEW125	55	SS062041G	4mm & 5/32
SS125DA108756	LNA108M	OEW125	55	SS062041G	4mm & 5/32
SS125DA188762	NPA188	OEW150	75	SS081041G	4mm & 5/32
SS150DA208531	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS150DA208731	NPA208	OEW100	40	SS044038G	4mm & 5/32
SS150DA108756	LNA108M	OEW125	55	SS062041G	4mm & 5/32
SS150DA188762	NPA188	OEW150	75	SS081041G	4mm & 5/32
SS175DA188762	NPA188	OEW150	75	SS081041G	4mm & 5/32
SS200DA188762	NPA188	OEW150	75	SS081041G	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
 Collet chuck technical section, see page K74.
 Supplied with locknut and stop screw.
 Locknut wrench must be ordered separately.
 Stop screw coolant caps are available and must be ordered separately; see page J22.
 DA standard straight-bore collets, see page I63.
 DA non-pullout collets, see page I65.

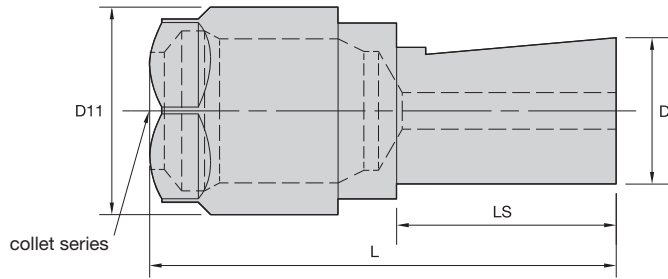
Straight Shank Tools

Straight Shank Tools

DA L Tap Series Solid Tapping, Double-Angle Collet Chucks



- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for machining centers, close center-distance, and fixture issues.
- Solid drive/positive drive collets prevent tap slippage.
- Right- or left-hand tapping capability.
- Economical to use.



DA L collet series	mm		Collet Capacity			
	min	max	inch			
L	M5	M24	#0	7/8	1/16P	1/2P

ERICKSON™

■ DA L Tap Solid-SS IN

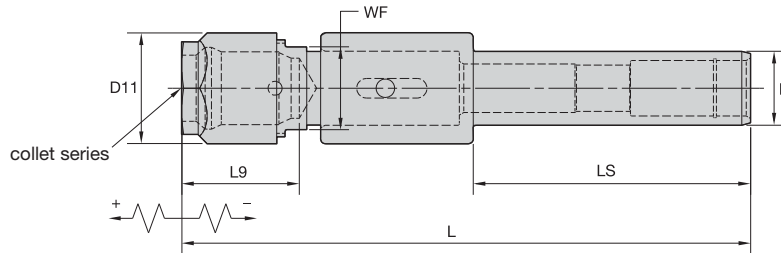


order number	catalog number	collet series	D	D11	L	LS	locknut	ft. lbs.	wrench	lbs
1017941	SS100STL169	L	1	1.50	3.19	1.50	LNAL04M	60	OEW125	1.59

*NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut.
Locknut wrench must be ordered separately.
DA standard straight-bore collets, see page I63.*

Straight Shank Tools

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for use on machining centers, close center-distance, and fixture issues.
- Use for through hole tapping.
- Key drive.
- Right- or left-hand tapping capability.
- Alternate springs available to adjust tension pressure to control thread quality in a variety of workpiece conditions.
- Positive-drive collets prevent tap slippage.
- Economical to use.



DA J, K, and L collet series	mm		Collet Capacity inch			
	min	max	min	max	min	max
J	M1	M12	#0	1/2	1/16P	—
K	M1	M16	#0	5/8	1/16P	1/8P
L	M5	M24	#0	7/8	1/16P	1/2P

ERICKSON

■ DA J, K, and L Tap T&C-SS • Inch



order number	catalog number	collet series	D	D11	L	LS	L9	tension	compression	WF	locknut	ft. lbs.	wrench	lbs
1017581	SS075TCJ731	J	3/4	.85	7.31	5.44	1.50	.56	.19	.562	LNA204M	40	OEW075	.72
1017748	SS100TCK719	K	1	1.06	7.19	5.44	—	.56	.19	.750	LNAK04M	45	OEW094	1.23
1017580	SS100TCL769	L	1	1.50	7.69	3.75	—	.56	.19	1.125	LNAL04M	60	OEW125	2.06

NOTE: Do not overtighten locknut; use torque recommendations above.
 Collet chuck technical section, see page K74.
 Supplied with locknut.
 Locknut wrench must be ordered separately.
 DA standard straight-bore collets, see page I63.

■ Alternate Tension Adjustment Springs for Tension and Compression Chucks

tap chuck	standard spring	alternate spring	preload (lb/in ²)
SS075TCJ731	CS0563041156PKG	—	2.37
—	—	heavier CS054001150PKG	3.50
SS100TCK719	CS0720067125PKG	—	6.75
—	—	lightest CS0563041156PKG	2.37
—	—	lightest CS0600049125PKG	3.25
—	—	heavier CS0600055150PKG	7.50
—	—	heaviest CS0600072150PKG	18.00
SS100TCL769	CS0600072150PKG	—	18.00
—	—	light CS0600055150 PKG	7.50

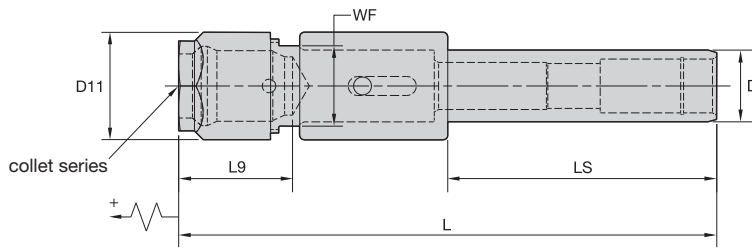
NOTE: There are two springs in a package.

Straight Shank Tools

DA J, K, and L Tap Series Double-Angle Collet Chucks, Tension Only



- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for use with machining centers, close center-distance, and fixture issues.
- Use for through hole tapping.
- Solid hard start ensures tap will start at same point every time, regardless if it is sharp or dull.
- Key drive.
- Right- or left-hand tapping capability.
- Alternate springs available to adjust tension pressure to control thread quality in a variety of workpiece conditions.
- Positive-drive collets prevent tap slippage.
- Economical to use.



DA J, K, and L collet series	mm		Collet Capacity			
	min	max	min	max	min	max
J	M1	M12	#0	1/2	1/16P	—
K	M1	M16	#0	5/8	1/16P	1/8P
L	M5	M24	#0	7/8	1/16P	1/2P

Straight Shank Tools

ERICKSON™

■ DA J, K, and L Tap Tension Only-SS • Inch



order number	catalog number	collet series	D	D11	L	LS	L9	tension	WF	locknut	ft. lbs.	wrench	lbs
1017627	SS075TOJ712	J	3/4	.85	7.13	5.44	1.50	.50	.562	LNA204M	40	OEW075	.72
1017629	SS100TOK700	K	1	1.06	7.00	5.44	1.47	.75	.750	LNAK04M	45	OEW094	1.14
1017631	SS100TOL750	L	1	1.50	7.50	3.75	1.59	.75	1.125	LNAL04M	60	OEW125	2.08

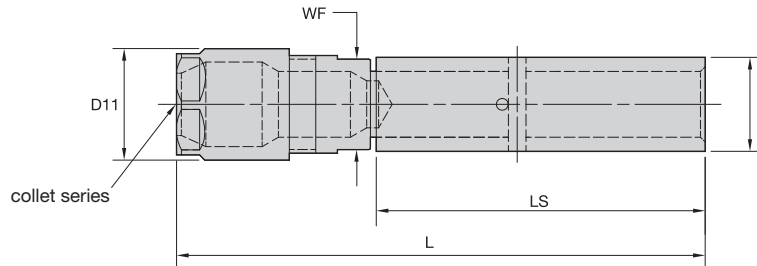
NOTE: Do not overtighten locknut; use torque recommendations above.
 Collet chuck technical section, see page K74.
 Supplied with locknut.
 Locknut wrench must be ordered separately.
 DA standard straight-bore collets, see page I63.

■ Alternate Tension Adjustment Springs for Tension-Only Chucks

tap chuck	standard spring	alternate spring	preload (lb/in ²)
SS075TOJ712	CS0563041156PKG	—	2.37
—	—	heavier CS0540041150 PKG	3.50
SS100TOK700	CS0600055150PKG	—	7.50
—	—	lighter CS0563041156 PKG	2.37
SS100TOL750	CS0600049125PKG	—	3.25
—	—	heavier CS0600055150 PKG	7.50

NOTE: There are two springs in a package.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Ideal for machining centers.
- It provides 0,10mm (.004") movement in all directions to compensate for angular and parallel misalignments.
- Minimum outside diameter and overhang provide maximum tool clearance.



DA collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

ERICKSON™

■ DA 08 DP F-SS IN



order number	catalog number	collet series	D	D11	L	LS	WF	locknut	wrench	ft. lbs.	lbs
1015905	SS050DP308403	DA300	1/2	.69	4.03	2.50	.500	NPA338	OEW062	20	.22
1015906	SS075DP308403	DA300	3/4	.69	4.03	2.50	.500	NPA338	OEW062	20	.50
1015980	SS075DP208448	DA200	3/4	.94	4.50	3.00	.625	NPA238	OEW088	40	.56
1015949	SS100DP308403	DA300	1	.69	4.03	2.50	.500	NPA338	OEW062	20	.89
1015981	SS100DP208448	DA200	1	.94	4.50	3.00	.625	NPA238	OEW088	40	.99
1015979	SS100DP108562	DA100	1	1.19	5.63	3.50	.875	NPA139	OEW088	55	1.24
1015944	SS125DP188696	DA180	1-1/4	1.50	6.97	4.50	1.125	LNA138	OEW138	75	2.41

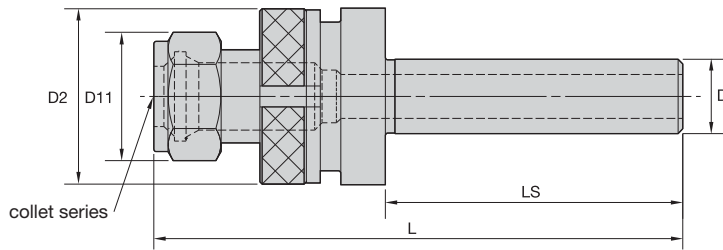
NOTE: Do not overtighten locknut; use torque recommendations above.
 Using two wrenches is recommended to prevent premature wear on the floating mechanism. Wrenches must be ordered separately.
 Collet chuck technical section, see page K74.
 Supplied with locknut.
 DA standard straight-bore collets, see page I63.

Straight Shank Tools

DA 08 FF Series Double-Angle Collet Chucks, Fully Floating Holders



- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Recommended only for stationary applications (lathe).
- Toolholder provides 0,25mm (.010") movement in all directions to compensate for angular and parallel misalignments.
- Hollow design enables coolant through the tool and short projection lengths.
- Adjusting nut varies spring tension to compensate for cutter weight.



DA 08 collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
DA180	2,2	20	1/64	3/4

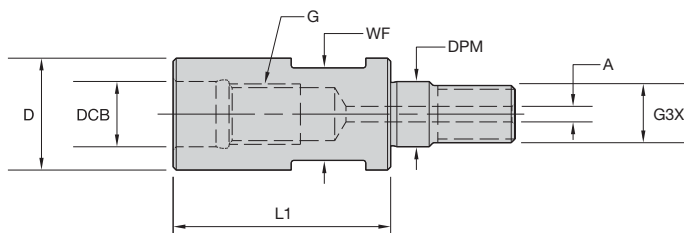
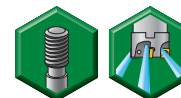
ERICKSON™

■ DA 08 FF-SS IN



order number	catalog number	collet series	D	D11	D2	L	LS	locknut	wrench	wrench	ft. lbs.	lbs
1015975	SS075FC188688	DA180	3/4	1.73	2.38	6.88	4.00	NPA188	OEW150	HSW58M	75	.86
1015982	SS100FC188688	DA180	1	1.73	2.38	6.88	4.00	NPA188	OEW150	HSW58M	75	1.52
1015910	SS125FC188888	DA180	1 1/4	1.73	2.38	8.88	6.00	NPA188	OEW150	HSW58M	75	4.08
1015952	SS150FC188688	DA180	1 1/2	1.73	2.38	6.88	4.00	NPA188	OEW150	HSW58M	75	3.44
1015947	SS150FC188888	DA180	1 1/2	1.73	2.38	8.88	6.00	NPA188	OEW150	HSW58M	75	4.44
1015976	SS175FC188888	DA180	1 3/4	1.73	2.38	8.88	6.00	NPA188	OEW150	HSW58M	75	6.04
1013502	SS200FC188888	DA180	2	1.73	2.38	8.88	6.00	NPA188	OEW150	HSW58M	75	—

NOTE: Do not overtighten locknut; use torque recommendations above.
 Locknut and adjusting nut wrenches must be ordered separately.
 Collet chuck technical section, see page K74.
 Supplied with locknut.
 DA standard straight-bore collets, see page I63.



ERICKSON

■ ST Ext-ST

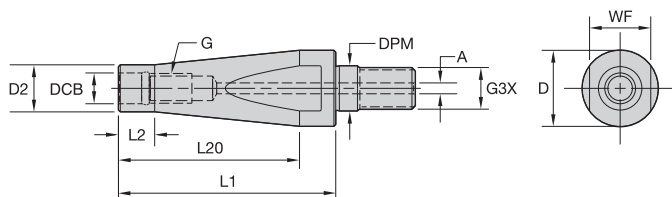
order number	catalog number	DCB	G	DPM	G3X	D	A	L1	WF	kg
4074158	M06MST06025M	6,5	M6	6,5	M6	9,8	2	25	7	0,01
4074159	M08MST08030M	8,5	M8	8,5	M8	13,0	2	30	10	0,03
4074160	M10MST10035M	10,5	M10	10,5	M10	18,0	3	35	15	0,06
4074161	M12MST12040M	12,5	M12	12,5	M12	21,0	3	40	17	0,10
4074162	M16MST16040M	17,0	M16	17,0	M16	29,0	4	40	22	0,18



Straight Shank Tools

Straight Shank Tools

Screw-On Adapters for Modular Milling Cutters, Reducers

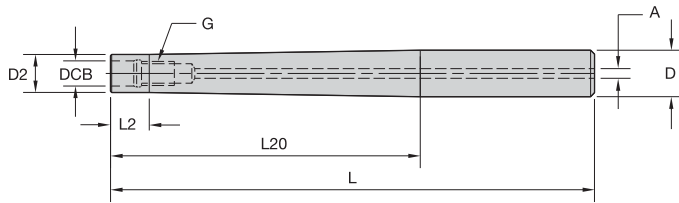


ERICKSON™

■ ST Red-ST

order number	catalog number	DCB	G	DPM	G3X	D	D2	A	L1	L2	L20	WF
4077826	M08MST06025M	6,5	M6	8,5	M8	13	10	2,0	25	10	15	10
4077815	M10MST08030M	8,5	M8	10,5	M10	18	13	2,5	30	10	20	15
4077822	M12MST06080M	6,5	M6	12,5	M12	21	10	3,0	80	10	70	17
4077818	M12MST06040M	6,5	M6	12,5	M12	21	10	3,0	40	10	30	17
4077820	M12MST10035M	10,5	M10	12,5	M12	21	18	3,0	35	10	25	17
4077816	M12MST06060M	6,5	M6	12,5	M12	21	10	3,0	60	10	50	17
4077817	M12MST08080M	8,5	M8	12,5	M12	21	13	3,0	80	10	70	17
4077819	M12MST08060M	8,5	M8	12,5	M12	21	13	3,0	60	10	50	17
4077821	M12MST08040M	8,5	M8	12,5	M12	21	13	3,0	40	10	30	17
4077825	M16MST10060M	10,5	M10	17,0	M16	29	18	4,0	60	10	50	22
4074194	M16MST12040M	12,5	M12	17,0	M16	29	21	4,0	35	10	25	22
4074193	M16MST08060M	8,5	M8	17,0	M16	29	13	4,0	60	10	50	22
4077824	M16MST10080M	10,5	M10	17,0	M16	29	18	4,0	80	10	70	22
4077823	M16MST08080M	8,5	M8	17,0	M16	29	13	4,0	80	10	70	22

- Heavy metal for strength.

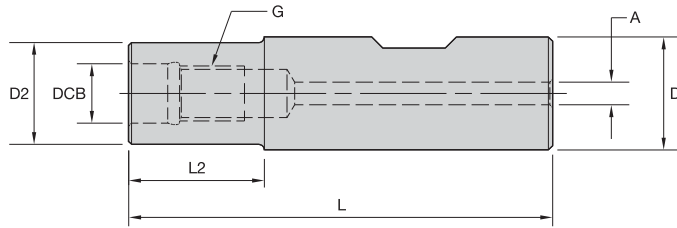
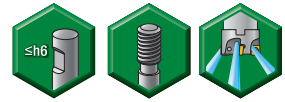


ERICKSON

■ ST Est-SS MM

order number	catalog number	DCB	G	D	D2	A	L	L2	L20
4160427	SS120STCHM06085M	6,5	M6	12	10	2,5	85	10	40
4160428	SS120STCHM06105M	6,5	M6	12	10	2,5	105	10	60
4160430	SS120STCHM06125M	6,5	M6	12	10	2,5	125	10	80
4160431	SS160STCHM08088M	8,5	M8	16	13	3,0	88	10	40
4160473	SS160STCHM08128M	8,5	M8	16	13	3,0	128	10	80
4160432	SS160STCHM08108M	8,5	M8	16	13	3,0	108	10	60
4160474	SS160STCHM08148M	8,5	M8	16	13	3,0	148	10	100
4160475	SS160STCHM08168M	8,5	M8	16	13	3,0	168	10	120
4160480	SS200STCHM10170M	10,5	M10	20	18	3,5	170	10	130
4160479	SS200STCHM10150M	10,5	M10	20	18	3,5	150	10	100
4160478	SS200STCHM10130M	10,5	M10	20	18	3,5	130	10	80
4160477	SS200STCHM10110M	10,5	M10	20	18	3,5	110	10	60
4160476	SS200STCHM10090M	10,5	M10	20	18	3,5	90	10	40

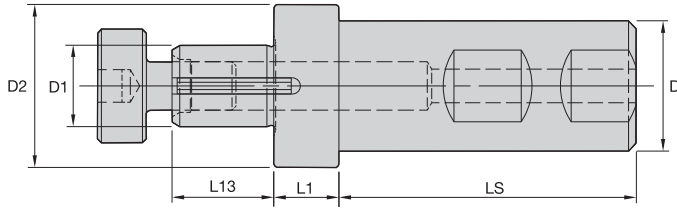
Straight Shank Tools



ERICKSON™

■ ST Est-WN MM

order number	catalog number	DCB	G	D	D2	A	L	L2
4074129	M06WST10060M	6,5	M6	10	10	2	60	19
4074131	M08WST16073M	8,5	M8	16	13	4	73	24
4074132	M10WST20080M	10,5	M10	20	18	4	75	24
4074153	M12WST25086M	12,5	M12	25	21	5	86	29
4074154	M16WST32095M	17,0	M16	32	29	6	95	34



ERICKSON

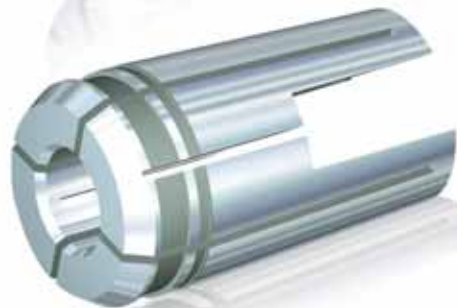
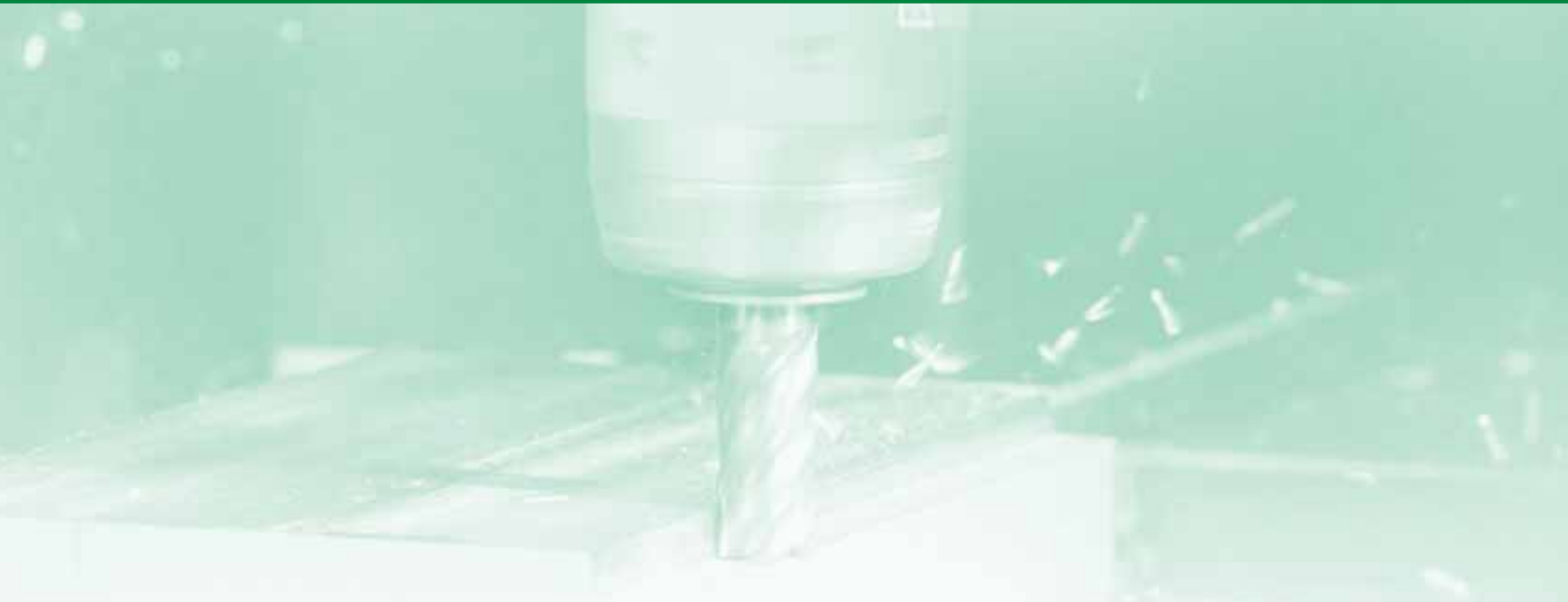
■ SA-SS IN



order number	catalog number	D	D1	D2	L1	LS	L13	lock screw	wrench size lock screw	drive key	spacing collar	lbs
1288235	SS100SA062050	1	5/8	1.25	.50	2.28	.78	KLS07	1/4	DWG SDK062088	—	.74
1288264	SS125SA100075	1 1/4	1	1.61	.75	2.28	.94	KLS10	5/16	DWG SDK100106	—	1.46
1015362	SS125SA125075	1 1/4	1 1/4	1.86	.75	2.28	1.09	KLS12	5/16	DWG SDK125119	QNB-80617B	2.05
1015363	SS150SA150100	1 1/2	1 1/2	2.11	1.00	2.69	1.70	KLS15	3/8	DWG SDK150175	—	3.28
1015384	SS200SA200100	2	2	2.75	1.00	3.25	1.70	KLS20	9/16	SDK200169	—	6.64

NOTE: Do not overtighten lock screw.
 Item 1288264 is supplied with .156" spacer.
 Item 1015362 is supplied with .250" spacer.
 Supplied with lock screw and drive key.
 Lock screw wrench not included.

Straight Shank Tools



Collets and Sleeves

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SMC Bearing Milling Chuck Sleeves16-19
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Erickson™ HC Hydraulic Chuck Sleeves • Drilling

Erickson Hydraulic Reduction Sleeves are specially designed for high-precision clamping of straight cylindrical cutting tool shanks. The self-sealing design enables efficient use of through-coolant cutting tools when the cutting tool shank completely engages the full gripping length of the sleeve.



HC

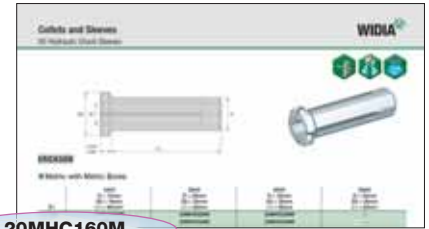
- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Capable of up to 100 bar (1,500 psi) coolant pressure.
- Cutting tool shank requirement tolerance is h6 and Ra $\geq 0,3 \mu\text{m}$ (12 μin) surface finish.
- Maximum collapse is h6.



ERICKSON™

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



ERICKSON

20MHC160M

20

System Size

- 12 = 12mm
- 20 = 20mm
- 32 = 32mm
- 50 = 1/2"
- 75 = 3/4"
- 12 = 1-1/4"

M

System Value

M = Previous two numbers built in metric values

HC

Sleeve Style

HC = Hydraulic Chuck

160

Sleeve Bore Size

- metric (xx.x)**
- 010 = 1mm
- 160 = 16mm
- 250 = 25mm
- inch (x.xxx)**
- 0125 = 1/8"
- 0500 = 1/2"
- 1000 = 1"

M

Identification Value

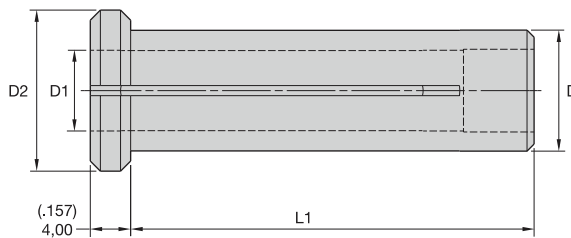
M = Sleeve bore size built to metric values
(blank) = Sleeve bore size built to metric values



Collets and Sleeves

HC Hydraulic Chuck Sleeves

- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Sleeve must be inserted completely into the hydraulic chuck until shoulder mates against the hydraulic chuck front face.
- Cutting tools must be in full contact with the sleeve bore (L1).



ERICKSON™

■ Metric with Metric Bores

D1	12HC D = 12mm D2 = 16mm L1 = 40mm	20HC D = 20mm D2 = 25mm L1 = 50mm	25HC D = 25mm D2 = 30mm L1 = 56mm	32HC D = 32mm D2 = 36mm L1 = 60mm
3,0	12MHC030M	20MHC030M	25MHC030M	—
4,0	12MHC040M	20MHC040M	25MHC040M	—
5,0	12MHC050M	20MHC050M	25MHC050M	—
6,0	12MHC060M	20MHC060M	25MHC060M	32MHC060M
7,0	12MHC070M	20MHC070M	25MHC070M	32MHC070M
8,0	12MHC080M	20MHC080M	25MHC080M	32MHC080M
9,0	12MHC090M	20MHC090M	25MHC090M	32MHC090M
10,0	12MHC100M	20MHC100M	25MHC100M	32MHC100M
11,0	—	20MHC110M	—	32MHC110M
12,0	—	20MHC120M	25MHC120M	32MHC120M
13,0	—	20MHC130M	—	32MHC130M
14,0	—	20MHC140M	25MHC140M	32MHC140M
15,0	—	20MHC150M	—	32MHC150M
16,0	—	20MHC160M	25MHC160M	32MHC160M
17,0	—	—	—	32MHC170M
18,0	—	—	25MHC180M	32MHC180M
19,0	—	—	—	32MHC190M
20,0	—	—	25MHC200M	32MHC200M
22,0	—	—	—	32MHC220M
25,0	—	—	—	32MHC250M

(continued)

(HC Hydraulic Chuck Sleeves continued)

■ Metric with Inch Bores

D1	20HC	32HC
	D = 20mm D2 = 25mm L1 = 50mm	D = 32mm D2 = 36mm L1 = 60mm
3/16	20HCM0188	—
1/4	20HCM0250	—
5/16	20HCM0312	—
3/8	20HCM0375	—
7/16	20HCM0438	—
1/2	20HCM0500	32HCM0500
9/16	20HCM0562	32HCM0562
5/8	20HCM0625	32HCM0625
11/16	—	32HCM0688
3/4	—	32HCM0750
7/8	—	32HCM0875
1	—	32HCM1000

■ Inch with Metric Bores

D1	50HC	75HC	12HC
	D = .500 D2 = .630 L1 = 1.575	D = .750 D2 = .984 L1 = 1.969	D = 1.250 D2 = 1.417 L1 = 2.362
3,0	50HC030M	75HC030M	—
4,0	50HC040M	75HC040M	—
5,0	50HC050M	75HC050M	—
6,0	50HC060M	75HC060M	—
8,0	50HC080M	75HC080M	—
10,0	50HC100M	75HC100M	—
12,0	—	75HC120M	—
14,0	—	75HC140M	—
16,0	—	75HC160M	12HC160M
18,0	—	—	12HC180M
20,0	—	—	12HC200M
25,0	—	—	12HC250M

■ Inch with Inch Bores

D1	50HC	75HC	12HC
	D = .500 D2 = .630 L1 = 1.575	D = .750 D2 = .945 L1 = 1.969	D = 1.250 D2 = 1.417 L1 = 2.362
1/8	50HC0125	75HC0125	—
3/16	50HC0188	75HC0188	—
1/4	50HC0250	75HC0250	—
5/16	50HC0312	75HC0312	—
3/8	50HC0375	75HC0375	—
7/16	—	75HC0438	—
1/2	—	75HC0500	12HC0500
9/16	—	75HC0562	12HC0562
5/8	—	75HC0625	12HC0625
11/16	—	—	12HC0688
3/4	—	—	12HC0750
13/16	—	—	12HC0812
7/8	—	—	12HC0875
1	—	—	12HC1000

NOTE: Inserting the cutting tool less than the full gripping length (L9) of the sleeve can permanently damage the sleeve and hydraulic chuck. Full length of the gripping bore needs to be maintained to achieve maximum accuracy, safety, and coolant sealing feature.

Erickson™ SMC Bearing Milling Chuck Sleeves • Milling

Erickson Bearing Milling Chuck Reduction Sleeves are specially designed for high-precision clamping of straight cylindrical cutting tool shanks. These are not self-sealing designed and rely on the back-up screws in the milling chuck for sealing coolant through the cutting tool.



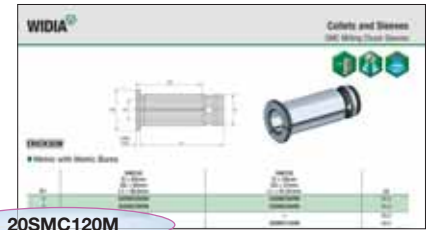
SMC

- One-piece design.
- Cutting tool shank requirement tolerance is h6.
- Maximum collapse is h6.



ERICKSON

- One-piece design.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Cutting tool shank requirement tolerance is h6 and Ra $\geq 0,3 \mu\text{m}$ (12 μin) surface finish.
- Maximum collapse is h6.



ERICKSON

20	SMC	120	M
System Size	Sleeve Style	Sleeve Bore Size	Identification Value
<p>20 = 20mm</p> <p>25 = 25mm</p> <p>32 = 32mm</p> <p>75 = 3/4"</p> <p>10 = 1"</p> <p>12 = 1-1/4"</p>	<p>SMC = Milling Chuck</p>	<p>metric (xx.x)</p> <p>010 = 1mm</p> <p>160 = 16mm</p> <p>245 = 24,5mm</p> <p>inch (x.xxx)</p> <p>0125 = 1/8"</p> <p>0500 = 1/2"</p> <p>1000 = 1"</p>	<p>M = Sleeve bore size built to metric values</p> <p>(blank) = Sleeve bore size built to metric values</p>

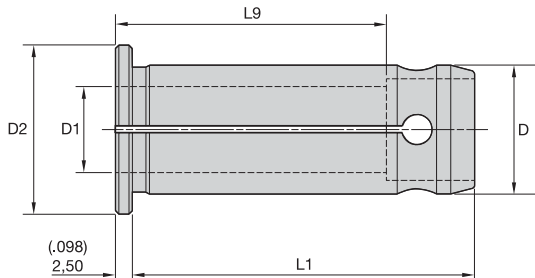


Collets and Sleeves

SMC Milling Chuck Sleeves



- One-piece design.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Sleeve must be inserted completely into the milling chuck until shoulder mates against the chuck front face.
- Cutting tools must be in full contact with the sleeve bore length (L9).
- Maximum collapse is h6.
- Metric and inch bores are available.



ERICKSON™

■ Metric with Metric Bores

D1	20SMC D = 20mm D2 = 25mm L1 = 50,5mm	32SMC D = 32mm D2 = 37mm L1 = 61,51mm	L9
6	20SMC060M	32SMC060M	32,0
8	20SMC080M	32SMC080M	35,0
10	20SMC100M	—	36,0
10	—	32SMC100M	38,0
12	20SMC120M	—	40,0
12	—	32SMC120M	42,5
16	20SMC160M	—	41,0
16	—	32SMC160M	47,5
20	—	32SMC200M	48,5
25	—	32SMC250M	51,5

■ Inch with Metric Bores

D1	75SMC D = 19,05mm D2 = 25mm L1 = 50,5mm	10SMC D = 25,4mm D2 = 29mm L1 = 58,5mm	12SMC D = 31,75mm D2 = 37mm L1 = 61,51mm	L9
.2362	75SMC060M	10SMC060M	12SMC060M	1.260
.3150	75SMC080M	10SMC080M	12SMC080M	1.378
.3937	75SMC100M	—	—	1.417
.3937	—	—	12SMC100M	1.496
.3937	—	10SMC100M	—	1.516
.4724	75SMC120M	—	—	1.575
.4724	—	10SMC120M	12SMC120M	1.673
.5512	75SMC140M	—	—	1.614
.5512	—	10SMC140M	—	1.673
.5512	—	—	12SMC140M	1.752
.6299	75SMC160M	—	—	1.614
.6299	—	10SMC160M	12SMC160M	1.870

(continued)

(SMC Milling Chuck Sleeves continued)

D1	75SMC D = 19,05mm D2 = 25mm L1 = 50,5mm	10SMC D = 25,4mm D2 = 29mm L1 = 58,5mm	12SMC D = 31,75mm D2 = 37mm L1 = 61,51mm	L9
.7087	—	—	12SMC180M	1.870
.7087	—	10SMC180M	—	1.909
.7874	—	10SMC200M	12SMC200M	1.909
.8661	—	—	12SMC220M	1.949
.9843	—	—	12SMC250M	2.028

■ Inch with Inch Bores

D1	75SMC D = .750 D2 = .984 L1 = 1.988	10SMC D = 1.000 D2 = 1.142 L1 = 2.303	12SMC D = 1.250 D2 = 1.457 L1 = 2.422	L9
1/8	75SMC0125	10SMC0125	12SMC0125	.709
3/16	75SMC0188	10SMC0188	12SMC0188	.984
1/4	75SMC0250	10SMC0250	12SMC0250	1.260
5/16	75SMC0312	10SMC0312	12SMC0312	1.378
3/8	75SMC0375	—	—	1.417
3/8	—	—	12SMC0375	1.496
3/8	—	10SMC0375	—	1.516
7/16	75SMC0438	10SMC0438	12SMC0438	1.575
1/2	75SMC0500	—	—	1.575
1/2	—	10SMC0500	12SMC0500	1.673
9/16	75SMC0563	—	—	1.614
9/16	—	10SMC0563	—	1.673
9/16	—	—	12SMC0563	1.752
5/8	75SMC0625	—	—	1.614
5/8	—	10SMC0625	12SMC0625	1.870
3/4	—	10SMC0750	12SMC0750	1.909
7/8	—	10SMC0875	—	1.909
7/8	—	—	12SMC0875	1.949
1	—	—	12SMC1000	2.028

Erickson™ • TG Single-Angle Collets

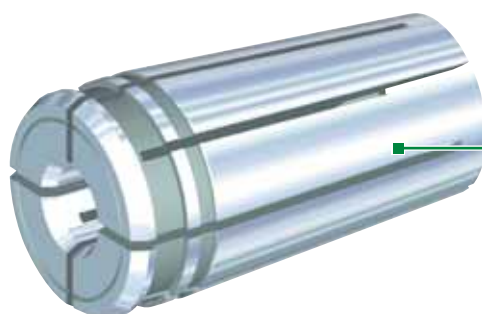
TG — Tremendous Grip Collets are manufactured according to the original Erickson standard and developed to utilize the full power available from the modern machine tool. A slow taper (8° inclusive angle) is used to produce maximum wedge action as the collet is forced back into the chuck body from the actuating locknut. From all the Collets WIDIA™ offers, the TG system is superior on grip, versatile in applications, and the most accurate. They are ideal for end milling, drilling, tapping, reaming, and boring solutions and available in a variety of styles, TG50, TG75, TG100, and TG150, with clamping ranges from 0,5–40mm (.0197–1.5000").

ERICKSON



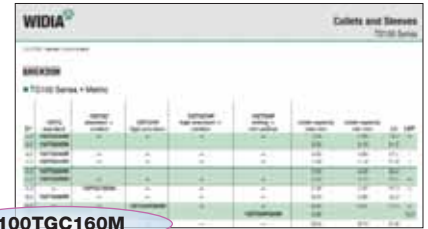
TG Collets

- Original Erickson standard.
- Slow 8° inclusive angle taper for best grip (approximately 3:1).
- Standard design accuracy to DIN 6499 Class 2 accuracy.
- HP design accuracy to DIN 6499 Class 1 accuracy.
- Bonded style available for through-coolant applications.
- Non-pullout style to captivate Weldon®-style end mills.
- Dedicated versions for tapping — driving off the square of the tap.



8° inclusive angle.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



100TGC160M

ERICKSON

100

System Size

- 50 = 50
- 75 = 75
- 100 = 100
- 150 = 150

TG

Collet Style

TG = Tremendous Grip, single angle

C

Special Features
(optional)

- C** = Coolant style — bonded
- HP** = High precision
- CHP** = Coolant/high precision
- NP** = Non-pullout (slot for drive)
- ST** = Solid tapping (slot for drive)
- STC** = Solid tapping/coolant (slot for drive)

160

Collet Bore Size

- metric (xx.x)**
- 010 = 1mm
- 160 = 16mm
- 245 = 24,5mm
- inch (x.xxx)**
- 0125 = 1/8"
- 0500 = 1/2"
- 1000 = 1"

M

Identification Value

- M** = Sleeve bore size built to metric values
- (blank)** = Sleeve bore size built to metric values



TG • Tremendous Grip

- Provides Tremendous Grip and accuracy for all drilling applications.
- 0,4mm [.016" (1/64)] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy.

ERICKSON



TGC • Tremendous Grip Coolant

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.
- Design enables flutes of drills to enter collet, unlike competitive designs.

ERICKSON



TGHP • Tremendous Grip High Precision

- Twice as accurate as standard TG- and ER-style collets.
- Available from stock in all popular sizes.
- Can be used in all standard TG-style collet chucks.
- 0,25mm (.010") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

ERICKSON



TGCHP • Tremendous Grip Coolant High Precision

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

ERICKSON



TGNP • Tremendous Grip Non-Pullout, Weldon® Style

- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill holders.
- 0,13mm (.005") range of collapse.
- Fits all standard TG-style collet chucks.

ERICKSON



TGST • Tremendous Grip Single-Angle Tap Collet

- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



TGSTC • Tremendous Grip Single-Angle Tap Collet, Coolant Style

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



WIN WITH WIDIA™



VariMill II™ Solid Carbide End Mills

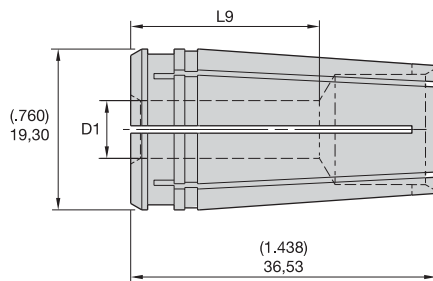
The next generation high-performance end mill, VariMill II dramatically improves metal removal rates without reducing tool life.

- Best suited for applications in the aerospace, medical, die and mold, automotive, and general engineering markets.
- Outstanding performance in stainless steel, titanium, INCONEL®, and other high-temperature alloys and steels.
- Increased metal removal rates in roughing and finishing operations.
- Excellent performance in both slotting and profiling operations.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 50TG 0,4mm [.016" (1/64)] range of collapse.
- 50TGC and 50TGCHP 0,13mm (.005") range of collapse.
- 50TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON™

■ TG50 Series • Metric

D1	50TG standard	50TGC standard – coolant	50TGHP high precision	50TGCHP high precision – coolant	collet capacity max mm	collet capacity min mm	L9
1,5	50TG015M	–	–	–	1,50	1,10	11,9
2,0	50TG020M	–	–	–	2,00	1,60	12,0
2,5	50TG025M	–	–	–	2,50	2,10	18,0
3,0	50TG030M	–	–	–	3,00	2,60	18,2
3,5	50TG035M	–	–	–	3,50	3,10	18,4
4,0	50TG040M	–	–	–	4,00	3,60	21,7
4,0	–	–	50TGHP040M	–	4,00	3,75	21,7
4,5	50TG045M	–	–	–	4,50	4,10	21,9
5,0	50TG050M	–	–	–	5,00	4,60	22,0
5,5	50TG055M	–	–	–	5,50	5,10	22,2
6,0	–	–	50TGHP060M	–	6,00	5,75	22,3
6,0	50TG060M	–	–	–	6,00	5,60	22,3
6,0	–	50TGC060M	–	–	6,00	5,87	22,3
6,0	–	–	–	50TGCHP060M	5,90	5,87	22,4
6,5	50TG065M	–	–	–	6,50	6,10	22,3
7,0	50TG070M	–	–	–	7,00	6,60	29,0

(continued)

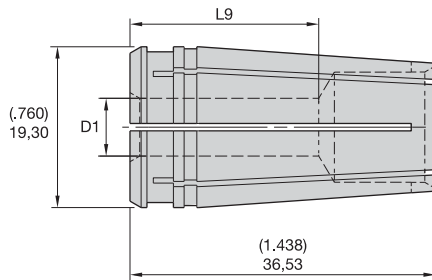
(TG50 Series continued)

D1	50TG standard	50TGC standard – coolant	50TGHP high precision	50TGCHP high precision – coolant	collet capacity max mm	collet capacity min mm	L9
7,5	50TG075M	–	–	–	7,50	7,10	29,1
8,0	–	50TGC080M	–	–	8,00	7,87	22,9
8,0	–	–	–	50TGCHP080M	7,90	7,87	23,0
8,0	50TG080M	–	–	–	8,00	7,60	29,3
8,0	–	–	50TGHP080M	–	8,00	7,75	29,4
8,5	50TG085M	–	–	–	8,50	8,10	29,4
9,0	50TG090M	–	–	–	9,00	8,60	29,6
9,5	50TG095M	–	–	–	9,50	9,10	29,9
10,0	–	50TGC100M	–	–	10,00	9,87	30,0
10,0	–	–	–	50TGCHP100M	9,90	9,87	30,0
10,0	–	–	50TGHP100M	–	10,00	9,75	30,0
10,0	50TG100M	–	–	–	10,00	9,60	30,0
10,5	50TG105M	–	–	–	10,50	10,10	30,2
11,0	50TG110M	–	–	–	11,00	10,60	30,3
11,5	50TG115M	–	–	–	11,50	11,10	30,5
12,0	–	50TGC120M	–	–	12,00	11,87	30,3
12,0	50TG120M	–	–	–	12,00	11,60	30,6
12,0	–	–	–	50TGCHP120M	11,90	11,87	30,6
12,0	–	–	50TGHP120M	–	12,00	11,75	30,6
12,5	50TG125M	–	–	–	12,50	12,10	30,8
13,0	50TG130M	–	–	–	13,00	12,60	30,9
13,5	50TG135M	–	–	–	13,50	13,10	36,5

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.



- Rubber-filled slots seal collet for coolant-fed tool applications.
- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,13mm (.005") range of collapse.
- 50TG 0,4mm [.016" (1/64)] range of collapse.
- 50TGTC and 50TGCHP 0,13mm (.005") range of collapse.
- 50TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON™

■ TG50 Series • Inch

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max inch	collet capacity min inch	L9
3/64	50TG0047	—	—	—	.0470	.0313	.465
1/16	50TG0062	—	—	—	.0625	.0469	.470
5/64	50TG0078	—	—	—	.0780	.0625	.475
3/32	50TG0094	—	—	—	.0940	.0781	.710
7/64	50TG0109	—	—	—	.1090	.0938	.715
1/8	—	—	50TGHP0125	—	.1250	.1150	.719
1/8	50TG0125	—	—	—	.1250	.1094	.720
1/8	—	—	—	50TGCHP0125	.1250	.1200	.847
9/64	—	50TGC0141	—	—	.1406	.1356	.852
9/64	50TG0141	—	—	—	.1410	.1250	.725
5/32	50TG0156	—	—	—	.1560	.1406	.855
5/32	—	50TGC0156	—	—	.1563	.1513	.857

(continued)

(TG50 Series continued)

D1	50TG standard	50TGC standard – coolant	50TGHP high precision	50TGCHP high precision – coolant	collet capacity max inch	collet capacity min inch	L9
11/64	–	50TGC0172	–	–	.1719	.1669	.861
11/64	50TG0172	–	–	–	.1720	.1563	.860
3/16	–	–	50TGHP0188	–	.1875	.1775	.865
3/16	–	50TGC0188	–	50TGCHP0188	.1875	.1825	.866
3/16	50TG0188	–	–	–	.1880	.1719	.865
13/64	50TG0203	–	–	–	.2030	.1875	.870
13/64	–	50TGC0203	–	–	.2031	.1981	.871
7/32	–	50TGC0219	–	–	.2188	.2138	.876
7/32	50TG0219	–	–	–	.2190	.2031	.875
15/64	50TG0234	–	–	–	.2340	.2188	.880
1/4	–	50TGC0250	–	50TGCHP0250	.2500	.2450	.885
1/4	–	–	50TGHP0250	–	.2500	.2400	1.139
1/4	50TG0250	–	–	–	.2500	.2344	1.139
17/64	–	50TGC0266	–	–	.2656	.2606	.890
17/64	50TG0266	–	–	–	.2660	.2500	1.144
9/32	50TG0281	–	–	–	.2810	.2656	1.148
9/32	–	50TGC0281	–	–	.2813	.2763	.894
19/64	50TG0297	–	–	–	.2970	.2813	1.153
5/16	50TG0312	–	–	–	.3120	.2969	1.158
5/16	–	50TGC0312	–	50TGCHP0312	.3125	.3075	.904
5/16	–	–	50TGHP0312	–	.3125	.3025	1.158
21/64	50TG0328	–	–	–	.3280	.3125	1.163
21/64	–	50TGC0328	–	–	.3281	.3231	.908
11/32	–	50TGC0344	–	–	.3438	.3388	.913
11/32	50TG0344	–	–	–	.3440	.3281	1.167
23/64	50TG0359	–	–	–	.3590	.3438	1.172
23/64	–	50TGC0359	–	–	.3594	.3544	.918
3/8	–	50TGC0375	–	50TGCHP0375	.3750	.3700	.922
3/8	50TG0375	–	–	–	.3750	.3594	1.177
3/8	–	–	50TGHP0375	–	.3750	.3650	1.177
25/64	–	50TGC0391	–	–	.3906	.3856	1.182
25/64	50TG0391	–	–	–	.3910	.3750	1.181
13/32	50TG0406	–	–	–	.4060	.3906	1.186
13/32	–	50TGC0406	–	–	.4063	.4013	1.187
27/64	–	50TGC0422	–	–	.4219	.4169	1.192
27/64	50TG0422	–	–	–	.4220	.4063	1.191
7/16	–	–	50TGHP0438	–	.4375	.4275	1.195
7/16	–	50TGC0438	–	50TGCHP0438	.4375	.4325	1.196
7/16	50TG0438	–	–	–	.4380	.4219	1.196
29/64	50TG0453	–	–	–	.4530	.4375	1.200

(continued)

Collets and Sleeves

TG50 Series



(TG50 Series continued)

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max inch	collet capacity min inch	L9
29/64	—	50TGC0453	—	—	.4531	.4481	1.201
15/32	50TG0469	—	—	—	.4680	.4531	1.205
15/32	—	50TGC0469	—	—	.4688	.4638	1.206
31/64	50TG0484	—	—	—	.4840	.4688	1.209
31/64	—	50TGC0484	—	—	.4844	.4794	1.210
1/2	—	—	50TGHP0500	—	.5000	.4900	1.214
1/2	50TG0500	—	—	—	.5000	.4844	1.214
1/2	—	50TGC0500	—	50TGCHP0500	.5000	.4950	1.215
33/64	—	50TGC0516	—	—	.5156	.5106	1.220
33/64	50TG0516	—	—	—	.5160	.5000	1.209
17/32	50TG0531	—	—	—	.5310	.5156	1.438
17/32	—	50TGC0531	—	—	.5313	.5263	1.438

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

- An economical way to purchase a group of collets.



ERICKSON

■ TG50 Collet Set • Inch

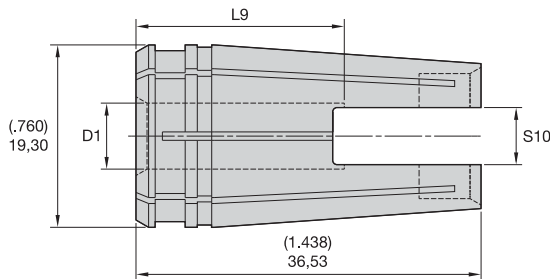
catalog number	series	quantity	dimensional range	incremental division
S50TG1SET	TG50	32	3/16 - 17/64	1/64
S50TG2SET	TG50	15	3/32 - 17/64	1/32



Collets and Sleeves

TG50 Single-Angle Solid Tap Collets

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON™

■ TG50 Solid Tap Collet • Metric DIN and ISO

tap size	50TGST solid tap — non-coolant	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	50TGST025021M	TG50	2,5	2,1	17,0
M2,5 & M4	50TGST028021M	TG50	2,8	2,1	17,0
M3 & M4	50TGST032025M	TG50	3,2	2,5	17,0
M3 & M5	50TGST035027M	TG50	3,5	2,7	17,0
M4 & M5	50TGST040032M	TG50	4,0	3,2	17,0
M4 & M6	50TGST045034M	TG50	4,5	3,4	17,0
M5	50TGST050040M	TG50	5,0	4,0	17,0
M5 & M6 & M7 & M8	50TGST060049M	TG50	6,0	4,9	17,0
M6	50TGST063050M	TG50	6,3	4,9	17,0
M10	50TGST070055M	TG50	7,0	5,5	17,0
M7	50TGST071056M	TG50	7,1	5,6	17,0
M8	50TGST080062M	TG50	8,0	6,2	17,0
M12	50TGST090070M	TG50	9,0	7,0	17,0
M10	50TGST100080M	TG50	10,0	8,0	17,0
M14	50TGST110090M	TG50	11,0	9,0	17,0
M16	50TGST120090M	TG50	12,0	9,0	17,0

(continued)

(TG50 Single-Angle Solid Tap Collets continued)

■ TG50 Solid Tap Collet • Inch/Metric ANSI

mm	tap size		50TGST solid tap — non-coolant	50TGSTC solid tap — coolant	collet series	D1	S10	L9
	in							
M3 & M3,15 & M3,5	#0-#6 & 1/8		50TGST6	—	TG50	.141	.110	.775
M4	#8 & 5/32		50TGST8	—	TG50	.168	.131	.775
M4,5 & M5	#10 & 3/16		50TGST10	—	TG50	.194	.152	.900
—	#12 & 7/32		50TGST12	—	TG50	.220	.165	.807
M6 & M6,3	#14 & 1/4		50TGST025	50TGSTC025	TG50	.255	.191	.838
—	1/16P & 1/8P(SS)		50TGST006P	—	TG50	.313	.234	.775
M7 & M8	5/16		50TGST031	50TGSTC031	TG50	.318	.238	.868
—	7/16		50TGST043	50TGSTC043	TG50	.323	.242	.963
M12 & M12,5	1/2		50TGST050	50TGSTC050	TG50	.367	.275	.932
M10	3/8		50TGST037	50TGSTC037	TG50	.381	.286	.900
M14	9/16		50TGST056	50TGSTC056	TG50	.429	.322	.937
—	1/8P(LS)		50TGST012P	—	TG50	.438	.328	.775
M16	5/8		50TGST062	—	TG50	.480	.360	.876

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
 Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

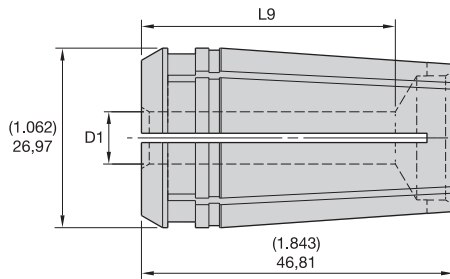
Collets and Sleeves

Collets and Sleeves

TG75 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 75TG 0,4mm [.016" (1/64)] range of collapse.
- 75TGC and 75TGCHP 0,13mm (.005") range of collapse.
- 75TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON™

TG75 Series • Metric

D1	75TG standard	75TGC standard – coolant	75TGHP high precision	75TGCHP high precision – coolant	collet capacity max mm	collet capacity min mm	L9
3,0	75TG030M	–	–	–	3,00	2,60	18,6
3,5	75TG035M	–	–	–	3,50	3,10	18,8
4,0	75TG040M	–	–	–	4,00	3,60	22,1
4,0	–	–	75TGHP040M	–	4,00	3,75	22,1
4,5	75TG045M	–	–	–	4,50	4,10	22,3
5,0	75TG050M	–	–	–	5,00	4,60	22,5
5,5	75TG055M	–	–	–	5,50	5,10	22,6
6,0	–	75TGC060M	–	–	6,00	5,87	22,8
6,0	75TG060M	–	–	–	6,00	5,60	22,8
6,0	–	–	75TGHP060M	–	6,00	5,75	22,8
6,0	–	–	–	75TGCHP060M	6,00	5,87	22,8
6,5	75TG065M	–	–	–	6,50	6,10	37,7
7,0	75TG070M	–	–	–	7,00	6,60	37,8
7,5	75TG075M	–	–	–	7,50	7,10	38,0
8,0	–	75TGC080M	–	75TGCHP080M	8,00	7,87	25,9
8,0	–	–	75TGHP080M	–	8,00	7,75	38,1

(continued)

(TG75 Series continued)

D1	75TG standard	75TGC standard – coolant	75TGHP high precision	75TGCHP high precision – coolant	collet capacity max mm	collet capacity min mm	L9
8,0	75TG080M	–	–	–	8,00	7,60	38,1
8,5	75TG085M	–	–	–	8,50	8,10	38,3
9,0	75TG090M	–	–	–	9,00	8,60	38,4
9,5	75TG095M	–	–	–	9,50	9,10	38,6
10,0	–	–	–	75TGCHP100M	10,00	9,87	38,7
10,0	–	–	75TGHP100M	–	10,00	9,75	38,7
10,0	75TG100M	–	–	–	10,00	9,60	38,7
10,0	–	75TGC100M	–	–	10,00	9,87	38,7
10,5	75TG105M	–	–	–	10,50	10,10	38,8
11,0	75TG110M	–	–	–	11,00	10,60	39,0
11,5	75TG115M	–	–	–	11,50	11,10	39,1
12,0	–	75TGC120M	–	–	12,00	11,87	39,3
12,0	75TG120M	–	–	–	12,00	11,60	39,3
12,0	–	–	75TGHP120M	–	12,00	11,75	39,3
12,0	–	–	–	75TGCHP120M	12,00	11,87	39,3
12,5	75TG125M	–	–	–	12,50	12,10	39,4
13,0	75TG130M	–	–	–	13,00	12,60	39,6
13,5	75TG135M	–	–	–	13,50	13,10	39,7
14,0	–	75TGC140M	–	75TGCHP140M	14,00	13,87	39,9
14,0	–	–	75TGHP140M	–	14,00	13,75	46,8
14,0	75TG140M	–	–	–	14,00	13,60	46,8
14,5	75TG145M	–	–	–	14,50	14,10	46,8
15,0	75TG150M	–	–	–	15,00	14,60	46,8
15,5	75TG155M	–	–	–	15,50	15,10	46,8
16,0	–	75TGC160M	–	75TGCHP160M	16,00	15,87	40,5
16,0	75TG160M	–	–	–	16,00	15,60	46,8
16,0	–	–	75TGHP160M	–	16,00	15,75	46,8
16,5	75TG165M	–	–	–	16,50	16,10	46,8
17,0	75TG170M	–	–	–	17,00	16,60	46,8
17,5	75TG175M	–	–	–	17,50	17,10	46,8
18,0	–	75TGC180M	–	75TGCHP180M	18,00	17,87	41,1
18,0	75TG180M	–	–	–	18,00	17,60	46,8
18,0	–	–	75TGHP180M	–	18,00	17,75	46,8
19,0	75TG190M	–	–	–	19,00	18,60	46,8
19,5	75TG195M	–	–	–	19,50	19,10	46,8
20,0	75TG200M	–	–	–	20,00	19,60	46,8
20,0	–	75TGC200M	–	75TGCHP200M	20,00	19,87	46,8
20,0	–	–	75TGHP200M	–	20,00	19,75	46,8

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

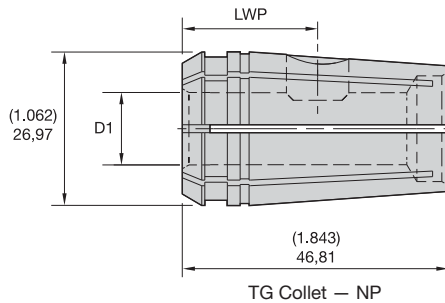
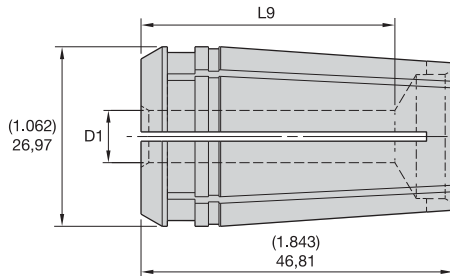
Collets and Sleeves

Collets and Sleeves

TG75 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 75TG and 75TGC 0,4mm [.016" (1/64)] range of collapse.
- 75TGCHP and 75TGNP 0,13mm (.005") range of collapse.
- 75TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet – NP

Collets and Sleeves

ERICKSON™

■ TG75 Series • Inch

D1	75TG standard	75TGC standard – coolant	75TGHP high precision	75TGCHP high precision – coolant	75TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1/16	75TG0062	–	–	–	–	.0620	.0469	.485	–
5/64	75TG0078	–	–	–	–	.0780	.0625	.490	–
3/32	75TG0094	–	–	–	–	.0940	.0781	.725	–
7/64	75TG0109	–	–	–	–	.1090	.0938	.730	–

(continued)



(TG75 Series continued)

D1	75TG standard	75TGC standard – coolant	75TGHP high precision	75TGCHP high precision – coolant	75TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1/8	75TG0125	–	–	–	–	.1250	.1094	.735	–
1/8	–	–	75TGHP0125	–	–	.1250	.1150	.735	–
9/64	75TG0141	–	–	–	–	.1410	.1250	.740	–
5/32	75TG0156	–	–	–	–	.1560	.1406	.872	–
11/64	75TG0172	–	–	–	–	.1720	.1563	.877	–
3/16	–	–	75TGHP0188	–	–	.1875	.1775	.881	–
3/16	75TG0188	–	–	–	–	.1880	.1719	.881	–
13/64	75TG0203	–	–	–	–	.2030	.1875	.886	–
7/32	75TG0219	–	–	–	–	.2190	.2031	.891	–
15/64	75TG0234	–	–	–	–	.2340	.2188	.895	–
1/4	–	–	–	75TGCHP0250	–	.2500	.2450	1.000	–
1/4	–	75TGC0250	–	–	–	.2500	.2450	1.001	–
1/4	–	–	75TGHP0250	–	–	.2500	.2400	1.480	–
1/4	75TG0250	–	–	–	–	.2500	.2344	1.481	–
17/64	–	75TGC0266	–	–	–	.2656	.2606	1.006	–
17/64	75TG0266	–	–	–	–	.2660	.2500	1.486	–
9/32	75TG0281	–	–	–	–	.2810	.2656	1.490	–
9/32	–	75TGC0281	–	–	–	.2813	.2763	1.010	–
19/64	–	75TGC0297	–	–	–	.2969	.2919	1.015	–
19/64	75TG0297	–	–	–	–	.2970	.2813	1.495	–
5/16	75TG0312	–	–	–	–	.3120	.2969	1.500	–
5/16	–	75TGC0312	–	–	–	.3125	.3075	1.020	–
5/16	–	–	75TGHP0312	–	–	.3125	.3025	1.499	–
21/64	75TG0328	–	–	–	–	.3280	.3125	1.505	–
21/64	–	75TGC0328	–	–	–	.3281	.3231	1.024	–
11/32	–	75TGC0344	–	–	–	.3438	.3281	1.029	–
11/32	75TG0344	–	–	–	–	.3440	.3281	1.509	–
23/64	75TG0359	–	–	–	–	.3590	.3438	1.514	–
23/64	–	75TGC0359	–	–	–	.3594	.3544	1.034	–
3/8	–	–	–	75TGCHP0375	–	.3750	.3700	1.038	–
3/8	–	–	75TGHP0375	–	–	.3750	.3650	1.518	–
3/8	–	75TGC0375	–	–	–	.3750	.3700	1.518	–
3/8	75TG0375	–	–	–	–	.3750	.3594	1.519	–
3/8	–	–	–	–	75TGNP0375	.3750	–	–	.703
25/64	–	75TGC0391	–	–	–	.3906	.3856	1.523	–
25/64	75TG0391	–	–	–	–	.3910	.3750	1.521	–
13/32	75TG0406	–	–	–	–	.4060	.3906	1.526	–
13/32	–	75TGC0406	–	–	–	.4063	.4013	1.528	–
27/64	–	75TGC0422	–	–	–	.4219	.4169	1.533	–
27/64	75TG0422	–	–	–	–	.4220	.4063	1.531	–
7/16	–	–	75TGHP0438	–	–	.4375	.4275	1.535	–
7/16	–	75TGC0438	–	75TGCHP0438	–	.4375	.4325	1.537	–
7/16	75TG0438	–	–	–	–	.4380	.4219	1.536	–
29/64	75TG0453	–	–	–	–	.4530	.4375	1.540	–
29/64	–	75TGC0453	–	–	–	.4531	.4481	1.542	–
15/32	–	75TGC0469	–	–	–	.4688	.4638	1.547	–
15/32	75TG0469	–	–	–	–	.4690	.4531	1.545	–
31/64	75TG0484	–	–	–	–	.4840	.4688	1.549	–

(continued)

Collets and Sleeves

TG75 Series

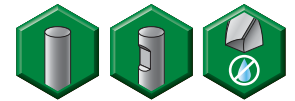


(TG75 Series continued)

D1	75TG standard	75TGC standard – coolant	75TGHP high precision	75TGCHP high precision – coolant	75TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
31/64	–	75TGC0484	–	–	–	.4844	.4794	1.551	–
1/2	75TG0500	–	–	–	–	.5000	.4844	1.554	–
1/2	–	–	75TGHP0500	–	–	.5000	.4900	1.554	–
1/2	–	75TGC0500	–	75TGCHP0500	–	.5000	.4950	1.556	–
1/2	–	–	–	–	75TGNP0500	.5000	–	–	.828
33/64	75TG0516	–	–	–	–	.5156	.5000	1.559	–
33/64	–	75TGC0516	–	–	–	.5156	.5106	1.561	–
17/32	75TG0531	–	–	–	–	.5310	.5156	1.563	–
17/32	–	75TGC0531	–	–	–	.5313	.5263	1.565	–
35/64	–	75TGC0547	–	–	–	.5469	.5419	1.570	–
35/64	75TG0547	–	–	–	–	.5470	.5313	1.843	–
9/16	75TG0562	–	–	–	–	.5620	.5469	1.843	–
9/16	–	75TGC0562	–	75TGCHP0562	–	.5625	.5575	1.575	–
9/16	–	–	75TGHP0562	–	–	.5625	.5525	1.843	–
37/64	75TG0578	–	–	–	–	.5780	.5625	1.843	–
37/64	–	75TGC0578	–	–	–	.5781	.5731	1.579	–
19/32	–	75TGC0594	–	–	–	.5938	.5888	1.584	–
19/32	75TG0594	–	–	–	–	.5940	.5781	1.843	–
39/64	75TG0609	–	–	–	–	.6090	.5938	1.843	–
39/64	–	75TGC0609	–	–	–	.6094	.6044	1.589	–
5/8	–	75TGC0625	–	75TGCHP0625	–	.6250	.6200	1.594	–
5/8	75TG0625	–	–	–	–	.6250	.6094	1.843	–
5/8	–	–	75TGHP0625	–	–	.6250	.6150	1.843	–
5/8	–	–	–	–	75TGNP0625	.6250	–	–	.859
41/64	–	75TGC0641	–	–	–	.6406	.6356	1.598	–
41/64	75TG0641	–	–	–	–	.6410	.6250	1.843	–
21/32	75TG0656	–	–	–	–	.6560	.6406	1.843	–
21/32	–	75TGC0656	–	–	–	.6563	.6513	1.603	–
43/64	–	75TGC0672	–	–	–	.6719	.6669	1.608	–
43/64	75TG0672	–	–	–	–	.6720	.6563	1.843	–
11/16	–	75TGC0688	–	75TGCHP0688	–	.6875	.6825	1.612	–
11/16	75TG0688	–	–	–	–	.6880	.6719	1.843	–
45/64	75TG0703	–	–	–	–	.7030	.6875	1.843	–
45/64	–	75TGC0703	–	–	–	.7031	.6981	1.617	–
23/32	–	75TGC0719	–	–	–	.7188	.7138	1.622	–
23/32	75TG0719	–	–	–	–	.7190	.7031	1.843	–
47/64	75TG0734	–	–	–	–	.7340	.7188	1.843	–
47/64	–	75TGC0734	–	–	–	.7344	.7294	1.843	–
3/4	–	–	75TGHP0750	–	–	.7500	.7400	1.843	–
3/4	–	75TGC0750	–	75TGCHP0750	–	.7500	.7450	1.843	–
3/4	75TG0750	–	–	–	–	.7500	.7344	1.843	–
3/4	–	–	–	–	75TGNP0750	.7500	–	–	.922

Collets and Sleeves

- An economical way to purchase a group of collets.



TG Collet

ERICKSON

■ TG75 Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S75TG1SET	TG75	45	1/16 - 3/4	1/64
S75TG2SET	TG75	23	1/16 - 3/4	1/32
S75TG3SET	TG75	33	1/4 - 3/4	1/64
S75TG4SET	TG75	17	1/4 - 3/4	1/32



TG Collet — NP

■ TG75 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S75TGNPSET	TG75	4	3/8 - 3/4	1/8

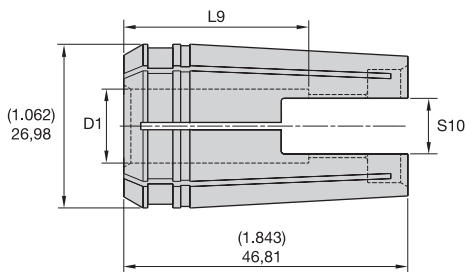
Collets and Sleeves

Collets and Sleeves

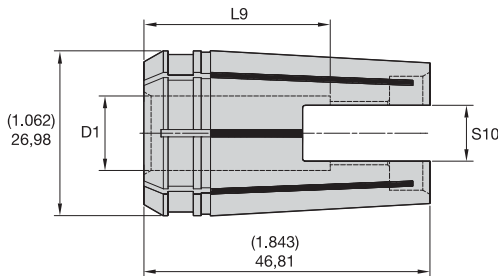
TG75 Single-Angle Solid Tap Collets



- Rubber-filled slots seal collet for coolant-fed tool applications.
- Twice as accurate as the standard TG and Class 2 ER-style collets.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,13mm (.005") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Slot in back of collets acts as a drive for the tap square.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



Bonded Type



Coolant Type

Collets and Sleeves



■ TG75 Solid Tap Collet • Solid Tap Coolant • Inch/Metric ANSI

tap size		75TGST solid tap	75TGSTC solid tap – coolant	collet series	D1	S10	L9
mm	in						
M3 & M3,15 & M3,5	0-#6 & 1/8	75TGST6	–	TG75	.141	.110	.775
M4	8 & 5/32	75TGST8	–	TG75	.168	.131	.775
M4,5 & M5	10 & 3/16	75TGST10	–	TG75	.194	.152	.900
–	12 & 7/32	75TGST12	–	TG75	.220	.165	.807
M6 & M6,3	14 & 1/4	75TGST025	75TGSTC025	TG75	.255	.191	.838
–	1/16P & 1/8P(SS)	75TGST006P	–	TG75	.313	.234	.775
M7 & M8	5/16	75TGST031	75TGSTC031	TG75	.318	.238	.868
–	7/16	75TGST043	75TGSTC043	TG75	.323	.242	.963

(continued)



(TG75 Single-Angle Solid Tap Collets continued)

mm	tap size		75TGST solid tap	75TGSTC solid tap – coolant	collet series	D1	S10	L9
	in							
M12 & M12,5	1/2		75TGST050	75TGSTC050	TG75	.367	.275	.932
M10	3/8		75TGST037	75TGSTC037	TG75	.381	.286	.900
M14	9/16		75TGST056	–	TG75	.429	.322	1.087
–	1/8P(LS)		75TGST012P	–	TG75	.438	.328	.775
M16	5/8		75TGST062	75TGSTC062	TG75	.480	.360	1.031
M18	11/16		75TGST068	75TGSTC068	TG75	.542	.406	.968
–	1/4P		75TGST025P	–	TG75	.563	.421	.775
–	3/4		75TGST075	75TGSTC075	TG75	.590	.442	.906
M20	13/16		75TGST081	–	TG75	.652	.489	.906
–	1/2P		75TGST050P	–	TG75	.688	.515	.775
M22	7/8		75TGST087	75TGSTC087	TG75	.697	.523	.843
–	3/8P		75TGST037P	–	TG75	.700	.531	.775

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.

Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.

Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.

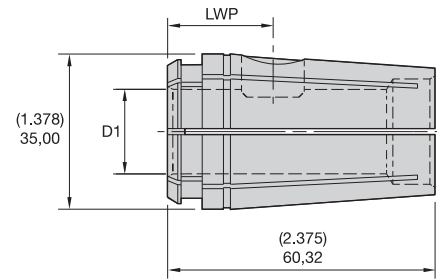
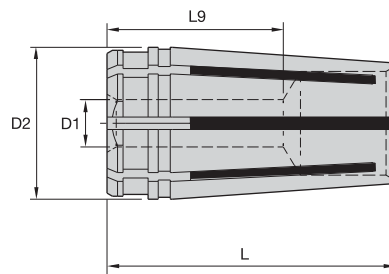
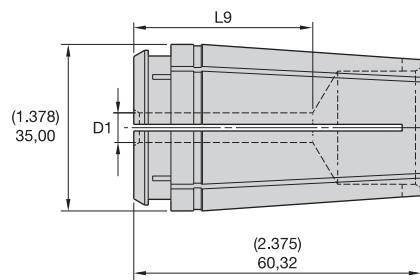
Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

TG100 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 100TG 0,4mm [.016" (1/64)] range of collapse.
- 100TGC and 100TGCHP 0,13mm (.005") range of collapse.
- 100TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet — NP



TG Collet — NP

Collets and Sleeves

ERICKSON™

■ TG100 Series • Metric

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
3,0	100TG030M	—	—	—	—	3,00	2,60	18,2	—
3,5	100TG035M	—	—	—	—	3,50	3,10	21,5	—
4,0	100TG040M	—	—	—	—	4,00	3,60	21,7	—
4,5	100TG045M	—	—	—	—	4,50	4,10	21,8	—
5,0	100TG050M	—	—	—	—	5,00	4,60	22,0	—
5,5	100TG055M	—	—	—	—	5,50	5,10	22,1	—
6,0	—	100TGC060M	—	—	—	6,00	5,87	22,3	—
6,0	100TG060M	—	—	—	—	6,00	5,60	22,3	—
6,0	—	—	100TGHP060M	—	—	6,00	5,87	22,3	—
6,0	—	—	—	—	100TGNP060M	6,00	—	—	16,0

(continued)



(TG100 Series continued)

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
6,5	100TG065M	–	–	–	–	6,50	6,10	37,6	–
7,0	100TG070M	–	–	–	–	7,00	6,60	37,8	–
7,5	100TG075M	–	–	–	–	7,50	7,10	37,9	–
8,0	–	100TGC080M	–	–	–	8,00	7,87	34,9	–
8,0	100TG080M	–	–	–	–	8,00	7,60	38,1	–
8,0	–	–	100TGHP080M	–	–	8,00	7,87	38,1	–
8,5	100TG085M	–	–	–	–	8,50	8,10	38,2	–
9,0	100TG090M	–	–	–	–	9,00	8,60	38,4	–
9,5	100TG095M	–	–	–	–	9,50	9,10	38,5	–
10,0	–	100TGC100M	–	100TGCHP100M	–	10,00	9,87	38,5	–
10,0	–	–	100TGHP100M	–	–	10,00	9,87	38,7	–
10,0	100TG100M	–	–	–	–	10,00	9,60	38,7	–
10,5	100TG105M	–	–	–	–	10,50	10,10	38,8	–
11,5	100TG115M	–	–	–	–	11,50	11,10	39,1	–
12,0	–	100TGC120M	–	100TGCHP120M	–	12,00	11,87	39,1	–
12,0	100TG120M	–	–	–	–	12,00	11,60	39,3	–
12,0	–	–	–	–	100TGNP120M	12,00	–	–	18,0
12,5	100TG125M	–	–	–	–	12,50	12,10	39,4	–
13,0	100TG130M	–	–	–	–	13,00	12,60	39,6	–
13,5	100TG135M	–	–	–	–	13,50	13,10	39,7	–
14,0	–	–	100TGHP140M	–	–	14,00	13,87	39,9	–
14,0	100TG140M	–	–	–	–	14,00	13,60	39,9	–
14,0	–	100TGC140M	–	100TGCHP140M	–	14,00	13,87	43,7	–
14,5	100TG145M	–	–	–	–	14,50	14,10	40,0	–
15,0	100TG150M	–	–	–	–	15,00	14,60	40,2	–
15,5	100TG155M	–	–	–	–	15,50	15,10	40,3	–
16,0	100TG160M	–	–	–	–	16,00	15,60	40,5	–
16,0	–	100TGC160M	–	100TGCHP160M	–	16,00	15,87	44,3	–
16,0	–	–	–	–	100TGNP160M	16,00	–	–	20,5
16,5	100TG165M	–	–	–	–	16,50	16,10	40,6	–
17,0	100TG170M	–	–	–	–	17,00	16,60	40,8	–
17,5	100TG175M	–	–	–	–	17,50	17,10	40,9	–
23,0	100TG230M	–	–	–	–	23,00	22,60	60,3	–
23,5	100TG235M	–	–	–	–	23,50	23,10	60,3	–
24,0	100TG240M	–	–	–	–	24,00	23,60	60,3	–
24,5	100TG245M	–	–	–	–	24,50	24,10	60,3	–
25,0	–	100TGC250M	–	100TGCHP250M	–	25,00	24,87	50,0	–
25,0	100TG250M	–	–	–	–	25,00	24,60	60,3	–
25,0	–	–	100TGHP250M	–	–	25,00	24,87	60,3	–
25,0	–	–	–	–	100TGNP250M	25,00	–	–	22,0
25,5	100TG255M	–	–	–	–	25,50	25,10	60,3	–

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
18,0	100TG180M	–	–	–	–	18,00	17,60	41,1	–
18,0	–	–	100TGHP180M	–	–	18,00	17,87	41,1	–
18,0	–	100TGC180M	–	100TGCHP180M	–	18,00	17,87	44,9	–
18,5	100TG185M	–	–	–	–	18,50	18,10	41,2	–
19,0	100TG190M	–	–	–	–	19,00	18,60	41,4	–
19,5	100TG195M	–	–	–	–	19,50	19,10	60,3	–
20,0	–	100TGC200M	–	100TGCHP200M	–	20,00	19,87	48,5	–
20,0	100TG200M	–	–	–	–	20,00	19,60	60,3	–
20,0	–	–	100TGHP200M	–	–	20,00	19,87	60,3	–
20,0	–	–	–	–	100TGNP200M	20,00	–	–	23,0
20,5	100TG205M	–	–	–	–	20,50	20,10	60,3	–
21,0	100TG210M	–	–	–	–	21,00	20,60	60,3	–
22,0	100TG220M	–	–	–	–	22,00	21,60	60,3	–
22,5	100TG225M	–	–	–	–	22,50	22,10	60,3	–

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
 Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

TOOLING SYSTEMS



Erickson™ Toolholders

WIDIA™ proudly offers premium quality Erickson toolholder products, so you can be sure that you're buying the best the industry has to offer. The entire portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility.

Designed for both manual and automatic tool changing, Erickson interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates.

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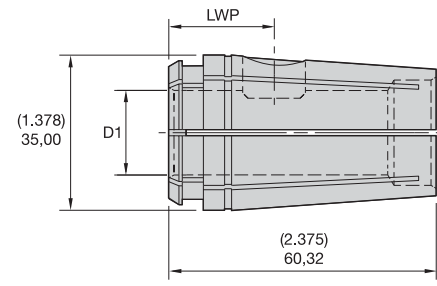
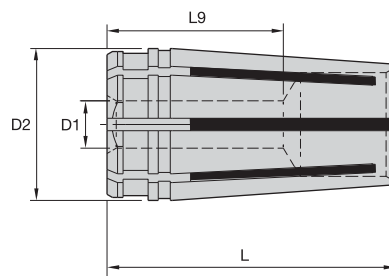
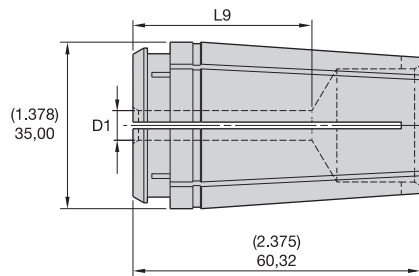
ERICKSON™

Collets and Sleeves

TG100 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 100TG 0,4mm [.016" (1/64)] range of collapse.
- 100TGC and 100TGCHP 0,13mm (.005") range of collapse.
- 100TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet – NP



TG Collet – NP

Collets and Sleeves

ERICKSON™

■ TG100 Series • Inch

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
3/32	100TG0094	–	–	–	–	.0940	.0781	.707	–
7/64	100TG0109	–	–	–	–	.1090	.0938	.712	–
1/8	100TG0125	–	–	–	–	.1250	.1094	.844	–
1/8	–	–	100TGHP0125	–	–	.1250	.1150	.844	–
9/64	100TG0141	–	–	–	–	.1410	.1250	.848	–
5/32	100TG0156	–	–	–	–	.1563	.1410	.853	–
11/64	100TG0172	–	–	–	–	.1720	.1563	.858	–
3/16	–	–	100TGHP0188	–	–	.1875	.1775	.862	–
3/16	100TG0188	–	–	–	–	.1880	.1719	.862	–
13/64	100TG0203	–	–	–	–	.2030	.1875	.867	–

(continued)



(TG100 Series continued)

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
7/32	100TG0219	–	–	–	–	.2190	.2031	.872	–
15/64	100TG0234	–	–	–	–	.2340	.2188	.876	–
1/4	–	100TGC0250	–	–	–	.2500	.2450	1.356	–
1/4	–	–	100TGHP0250	–	–	.2500	.2400	1.461	–
1/4	100TG0250	–	–	–	–	.2500	.2344	1.480	–
17/64	–	100TGC0266	–	–	–	.2656	.2606	1.360	–
17/64	100TG0266	–	–	–	–	.2660	.2500	1.485	–
9/32	100TG0281	–	–	–	–	.2810	.2656	1.489	–
9/32	–	100TGC0281	–	–	–	.2813	.2763	1.365	–
19/64	–	100TGC0297	–	–	–	.2969	.2919	1.370	–
19/64	100TG0297	–	–	–	–	.2970	.2813	1.494	–
5/16	100TG0312	–	–	–	–	.3120	.2969	1.499	–
5/16	–	100TGC0312	–	–	–	.3125	.3075	1.374	–
5/16	–	–	100TGHP0312	–	–	.3125	.3025	1.499	–
21/64	100TG0328	–	–	–	–	.3280	.3125	1.503	–
21/64	–	100TGC0328	–	–	–	.3281	.3231	1.379	–
11/32	–	100TGC0344	–	–	–	.3438	.3388	1.384	–
11/32	100TG0344	–	–	–	–	.3440	.3281	1.508	–
23/64	100TG0359	–	–	–	–	.3590	.3438	1.513	–
23/64	–	100TGC0359	–	–	–	.3594	.3544	1.388	–
3/8	–	100TGC0375	–	–	–	.3750	.3700	1.393	–
3/8	–	–	–	100TGCHP0375	–	.3750	.3700	1.511	–
3/8	–	–	100TGHP0375	–	–	.3750	.3650	1.518	–
3/8	100TG0375	–	–	–	–	.3750	.3594	1.518	–
3/8	–	–	–	–	100TGNP0375	.3750	–	–	.703
25/64	–	100TGC0391	–	–	–	.3906	.3856	1.516	–
25/64	100TG0391	–	–	–	–	.3910	.3750	1.522	–
13/32	100TG0406	–	–	–	–	.4060	.3906	1.527	–
13/32	–	100TGC0406	–	–	–	.4063	.4013	1.520	–
27/64	–	100TGC0422	–	–	–	.4219	.4169	1.525	–
27/64	100TG0422	–	–	–	–	.4220	.4063	1.532	–
7/16	–	100TGC0438	–	100TGCHP0438	–	.4375	.4325	1.530	–
7/16	–	–	100TGHP0438	–	–	.4375	.4275	1.536	–
7/16	100TG0438	–	–	–	–	.4380	.4219	1.536	–
29/64	100TG0453	–	–	–	–	.4530	.4375	1.541	–
29/64	–	100TGC0453	–	–	–	.4531	.4481	1.534	–
15/32	–	100TGC0469	–	–	–	.4688	.4638	1.539	–
15/32	100TG0469	–	–	–	–	.4690	.4531	1.546	–
31/64	100TG0484	–	–	–	–	.4840	.4688	1.550	–
31/64	–	100TGC0484	–	–	–	.4844	.4794	1.544	–
1/2	–	100TGC0500	–	100TGCHP0500	–	.5000	.4950	1.549	–
1/2	–	–	100TGHP0500	–	–	.5000	.4900	1.555	–
1/2	100TG0500	–	–	–	–	.5000	.4844	1.555	–
1/2	–	–	–	–	100TGNP0500	.5000	–	–	.828

(continued)

Collets and Sleeves

TG100 Series



(TG100 Series continued)

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
33/64	—	100TGC0516	—	—	—	.5156	.5106	1.553	—
33/64	100TG0516	—	—	—	—	.5160	.5000	1.560	—
17/32	100TG0531	—	—	—	—	.5310	.5156	1.564	—
17/32	—	100TGC0531	—	—	—	.5313	.5263	1.558	—
35/64	—	100TGC0547	—	—	—	.5469	.5419	1.720	—
35/64	100TG0547	—	—	—	—	.5470	.5313	1.569	—
9/16	100TG0562	—	—	—	—	.5620	.5469	1.574	—
9/16	—	—	100TGHP0562	—	—	.5625	.5525	1.574	—
9/16	—	100TGC0562	—	100TGCHP0562	—	.5625	.5575	1.724	—
37/64	100TG0578	—	—	—	—	.5780	.5625	1.579	—
37/64	—	100TGC0578	—	—	—	.5781	.5731	1.729	—
19/32	—	100TGC0594	—	—	—	.5938	.5888	1.734	—
19/32	100TG0594	—	—	—	—	.5940	.5781	1.583	—
39/64	100TG0609	—	—	—	—	.6090	.5938	1.588	—
39/64	—	100TGC0609	—	—	—	.6094	.6044	1.738	—
5/8	100TG0625	—	—	—	—	.6250	.6094	1.593	—
5/8	—	—	100TGHP0625	—	—	.6250	.6150	1.593	—
5/8	—	100TGC0625	—	100TGCHP0625	—	.6250	.6200	1.743	—
5/8	—	—	—	—	100TGNP0625	.6250	—	—	.875
41/64	—	100TGC0641	—	—	—	.6406	.6356	1.748	—
41/64	100TG0641	—	—	—	—	.6410	.6250	1.597	—
21/32	100TG0656	—	—	—	—	.6560	.6406	1.602	—
21/32	—	100TGC0656	—	—	—	.6563	.6513	1.752	—
43/64	—	100TGC0672	—	—	—	.6719	.6669	1.757	—
43/64	100TG0672	—	—	—	—	.6720	.6563	1.607	—
11/16	—	—	100TGHP0688	—	—	.6875	.6775	1.612	—
11/16	—	100TGC0688	—	100TGCHP0688	—	.6875	.6825	1.762	—
11/16	100TG0688	—	—	—	—	.6880	.6719	1.612	—
45/64	100TG0703	—	—	—	—	.7030	.6875	1.612	—
45/64	—	100TGC0703	—	—	—	.7031	.6981	1.767	—
23/32	—	100TGC0719	—	—	—	.7188	.7138	1.771	—
23/32	100TG0719	—	—	—	—	.7190	.7031	1.621	—
47/64	100TG0734	—	—	—	—	.7340	.7188	1.625	—
47/64	—	100TGC0734	—	—	—	.7344	.7294	1.776	—
3/4	100TG0750	—	—	—	—	.7500	.7348	1.630	—
3/4	—	—	100TGHP0750	—	—	.7500	.7400	1.630	—
3/4	—	100TGC0750	—	100TGCHP0750	—	.7500	.7450	1.781	—
3/4	—	—	—	—	100TGNP0750	.7500	—	—	.938
49/64	—	100TGC0766	—	—	—	.7656	.7606	1.904	—
49/64	100TG0766	—	—	—	—	.7660	.7500	2.375	—
25/32	100TG0781	—	—	—	—	.7810	.7656	2.375	—
25/32	—	100TGC0781	—	—	—	.7813	.7763	1.908	—
51/64	—	100TGC0797	—	—	—	.7969	.7919	1.913	—
51/64	100TG0797	—	—	—	—	.7970	.7813	2.375	—
13/16	100TG0812	—	—	—	—	.8120	.7969	2.375	—
13/16	—	100TGC0812	—	—	—	.8125	.8075	1.917	—

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard – coolant	100TGHP high precision	100TGCHP high precision – coolant	100TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
53/64	100TG0828	–	–	–	–	.8280	.8125	2.375	–
53/64	–	100TGC0828	–	–	–	.8281	.8231	1.922	–
27/32	–	100TGC0844	–	–	–	.8438	.8388	1.927	–
27/32	100TG0844	–	–	–	–	.8440	.8281	2.375	–
55/64	100TG0859	–	–	–	–	.8590	.8438	2.375	–
7/8	–	100TGC0875	–	100TGCHP0875	–	.8750	.8700	1.936	–
7/8	–	–	100TGHP0875	–	–	.8750	.8650	2.375	–
7/8	100TG0875	–	–	–	–	.8750	.8594	2.375	–
7/8	–	–	–	–	100TGNP0875	.8750	–	2.375	.938
57/64	–	100TGC0891	–	–	–	.8906	.8856	1.941	–
57/64	100TG0891	–	–	–	–	.8910	.8750	2.375	–
29/32	100TG0906	–	–	–	–	.9060	.8906	2.375	–
29/32	–	100TGC0906	–	–	–	.9063	.9013	1.946	–
59/64	–	100TGC0922	–	–	–	.9219	.9169	1.950	–
59/64	100TG0922	–	–	–	–	.9220	.9063	2.375	–
15/16	–	100TGC0938	–	–	–	.9375	.9325	1.955	–
15/16	100TG0938	–	–	–	–	.9380	.9219	2.375	–
61/64	100TG0953	–	–	–	–	.9530	.9375	2.375	–
61/64	–	100TGC0953	–	–	–	.9531	.9481	1.960	–
31/32	–	100TGC0969	–	–	–	.9688	.9638	1.964	–
31/32	100TG0969	–	–	–	–	.9690	.9531	2.375	–
63/64	100TG0984	–	–	–	–	.9840	.9688	2.375	–
63/64	–	100TGC0984	–	–	–	.9844	.9794	1.969	–
1	100TG1000	–	–	–	–	1.0000	.9844	2.375	–
1	–	100TGC1000	–	100TGCHP1000	–	1.0000	.9950	2.375	–
1	–	–	100TGHP1000	–	–	1.0000	.9900	2.375	–
1	–	–	–	–	100TGNP1000	1.0000	–	–	.938

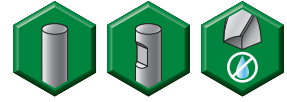
NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
 Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

Collets and Sleeves

TG100 Single-Angle Standard Collet Sets

- An economical way to purchase a group of collets.



TG Collet

ERICKSON™

■ TG100 Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S100TG1SET	TG100	59	3/32-1	1/64
S100TG2SET	TG100	30	3/32 - 1	1/32
S100TG3SET	TG100	41	3/8 - 1	1/64
S100TG4SET	TG100	21	3/8 - 1	1/32

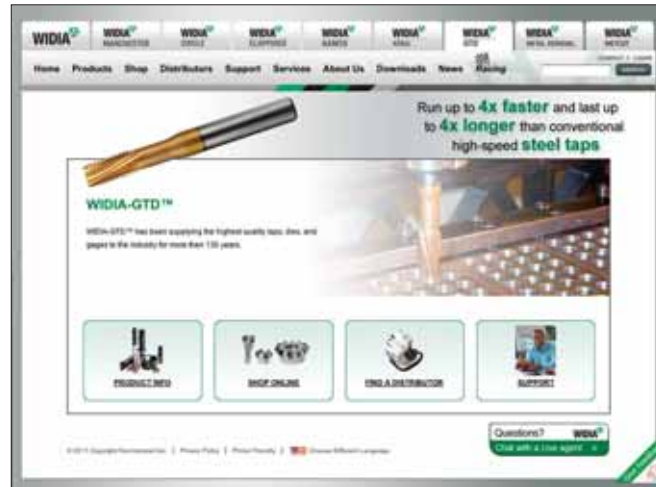


TG Collet — NP

■ TG100 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S100TGNPSET	TG100	6	3/8-1	1/8

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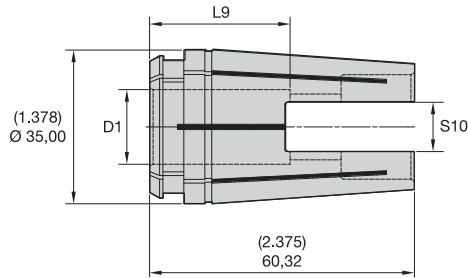
WIDIA Products

Whether your operation is turning, milling, or holmaking, WIDIA brands are the high-performance tooling you need. We offer standard and custom solutions for the general engineering market.

Collets and Sleeves

TG100 Single-Angle Solid Tap Collets

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON™

■ TG100 Solid Tap Collet • Metric DIN and ISO

tap size	catalog number	collet series	D1	S10	L9
M9 & M12	100TGST090071M	TG100	9,0	7,1	30,0
M10	100TGST100080M	TG100	10,0	8,0	30,0
M14	100TGST110090M	TG100	11,0	9,0	30,0
M16	100TGST120090M	TG100	12,0	9,0	30,0
M18	100TGST140110M	TG100	14,0	11,0	30,0
M20	100TGST160120M	TG100	16,0	12,0	30,0
M22 & M24	100TGST180145M	TG100	18,0	14,5	30,0

■ TG100 Solid Tap Collet • Solid Tap Coolant • Inch/Metric ANSI

tap size		100TGST solid tap	100TGSTC solid tap – coolant	collet series	D1	S10	L9
mm	in						
M3 & M3,15 & M3,5	#0-#6 & 1/8	100TGST6	—	TG100	.141	.110	.141
M4	#8 & 5/32	100TGST8	—	TG100	.168	.131	.168
M4,5 & M5	#10 & 3/16	100TGST10	—	TG100	.194	.152	.194
—	#12 & 7/32	100TGST12	—	TG100	.220	.165	.220
M6 & M6,3	#14 & 1/4	100TGST025	—	TG100	.255	.191	.812
—	1/16P & 1/8P(SS)	100TGST006P	—	TG100	.313	.234	.812
M7 & M8	5/16	100TGST031	100TGSTC031	TG100	.318	.238	.868
—	7/16	100TGST043	100TGSTC043	TG100	.323	.242	.963
M12 & M12,5	1/2	100TGST050	100TGSTC050	TG100	.367	.275	.932
M10	3/8	100TGST037	100TGSTC037	TG100	.381	.286	.900
M14	9/16	100TGST056	—	TG100	.429	.322	1.087
—	1/8P(LS)	100TGST012P	—	TG100	.438	.328	.812
M16	5/8	100TGST062	100TGSTC062	TG100	.480	.360	1.087
M18	11/16	100TGST068	—	TG100	.542	.406	1.244

(continued)

(TG100 Single-Angle Solid Tap Collets continued)

mm	tap size		100TGST solid tap	100TGSTC solid tap – coolant	collet series	D1	S10	L9
		in						
–		1/4P	100TGST025P	–	TG100	.563	.421	.812
–		3/4	100TGST075	100TGSTC075	TG100	.590	.442	1.213
M20		13/16	100TGST081	–	TG100	.652	.489	.652
–		1/2P	100TGST050P	–	TG100	.688	.515	.812
M22		7/8	100TGST087	–	TG100	.697	.523	.697
M22		7/8	–	100TGSTC087	TG100	.697	.523	1.369
–		3/8P	100TGST037P	–	TG100	.700	.531	.812
M24		15/16	100TGST094	–	TG100	.760	.570	.760
M25		1	–	100TGSTC100	TG100	.800	.600	1.313
M25		1	100TGST100	–	TG100	.800	.600	.800
M27		1 1/16 & 1 1/8	100TGST112	–	TG100	.896	.672	.896
–		3/4P	100TGST075P	–	TG100	.906	.679	.812

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.

Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.

Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.

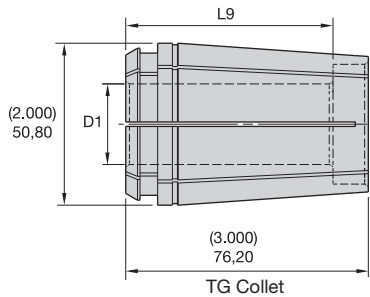
Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

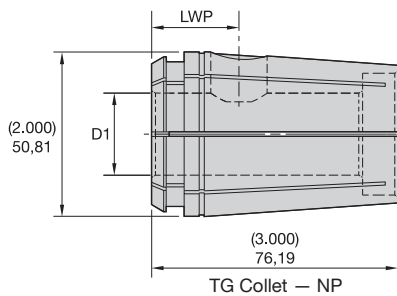
TG150 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,4mm [.016" (1/64")] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet



TG Collet – NP

Collets and Sleeves

ERICKSON™

■ TG150 Series • Metric

D1	150TG standard	150TGNP standard – non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
12,0	150TG120M	—	12,0	11,6	44,0	—
13,0	150TG130M	—	13,0	12,6	44,0	—
14,0	150TG140M	—	14,0	13,6	44,0	—
14,5	150TG145M	—	14,5	14,1	44,0	—
15,0	150TG150M	—	15,0	14,6	54,0	—
16,0	150TG160M	—	16,0	15,6	54,0	—
18,0	150TG180M	—	18,0	17,6	54,0	—
19,0	150TG190M	—	19,0	18,6	76,2	—
20,0	150TG200M	—	20,0	19,6	76,2	—
21,0	150TG210M	—	21,0	20,6	76,2	—

(continued)



(TG150 Series continued)

D1	150TG standard	150TGNP standard – non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
22,0	150TG220M	–	22,0	21,6	76,2	–
25,0	150TG250M	–	25,0	24,6	76,2	–
25,0	–	150TGNP250M	25,0	–	–	22
25,5	150TG255M	–	25,5	25,1	76,2	–
26,0	150TG260M	–	26,0	25,6	76,2	–
27,0	150TG270M	–	27,0	26,6	76,2	–
28,0	150TG280M	–	28,0	27,6	76,2	–
30,0	150TG300M	–	30,0	29,6	76,2	–
32,0	150TG320M	–	32,0	31,6	76,2	–
32,0	–	150TGNP320M	32,0	–	–	22
34,0	150TG340M	–	34,0	33,6	76,2	–
35,0	150TG350M	–	35,0	34,6	76,2	–
36,0	150TG360M	–	36,0	35,6	76,2	–
38,0	150TG380M	–	38,0	37,6	76,2	–
40,0	150TG400M	–	40,0	39,6	76,2	–

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.

Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.

Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.

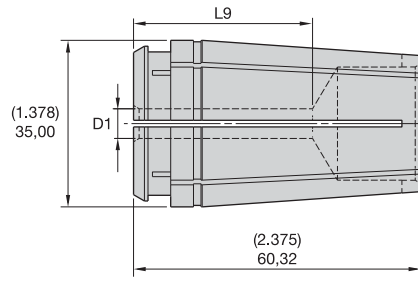
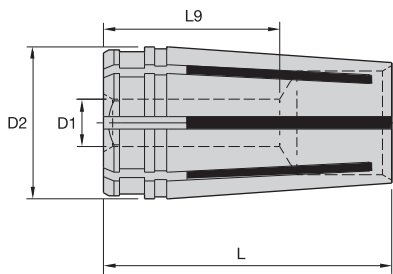
Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

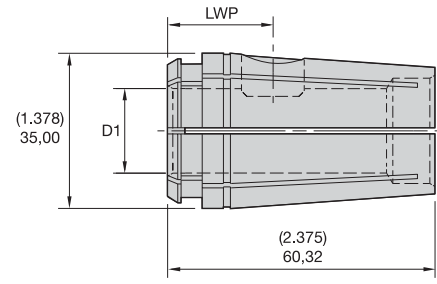
TG150 Series



- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 150TG 0,4mm [.016" (1/64)] range of collapse.
- 150TGCHP and 150TGNP 0,13mm (.005") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet



TG Collet – NP



TG Collet



TG Collet – NP

ERICKSON™

■ TG150 Series • Inch

D1	150TG standard	150TGCHP high precision – coolant	150TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
3/8	150TG0375	–	–	.3750	.3594	2.000	–
25/64	150TG0391	–	–	.3906	.3750	2.000	–
13/32	150TG0406	–	–	.4063	.3906	2.000	–
27/64	150TG0422	–	–	.4219	.4063	2.000	–
7/16	150TG0438	–	–	.4375	.4219	2.000	–
29/64	150TG0453	–	–	.4531	.4375	2.000	–
15/32	150TG0468	–	–	.4688	.4531	2.000	–
31/64	150TG0484	–	–	.4844	.4688	2.000	–
1/2	150TG0500	–	–	.5000	.4844	2.560	–
1/2	–	–	150TGNP0500	.5000	–	–	.828
33/64	150TG0516	–	–	.5156	.5000	2.560	–
17/32	150TG0531	–	–	.5313	.5156	2.560	–

(continued)

(TG150 Series continued)

D1	150TG standard	150TGCHP high precision – coolant	150TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
35/64	150TG0547	—	—	.5469	.5313	2.560	—
9/16	150TG0562	—	—	.5625	.5469	2.560	—
37/64	150TG0578	—	—	.5781	.5625	2.560	—
19/32	150TG0594	—	—	.5938	.5781	2.560	—
39/64	150TG0609	—	—	.6094	.5938	2.560	—
5/8	150TG0625	—	—	.6250	.6094	2.560	—
5/8	—	—	150TGNP0625	.6250	—	—	.875
41/64	150TG0641	—	—	.6406	.6250	2.560	—
21/32	150TG0656	—	—	.6563	.6406	2.560	—
43/64	150TG0672	—	—	.6719	.6563	2.560	—
11/16	150TG0688	—	—	.6875	.6719	2.560	—
45/64	150TG0703	—	—	.7031	.6875	2.560	—
23/32	150TG0719	—	—	.7188	.7031	2.560	—
47/64	150TG0734	—	—	.7344	.7188	2.560	—
3/4	150TG0750	—	—	.7500	.7344	2.560	—
3/4	—	—	150TGNP0750	.7500	—	—	.938
49/64	150TG0766	—	—	.7656	.7500	2.560	—
25/32	150TG0781	—	—	.7813	.7656	2.560	—
51/64	150TG0797	—	—	.7969	.7813	2.560	—
13/16	150TG0812	—	—	.8125	.7969	2.560	—
53/64	150TG0828	—	—	.8281	.8125	2.560	—
27/32	150TG0844	—	—	.8438	.8281	2.560	—
55/64	150TG0859	—	—	.8594	.8438	2.560	—
7/8	150TG0875	—	—	.8750	.8594	2.560	—
7/8	—	—	150TGNP0875	.8750	—	—	.938
57/64	150TG0891	—	—	.8906	.8750	2.560	—
29/32	150TG0906	—	—	.9063	.8906	2.560	—
59/64	150TG0922	—	—	.9219	.9063	2.560	—
15/16	150TG0938	—	—	.9375	.9219	2.560	—
61/64	150TG0953	—	—	.9531	.9375	2.560	—
31/32	150TG0969	—	—	.9688	.9531	2.560	—
63/64	150TG0984	—	—	.9844	.9688	2.560	—
1	150TG1000	—	—	1.0000	.9844	2.560	—
1	—	150TGCHP1000	—	—	—	—	—
1	—	—	150TGNP1000	1.0000	—	—	1.063
1 1/64	150TG1016	—	—	1.0156	1.0000	2.560	—
1 1/32	150TG1031	—	—	1.0313	1.0156	2.560	—
1 3/64	150TG1047	—	—	1.0469	1.0313	2.560	—
1 1/16	150TG1062	—	—	1.0625	1.0469	2.560	—
1 5/64	150TG1078	—	—	1.0781	1.0625	2.560	—
1 3/32	150TG1094	—	—	1.0938	1.0781	2.560	—
1 7/64	150TG1109	—	—	1.1094	1.0938	2.560	—
1 9/64	150TG1141	—	—	1.1200	1.1094	2.560	—
1 1/8	150TG1125	—	—	1.1250	1.1200	2.560	—
1 5/32	150TG1156	—	—	1.1563	1.1250	2.560	—
1 11/64	150TG1172	—	—	1.1719	1.1563	2.560	—
1 3/16	150TG1187	—	—	1.1875	1.1719	2.560	—
1 13/64	150TG1203	—	—	1.2031	1.1875	2.560	—

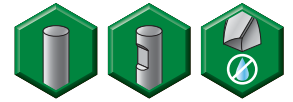
(continued)

(TG150 Series continued)

D1	150TG standard	150TGCHP high precision – coolant	150TGNP milling – non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1 7/32	150TG1219	–	–	1.2188	1.2031	2.560	–
1 15/64	150TG1234	–	–	1.2344	1.2188	2.560	–
1 1/4	150TG1250	–	–	1.2500	1.2344	2.560	–
1 1/4	–	–	150TGNP1250	1.2500	–	–	1.063
1 1/4	–	150TGCHP1250	–	–	–	–	–
1 17/64	150TG1266	–	–	1.2656	1.2500	2.560	–
1 9/32	150TG1281	–	–	1.2813	1.2656	2.560	–
1 19/64	150TG1297	–	–	1.2969	1.2813	2.560	–
1 5/16	150TG1312	–	–	1.3125	1.2969	2.560	–
1 21/64	150TG1328	–	–	1.3281	1.3125	2.560	–
1 11/32	150TG1344	–	–	1.3438	1.3281	2.560	–
1 23/64	150TG1359	–	–	1.3594	1.3438	2.560	–
1 3/8	150TG1375	–	–	1.3750	1.3594	2.560	–
1 25/64	150TG1391	–	–	1.3906	1.3750	2.560	–
1 13/32	150TG1406	–	–	1.4063	1.3906	2.560	–
1 27/64	150TG1422	–	–	1.4219	1.4063	2.560	–
1 7/16	150TG1438	–	–	1.4375	1.4219	2.560	–
1 29/64	150TG1453	–	–	1.4531	1.4375	2.560	–
1 15/32	150TG1469	–	–	1.4688	1.4531	2.560	–
1 1/2	150TG1500	–	–	1.5000	1.4688	2.560	–
1 1/2	–	–	150TGNP1500	1.5000	–	–	1.063
1 1/2	–	150TGCHP1500	–	–	–	–	–
1 31/32	150TG1484	–	–	1.9688	1.5000	2.560	–

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
 Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

- An economical way to purchase a group of collets.



TG Collet

ERICKSON

■ TG150 Collet Set • Metric

catalog number	series	quantity	dimensional range	incremental division
150TGS000M	TG150	3	25mm - 40mm	25 & 32 & 40

■ TG150 Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S150TG1SET	TG150	65	1/2-1 1/2	1/64
S150TG2SET	TG150	33	1/2- 1 1/2	1/32
S150TG4SET	TG150	25	3/4-1 1/2	1/32



TG Collet — NP

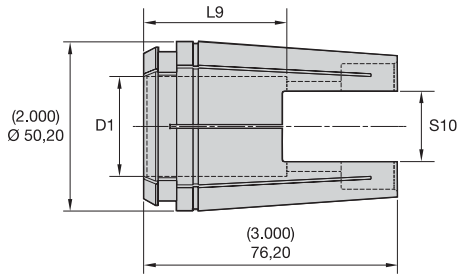
■ TG150 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S150TGNPSET	TG150	7	1/2 - 1 1/2	1/8(1/2-1) & 1/4(1 1/4-1 1/2)

Collets and Sleeves

TG150 Single-Angle Solid Tap Collets

- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.



ERICKSON™

■ TG150 Solid Tap Collet • Metric DIN and ISO

*** Metric DIN and ISO only available in TG50 and TG100 series ***

■ TG150 Solid Tap Collet • Inch/Metric ANSI

tap size		150TGST solid tap	collet series	D1	S10	L9
mm	in					
—	3/4	150TGST075	TG150	.590	.442	1.213
—	1/2P	150TGST050P	TG150	.688	.515	.812
—	3/8P	150TGST037P	TG150	.700	.531	.812
M25	1	150TGST100	TG150	.800	.600	1.463
M27	1 1/16 & 1 1/8	150TGST112	TG150	.896	.672	1.650
—	3/4P	150TGST075P	TG150	.906	.679	.906
M30	1 3/16 & 1 1/4	150TGST125	TG150	1.021	.766	1.750
M33	1 5/16 & 1 3/8	150TGST137	TG150	1.108	.831	1.687
—	1P	150TGST100P	TG150	1.125	2.142	.906
M36	1 7/16 & 1 1/2	150TGST150	TG150	1.233	.925	1.625
M39	1 5/8	150TGST162	TG150	1.305	.979	1.625
—	1 1/4P	150TGST125P	TG150	1.313	2.085	.963
M42	1 3/4	150TGST175	TG150	1.430	1.072	1.500
—	1 1/2P	150TGST150P	TG150	1.500	1.898	1.150

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
 Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

WIN WITH WIDIA™



ProGroove™

With easy-to-change inserts available in multiple high-performance carbide grades, the ProGroove system ensures accurate, reliable, and reproducible cutting edge performance.

ProGroove Grooving and Cut-Off

- Single-end inserts for grooving and cut-off.
- Offered with integral shanks and blades.
- Shallow, deep grooving, and cut-off capabilities.
- Available in four different geometries.

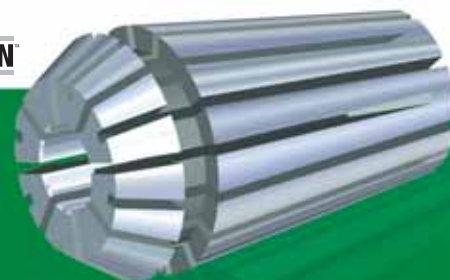
To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 
Win with WIDIA™

Erickson™ • ER Single-Angle Collets

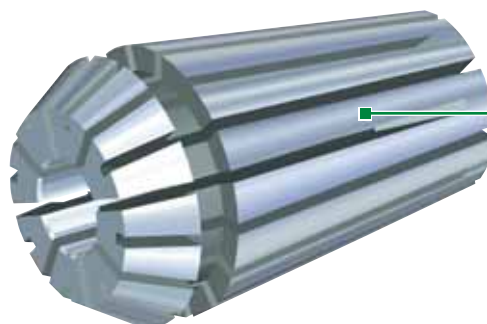
The standard ER Collets are manufactured according to DIN 6499-B (16° inclusive angle) standard and are available in a variety of styles, ER8, ER11, ER16, ER20, ER25, ER32, and ER40, with sizes ranging from 0,5–26mm (.0197–1.0000"). Applications of light end milling, drilling, tapping, reaming, and boring solution are applicable.

ERICKSON™



ER Collets

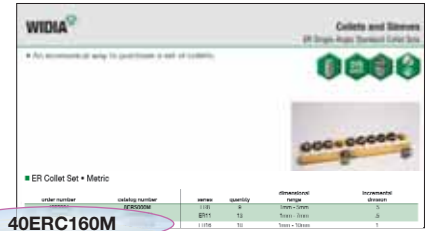
- DIN 6499 Class 2 accuracy.
- 16° inclusive taper angle taper for approximately 2:1 grip.
- Dedicated versions for tapping — driving off the square of the tap.



16° inclusive angle.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



ERICKSON

40ERC160M

<p>40</p> <p>System Size</p> <ul style="list-style-type: none"> 11 = ER11 16 = ER16 20 = ER20 25 = ER25 32 = ER32 40 = ER40 	<p>ER</p> <p>Collet Style</p> <p>ER-DIN 6499 = Single-angle</p>	<p>C</p> <p>Special Feature <i>(optional)</i></p> <p>TC = Solid tapping (square for drive)</p> <p>TCT = Solid tapping with tension only</p>	<p>160</p> <p>Collet Bore Size</p> <p>metric (xx.x)</p> <ul style="list-style-type: none"> 010 = 1mm 160 = 16mm 245 = 24,5mm <p>inch (x.xxx)</p> <ul style="list-style-type: none"> 0125 = 1/8" 0500 = 1/2" 1000 = 1" 	<p>M</p> <p>Identification Value</p> <p>M = Collet bore size built to metric values</p> <p>(blank) = Collet bore size built to metric values</p>
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ER • Single-Angle

- Provides good grip and accuracy for all drilling applications.
- Wide clamping range.
- Available in both inch and metric bores.
- 1mm (.040") range of collapse.
- Manufactured to DIN 6499.
- Accuracy to DIN 6499 Class 2.

ERICKSON



ERTC • Single-Angle Tap Collet

- Designed to grip taps on shank and square to eliminate slippage.
- Fits all standard ER-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



ERTCT • Single-Angle Tap Collet with Axial Compensation

- Designed to grip taps on shank and square to eliminate slippage.
- Tension only, cost effective solution for machines that require axial compensation for tapping.
- Fits all standard ER-style collet chucks.

ERICKSON



Our complete portfolio. Your complete satisfaction.

WIDIA[™]
HANITA

WIDIA[™]
MANCHESTER

WIDIA[™]
METCUT

WIDIA[™]
METAL REMOVAL

WIDIA[™]
CIRCLE

WIDIA[™]
RÜBIG

WIDIA[™]
CLAPPDICO

WIDIA[™]
GTD

WIDIA[™]

From turning, holemaking, and indexable milling to solid carbide end milling, solid carbide drilling, and tapping, the most powerful tools in the business now proudly wear WIDIA™ brands. When you buy WIDIA products, you're not just purchasing speed, power, and precision, you're investing in quality and complete satisfaction.

Match the most expansive portfolio of precision-engineered products and engineered solution services available today with a global, specialized network of Authorized Distributor partners, and you have the tools you need — and the power that only comes from WIDIA brands. For product information, or to schedule an onsite demonstration, visit www.widia.com.

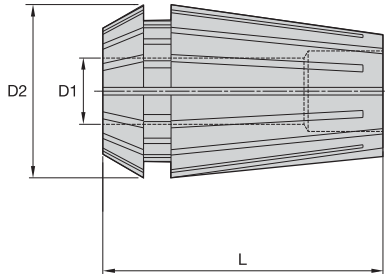
To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA[™]

Collets and Sleeves

ER Single-Angle Standard Collets

- Provides approximately 2:1 grip advantage.
- Wide clamping range for all drilling applications.
- ER8 and ER11 0,5mm (.020") range of collapse.
- ER16, ER20, ER25, ER32, and ER40 1mm (.040") range of collapse.
- Available in both metric and inch sizes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

ER Collets • Metric

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
1,0	8ER010M	11ER010M	16ER010M	20ER010M	—	—	—	1,00	0,50
1,5	8ER015M	11ER015M	16ER015M	—	—	—	—	1,50	1,00
2,0	—	—	16ER020M	20ER020M	25ER020M	—	—	2,00	1,00
2,0	8ER020M	11ER020M	—	—	—	—	—	2,00	1,50
2,5	—	—	16ER025M	—	—	—	—	2,50	1,50
2,5	8ER025M	11ER025M	—	—	—	—	—	2,50	2,00
3,0	—	—	16ER030M	20ER030M	25ER030M	32ER030M	—	3,00	2,00
3,0	8ER030M	11ER030M	—	—	—	—	—	3,00	2,50
3,5	—	—	16ER035M	—	—	—	—	3,50	2,50
3,5	8ER035M	11ER035M	—	—	—	—	—	3,50	3,00
4,0	—	—	16ER040M	20ER040M	25ER040M	32ER040M	40ER040M	4,00	3,00
4,0	8ER040M	11ER040M	—	—	—	—	—	4,00	3,50
4,5	—	—	16ER045M	—	—	—	—	4,50	3,50
4,5	8ER045M	11ER045M	—	—	—	—	—	4,50	4,00
5,0	—	—	16ER050M	20ER050M	25ER050M	32ER050M	40ER050M	5,00	4,00
5,0	8ER050M	11ER050M	—	—	—	—	—	5,00	4,50
5,5	—	—	16ER055M	—	—	—	—	5,50	4,50
5,5	—	11ER055M	—	—	—	—	—	5,50	5,00
6,0	—	—	16ER060M	20ER060M	25ER060M	32ER060M	40ER060M	6,00	5,00
6,0	—	11ER060M	—	—	—	—	—	6,00	5,50
6,5	—	—	16ER065M	—	—	—	—	6,50	5,50
6,5	—	11ER065M	—	—	—	—	—	6,50	6,00
7,0	—	—	16ER070M	20ER070M	25ER070M	32ER070M	40ER070M	7,00	6,00
7,0	—	11ER070M	—	—	—	—	—	7,00	6,50
7,5	—	—	16ER075M	—	—	—	—	7,50	6,50
8,0	—	—	16ER080M	20ER080M	25ER080M	32ER080M	40ER080M	8,00	7,00

(continued)

Collets and Sleeves

(ER Single-Angle Standard Collets continued)

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
8,5	—	—	16ER085M	—	—	—	—	8,50	7,50
9,0	—	—	16ER090M	20ER090M	25ER090M	32ER090M	40ER090M	9,00	8,00
9,5	—	—	16ER095M	—	—	—	—	9,50	8,50
10,0	—	—	16ER100M	20ER100M	25ER100M	32ER100M	40ER100M	10,00	9,00
11,0	—	—	—	20ER110M	25ER110M	32ER110M	40ER110M	11,00	10,00
12,0	—	—	—	20ER120M	25ER120M	32ER120M	40ER120M	12,00	11,00
13,0	—	—	—	20ER130M	25ER130M	32ER130M	40ER130M	13,00	12,00
14,0	—	—	—	—	25ER140M	32ER140M	40ER140M	14,00	13,00
15,0	—	—	—	—	25ER150M	32ER150M	40ER150M	15,00	14,00
16,0	—	—	—	—	25ER160M	32ER160M	40ER160M	16,00	15,00
17,0	—	—	—	—	—	32ER170M	40ER170M	17,00	16,00
18,0	—	—	—	—	—	32ER180M	40ER180M	18,00	17,00
19,0	—	—	—	—	—	32ER190M	40ER190M	19,00	18,00
20,0	—	—	—	—	—	32ER200M	40ER200M	20,00	19,00
21,0	—	—	—	—	—	—	40ER210M	21,00	20,00
22,0	—	—	—	—	—	—	40ER220M	22,00	21,00
23,0	—	—	—	—	—	—	40ER230M	23,00	22,00
24,0	—	—	—	—	—	—	40ER240M	24,00	23,00
25,0	—	—	—	—	—	—	40ER250M	25,00	24,00
26,0	—	—	—	—	—	—	40ER260M	26,00	25,00

(continued)

Collets and Sleeves

ER Single-Angle Standard Collets



(ER Single-Angle Standard Collets continued)

ER Collets • Inch

D1	ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	collet capacity max inch	collet capacity min inch
1/16	16ER0062	20ER0062	25ER0062	—	—	.0625	.0425
3/32	—	20ER0094	—	—	—	.0938	.0538
3/32	16ER0094	—	25ER0094	—	—	.0938	.0738
1/8	16ER0125	20ER0125	25ER0125	32ER0125	40ER0125	.1250	.0850
5/32	16ER0156	20ER0156	25ER0156	32ER0156	40ER0156	.1563	.1163
3/16	16ER0188	20ER0188	25ER0188	32ER0188	40ER0188	.1875	.1475
7/32	16ER0219	20ER0219	25ER0219	32ER0219	40ER0219	.2188	.1788
1/4	16ER0250	20ER0250	25ER0250	32ER0250	40ER0250	.2500	.2100
9/32	16ER0281	20ER0281	25ER0281	32ER0281	40ER0281	.2813	.2413
5/16	16ER0312	20ER0312	25ER0312	32ER0312	40ER0312	.3125	.2725
11/32	16ER0344	20ER0344	25ER0344	32ER0344	40ER0344	.3438	.3038
3/8	16ER0375	20ER0375	25ER0375	32ER0375	40ER0375	.3750	.3350
13/32	16ER0406	20ER0406	25ER0406	32ER0406	40ER0406	.4063	.3663
7/16	—	20ER0438	25ER0438	32ER0438	40ER0438	.4375	.3975
15/32	—	20ER0469	25ER0469	32ER0469	40ER0469	.4688	.4288
1/2	—	20ER0500	25ER0500	32ER0500	40ER0500	.5000	.4600
17/32	—	—	25ER0531	32ER0531	40ER0531	.5313	.4913
9/16	—	—	—	32ER0562	40ER0562	.5625	.5225
9/16	—	—	25ER0562	—	—	.5626	.5225
19/32	—	—	25ER0594	32ER0594	40ER0594	.5938	.5538
5/8	—	—	25ER0625	32ER0625	40ER0625	.6250	.5850
21/32	—	—	—	32ER0656	40ER0656	.6563	.6163
11/16	—	—	—	32ER0688	40ER0688	.6875	.6475
23/32	—	—	—	32ER0719	40ER0719	.7188	.6788
3/4	—	—	—	32ER0750	40ER0750	.7500	.7100
25/32	—	—	—	32ER0781	40ER0781	.7813	.7413
13/16	—	—	—	32ER0812	40ER0812	.8125	.7725
27/32	—	—	—	—	40ER0844	.8438	.8038
7/8	—	—	—	—	40ER0875	.8750	.8350
29/32	—	—	—	—	40ER0906	.9063	.8663
15/16	—	—	—	—	40ER0938	.9375	.8975
31/32	—	—	—	—	40ER0969	.9688	.9288
1	—	—	—	—	40ER1000	1.0000	.9600

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions.
 Never try to stretch the collets by clamping oversized cutting tools.

- An economical way to purchase a set of collets.



ERICKSON

■ ER Collet Set • Metric

order number	catalog number	series	quantity	dimensional range	incremental division
1025864	8ERS000M	ER8	9	1mm - 5mm	.5
1020872	11ERS000M	ER11	13	1mm - 7mm	.5
1135892	16ERS000M	ER16	10	1mm - 10mm	1
1025865	20ERS000M	ER20	12	2mm - 13mm	1
1123858	25ERS000M	ER25	15	2mm - 16mm	1
1135911	32ERS000M	ER32	18	3mm - 20mm	1
1126252	40ERS000M	ER40	23	4mm - 26mm	1

■ ER Collet Set • Inch

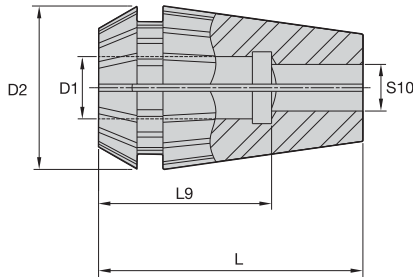
order number	catalog number	series	quantity	dimensional range	incremental division
2269968	16ERS000SET2	ER16	12	1/16 - 13/32	1/32
2269969	20ERS000SET1	ER20	8	1/16 - 1/2	1/16
2269970	20ERS000SET2	ER20	15	1/16 - 1/2	1/32
2269971	25ERS000SET1	ER25	10	1/16 - 5/8	1/16
2269972	25ERS000SET2	ER25	19	1/16 - 5/8	1/32
2269973	32ERS000SET1	ER32	12	1/8 - 13/16	1/16
2269974	32ERS000SET2	ER32	23	1/8 - 13/16	1/32
2269975	40ERS000SET1	ER40	15	1/8 - 1	1/16
2269976	40ERS000SET2	ER40	29	1/8 - 1	1/32

NOTE: ER collet sets come complete with protective tray.

Collets and Sleeves

ER Single-Angle Solid Tap Collets

- Square in back of collet acts as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in metric and inch sizes.



ERICKSON™

■ ER Solid Tap Collet • Metric DIN and ISO

tap size	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1	S10	L9
M4 & M6	16ERTC045034M	20ERTC045034M	25ERTC045034M	32ERTC045034M	—	4,5	3,4	18
—	16ERTC055043M	20ERTC055043M	25ERTC055043M	32ERTC055043M	—	5,5	4,3	18
M5 & M6 & M7 & M8	16ERTC060049M	20ERTC060049M	25ERTC060049M	32ERTC060049M	—	6,0	4,9	18
M10	16ERTC070055M	20ERTC070055M	25ERTC070055M	32ERTC070055M	40ERTC070055M	7,0	5,5	18
M8	16ERTC080062M	20ERTC080062M	25ERTC080062M	32ERTC080062M	40ERTC080062M	8,0	6,2	22
M12	16ERTC090070M	20ERTC090070M	25ERTC090070M	32ERTC090070M	40ERTC090070M	9,0	7,0	22
M10	—	20ERTC100080M	25ERTC100080M	32ERTC100080M	40ERTC100080M	10,0	8,0	25
M14	—	20ERTC110090M	25ERTC110090M	32ERTC110090M	40ERTC110090M	11,0	9,0	25
M16	—	—	25ERTC120090M	32ERTC120090M	40ERTC120090M	12,0	9,0	25
M18	—	—	—	32ERTC140110M	40ERTC140110M	14,0	11,0	25
—	—	—	25ERTC140110M	—	—	14,0	11,0	25
M20	—	—	—	32ERTC160120M	—	16,0	12,0	25
—	—	—	25ERTC160120M	—	—	16,0	12,0	25
M20	—	—	—	—	40ERTC160120M	16,0	12,0	25
M22 & M24	—	—	—	32ERTC180145M	40ERTC180145M	18,0	14,5	25
M27 & M30	—	—	—	32ERTC200160M	40ERTC200160M	20,0	16,0	28
M30	—	—	—	—	40ERTC220180M	22,0	18,0	28

(continued)

(ER Single-Angle Solid Tap Collets continued)

■ ER Solid Tap Collet • Inch/Metric ANSI

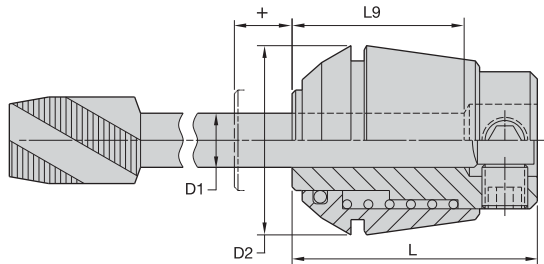
tap size		ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	D1	S10	L9
mm	in								
M4	8 & 5/32	16ERTC8	20ERTC8	25ERTC8	32ERTC8	—	.168	.131	.710
M4,5 & M5	10 & 3/16	16ERTC10	20ERTC10	25ERTC10	32ERTC10	—	.194	.152	.710
—	12 & 7/32	16ERTC12	20ERTC12	25ERTC12	32ERTC12	—	.220	.165	.710
M6 & M6,3	14 & 1/4	16ERTC025	20ERTC025	25ERTC025	32ERTC025	40ERTC025	.255	.191	.710
M7 & M8	5/16	—	20ERTC031	25ERTC031	32ERTC031	40ERTC031	.318	.238	.866
—	7/16	—	20ERTC043	25ERTC043	32ERTC043	40ERTC043	.323	.242	.866
M12 & M12,5	1/2	—	20ERTC050	25ERTC050	32ERTC050	40ERTC050	.367	.275	.866
M10	3/8	—	20ERTC037	25ERTC037	32ERTC037	40ERTC037	.381	.286	.866
M14	9/16	—	—	25ERTC056	32ERTC056	40ERTC056	.429	.322	.984
M16	5/8	—	—	25ERTC062	32ERTC062	40ERTC062	.480	.360	.984
M18	11/16	—	—	—	32ERTC069	40ERTC069	.542	.406	.984
—	3/4	—	—	—	32ERTC075	—	.590	.422	.984
—	3/4	—	—	—	—	40ERTC075	.590	.442	.984
M20	13/16	—	—	—	32ERTC081	40ERTC081	.652	.489	.984
M22	7/8	—	—	—	—	40ERTC087	.697	.523	.984
M24	15/16	—	—	—	—	40ERTC093	.760	.570	1.100
M25	1	—	—	—	—	40ERTC100	.800	.600	1.100

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

ER16 Single-Angle Tension Tap Collets

- Tension feature for applications that need synchronized tapping.
- Adjustable screws in back of collet act as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in inch sizes.



ERICKSON™

■ ER T-Only Tap Collet • Inch/Metric ANSI

mm		tap size	in	ER12 D2 = 11,4mm L = 21,5mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1	
										mm	in
M3 & M3,15 & M3,5	#0-#6 & 1/8			12ERTCT6	16ERTCT6	20ERTCT6	25ERTCT6	—	—	3,58	.141
M4	#8 & 5/32			—	16ERTCT8	20ERTCT8	25ERTCT8	32ERTCT8	—	4,27	.168
M4,5 & M5	#10 & 3/16			—	16ERTCT10	20ERTCT10	25ERTCT10	32ERTCT10	—	4,93	.194
—	#12 & 7/32			—	—	20ERTCT12	25ERTCT12	32ERTCT12	—	5,59	.220
M6 & M6,3	#14 & 1/4			—	—	20ERTCT025	25ERTCT025	32ERTCT025	40ERTCT025	6,48	.255
—	1/8P(LS)			—	—	—	—	32ERTCT012P	—	7,94	.313
M7 & M8	5/16			—	—	—	25ERTCT031	32ERTCT031	40ERTCT031	8,08	.318
—	7/16			—	—	—	25ERTCT043	32ERTCT043	40ERTCT043	8,20	.323
M12 & M12,5	1/2			—	—	—	25ERTCT050	32ERTCT050	40ERTCT050	9,32	.367
M10	3/8			—	—	—	25ERTCT037	32ERTCT037	40ERTCT037	9,68	.381
M14	9/16			—	—	—	—	32ERTCT056	40ERTCT056	10,90	.429
M16	5/8			—	—	—	—	32ERTCT062	40ERTCT062	12,19	.480
M18	11/16			—	—	—	—	—	40ERTCT069	13,77	.542
—	3/4			—	—	—	—	—	40ERTCT075	14,99	.590
M20	13/16			—	—	—	—	—	40ERTCT081	16,56	.652
M22	7/8			—	—	—	—	—	40ERTCT087	17,70	.697

NOTE: 12ERTCT6 fits ER11 chucks.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.

WIN WITH WIDIA™



WIDIA™ Victory™ TOP DRILL M1™ Modular Drills

Series TDM1

For solid carbide performance at an economical price, the TOP DRILL M1 modular drills are the ideal choice for of all your steel and cast iron general drilling applications.

- Disposable inserts mean no set-up or insert regrinding costs.
- Enhanced centering capabilities and metal removal rates.
- Speed and feed rates and performance comparable to solid carbide drills.

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WIDIA
VICTORY
Win with Widia™

Erickson™ • DA Double-Angle Collets

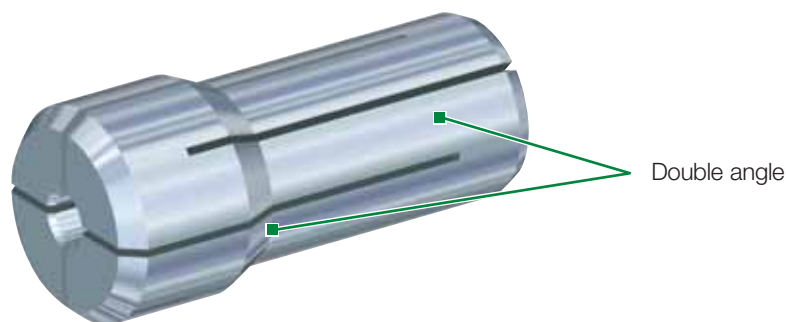
DA – Double-Angle Collets are well-known in the industry as an economical collet system allowing reaching in to areas where other systems have clearance issues. These collets are manufactured according to the original Erickson standard styles, DA000, DA100, DA180, DA200, and DA300, with clamping sizes ranging from 0,5–20mm (.0197–.7500"). They are ideal for end milling, drilling, tapping, reaming, and boring solutions.

ERICKSON

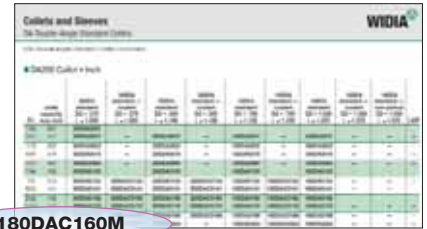


DA Collets

- Original Erickson standard.
- Versatile double-angle design providing approximately 1:1 grip.
- Bonded style available for through-coolant applications.
- Non-pullout style to captivate Weldon®-style end mills.
- Dedicated versions for tapping — driving off the square of the tap.



- Industry-standard Erickson™ double-angle collet system.



ERICKSON™

180

System Size

- 100 = DA100
- 180 = DA180
- 200 = DA200
- 300 = DA300

DA

Collet Style

DA =
Erickson Double-Angle

C

Special Feature
(optional)

- C** =
Coolant style bonded
- NP** =
Non-pullout Weldon®
(end mill design)

160

Collet Bore Size

- metric (xx.x)**
- 010 = 1mm
- 160 = 16mm
- inch (x.xxx)**
- 0125 = 1/8"
- 0500 = 1/2"

M

Identification
Value

- M** =
Collet bore size built
to metric values
- (blank)** =
Collet bore size built
to metric values



DA • Double-Angle

- 0,8mm [.031" (1/32")] range of collapse.

ERICKSON™



DAC • Double-Angle Coolant

- Rubber-filled slots seal coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON™



DANP • Double-Angle Non-Pullout, Weldon® Style

- Designed to grip end mills with Weldon-style shanks.
- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill adapters.
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON™



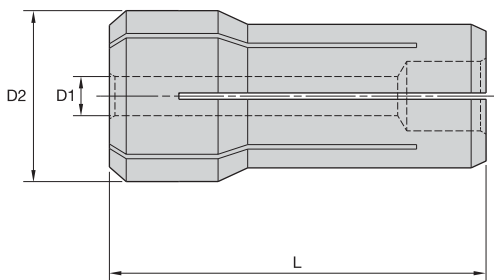
DA-J, K, & L • Double-Angle Solid Tap

- Provides positive drive for taps.

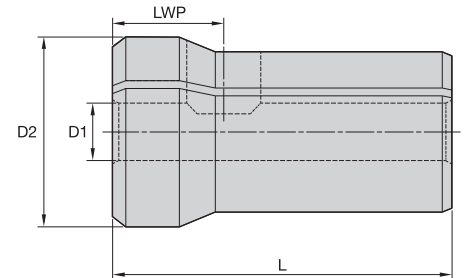
ERICKSON™



- For bonded collet DAC only — rubber-filled slots seal collet for coolant-fed tool applications.
- Provides 1:1 grip for most drilling, reaming, and tapping applications.
- Industry-standard Erickson™ double-angle collet system.
- 000DA 0,25mm (.010") range of collapse.
- 300DA, 200DA, 100DA, and 180DA 0,8mm [.0310" (1/32)] range of collapse.
- 200DA, 100DAC, 180DAC, and 180DANP 0,13mm (.005") range of collapse.
- 0,025mm (.001") TIR collet accuracy.



DA collet



DA collet — non-pullout



DA collet



DA collet — non-pullout

■ DA Collet • Metric

collet capacity		000DA standard	300DA standard	200DA standard	200DA standard — coolant	100DA standard	100DA standard — coolant	180DA standard	180DA standard — coolant	180DA standard — non-pullout	LWP
D1	max mm	D2 = L =	D2 = L =	D2 = L =	D2 = L =	D2 = L =	D2 = L =	D2 = L =	D2 = L =	D2 = L =	
1,0	1,0	8,50mm 16,76mm	9,53mm 25,406mm	13,69mm 30,16mm	13,69mm 30,16mm	19,53mm 36,53mm	19,53mm 36,53mm	26,29mm 41,28mm	26,29mm 41,28mm	26,29mm 41,28mm	—
1,3	1,3	000DA010M	300DA010M	200DA010M	—	—	—	—	—	—	—
1,5	1,5	000DA012M	—	—	—	—	—	—	—	—	—
1,8	1,8	000DA015M	300DA015M	200DA015M	—	—	—	—	—	—	—
2,0	2,0	000DA017M	—	—	—	—	—	—	—	—	—
2,3	2,3	000DA020M	300DA020M	200DA020M	—	—	—	—	—	—	—
2,5	2,5	000DA022M	—	—	—	—	—	—	—	—	—
2,8	2,8	000DA025M	300DA025M	200DA025M	—	100DA025M	—	—	—	—	—
3,0	3,0	000DA027M	—	—	—	—	—	—	—	—	—
3,3	3,3	000DA030M	300DA030M	200DA030M	—	100DA030M	—	180DA030M	—	—	—
		000DA032M	—	—	—	—	—	—	—	—	—

(continued)

Collets and Sleeves

DA Double-Angle Standard Collets



(DA Double-Angle Standard Collets continued)

collet capacity		000DA standard	300DA standard	200DA standard	200DA standard – coolant	100DA standard	100DA standard – coolant	180DA standard	180DA standard – coolant	180DA standard – non-pullout	LWP
D1 max mm		D2 = 8,50mm L = 16,76mm	D2 = 9,53mm L = 25,406mm	D2 = 13,69mm L = 30,16mm	D2 = 13,69mm L = 30,16mm	D2 = 19,53mm L = 36,53mm	D2 = 19,53mm L = 36,53mm	D2 = 26,29mm L = 41,28mm	D2 = 26,29mm L = 41,28mm	D2 = 26,29mm L = 41,28mm	
3,5	3,5	000DA035M	300DA035M	200DA035M	–	100DA035M	–	180DA035M	–	–	–
3,8	3,8	000DA037M	–	–	–	–	–	–	–	–	–
4,0	4,0	000DA040M	300DA040M	200DA040M	–	100DA040M	–	180DA040M	–	–	–
4,5	4,5	–	300DA045M	200DA045M	–	100DA045M	–	180DA045M	–	–	–
5,0	5,0	–	300DA050M	200DA050M	–	100DA050M	–	180DA050M	–	–	–
5,5	5,5	–	300DA055M	200DA055M	–	100DA055M	–	180DA055M	–	–	–
6,0	6,0	–	300DA060M	200DA060M	200DAC060M	100DA060M	100DAC060M	180DA060M	180DAC060M	–	–
6,5	6,5	–	–	200DA065M	–	100DA065M	–	180DA065M	–	–	–
7,0	7,0	–	–	200DA070M	–	100DA070M	–	180DA070M	–	–	–
7,5	7,5	–	–	200DA075M	–	100DA075M	–	180DA075M	–	–	–
8,0	8,0	–	–	200DA080M	200DAC080M	100DA080M	100DAC080M	180DA080M	180DAC080M	–	–
8,5	8,5	–	–	200DA085M	–	100DA085M	–	180DA085M	–	–	–
9,0	9,0	–	–	200DA090M	–	100DA090M	–	180DA090M	–	–	–
9,5	9,5	–	–	200DA095M	–	100DA095M	–	180DA095M	–	–	–
10,0	10,0	–	–	200DA100M	200DAC100M	100DA100M	100DAC100M	180DA100M	180DAC100M	–	–
10,0	10,0	–	–	–	–	–	–	–	–	180DANP100M	12,5
10,5	10,5	–	–	–	–	100DA105M	–	180DA105M	–	–	–
11,0	11,0	–	–	–	–	100DA110M	–	180DA110M	–	–	–
11,5	11,5	–	–	–	–	100DA115M	–	180DA115M	–	–	–
12,0	12,0	–	–	–	–	100DA120M	–	180DA120M	–	–	–
12,0	12,0	–	–	–	–	–	–	–	–	180DANP120M	12,5
12,0	12,0	–	–	–	–	–	100DAC120M	–	180DAC120M	–	–
12,5	12,5	–	–	–	–	100DA125M	–	180DA125M	–	–	–
13,0	13,0	–	–	–	–	100DA130M	–	180DA130M	–	–	–
13,5	13,5	–	–	–	–	100DA135M	–	180DA135M	–	–	–
14,0	14,0	–	–	–	–	100DA140M	100DAC140M	180DA140M	180DAC140M	–	–
14,5	14,5	–	–	–	–	–	–	180DA145M	–	–	–
15,0	15,0	–	–	–	–	–	–	180DA150M	–	–	–
15,5	15,5	–	–	–	–	–	–	180DA155M	–	–	–
16,0	16,0	–	–	–	–	–	–	–	180DAC160M	–	–
16,0	16,0	–	–	–	–	–	–	–	–	180DANP160M	16,1
16,0	16,0	–	–	–	–	–	–	180DA160M	–	–	–
16,5	16,5	–	–	–	–	–	–	180DA165M	–	–	–
17,0	17,0	–	–	–	–	–	–	180DA170M	–	–	–
17,5	17,5	–	–	–	–	–	–	180DA175M	–	–	–
18,0	18,0	–	–	–	–	–	–	180DA180M	180DAC180M	–	–
18,5	18,5	–	–	–	–	–	–	180DA185M	–	–	–
19,0	19,0	–	–	–	–	–	–	180DA190M	–	–	–
19,5	19,5	–	–	–	–	–	–	180DA195M	–	–	–
20,0	20,0	–	–	–	–	–	–	180DA200M	180DAC200M	–	–

(continued)

(DA Double-Angle Standard Collets continued)

■ DA200 Collet • Inch

D1	collet capacity max inch	300DA standard D2 = .375 L = 1.000	300DA standard – coolant D2 = .375 L = 1.000	200DA standard D2 = .539 L = 1.188	200DA standard – coolant D2 = .539 L = 1.188	100DA standard D2 = .769 L = 1.438	100DA standard – coolant D2 = .769 L = 1.438	180DA standard D2 = 1.035 L = 1.625	180DA standard – coolant D2 = 1.035 L = 1.625	180DA standard – non-pullout D2 = 1.035 L = 1.625	LWP
1/32	.031	300DA0031	–	–	–	–	–	–	–	–	–
3/64	.047	300DA0047	–	200DA0047	–	100DA0047	–	180DA0047	–	–	–
1/16	.063	300DA0062	–	200DA0062	–	100DA0062	–	180DA0062	–	–	–
5/64	.078	300DA0078	–	200DA0078	–	100DA0078	–	180DA0078	–	–	–
3/32	.094	300DA0094	–	200DA0094	–	100DA0094	–	180DA0094	–	–	–
7/64	.109	300DA0109	–	200DA0109	–	100DA0109	–	180DA0109	–	–	–
1/8	.125	300DA0125	300DAC0125	200DA0125	200DAC0125	100DA0125	100DAC0125	180DA0125	–	–	–
9/64	.141	300DA0141	300DAC0141	200DA0141	200DAC0141	–	–	180DA0141	–	–	–
9/64	.141	–	–	–	–	100DA0141	100DAC0141	–	–	–	–
5/32	.156	300DA0156	300DAC0156	200DA0156	200DAC0156	100DA0156	100DAC0156	180DA0156	–	–	–
11/64	.172	300DA0172	300DAC0172	200DA0172	200DAC0172	100DA0172	100DAC0172	180DA0172	–	–	–
3/16	.188	300DA0188	300DAC0188	200DA0188	200DAC0188	100DA0188	100DAC0188	180DA0188	–	–	–
13/64	.203	300DA0203	300DAC0203	200DA0203	–	100DA0203	100DAC0203	180DA0203	–	–	–
7/32	.219	300DA0219	300DAC0219	200DA0219	–	100DA0219	100DAC0219	180DA0219	–	–	–
15/64	.234	300DA0234	300DAC0234	200DA0234	200DAC0234	100DA0234	100DAC0234	180DA0234	–	–	–
1/4	.250	300DA0250	300DAC0250	200DA0250	200DAC0250	100DA0250	100DAC0250	180DA0250	180DAC0250	–	–
17/64	.266	–	–	200DA0266	200DAC0266	100DA0266	100DAC0266	180DA0266	180DAC0266	–	–
9/32	.281	–	–	200DA0281	200DAC0281	100DA0281	100DAC0281	180DA0281	180DAC0281	–	–
19/64	.297	–	–	200DA0297	–	100DA0297	100DAC0297	180DA0297	180DAC0297	–	–
5/16	.312	–	–	–	–	100DA0312	100DAC0312	–	–	–	–
5/16	.313	–	–	200DA0312	200DAC0312	–	–	180DA0312	180DAC0312	–	–
21/64	.328	–	–	200DA0328	200DAC0328	100DA0328	100DAC0328	180DA0328	180DAC0328	–	–
11/32	.344	–	–	200DA0344	200DAC0344	100DA0344	100DAC0344	180DA0344	180DAC0344	–	–
23/64	.359	–	–	200DA0359	–	100DA0359	100DAC0359	180DA0359	180DAC0359	–	–
3/8	.375	–	–	200DA0375	200DAC0375	100DA0375	100DAC0375	–	180DAC0375	–	–
3/8	.375	–	–	–	–	–	–	–	–	180DANP0375	.484
25/64	.391	–	–	200DA0391	200DAC0391	100DA0391	100DAC0391	180DA0391	180DAC0391	–	–
13/32	.406	–	–	–	–	100DA0406	100DAC0406	180DA0406	180DAC0406	–	–
27/64	.422	–	–	–	–	100DA0422	100DAC0422	180DA0422	180DAC0422	–	–
7/16	.438	–	–	–	–	100DA0438	100DAC0438	180DA0438	180DAC0438	–	–
29/64	.453	–	–	–	–	100DA0453	100DAC0453	180DA0453	180DAC0453	–	–
15/32	.469	–	–	–	–	100DA0469	100DAC0469	180DA0469	180DAC0469	–	–
31/64	.484	–	–	–	–	100DA0484	100DAC0484	180DA0484	180DAC0484	–	–
1/2	.500	–	–	–	–	100DA0500	100DAC0500	180DA0500	180DAC0500	–	–
1/2	.500	–	–	–	–	–	–	–	–	180DANP0500	.484
33/64	.516	–	–	–	–	100DA0516	100DAC0516	180DA0516	180DAC0516	–	–
17/32	.531	–	–	–	–	100DA0531	100DAC0531	180DA0531	180DAC0531	–	–
35/64	.547	–	–	–	–	100DA0547	100DAC0547	180DA0547	180DAC0547	–	–
9/16	.562	–	–	–	–	100DA0562	100DAC0562	–	–	–	–
9/16	.563	–	–	–	–	–	–	180DA0562	180DAC0562	–	–
37/64	.578	–	–	–	–	–	–	180DA0578	180DAC0578	–	–
19/32	.594	–	–	–	–	–	–	180DA0594	180DAC0594	–	–
39/64	.609	–	–	–	–	–	–	180DA0609	180DAC0609	–	–
5/8	.625	–	–	–	–	–	–	180DA0625	180DAC0625	–	–
5/8	.625	–	–	–	–	–	–	–	–	180DANP0625	.633
41/64	.641	–	–	–	–	–	–	180DA0641	180DAC0641	–	–
21/32	.656	–	–	–	–	–	–	180DA0656	180DAC0656	–	–
43/64	.672	–	–	–	–	–	–	180DA0672	180DAC0672	–	–

Collets and Sleeves

(continued)

Collets and Sleeves

DA Double-Angle Standard Collets



(DA Double-Angle Standard Collets continued)

D1	collet capacity max inch	300DA standard D2 = .375 L = 1.000	300DA standard – coolant D2 = .375 L = 1.000	200DA standard D2 = .539 L = 1.188	200DA standard – coolant D2 = .539 L = 1.188	100DA standard D2 = .769 L = 1.438	100DA standard – coolant D2 = .769 L = 1.438	180DA standard D2 = 1.035 L = 1.625	180DA standard – coolant D2 = 1.035 L = 1.625	180DA standard – non-pullout D2 = 1.035 L = 1.625	LWP
11/16	.688	–	–	–	–	–	–	180DA0688	180DAC0688	–	–
45/64	.703	–	–	–	–	–	–	180DA0703	180DAC0703	–	–
23/32	.719	–	–	–	–	–	–	180DA0719	180DAC0719	–	–
47/64	.734	–	–	–	–	–	–	180DA0734	180DAC0734	–	–
3/4	.750	–	–	–	–	–	–	–	–	180DANP0750	.664
3/4	.750	–	–	–	–	–	–	180DA0750	180DAC0750	–	–



- An economical way to purchase a set of collets.



ERICKSON

■ DA Collet Set • Metric

order number	catalog number	series	quantity	dimensional range	incremental division
1293409	000DAS000M	DA000	13	1mm - 4mm	.25
1297410	300DAS000M	DA300	11	1mm - 6mm	.5
1296078	200DAS000M	DA200	19	1mm - 10mm	.5
1294736	100DAS000M	DA100	24	2,5mm - 14mm	.5
1191011	180DAS000M	DA180	35	3mm - 20mm	.5

■ DA Collet Set • Inch

order number	catalog number	series	quantity	dimensional range	incremental division
1289026	S303SET	DA300	8	3/64 - 1/4	1/32 (3/32-1/4) + 3/64 & 5/64
1289027	S304SET	DA300	9	1/8 - 1/4	1/64
1289028	S305SET	DA300	5	1/8 - 1/4	1/32
1288983	S203SET	DA200	9	1/8 - 3/8	1/32
1288984	S204SET	DA200	17	1/8 - 3/8	1/64
1288923	S103SET	DA100	11	1/4 - 9/16	1/32
1288925	S104SET	DA100	21	1/4 - 9/16	1/64
1288963	S183SET	DA180	17	1/4 - 3/4	1/32
1288964	S184SET	DA180	33	1/4 - 3/4	1/64

WIN WITH WIDIA™



WIDIA™ M1200 Mini • One Series Meets Every Face Milling Need

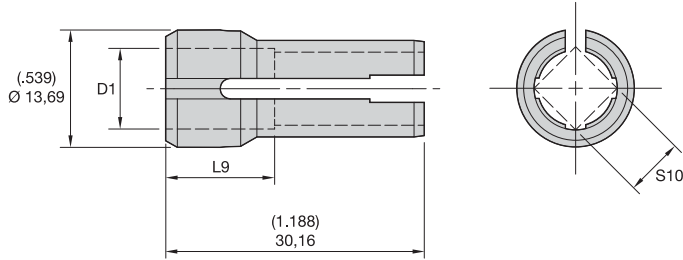
For consistent performance, look no further than the WIDIA M1200 Mini. This easy-to-use product ensures great tool life, reduced machining time, and maximum productivity.

- Low cost per edge and high productivity.
- 25% lower cutting forces due to soft cutting action.
- Up to 30% increased Metal Removal Rates (MRR).
- M1200 Mini 15°, 45°, and 60° lead.
- WIDIA premium milling grades.
- Up to 35% better tool life from light to heavy machining.
- Up to 40% shorter machining cycle time.

To learn more about our innovations, contact your local Authorized Distributor or visit www.widia.com.

WIDIA
VICTORY
Win with WIDIA™

- Provides positive retention for tapping applications.
- Design of slots in back of collet acts as a drive for the tap square.
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.



ERICKSON™

■ DA-J Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	1274924	JTC025021M	J	2,5	2,1	13,0
M3 & M5	1274926	JTC035027M	J	3,5	2,7	13,0
M4 & M6	1274928	JTC045034M	J	4,5	3,4	13,0
M5 & M6 & M7 & M8	1274931	JTC060049M	J	6,0	4,9	13,0
M10	1274932	JTC070055M	J	7,0	5,5	13,0
M8 & M10 & M11	1228732	JTC080063M	J	8,1	6,3	13,0

■ DA-J Tap Collet • Metric ISO

tap size	order number	catalog number	collet series	D1	S10	L9
M2,5 & M4	1274925	JTC028021M	J	2,8	2,1	13,0
M2,2 & M2,5	1228728	JTC028022M	J	2,8	2,2	13,0
M3 & M4	1228729	JTC032025M	J	3,2	2,5	13,0
M3,5 & M4,5	1274927	JTC036028M	J	3,6	2,8	13,0
M4 & M5	1228730	JTC040032M	J	4,0	3,2	13,0
M4,5 & M6	1274929	JTC045036M	J	4,5	3,6	13,0
12UNC/UNF	1274930	JTC056045M	J	5,6	4,5	—
M7	1274933	JTC071056M	J	7,1	5,6	13,0
M8 & M10 & M11	1228732	JTC080063M	J	8,1	6,3	13,0
M9 & M12	1228733	JTC090071M	J	9,0	7,1	13,0

■ DA-J Tap Collet • Inch/Metric ANSI

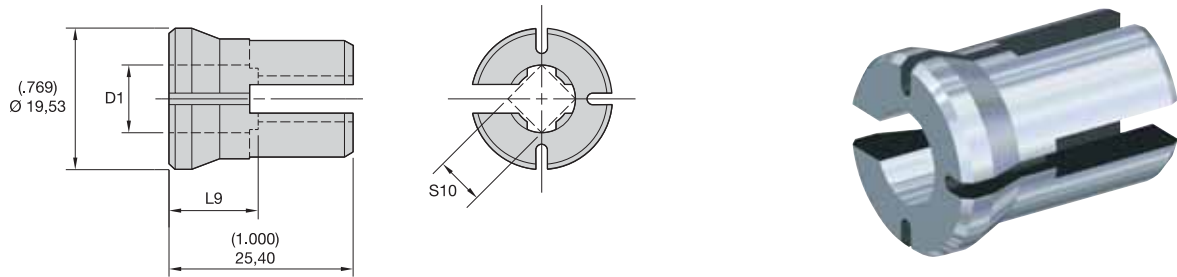
tap size		order number	catalog number	collet series	D1	S10	L9
mm	in						
M3 & M3,15 & M3,5	0-#6 & 1/8	1016411	JTC6	J	.141	.110	.500
M4	8 & 5/32	1016464	JTC8	J	.168	.131	.500
M4,5 & M5	10 & 3/16	1016467	JTC10	J	.194	.152	.500
—	12 & 7/32	1016470	JTC12	J	.220	.165	.500
M6 & M6,3	14 & 1/4	1016473	JTC025	J	.255	.191	.500
M7 & M8	5/16	1016529	JTC031	J	.318	.238	.500
—	7/16	1016532	JTC043	J	.323	.242	.500
M12 & M12,5	1/2	1016585	JTC050	J	.367	.275	.500
M10	3/8	1016589	JTC037	J	.381	.286	.500

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet. Full length of the gripping bore must be maintained to achieve maximum accuracy and safety. Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers. Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

DA-K Series Double-Angle Solid Tap Collets

- Provides positive drive for tapping applications.
- Design of slots in back of collet acts as a drive for the tap square.
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.



ERICKSON™

■ DA-K Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	1280271	KTC025021M	K	2,5	2,1	13,0
M3 & M5	1280273	KTC035027M	K	3,5	2,7	13,0
M4 & M6	1280274	KTC045034M	K	4,5	3,4	13,0
M5 & M6 & M7 & M8	1280275	KTC060049M	K	6,0	4,9	13,0
M10	1280277	KTC070055M	K	7,0	5,5	13,0
M10	1192315	KTC100080M	K	10,0	8,0	13,0
M14	1280279	KTC110090M	K	11,0	9,0	13,0
M16	1280280	KTC120090M	K	12,0	9,0	13,0

■ DA-K Tap Collet • Metric ISO

tap size	order number	catalog number	collet series	D1	S10	L9
M2.5 & M4	1280272	KTC028021M	K	2,8	2,1	13,0
M3.5 & 4.5	1192306	KTC036028M	K	3,6	2,8	13,0
M4 & M5	1192307	KTC040032M	K	4,0	3,2	13,0
M4.5 & M6	1192308	KTC045036M	K	4,5	3,6	13,0
M5	1192309	KTC050040M	K	5,0	4,0	13,0
M7	1192312	KTC071056M	K	7,1	5,6	13,0
M8 & M10 & M11	1192313	KTC080063M	K	8,0	6,3	13,0
M9 & M12	1192314	KTC090071M	K	9,0	7,1	13,0
M14	1192316	KTC112090M	K	11,2	9,0	13,0

(continued)

(DA-K Series Double-Angle Solid Tap Collets continued)

■ DA-K Tap Collet • Inch/Metric ANSI

tap size		order number	catalog number	collet series	D1	S10	L9
mm	in						
M3 & M3,15 & M3,5	0-#6 & 1/8	1016412	KTC6	K	.141	.110	.480
M4	8 & 5/32	1016465	KTC8	K	.168	.131	.480
M4,5 & M5	10 & 3/16	1016468	KTC10	K	.194	.152	.480
—	12 & 7/32	1016471	KTC12	K	.220	.165	.480
M6 & M6,3	14 & 1/4	1016524	KTC025	K	.255	.191	.480
M7 & M8	5/16	1016530	KTC031	K	.318	.238	.480
—	7/16	1016533	KTC043	K	.323	.242	.480
M12 & M12,5	1/2	1016586	KTC050	K	.367	.275	.480
M10	3/8	1016590	KTC037	K	.381	.286	.480
M14	9/16	1016592	KTC056	K	.429	.322	.480

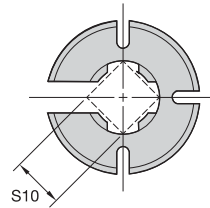
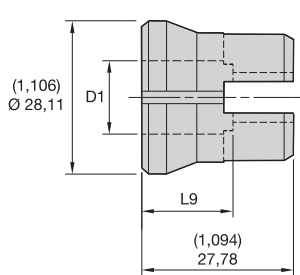
NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
 Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

Collets and Sleeves

DA-L Series Double-Angle Solid Tap Collets



- Provides positive drive for tapping applications.
- Design of slots in back of collet acts as a drive for the tap square.
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.



ERICKSON™

■ DA-L Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M5 & M6 & M7 & M8	1192328	LTC060049M	L	6,0	4,9	15,0
M10	1109575	LTC070055M	L	7,0	5,5	15,0
M10	1117803	LTC100080M	L	10,0	8,0	15,0
M14	1281835	LTC110090M	L	11,0	9,0	15,0
M16	1281837	LTC120090M	L	12,0	9,0	15,0
M18	1281838	LTC140110M	L	14,0	11,0	15,0
M20	1281839	LTC160120M	L	16,0	12,0	15,0
M22 & M24	1109574	LTC180145M	L	18,0	14,5	15,0

■ DA-L Tap Collet • Metric ISO

tap size	order number	catalog number	collet series	D1	S10	L9
—	1192329	LTC063050M	L	6,3	4,9	15,0
M7	1192330	LTC071056M	L	7,1	5,6	15,0
M8 & M10 & M11	1117802	LTC080063M	L	8,0	6,3	15,0
M9 & M12	1093758	LTC090071M	L	9,0	7,1	15,0
(1/4BSPF)	1192331	LTC109082M	L	10,9	8,2	—
(1/8NPT) (ANSI)	1192332	LTC111085M	L	11,1	8,5	—
M14	1281836	LTC112090M	L	11,2	9,0	15,0
M16 (3/8BSP)	1192333	LTC125100M	L	12,5	10,0	15,0
M18 & M20	1192335	LTC140112M	L	14,0	11,2	15,0
(1/4NPT) (ANSI)	1192336	LTC143107M	L	14,3	10,7	—
M22	1192337	LTC160125M	L	16,0	12,5	15,0
M24	1192338	LTC180140M	L	18,0	14,0	15,0

(continued)

(DA-L Series Double-Angle Solid Tap Collets continued)

■ DA-L Tap Collet • Inch/Metric ANSI

tap size		order number	catalog number	collet series	D1	S10	L9
mm	in						
M3 & M3,15 & M3,5	0-#6 & 1/8	1016413	LTC6	L	.141	.110	.560
M4	8 & 5/32	1016466	LTC8	L	.168	.131	.560
M4,5 & M5	10 & 3/16	1016469	LTC10	L	.194	.152	.560
—	12 & 7/32	1016472	LTC12	L	.220	.165	.560
M6 & M6,3	14 & 1/4	1016525	LTC025	L	.255	.191	.560
M7 & M8	5/16	1016531	LTC031	L	.318	.238	.560
—	7/16	1016584	LTC043	L	.323	.242	.560
M12 & M12,5	1/2	1016587	LTC050	L	.367	.275	.560
M10	3/8	1016591	LTC037	L	.381	.286	.560
M14	9/16	1016593	LTC056	L	.429	.322	.560
M16	5/8	1016658	LTC062	L	.480	.360	.560
M18	11/16	1016660	LTC069	L	.542	.406	.560
—	3/4	1016663	LTC075	L	.590	.442	.560
M20	13/16	1016705	LTC081	L	.652	.489	.560
M22	7/8	1016708	LTC087	L	.697	.523	.560

NOTE: Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
 Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
 Never try to stretch the collets by clamping oversized cutting tools.

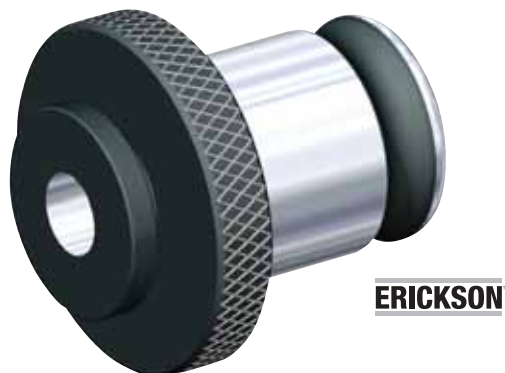
Erickson™ RC Rapid Quick-Change Tap Adapters • Tapping

Erickson RC Rapid Quick-Change Tap Adapters are convenient for hand changes with taps within seconds. No wrenches or locknuts are required. For this positive drive tap adapter, simply hold the tap in place with internal locking balls and drive on the tap square.

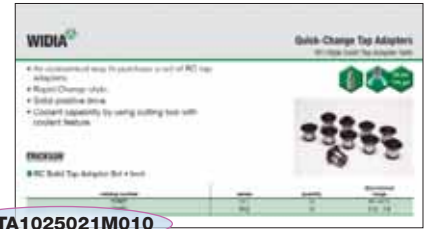


RC

- Compact Rapid Change by hand design.
- Solid positive drive.
- Coolant through the tap design.



- Rapid-change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.
- For taps with DIN, ISO, and ANSI specifications.



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Collets and Sleeves

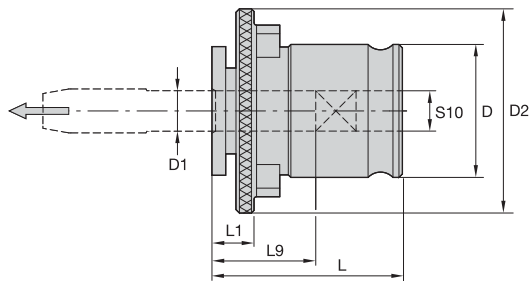


Quick-Change Tap Adapters

RC-Style Solid Tap Adapters



- Rapid Change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.
- For taps with DIN, ISO, and ANSI specifications.



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RC Solid Tap Adapter • Metric DIN

tap size DIN	RC1	RC2	RC3	D1	S10
	D = 19mm D2 = 30mm L = 28mm L1 = 7mm L9 = 17mm	D = 31mm D2 = 48mm L = 46mm L1 = 11mm L9 = 30mm	D = 48mm D2 = 70mm L = 70mm L1 = 14mm L9 = 44mm		
M1 & M1.8 & M3 & M3.5	RC1TA025021M010	—	—	2,5	2,1
M2.5 & M4	RC1TA028021M020	—	—	2,8	2,1
M3 & M5	RC1TA035027M030	—	—	3,5	2,7
M3.5	RC1TA040030M035	—	—	4,0	3,0
M4 & M6	RC1TA045034M040	—	—	4,5	3,4
M4	—	RC2TA045034M040	—	4,5	3,4
M5 & M6 & M7 & M8	RC1TA060049M050	RC2TA060049M050	—	6,0	4,9
M10	RC1TA070055M100	RC2TA070055M100	—	7,0	5,5
M8	RC1TA080062M080	RC2TA080062M080	—	8,0	6,2
M12	RC1TA090070M120	RC2TA090070M120	—	9,0	7,0
M10	RC1TA100080M100	RC2TA100080M100	—	10,0	8,0
M14	RC1TA110090M140	RC2TA110090M140	RC3TA110090M140	11,0	9,0
M16	—	—	RC3TA120090M160	12,0	9,0
M16	—	RC2TA120090M160	—	12,9	9,0
M18	—	RC2TA140110M180	RC3TA140110M180	14,0	11,0
M20	—	RC2TA160120M200	RC3TA160120M200	16,0	12,0
M22 & M24	—	RC2TA180145M220	—	18,0	4,5
—	—	—	RC3TA180140M240	18,0	14,0
M22 & M24	—	—	RC3TA180145M240	18,0	14,5
M27	—	—	RC3TA200160M300	20,0	16,0
M30	—	—	RC3TA220180M300	22,0	18,0
M33	—	—	RC3TA250200M360	25,0	20,0
M36	—	—	RC3TA280220M360	28,0	22,0

(continued)

Quick-Change Tap Adapters

(RC-Style Solid Tap Adapters continued)

■ RC Solid Tap Adapter • Metric ISO

tap size	RC1	RC2	RC3	D1	S10
	D = 19mm D2 = 30mm L = 28mm L1 = 7mm L9 = 17mm	D = 31mm D2 = 48mm L = 46mm L1 = 11mm L9 = 30mm	D = 48mm D2 = 70mm L = 70mm L1 = 14mm L9 = 44mm		
M3	RC1TA023018M030	—	—	2,24	1,80
M2.2 & M2.5	RC1TA028023M025	—	—	2,80	2,24
M3 & M4	RC1TA032025M030	—	—	3,15	2,50
M3.5 & M4.5	RC1TA036028M035	—	—	3,55	2,80
M4 & M5	RC1TA040032M040	—	—	4,00	3,15
M4.5 & M6	RC1TA045036M060	RC2TA045036M060	—	4,50	3,55
M5	RC1TA050040M050	RC2TA050040M050	—	5,00	4,00
—	RC1TA056045M000	—	—	5,60	4,50
M6 & M8	RC1TA063050M060	RC2TA063050M060	—	6,30	5,00
M7	RC1TA071056M070	RC2TA071056M070	—	7,10	5,60
M8 & M10 & M11	RC1TA080063M080	RC2TA080063M080	—	8,00	6,30
M9 & M12	RC1TA090071M090	—	—	9,00	7,10
M9 & M12	—	RC2TA090071M090	—	9,00	7,10
M14	RC1TA112090M140	RC2TA112090M140	RC3TA112090M140	11,20	9,00
M16	—	RC2TA125100M160	—	12,50	10,00
M18 & M20	—	RC2TA140112M180	—	14,00	11,20
M22	—	RC2TA160125M220	RC3TA160125M220	16,00	12,50
M24	—	RC2TA180140M240	—	18,00	14,00
M33	—	—	RC3TA224180M330	22,40	18,00

(continued)

Quick-Change Tap Adapters

RC-Style Solid Tap Adapters



(RC-Style Solid Tap Adapters continued)

■ RC Solid Tap Adapter • Inch/Metric ANSI

tap size		RC1 D = .750 D2 = 1.180 L = 1.100 L1 = .280	RC2 D = 1.220 D2 = 1.890 L = 1.810 L1 = .430	RC3 D = 1.890 D2 = 2.760 L = 2.760 L1 = .550	D1	S10
mm	in					
M3 & M3.18 & M3.5	#0 - #6 UNC/UNF	T11006	—	—	.141	.110
M4	#8 UNC/UNF	T11007	—	—	.168	.131
M4.5 & M5	#10 UNC/UNF	T11008	—	—	.194	.152
—	#12 UNC/UNF	T11009	—	—	.220	.165
M6 & M6.3	1/4 UNC/UNF	T11010	—	—	.255	.191
—	—	T110166	—	—	.313	.234
M7 & M8	5/16 UNC/UNF	T11012	T21018	—	.318	.238
—	7/16 UNC/UNF	T11014	T21020	—	.323	.242
M12 & M12.5	1/2 UNC/UNF	T11015	T21021	—	.367	.275
M10	3/8 UNC/UNF	T11013	T21019	—	.381	.286
M14	9/16 UNC/UNF	T110155	T21022	—	.429	.322
—	—	T110177	—	—	.438	.328
M16	5/8 UNC/UNF	—	T21023	—	.480	.360
M18	11/16 UNC/UNF	—	T21024	—	.542	.406
—	—	—	T210288	—	.563	.421
—	3/4 UNC/UNF	—	T21025	—	.590	.442
M20	13/16 UNC/UNF	—	T21026	T31031	.652	.489
—	—	—	T210300	T310387	.688	.515
M22	7/8 UNC/UNF	—	T21027	T31032	.697	.523
—	—	—	T210299	—	.700	.531
M24	15/16 UNC/UNF	—	—	T31033	.760	.570
M25	1 UNC/UNF	—	—	T31034	.800	.600
M27	1 1/8 UNC/UNF	—	—	T31035	.896	.672
—	—	—	—	T310388	.906	.679
—	1 1/4 UNC/UNF	—	—	T31036	1.021	.766
M30	1 3/8 UNC/UNF	—	—	T31037	1.108	.831
—	—	—	—	T310389	1.125	.843

Quick-Change Tap Adapters

- An economical way to purchase a set of RC tap adapters.
- Rapid Change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.



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■ RC Solid Tap Adapter Set • Inch

catalog number	series	quantity	dimensional range
T1SET	RC1	10	#0 - 9/16
T2SET	RC2	10	5/16 - 7/8





Shrink Fit Axial Adjustment Gages	J2-J3
TG Balanceable Round Locknuts	J3
Balance Screw Sets	J4
HC Hydraulic Chuck Test Pins	J4
HC Hydraulic Chuck Cleaning Brushes	J5
Collet Extractors TG	J5
TG Round Flush-Face Locknuts	J6
Coolant Disk Assemblies	J7
TG Standard Round and Hex Locknuts	J8
ER Standard Short and Slim Locknuts	J9
ER Slim Coolant and Hex Locknuts	J10
ER Coolant Hex and Standard Round Locknuts	J11
ER Coolant Round Locknuts	J12
Coolant Locknut Sealing Disks and Disk Sets	J13-J19
ER16	J13
ER20	J14
ER25	J15
ER32	J16-J17
ER40	J18-J19
Stop Screws	J20
Coolant and Blank Caps	J22
Extended Caps	J23
Shell Mill Adapter Lock Screws	J24-J25
Shell Mill Coolant Lock Screws	J26
Tightening Fixtures	J26-J29
KM Vise Mounts	J26
KM4X and HSK Vise Mounts	J27
HSK Universal Mounts and Sleeves	J28
7/24 Steep Taper Vises and Universal Mounts	J29
P-KM Spindle and HSK Plugs	J30
KM, HSK, and 7/24 Steep Taper Spindle Wipers	J31
HSK Coolant Supply Unit and Wrenches	J32
Retention Knobs	J33-J38
Socket Wrenches	J39
KM Manual Torque Wrenches	J40
KM-LOC II and KM-LOC Wrenches	J40
T-Handle Hex Wrench Sets	J41
Universal Bit Drivers	J42
Driver Bits	J42
Open-Ended Wrenches	J44
Pin Spanner and Hook Spanner Wrenches	J45



Shrink Fit Axial Adjustment Gages

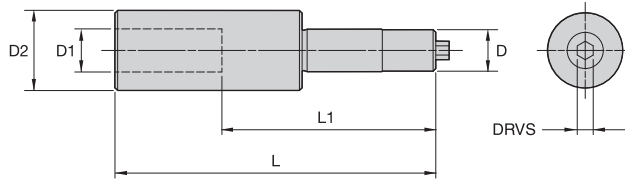
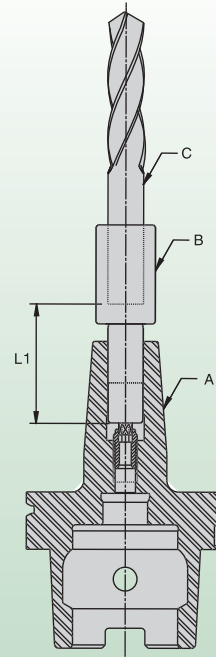
Cutting tool length adjustment is performed using a special axial adjusting gage (B) before shrinking the cutting tool into the toolholder.

An axial adjustment gage is placed in the toolholder (A) along with the cutting tool (C). Length difference of the setting gage (L1) is calculated into the required tool assembly length.

The whole assembly then can be placed into a length presetter for adjustment.

Rotating the gage moves the axial stop screw and presets the assembled tool to the required length. Remove the gage; the cutting tool can then be shrunk into the toolholder.

In some cases, there are two different gage options for the D bore size. The only difference is the DRVS hex drive size to accommodate a recent DIN standard change.



Accessories

ERICKSON™

■ TTAAG • Metric

order number	catalog number	D	D1	D2	L	L1	DRVS
2441761	TTAAG03M	3	3	20	50	40	3mm
2456185	TTAAG04M	4	4	20	52	40	4mm
2456186	TTAAG05M	5	5	20	55	40	3mm
1801298	TTAAG06M	6	6	25	110	80	2,5mm
1775603	TTAAG08M	8	8	25	112	80	3mm
1775604	TTAAG10M	10	10	30	117	80	4mm
1775605	TTAAG12M	12	12	30	117	80	4mm
3110267	TTAAG12MX1	12	12	30	117	80	5mm
1775606	TTAAG14M	14	14	30	117	80	4mm
3110268	TTAAG14MX1	14	14	30	117	80	5mm
1775608	TTAAG16M	16	16	30	120	80	6mm
1775609	TTAAG18M	18	16	30	120	80	6mm
1775610	TTAAG20M	20	20	40	120	80	8mm
1784105	TTAAG25M	25	25	40	124	80	8mm
1775611	TTAAG32M	32	32	40	124	80	8mm

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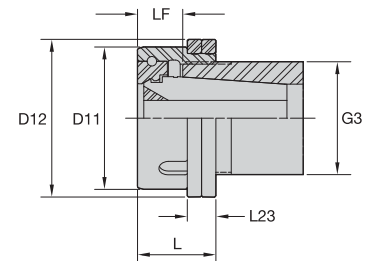
(TTAAG continued)



■ TTAAG • Inch

order number	catalog number	D	D1	D2	L	L1	DRVS
1765666	TTAAG025	1/4	.250	.984	4.33	3.15	2,5mm
1765669	TTAAG031	5/16	.313	.984	4.41	3.15	3mm
1765670	TTAAG038	3/8	.375	1.181	4.61	3.15	4mm
1765671	TTAAG044	7/16	.438	1.181	4.41	3.15	4mm
3110269	TTAAG044X1	7/16	.438	1.181	4.41	3.15	5mm
1765702	TTAAG050	1/2	.500	1.181	4.61	3.15	4mm
3110270	TTAAG050X1	1/2	.500	1.181	4.61	3.15	5mm
1765703	TTAAG056	9/16	.563	1.181	4.61	3.15	4mm
3110271	TTAAG056X1	9/16	.563	1.181	4.61	3.15	5mm
1765704	TTAAG062	5/8	.625	1.181	4.72	3.15	6mm
1765705	TTAAG068	11/16	.688	1.181	4.72	3.15	6mm
1765707	TTAAG075	3/4	.750	1.575	4.72	3.15	8mm
1765708	TTAAG088	7/8	.875	1.575	4.72	3.15	8mm
1765709	TTAAG100	1	1.000	1.575	4.88	3.15	8mm
1765710	TTAAG125	1 1/4	1.250	1.850	4.88	3.15	8mm

- Balanceable and interchangeable locknuts can be ordered separately as an option to the original standard locknut supplied on collet chucks.



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■ TG Locknut Round – Balanceable

order number	catalog number	D11		D12		L		L23		LF		G3	wrench size	Nm	ft. lbs.	balance ring set
		mm	in	mm	in	mm	in	mm	in	mm	in					
1020465	HPVLNA050G	38,0	1.50	42,5	1.67	20,0	.79	10,05	.40	9,7	.38	15/16-20 UNEF	HSW34M	81	60	SHVBR0325M
1091592	HPVLNA075G	50,0	1.97	56,5	2.22	25,0	.98	12,05	.47	14,4	.57	1 1/2-12 ACME	HSW45M	150	110	SHVBR0445M
1020466	HPVLNA100G	60,0	2.36	66,5	2.62	33,0	1.30	12,05	.47	19,1	.75	1 7/8-12 ACME	HSW58M	203	150	SHVBR0545M

Note: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten according to torque recommendations. Collet chuck technical section, see page K74. Locknut wrench must be ordered separately. Balance rings are supplied with locknut and adjustment directions.

Accessories

Balance Screw Sets • HC Hydraulic Chuck Test Pins

- Standard balance screw set is used on HPMC bearing milling chuck.
- Total number of screws in each set is 110.
- All are M6 screws.
- Eleven different lengths from 3,5–8mm.
- Eleven different weights, 10 of each, varying between 0,047–1,138 grams.
- Set comes complete in a divider box and screwdriver.
- For high-performance milling choices.

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■ Balance Screw Set

POS. 1 M6X3,5 M: 0,478g 3,5	POS. 2 M6X4,0 M: 0,524g 4	POS. 3 M6X5,0 M: 0,640g 5	POS. 4 M6X5,5 M: 0,728g 5,5
POS. 5 M6X5,75 M: 0,780g 5,75	POS. 6 M6X6,0 M: 0,808g 6	POS. 7 M6X6,25 M: 0,832g 6,25	POS. 8 M6X6,5 M: 0,894g 6,5
POS. 9 M6X7,0 M: 0,978g 7	POS. 10 M6X7,5 M: 1,066g 7,5	POS. 11 M6X8,0 M: 1,138g 8	

order number	catalog number
3367391	HPMCBALSCREWSET

- It is important to periodically check the clamping function on a hydraulic chuck with a test pin for clamping clarity.
- The clamping grip can be checked quickly and easily by placing the correct test pin in the chuck bore and the turning the clamp screw to the limit stop. The chuck is functioning correctly if the testing pin cannot be moved by hand.



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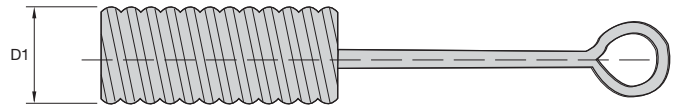
■ HC Test Pin • Metric

order number	catalog number	D
1191037	280.200	6
1191039	280.202	10
1191040	280.203	12
1245409	280.204	14
1191041	280.205	16
1245410	280.206	18
1191042	280.207	20
1245411	280.208	25
1191043	280.209	32

■ HC Test Pin • Inch

order number	catalog number	D
1247566	280.262	3/8
1247570	280.264	1/2
1247572	280.266	5/8
1247575	280.268	3/4
1247577	280.269	1

- Hydraulic chucks are maintenance-free and deliver a long service life. A non-abrasive cleaning brush is recommended to help maintain the performance and accuracy of the clamping bore of the hydraulic chuck and reducing sleeves.

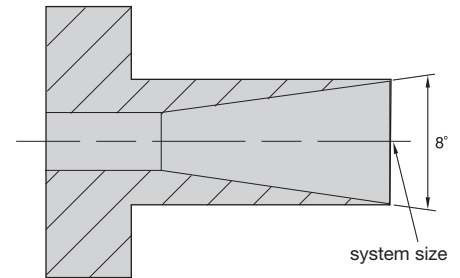


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■ Cleaning Brush

order number	catalog number	D1	
		mm	in
1138729	192.950	6	1/4
1138736	192.951	8	5/16
1138744	192.952	10	3/8
1138752	192.953	12	1/2
1138759	192.954	14	9/16
1138766	192.955	16	5/8
1138914	192.956	18	11/16
1138853	192.957	20	3/4
1138922	192.958	25	1
1138930	192.959	32	1 1/4

- Assists with collet extraction from locknut.



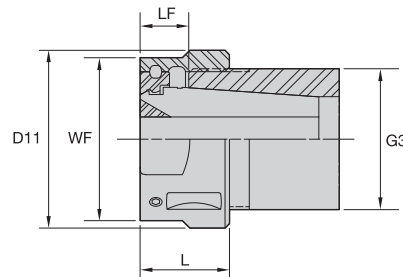
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■ TG • CE

order number	catalog number	system size
1106809	50TGCE	TG50
1106812	75TGCE	TG75
1106813	100TGCE	TG100
1106814	150TGCE	TG150

TG Round Flush-Face Locknuts

- TG flush mount, coolant-capable locknuts, and coolant disks/caps can be used on all standard WIDIA™ collet chucks to seal standard TG collets.
- Face is completely flush.
- Includes the WIDIA original ball bearing race design.
- External diameter is the same as existing global round TG locknut.
- Operated by a standard open-ended wrench or the original hook-style wrench.
- TG flush mount coolant capable locknuts and coolant disks/caps are interchangeable with existing designs.
- Utilizes standard TG collets.



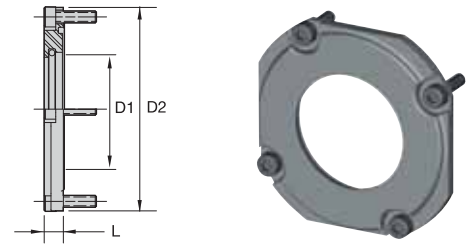
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■ TG Locknut • Round Flush Face

order number	catalog number	D11		L		LF		WF	G3	wrench size	Nm	ft. lbs.
		mm	in	mm	in	mm	in					
2980879	LNATGF050M	38	1.50	18,3	.72	10,6	.42	34	15/16-20 UNEF	HSW34M	81	60
2980880	LNATGF075M	50	1.97	23,4	.92	13,0	.51	46	1 1/2-12 ACME	HSW45M	150	110
2980881	LNATGF100M	60	2.36	30,2	1.19	16,4	.65	55	1 7/8-12 ACME	HSW58M	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.

- TG coolant disk cap assemblies are used in conjunction with the TG flush-style locknuts and collet chucks to seal standard TG collets.
- Utilizes the ER coolant disks.
- High-pressure coolant up to 150 bar (1,500 psi).
- Withstands most of today's coolants.
- Seals against chip packing and machined contaminants.



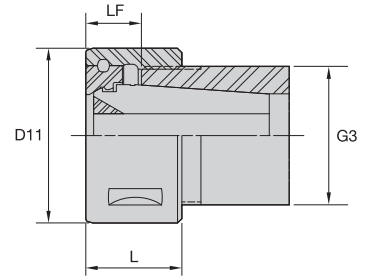
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■ TG Nut • Coolant Disk Assembly

order number	catalog number	D1		D2		L		lock screw	locknut reference	ER coolant disk reference	Nm	ft. lbs.
		mm	in	mm	in	mm	in					
2980882	TG050CDA	21,0	.827	40	1.6	5,7	.22	MS311	LNATGF050M	ER25	25	18
2980893	TG075CDA	27,0	1.063	50	2.0	5,7	.22	MS1488	LNATGF075M	ER32	25	18
2980894	TG100CDA	33,5	1.319	60	2.4	5,7	.22	MS1488	LNATGF100M	ER40	25	18

*NOTE: Tighten the four assembly screws to the recommended tightening torque.
 Assembly screws to locknuts are supplied with the appropriate wrench.
 ER coolant disks must be ordered separately; see page J13.
 Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to torque recommendations.
 Collet chuck technical section, see page K74.
 Locknut wrench must be ordered separately.*

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.

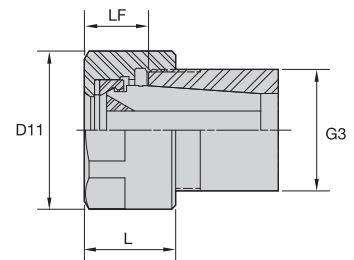


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■ TG Locknut • Round

order number	catalog number	D11		L		LF		G3	locknut wrench	Nm	ft. lbs.
		mm	in	mm	in	mm	in				
1013486	LNA075M	50,0	1.97	25,0	.98	14,4	.57	1 1/2-12 ACME	HSW45M	136	100
1013485	LNA100M	60,0	2.36	33,0	1.30	19,1	.75	1 7/8-12 ACME	HSW58M	203	150
1013484	LNA150M	85,0	3.35	37,0	1.46	18,0	.71	2 5/8-12 ACME	HSW80M	271	200
1020326	NPA150	88,3	3.48	34,9	1.38	18,6	.73	2 5/8-12 ACME	PSW350	271	200

NOTE: Locknut wrench must be ordered separately.



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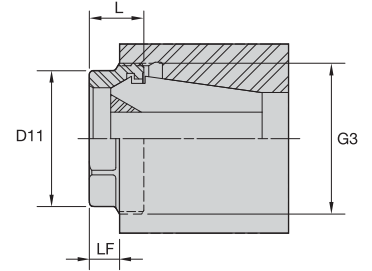
■ TG Locknut • Hex

order number	catalog number	D11		L		LF		G3	locknut wrench	WF	Nm	ft. lbs.
		mm	in	mm	in	mm	in					
1020290	NPA050	30,2	1.19	21,4	.84	14,6	.58	15/16-20 2B	OEW106	1 1/16	102	75
4134686	LN050M	34,0	1.34	19,0	.75	9,8	.38	15/16-20 UNEF	OEW30M	30mm	136	100
1020289	NPA075	53,2	2.09	28,4	1.12	19,7	.78	1 1/2-12 ACME	OEW188	1 7/8	136	100
1020331	NPA100	61,9	2.44	35,7	1.41	25,1	.99	1 7/8-12 ACME	OEW225	2 1/4	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.



- Standard and replaceable locknuts are supplied as the standard option with the original short-style collet chuck.



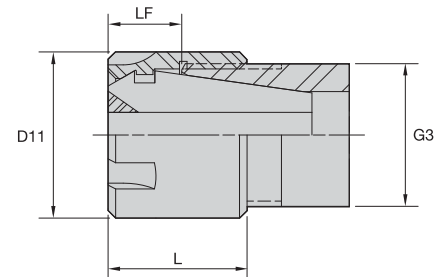
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■ ER Locknut • Short



order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	wrench size	Nm	ft. lbs.
			mm	in	mm	in	mm	in					
2978768	LNECSER32M	ER32	35,9	1.41	14,4	.57	8	.32	M40 x 1.5	OEW32M	32	136	100
2978769	LNECSER40M	ER40	46,0	1.81	16,0	.63	8	.32	M50 x 1.5	OEW168	1 11/16	176	130

NOTE: Locknut wrench must be ordered separately.



Accessories

ERICKSON

■ ER Locknut • Slim



order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (in. lbs.)	straight collet torque (in. lbs.)
			mm	in	mm	in	mm	in						
1024642	LER08M	ER08	12	.47	10,8	.43	6,1	.24	M10 X .75	ER08WEM	5	5	42	42
1024643	LER11M	ER11	16	.63	12,0	.47	7,5	.30	M13 X .75	ER11WEM	12	16	106	142
1016342	LER16M	ER16	22	.87	18,4	.72	11,5	.45	M19 X 1	ER16WEM	24	24	212	212
1799219	LER20M	ER20	28	1.10	19,0	.75	11,5	.45	M24 X 1	ER20WEM	28	28	248	248

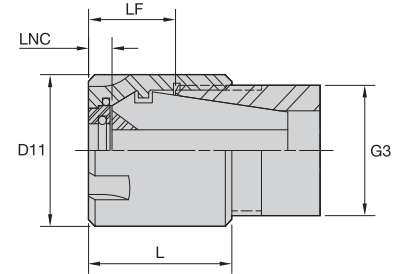
NOTE: Locknut wrench must be ordered separately.

Accessories

ER Slim Coolant Locknuts • Hex Locknuts



- Interchangeable with slim locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



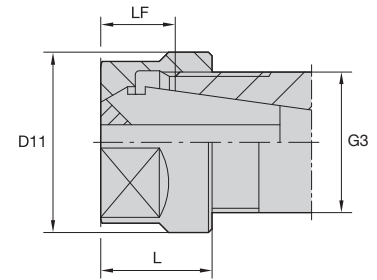
ERICKSON™

ER Locknut • Slim Coolant

order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	Nm	in. lbs.
			mm	in	mm	in	mm	in	mm	in				
2255307	LABER16M	ER16	22	.87	22	.87	4,5	.18	11,5	.45	M19 X 1	ER16WEM	24	212
2398953	LABER20M	ER20	28	1.10	24	.94	5,0	.20	13,0	.51	M24 X 1	ER20WEM	28	248

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



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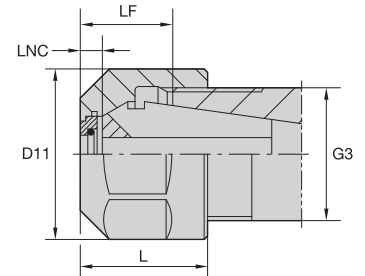
ER Locknut • Hex

order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	wrench size	Nm	ft. lbs.	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
			mm	in	mm	in	mm	in									
3062811	LNHSER16M	ER16	28,0	1.10	17,5	.69	10,5	.41	M22 X 1.5	OEW25M	25mm	56	42	40	56	30	42
3062812	LNHSER20M	ER20	34,0	1.34	19,0	.75	11,5	.45	M25 X 1.5	OEW30M	30mm	80	59	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

Accessories

- Interchangeable with standard locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



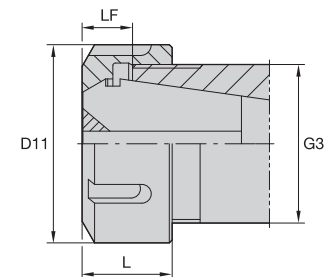
ERICKSON

■ ER Locknut Hex • Coolant

order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	wrench size	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
			mm	in	mm	in	mm	in	mm	in							
1854738	LNHABER16M	ER16	28,0	1.10	22,5	.89	5,0	.20	15,5	.61	M22 X 1.5	OEW25M	25mm	40	56	30	42
1859410	LNHABER20M	ER20	34,0	1.34	24,0	.94	5,0	.20	16,5	.65	M25 X 1.5	OEW30M	30mm	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



ERICKSON

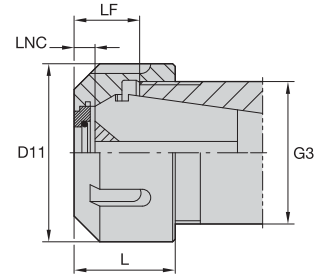
■ ER Locknut • Round

order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	Nm	ft. lbs.
			mm	in	mm	in	mm	in				
3063113	LNSER25M	ER25	42	1.65	20	.79	12	.47	M32 X 1.5	ER25WM	104	77
3063114	LNSER32M	ER32	50	1.97	23	.89	13	.51	M40 X 1.5	ER32WM	136	100
3063115	LNSER40M	ER40	63	2.48	26	1.00	15	.59	M50 X 1.5	ER40WM	176	130

NOTE: Locknut wrench must be ordered separately.

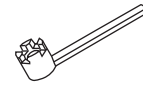
Accessories

- Interchangeable with standard locknuts; must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



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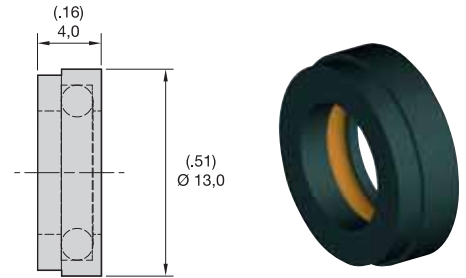
■ ER Locknut Round • Coolant



order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	Nm	ft. lbs.
			mm	in	mm	in	mm	in	mm	in				
1127154	LNABER25M	ER25	42	1.65	25,0	.98	5	.20	17	.67	M32 X 1.5	ER25WM	104	77
1128857	LNABER32M	ER32	50	1.97	27,5	1.08	5	.20	18	.71	M40 X 1.5	ER32WM	136	100
1125692	LNABER40M	ER40	63	2.48	30,5	1.20	5	.20	20	.79	M50 X 1.5	ER40WM	176	130

NOTE: Locknut wrench must be ordered separately.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized replaceable O-rings.

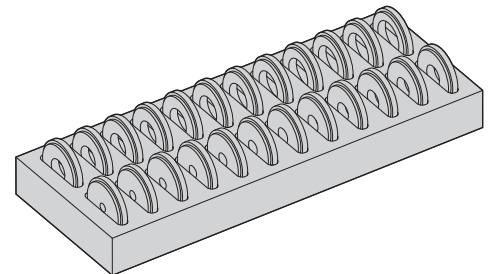


ERICKSON

■ ER16 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1128244	CDER16035M	ER16	3,0–3,5	.1181–.1387	1/8
1122128	CDER16040M	ER16	3,5–4,0	.1378–.1575	5/32
1125973	CDER16045M	ER16	4,0–4,5	.1575–.1772	–
1125741	CDER16050M	ER16	4,5–5,0	.1772–.1969	3/16
1260100	CDER16055M	ER16	5,0–5,5	.1969–.2165	7/32
1130781	CDER16060M	ER16	5,5–6,0	.2165–.2362	–
1260101	CDER16065M	ER16	6,0–6,5	.2362–.2559	1/4
1260102	CDER16070M	ER16	6,5–7,0	.2559–.2756	–
1260103	CDER16075M	ER16	7,0–7,5	.2756–.2953	9/32
1124948	CDER16080M	ER16	7,5–8,0	.3150–.3347	5/16
1254499	CDER16085M	ER16	8,0–8,5	.3150–.3347	–
1120977	CDER16090M	ER16	8,5–9,0	.3347–.3543	11/32
1260104	CDER16095M	ER16	9,0–9,5	.3543–.3740	3/8
1128201	CDER16100M	ER16	9,5–10,0	.3740–.3937	–

- An economical way to purchase a group of coolant disks.



ERICKSON

■ ER16 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1148501	CDER16000M	ER16	14	3,5mm–10mm	.5mm

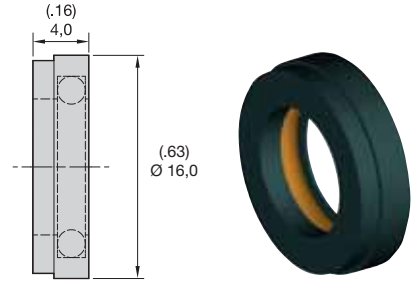
NOTE: ER coolant disk sets come complete with wooden protective tray.

Accessories

ER20 Coolant Locknut Sealing Disks • Disk Sets



- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.

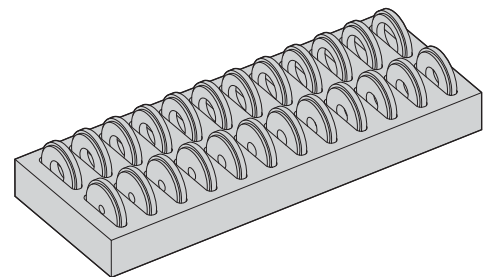


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■ ER20 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1882862	CDER20030M	ER20	2,5–3,0	.0984–.1181	–
2046541	CDER20035M	ER20	3,0–3,5	.1181–.1387	1/8
2046542	CDER20040M	ER20	3,5–4,0	.1378–.1575	5/32
1785844	CDER20045M	ER20	4,0–4,5	.1575–.1772	–
2046613	CDER20050M	ER20	4,5–5,0	.1772–.1969	3/16
2046614	CDER20055M	ER20	5,0–5,5	.1969–.2165	7/32
1600448	CDER20060M	ER20	5,5–6,0	.2165–.2362	–
2046615	CDER20065M	ER20	6,0–6,5	.2362–.2559	1/4
1821042	CDER20070M	ER20	6,5–7,0	.2559–.2756	–
2046616	CDER20075M	ER20	7,0–7,5	.2756–.2953	9/32
1568338	CDER20080M	ER20	7,5–8,0	.3150–.3347	5/16
2046617	CDER20085M	ER20	8,0–8,5	.3150–.3347	–
1567466	CDER20090M	ER20	8,5–9,0	.3347–.3543	11/32
2046618	CDER20095M	ER20	9,0–9,5	.3543–.3740	3/8
1747032	CDER20100M	ER20	9,5–10,0	.3740–.3937	–
2046619	CDER20105M	ER20	10,0–10,5	.3937–.4134	13/32
1923780	CDER20110M	ER20	10,5–11,0	.4314–.4330	–
2046620	CDER20115M	ER20	11,0–11,5	.4330–.4528	7/16
1883015	CDER20120M	ER20	11,5–12,0	.4528–.4724	15/32
2046621	CDER20125M	ER20	12,0–12,5	.4724–.4921	–
2046622	CDER20130M	ER20	12,5–13,0	.4921–.5118	1/2

- An economical way to purchase a group of coolant disks.



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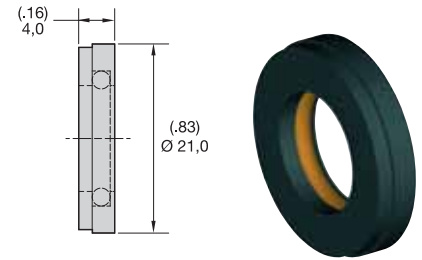
■ ER20 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1720848	CDER20000M	ER20	20	3,5mm–13mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.



- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



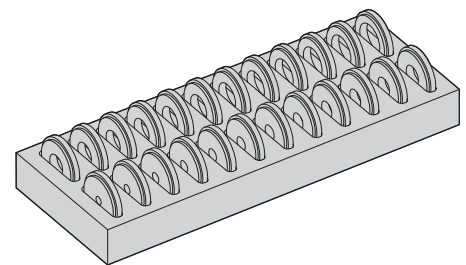
ERICKSON

■ ER25 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1820323	CDER25035M	ER25	3,0–3,5	.1181–.1387	1/8
1136043	CDER25040M	ER25	3,5–4,0	.1378–.1575	5/32
1260105	CDER25045M	ER25	4,0–4,5	.1575–.1772	–
1130194	CDER25050M	ER25	4,5–5,0	.1772–.1969	3/16
1260114	CDER25150M	ER25	4,5–5,0	.1772–.1969	3/16
1260115	CDER25155M	ER25	5,0–5,5	.1969–.2165	7/32
1260106	CDER25055M	ER25	5,0–5,5	.1969–.2165	7/32
1127146	CDER25060M	ER25	5,5–6,0	.2165–.2362	–
1260107	CDER25065M	ER25	6,0–6,5	.2263–.2559	1/4
1126670	CDER25070M	ER25	6,5–7,0	.2559–.2756	–
1260108	CDER25075M	ER25	7,0–7,5	.2756–.2953	9/32
1126599	CDER25080M	ER25	7,5–8,0	.3150–.3347	–
1126607	CDER25085M	ER25	8,0–8,5	.3150–.3347	–
1129478	CDER25090M	ER25	8,5–9,0	.3347–.3543	11/32
1260109	CDER25095M	ER25	9,0–9,5	.3543–.3740	3/8
1126613	CDER25100M	ER25	9,5–10,0	.3740–.3937	–
1124966	CDER25105M	ER25	10,0–10,5	.3937–.4134	13/32
1126677	CDER25110M	ER25	10,5–11,0	.4134–.4330	–
1260110	CDER25115M	ER25	11,0–11,5	.4330–.4528	7/16
1125474	CDER25120M	ER25	11,5–12,0	.4528–.4724	15/32
1260111	CDER25125M	ER25	12,0–12,5	.4724–.4921	–
1129141	CDER25130M	ER25	12,5–13,0	.4921–.5118	1/2
1260112	CDER25135M	ER25	13,0–13,5	.5118–.5315	17/32
1125481	CDER25140M	ER25	13,5–14,0	.5315–.5512	–
1260113	CDER25145M	ER25	14,0–14,5	.5512–.5709	9/16
1128486	CDER25160M	ER25	15,5–16,0	.6102–.6300	5/8

Accessories

- An economical way to purchase a group of coolant disks.



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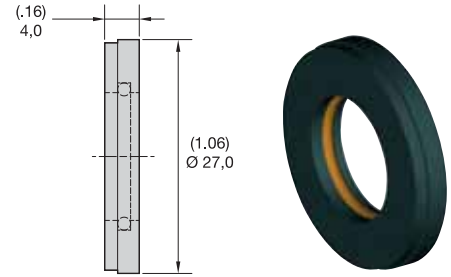
■ ER25 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1254501	CDER25000M	ER25	26	3,5mm–16mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

ER32 Coolant Locknut Sealing Disks

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



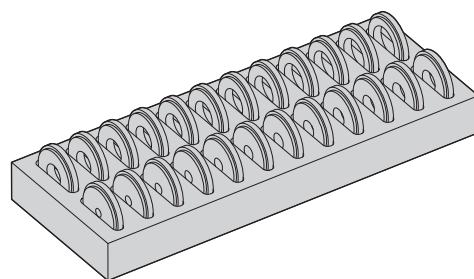
ERICKSON

■ ER32 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1120969	CDER32035M	ER32	3,0–3,5	.1181–.1387	1/8
1125347	CDER32040M	ER32	3,5–4,0	.1378–.1575	5/32
1260116	CDER32045M	ER32	4,0–4,5	.1575–.1772	–
1148555	CDER32050M	ER32	4,5–5,0	.1772–.1969	3/16
1260117	CDER32055M	ER32	5,0–5,5	.1969–.2165	7/32
1121104	CDER32060M	ER32	5,5–6,0	.2165–.2362	–
1120661	CDER32065M	ER32	6,0–6,5	.2362–.2559	1/4
1131561	CDER32070M	ER32	6,5–7,0	.2559–.2756	–
1260118	CDER32075M	ER32	7,0–7,5	.2756–.2953	9/32
1132831	CDER32080M	ER32	7,5–8,0	.3150–.3347	5/16
1260119	CDER32085M	ER32	8,0–8,5	.3150–.3347	–
1122258	CDER32090M	ER32	8,5–9,0	.3347–.3543	11/32
1260120	CDER32095M	ER32	9,0–9,5	.3543–.3740	3/8
1136052	CDER32100M	ER32	9,5–10,0	.3740–.3937	–
1260121	CDER32105M	ER32	10,0–10,5	.3937–.4134	13/32
1135241	CDER32110M	ER32	10,5–11,0	.4134–.4330	–
1260122	CDER32115M	ER32	11,0–11,5	.4330–.4528	7/16
1128840	CDER32120M	ER32	11,5–12,0	.4528–.4724	15/32
1125490	CDER32125M	ER32	12,0–12,5	.4724–.4921	–
1126728	CDER32130M	ER32	12,5–13,0	.4921–.5118	1/2
1260123	CDER32135M	ER32	13,0–13,5	.5118–.5315	17/32
1132848	CDER32140M	ER32	13,5–14,0	.5315–.5512	–
1127692	CDER32145M	ER32	14,0–14,5	.5512–.5709	9/16
1232472	CDER32150M	ER32	14,5–15,0	.5709–.5905	–
1260124	CDER32155M	ER32	15,0–15,5	.5905–.6102	19/32
1125023	CDER32160M	ER32	15,5–16,0	.6102–.6300	5/8
1260125	CDER32165M	ER32	16,0–16,5	.6300–.6496	–
1260126	CDER32170M	ER32	16,5–17,0	.6496–.6693	21/32
1260127	CDER32175M	ER32	17,0–17,5	.6693–.6890	11/16
1126732	CDER32180M	ER32	17,5–18,0	.6890–.7087	–
1260128	CDER32185M	ER32	18,0–18,5	.7087–.7284	23/32
1155337	CDER32190M	ER32	18,5–19,0	.7284–.7480	3/4
1260129	CDER32195M	ER32	19,0–19,5	.7480–.7677	–
1124951	CDER32200M	ER32	19,5–20,0	.7677–.7874	25/32

Accessories

- An economical way to purchase a group of coolant disks.



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■ ER32 Locknut Coolant Seal Disk Set

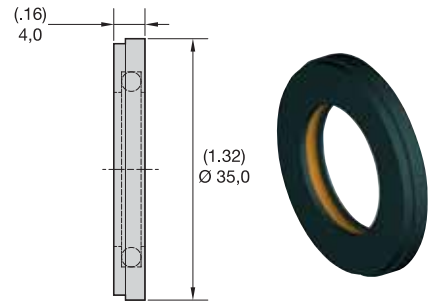
order number	catalog number	collet series	quantity	dimensional range	incremental division
1123496	CDER32000M	ER32	34	3,5mm-20mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.



ER40 Coolant Locknut Sealing Disks

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



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■ ER40 Locknut Coolant Seal Disk

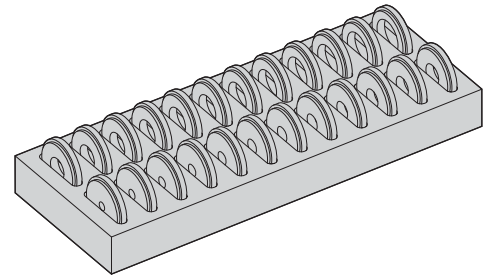
order number	catalog number	collet series	range metric	range inch	range fraction
1260131	CDER40035M	ER40	3,0–3,5	.1181–.1387	1/8
1260132	CDER40040M	ER40	3,5–4,0	.1378–.1575	5/32
1260133	CDER40045M	ER40	4,0–4,5	.1575–.1772	–
1260134	CDER40050M	ER40	4,5–5,0	.1772–.1969	3/16
1260135	CDER40055M	ER40	5,0–5,5	.1969–.2165	7/32
1128810	CDER40060M	ER40	5,5–6,0	.2165–.2362	–
1260136	CDER40065M	ER40	6,0–6,5	.2362–.2559	1/4
1128828	CDER40070M	ER40	6,5–7,0	.2559–.2756	–
1260137	CDER40075M	ER40	7,0–7,5	.2756–.2953	9/32
1126684	CDER40080M	ER40	7,5–8,0	.3150–.3347	5/16
1260138	CDER40085M	ER40	8,0–8,5	.3150–.3347	–
1129486	CDER40090M	ER40	8,5–9,0	.3347–.3543	11/32
1260139	CDER40095M	ER40	9,0–9,5	.3543–.3740	3/8
1128834	CDER40100M	ER40	9,5–10,0	.3740–.3937	–
1260140	CDER40105M	ER40	10,0–10,5	.3937–.4134	13/32
1125622	CDER40110M	ER40	10,5–11,0	.4134–.4330	–
1260141	CDER40115M	ER40	11,0–11,5	.4330–.4528	7/16
1125678	CDER40120M	ER40	11,5–12,0	.4528–.2724	15/32
1260142	CDER40125M	ER40	12,0–12,5	.4724–.4921	–
1260143	CDER40130M	ER40	12,5–13,0	.4921–.5118	1/2
1260144	CDER40135M	ER40	13,0–13,5	.5118–.5315	17/32
1128841	CDER40140M	ER40	13,5–14,0	.5315–.5512	–
1260145	CDER40145M	ER40	14,0–14,5	.5512–.5709	9/16
1128848	CDER40150M	ER40	14,5–15,0	.5709–.5905	–
1260146	CDER40155M	ER40	15,0–15,5	.5905–.6102	19/32
1125686	CDER40160M	ER40	15,5–16,0	.6102–.6300	5/8
1260147	CDER40165M	ER40	16,0–16,5	.6300–.6496	–
1125623	CDER40170M	ER40	16,5–17,0	.6496–.6693	21/32

(continued)

(ER40 Locknut Coolant Seal Disk continued)

order number	catalog number	collet series	range metric	range inch	range fraction
1260148	CDER40175M	ER40	17,0–17,5	.6693–.6890	11/16
1128856	CDER40180M	ER40	17,5–18,0	.6890–.7087	—
1260149	CDER40185M	ER40	18,0–18,5	.7087–.7248	23/32
1260150	CDER40190M	ER40	18,5–19,0	.7284–.7480	3/4
1260151	CDER40195M	ER40	19,0–19,5	.7480–.7677	—
1128845	CDER40200M	ER40	19,5–20,0	.7677–.7874	25/32
1260152	CDER40205M	ER40	20,0–20,5	.7874–.8071	—
1260153	CDER40215M	ER40	21,0–21,5	.7874–.8465	27/32
1129413	CDER40210M	ER40	20,5–21,0	.8071–.8268	13/16
1121616	CDER40220M	ER40	21,5–22,0	.8465–.8661	—
1254500	CDER40230M	ER40	22,5–23,0	.8858–.9055	29/32
1260154	CDER40225M	ER40	23,0–23,5	.9055–.9252	—
1260155	CDER40235M	ER40	23,0–23,5	.9055–.9252	—
1260156	CDER40240M	ER40	23,5–24,0	.9252–.9449	15/16
1260157	CDER40245M	ER40	24,0–24,5	.9449–.9646	—
1128850	CDER40250M	ER40	24,5–25,0	.9646–.9843	31/32
1971143	CDER40255M	ER40	25,0–25,5	.9843–.1.0039	1
1124539	CDER40260M	ER40	25,5–26,0	1.0039–1.0236	—

- An economical way to purchase a group of coolant disks.



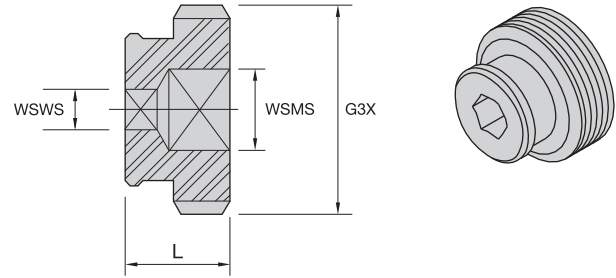
ERICKSON

■ ER40 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1260130	CDER40000M	ER40	46	3,5mm–26mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- Replacement stop screws.
- Coolant, blank, and extended caps are available for added capabilities.



ERICKSON™

■ Stop Screw

order number	catalog number	L		WSWS wrench size	WSMS wrench size	G3X
		mm	in			
1019943	SS031031G	7,9	.31	4mm & 5/32	—	5/16-24UNF LH
1019975	SS038031G	7,9	.31	4mm & 5/32	—	3/8-24UNF LH
1019977	SS044038G	9,5	.38	4mm & 5/32	—	7/16-20UNF LH
1019979	SS050038G	9,5	.38	4mm & 5/32	—	1/2-20UNF LH
1019981	SS056041G	9,5	.38	4mm & 5/32	—	9/16-18UNF LH
1019983	SS062041G	9,5	.38	4mm & 5/32	—	5/8-18UNF LH
1019985	SS075041G	10,3	.41	4mm & 5/32	—	3/4-16UNF LH
1019987	SS081041G	10,3	.41	4mm & 5/32	8mm & 5/16	13/16-16UN LH
1019989	SS094041G	10,3	.41	4mm & 5/32	8mm & 5/16	15/16-16UN LH
1019991	SS112041G	10,3	.41	4mm & 5/32	8mm & 5/16	1 1/8-16UN LH
1020023	SS125050G	12,7	.50	4mm & 5/32	8mm & 5/16	1 1/4-12UNF LH
1020017	SS162062G	15,8	.62	4mm & 5/32	8mm & 5/16	1 5/8-12UN LH
1020049	SS175062G	15,8	.62	4mm & 5/32	8mm & 5/16	1 3/4-12UN LH

WIN WITH WIDIA™



WIDIA™ M690 90° Shoulder Mill Series

M690 SD1204.. | M690 SD1506..

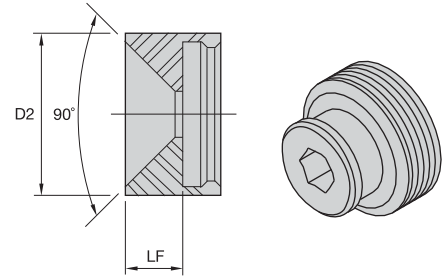
Strong and specially designed to streamline most milling operations, M690 Series 90° shoulder mills enable excellent shoulder finishes, enhanced chip evacuation, and optimal insert support.

- Sturdy tool design for maximum safety and productivity.
- Four cutting edges for economical and reliable machining.
- Superior shoulder finishes and smooth cutting action.

To learn more, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.

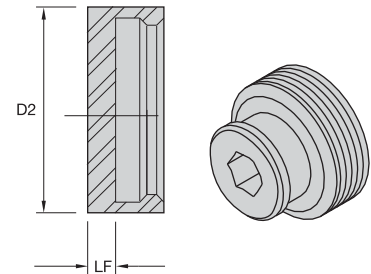


ERICKSON™

■ Coolant Cap

order number	catalog number	D2		LF		stop screw reference
		mm	in	mm	in	
1021134	SSCC031	6,5	.25	2,4	.09	SS031031G
1021138	SSCC044	9,5	.37	3,0	.12	SS044038G
1021140	SSCC050	11,0	.43	3,0	.12	SS050038G
1021142	SSCC056	12,0	.47	4,0	.16	SS056041G
1092046	SSCC062	14,0	.55	4,5	.18	SS062041G
1021154	SSCC075	17,0	.67	6,0	.24	SS075041G
1021156	SSCC081	17,0	.67	6,0	.24	SS081041G
1021158	SSCC094	21,8	.86	8,5	.33	SS094041G
1021160	SSCC112	24,5	.97	9,8	.38	SS112041G
1021162	SSCC125	29,0	1.14	12,0	.47	SS125050G
1021176	SSCC162	37,0	1.46	15,5	.61	SS162062G
1021178	SSCC175	42,0	1.65	18,5	.73	SS175062G

NOTE: For use with through-coolant applications for improved sealing.

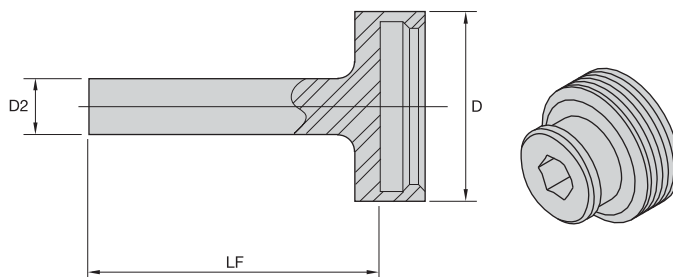


■ Blank Cap

order number	catalog number	D2		LF		stop screw reference
		mm	in	mm	in	
1021180	SSC031	6,5	.26	2,2	.09	SS031031G
1021204	SSC044	9,5	.37	2,2	.09	SS044038G, SS0500384
1021206	SSC056	12,0	.47	2,2	.09	SS075041G, SS056041G, SS062041G
1021208	SSC081	17,0	.67	2,2	.09	SS081041G, SS094041G

NOTE: A solid cap for small-diameter cutting tools with no through-coolant capability.

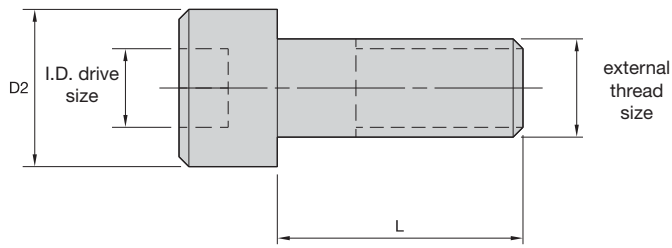
- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.



■ Extended Cap

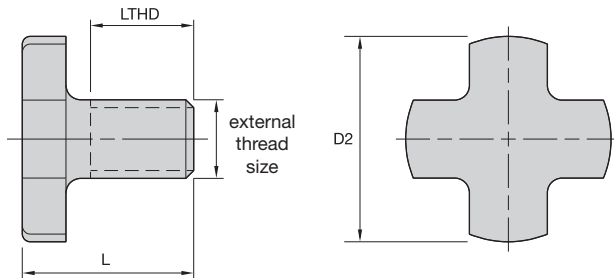
order number	catalog number	D		D2		LF		stop screw reference
		mm	in	mm	in	mm	in	
1021216	SSC038081	8,1	.32	8,1	.32	20,5	.81	SS038031G
1021220	SSC056066	12,0	.47	5,0	.20	16,7	.66	SS094041G,SS075041G,SS056041G
1021222	SSC081103	17,0	.67	5,0	.20	26,2	1.03	SS094041G,SS081041G
1021254	SSC112150	24,5	.96	12,0	.47	38,1	1.50	SS150062G,SS125050G,SS112041G

NOTE: For greater access and reaching inside collet cavities.



■ SM Cap Lock Screw • Metric

order number	catalog number	external thread size	D2	L	I.D. drive size
1905810	MS1294	M8X1.25	13,0	25,0	6mm
1129648	MS1234	M10X1.5	16,0	25,0	8mm

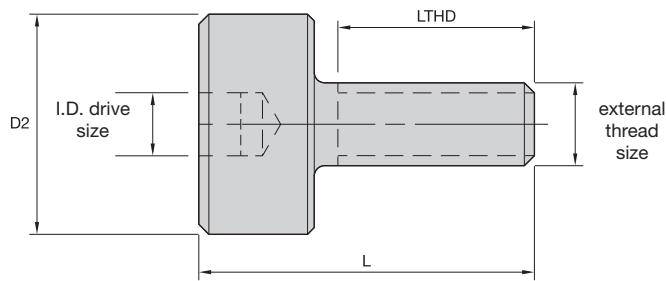


■ SM Lock Screw • Metric

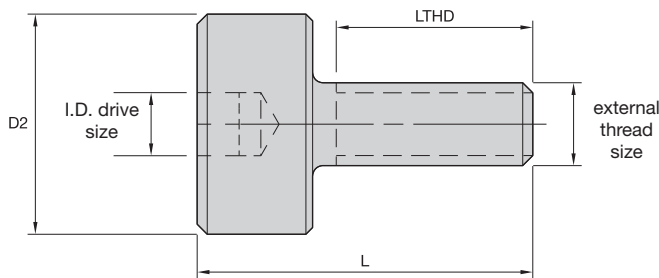
order number	catalog number	external thread size	D2	L	LTHD
1147969	KLS27MPKG	M12X1.75	34,8	29,9	17,5
1736199	KLS32M	M16X2.0	41,8	34,9	20,5
1016374	KLS40M	M20X2.5	51,8	39,9	24,0
1178775	KLS50M	M24X3	62,8	47,9	28,5

(continued)

(SM Lock Screws continued)

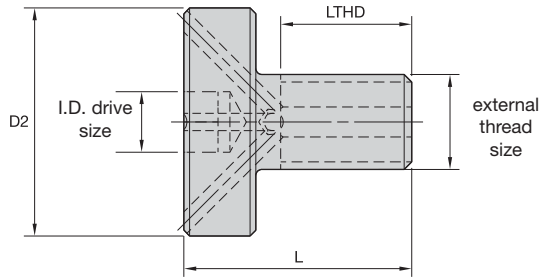

■ SM Round Lock Screw • Metric

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
4078806	KLSS27M	M12X1.75	35,0	30,9	22,0	10mm
4078807	KLSS32M	M16X2.0	42,0	37,9	26,0	14mm
4078808	KLSS40M	M20X2.5	52,0	44,9	30,0	17mm


■ SM Lock Screw • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1020548	KLS05	.250-28 UNF	.656	1.000	.656	3/16
1020550	KLS07	.375 - 24 UNF	.875	1.062	.687	1/4
1020552	KLS10	.500 - 20 UNF	1.188	1.187	.812	5/16
1020574	KLS12	.625 - 18 UNF	1.500	1.535	1.040	5/16
1020576	KLS15	3/4 - 16 UNF	1.875	1.516	1.016	3/8
1020578	KLS20	1.000 - 14 UNS	—	—	—	9/16

- Coolant lock screw to convert a standard shell mill adapter into a through-coolant version.

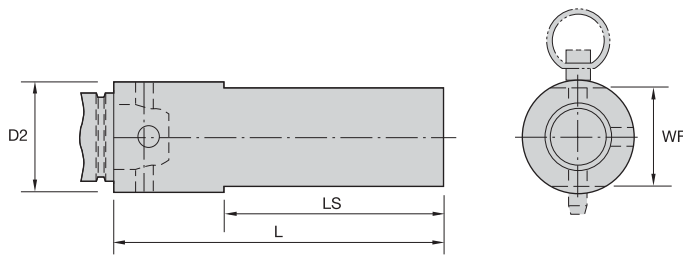


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■ SM Lock Screw Coolant • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1151259	KLSSH10	.500-20 UNF	1.2	1.2	.8	5/16
1151260	KLSSH12	.625-18 UNF	1.5	1.5	1.0	5/16
1151261	KLSSH15	.750-16 UNF	1.9	1.5	1.0	3/8
1151262	KLSSH20	1.000-14 UNS	2.5	1.5	1.0	9/16
1151315	KLSSH25	1.000-14 UNS	3.1	2.0	1.5	9/16

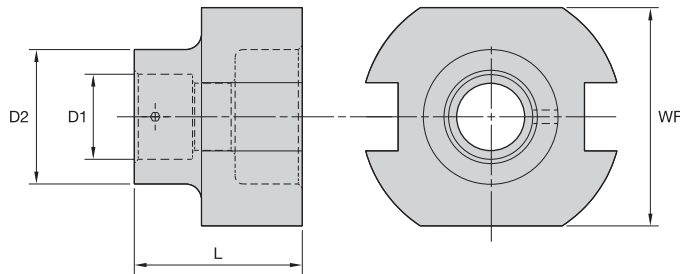
- Vise mount pot to hold KM™ toolholders for tightening/locking operations.



■ TF • KM Vise Mount

order number	catalog number	system size	D2		L		LS		WF	
			mm	in	mm	in	mm	in	mm	in
1021816	KM40TF	KM40	50,80	2.00	152,4	6.00	101,6	4.00	44,45	1.750
1021817	KM50TF	KM50	63,50	2.50	152,4	6.00	101,6	4.00	57,15	2.250
1021818	KM63TF	KM63	76,20	3.00	152,4	6.00	101,6	4.00	69,15	2.750
2606542	KM80TF	KM80	88,90	3.50	152,4	6.00	101,6	4.00	85,73	3.375

- Vise mount pot to hold HSK toolholders for tightening/locking operations.

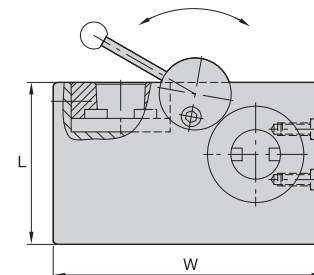


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■ TF • KM4X and HSK Vise Mount

order number	catalog number	D1		D2		L		WF		wrench size clamp screw
		mm	in	mm	in	mm	in	mm	in	
1013573	TFHSK32A	32,0	1.26	50,8	2.00	63,5	2.50	82,5	3.25	3mm & 1/8
1013584	TFHSK40A	40,0	1.57	60,0	2.36	63,5	2.50	82,5	3.25	4mm & 5/32
1013586	TFHSK63A	63,0	2.48	98,4	98.41	69,9	2.75	82,5	3.25	8mm & 5/16
1013587	TFHSK80A	80,0	3.15	108,0	4.25	120,7	4.75	82,5	3.25	8mm & 5/16
1013588	TFHSK100A	100,0	3.94	135,0	5.31	139,7	5.50	82,5	3.25	8mm & 5/16

- Universal vise to hold HSK forms A, C, and E toolholders for tightening/locking operations.
- Permits simultaneous access to the rear and front end of the toolholders.
- Replaces up to 15 separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Rigid aluminum construction with bolt holes to secure to bench.

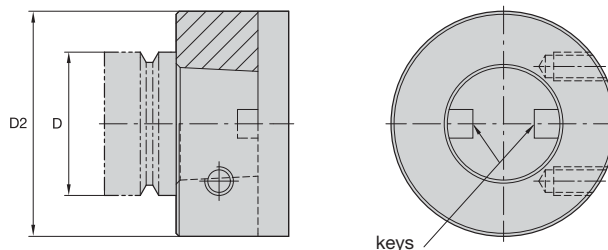


ERICKSON™

■ TF • HSK Universal Mount

order number	catalog number	CSWS	L		W	
			mm	in	mm	in
1254135	UTAV	ALL	160	6.30	260	10.24

- For HSK forms A and C, insert sleeve into fixture.
- For HSK form E, remove the drive keys before inserting the sleeve adapter.
- Sleeve adapters are made from hardened steel with removable keys.
- For sizes HSK32 and HSK40, a larger cam disk must be ordered when used in a horizontal position.



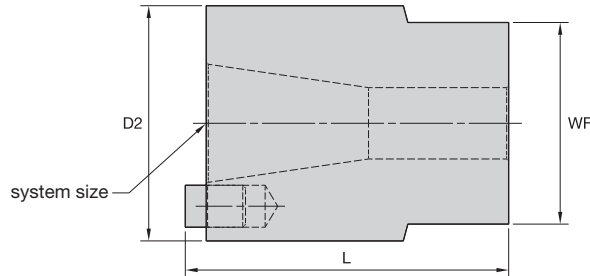
■ TF • HSK Universal Sleeve

order number	catalog number	system size	D		D2	
			mm	in	mm	in
1254136	HSK32AS	32	32,0	1.26	98,0	3.86
1254137	HSK40AS	40	40,0	1.57	98,0	3.86
1254158	HSK50AS	50	50,0	1.97	98,0	3.86
1254159	HSK63AS	63	63,0	2.48	98,0	3.86
1254160	HSK80AS	80	80,0	3.15	98,0	3.86
1254161	HSK100AS	100	100,0	3.94	98,0	3.86

cam disks needed to support HSK32 and HSK40

catalog number • sleeve	size reference • HSK	order number • cam disk	catalog number • cam disk
HSK32AS	HSK32	2241080	536.150
HSK40AS	HSK40	2241080	536.150

- Vise mount pot to hold steep taper toolholders for tightening/locking operations.

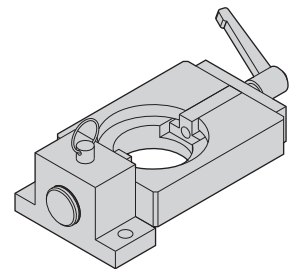


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■ TF • ST Vise Mount

order number	catalog number	system size	D2		L		WF	
			mm	in	mm	in	mm	in
1013620	TF30	30	88,9	3.50	109,5	4.31	76,2	3.00
1013636	TF40	40	88,9	3.50	122,2	4.81	76,2	3.00
1013638	TF50	50	133,4	5.25	165,1	6.50	114,3	4.50

- Universal vise to hold 30, 35, 40, 45, and 50 7/24 steep taper toolholders for tightening/locking operations.
- Permits simultaneous access to the retention knob and locknut.
- Replaces up to five separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Holds most 7/24 tapers including ANSI, ISO, DIN, V-flange, BT, and NMTB.
- Handle position is easily changed with a simple button push.
- No setups, bushings, or spare parts required.
- 400 Nm (300 ft. lbs.) maximum torque capacity.



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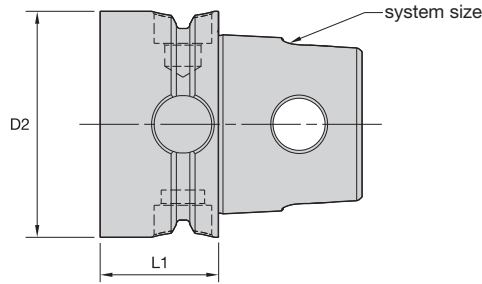
■ TF • ST Universal Mount

order number	catalog number	system size
1013591	UTV5030	30, 35, 40, 45, & 50

Accessories

P-KM Spindle Plugs • HSK Spindle Plugs

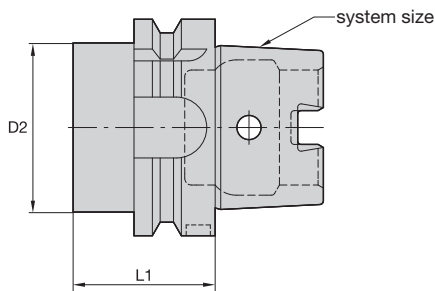
- Prevents machine tool spindle from becoming contaminated when not in use.



■ Spindle Plug • KM™

order number	catalog number	system size	D2		L1	
			mm	in	mm	in
1019237	KM32P	KM32	32	1.26	25	.98
1144452	KM40P	KM40	40	1.57	27	1.06
1144501	KM50P	KM50	50	1.97	31	1.22
1019945	KM63TSP	KM63TS	63	2.48	33	1.30
1144328	KM80P	KM80	80	3.15	37	1.46

- Prevents machine tool spindle from becoming contaminated when not in use.

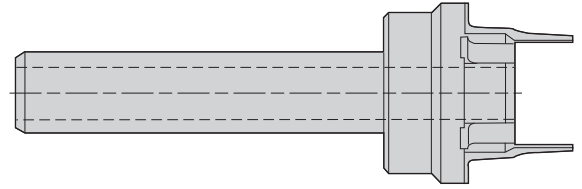


ERICKSON™

■ P-HSK • Form A

order number	catalog number	system size	D2		L1		kg
			mm	in	mm	in	
1256061	HSK63AP	63	50	1.97	42,3	1.66	0,7
1307767	HSK100AP	100	80	3.15	45,3	1.78	0,7

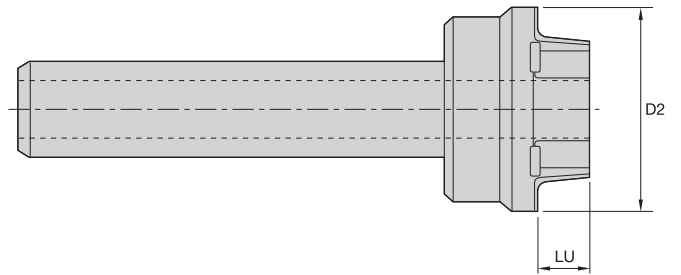
- Cleans taper and face of machine spindle and tool adapter.



■ SW-KM

order number	catalog number	system size
1727267	KMSW32	32
1606113	KMSW40	40
1612900	KMSW50	50
1612922	KMSW63	63
1612923	KMSW80	80

- Cleans taper and face of machine spindle and tool adapter.

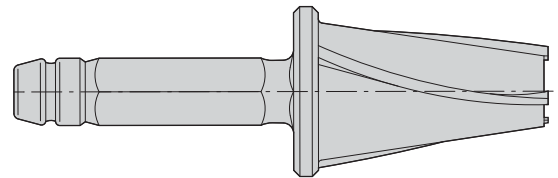


ERICKSON

■ SW-HSK

order number	catalog number	system size	D2		LU	
			mm	in	mm	in
1518662	HSK32SW	32	45	1.77	11	.43
1518630	HSK40SW	40	45	1.77	14	.55
1514497	HSK50SW	50	53	2.09	17	.67
1518677	HSK63SW	63	66	2.60	22	.87
1518681	HSK100SW	100	103	4.06	35	1.38

- Cleans taper of machine spindle and tool adapter.



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■ SW-ST

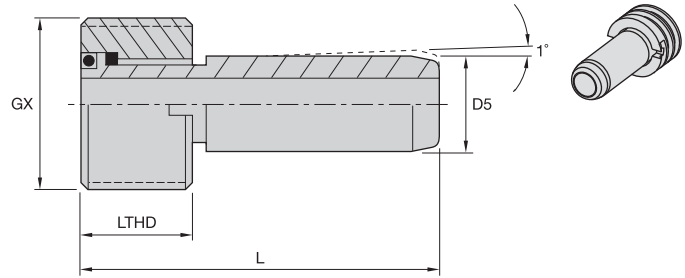
order number	catalog number	system size
1288838	SW30	30
1288842	SW40	40
1192562	SW50	50

Accessories

HSK Coolant Supply Units • Wrenches



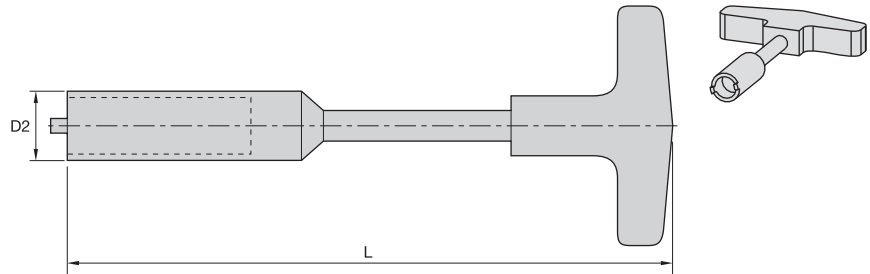
- Designed in accordance with DIN 69893.
- Withstand coolant pressure up to 80 bar (1,160 psi).
- Directs flow of coolant through the tool and avoids spindle mechanism contamination from flow-back.
- Standard-sized replaceable O-rings.



■ HSK Coolant Supply Unit • Assembly

order number	catalog number	system size	D5		L		LTHD		GX	Nm	in. lbs.
			mm	in	mm	in	mm	in			
1132083	193.158	40A & 40E	8,0	.3	29,5	1.2	7,5	.30	M12 X 1	3	30
1132144	193.159	50A & 50E & 63F	10,0	.4	32,7	1.3	9,5	.37	M16 X 1	4	35
1132145	193.160	63A & 80F	12,0	.5	36,2	1.4	11,5	.45	M18 X 1	6	53
1132146	193.161	80A	14,0	.6	40,2	1.6	13,5	.53	M20 X 1.5	8	70
1132147	193.162	100A	16,0	.6	43,6	1.7	15,5	.61	M24 X 1.5	12	106

- Designed to lock and unlock the HSK coolant supply units.



■ HSK Wrench

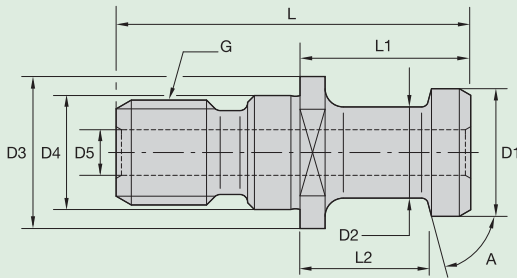
order number	catalog number	CSWS	D2		L		Nm	in. lbs.
			mm	in	mm	in		
1176487	170.195	40A & 40E	13,0	.51	120	4.72	3	30
1132992	170.196	50A & 50E & 63F	14,5	.57	114	4.49	4	35
1134161	170.197	63A & 80F	16,5	.65	122	4.80	6	53
1127524	170.198	80A	19,0	.75	130	5.12	8	70
1132993	170.199	100A	22,0	.87	141	5.55	12	106

Accessories

WARNING

Retention knobs are available in various styles and are not always interchangeable because all are machine and spindle specific. The proper retention knob must be used at all times with the appropriate adapter, according to machine specifications as provided by the machine's original manufacturer. Failure to use the correct retention knob, or to adequately install and tighten the correct retention knob, may result in an adapter loosening. Using a combination of metric and non-metric components can result in an inadequate coupling of the adapter to the spindle during machining, causing the component to fail.

While WIDIA™ has endeavored to obtain accurate and up-to-date information regarding retention knob selection based on individual machine tool builder specifications, we cannot guarantee that the information and specifications contained in this catalog are complete and that they have not been modified or superseded by the manufacturer. **You, the machine tool operator, are ultimately responsible for proper selection and use of retention knobs.** The purchase of retention knobs from WIDIA is subject to WIDIA's Standard Terms and Conditions of Sale.



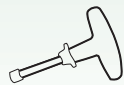

Machining center manufacturers use numerous types and styles of retention knobs. WIDIA has listed some of the most popular retention knobs in the industry on the next few pages.

If a retention knob is not shown, please contact your WIDIA Representative or call WIDIA's Customer Service and have the following information available:

machine builder	machine builder's drawing and/or numbers		machine model number	
taper size	G thread		A angle	
D1	D2	D3	D4	D5
L	L1	L2	through coolant needed?	O-ring needed?

The machine builder should recommend the required tightening torque for the retention knobs. This information is not always available.

WIDIA has referenced a suggested maximum torque setting and offers a specialized socket just for retention knobs. Please see these socket wrench sizes listed against each knob.

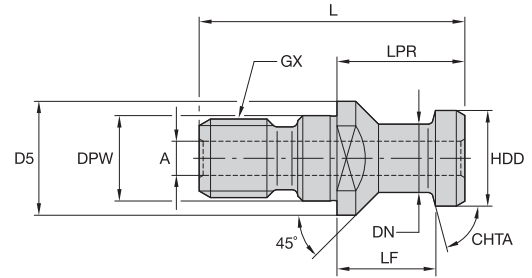
	taper size	suggested torque max (ft. lbs.)	suggested torque max (Nm)	
	30	40	54	
	40	85	115	
	50	110	149	

Accessories

Retention Knobs DIN 69872 Form A Metric • Form B Metric



- Metric thread.
- Piloted.
- Through coolant.



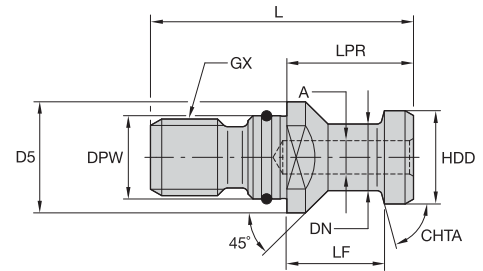
■ RK DIN 69872 Form A • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192424	RK40DVM	40	M16 X 2	7,05	75°	23	13,95	16,97	18,97	20,0	26,00	54	RKW40	115
1192430	RK50DVM	50	M24 X 3	11,55	75°	36	20,95	24,97	27,97	25,0	34,00	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted with O-ring.
- No through coolant.



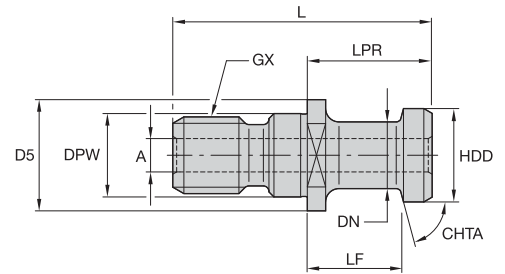
■ RK DIN 69872 Form B • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192423	RK40DVBM	40	M16 X 2	7,05	75°	22,9	13,95	16,97	18,97	20	26	54	RKW40	115
1192429	RK50DVBM	50	M24 X 3	11,55	75°	35,9	20,95	24,97	27,97	25	34	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.



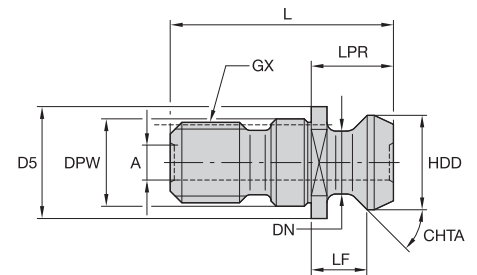
■ RK ISO 7388/2 Type A • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1285460	RK40ISAM	40	M16 X 2	7,05	75°	22,9	13,95	16,99	18,95	20	26	54	RKW40	115
1285502	RK50ISAM	50	M24 X 3	11,55	75°	35,9	20,95	24,99	27,95	25	34	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.



■ RK • ISO 7388/2 Type B • Metric



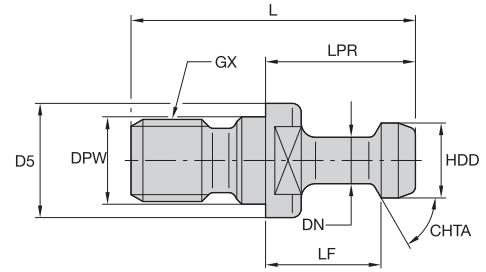
order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192425	RK40ISBM	40	M16 X 2	7,5	45°	22	12,80	16,99	18,80	11,0	16,25	44,50	RKW40	115
1192431	RK50ISBM	50	M24 X 3	11,7	45°	36	19,45	24,99	28,95	17,8	25,40	65,50	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

Accessories

Retention Knobs BT-MAS-Style with Pilot Metric

- Metric thread.
- Piloted.
- No through coolant.



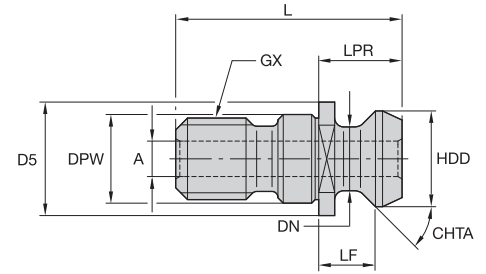
■ RK BT-MAS-Style with Pilot • Metric



order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192417	RK30BT1M	30	M12 X 1.75	45°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	RKW30	54
1285416	RK30BT2M	30	M12 X 1.75	60°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	RKW30	54
1192419	RK40BT1M	40	M16 X 2	45°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1192420	RK40BT2M	40	M16 X 2	60°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1285441	RK40BT3M	40	M16 X 2	90°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1192426	RK50BT1M	50	M24 X 3	45°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143
1192427	RK50BT2M	50	M24 X 3	60°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143
1285482	RK50BT3M	50	M24 X 3	90°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.



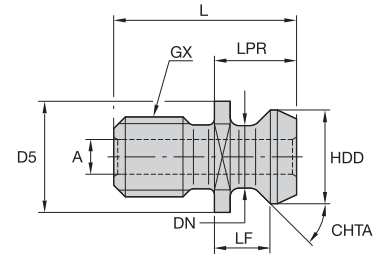
■ RK Short CV with Pilot • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192422	RK40CV3M	40	M16 X 2	7,14	45°	23,63	12,45	16,98	18,80	11,18	16,26	41,26	RKW40	115
1026734	RK50HPCV	50	M24 X 3	11,89	45°	36,32	20,83	24,99	28,96	17,78	25,40	65,41	RKW50	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- No pilot.
- Through coolant.



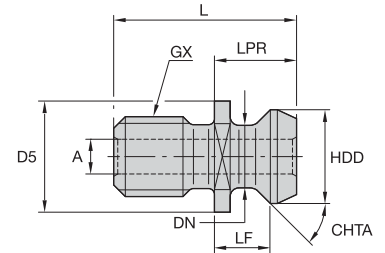
■ RK Short CV without Pilot • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	Nm
1192421	RK40CV1M	40	M16 X 2	6,95	45°	22,5	12,4	18,8	11,20	16,30	38,1	RKW40	115
1285478	RK50AV1M	50	M24 X 3	11,55	45°	37,0	19,6	29,1	17,95	25,55	60,0	RKW50M	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Inch thread.
- No pilot.
- Through coolant.



■ RK Short CV without Pilot • Inch



order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026590	RK40CV	40	5/8 - 11	.281	45°	.900	.490	.740	.440	.640	1.500	RKW40	85
1026690	RK50CV	50	1 - 8	.500	45°	1.400	.820	1.140	.700	1.000	2.300	RKW50	110

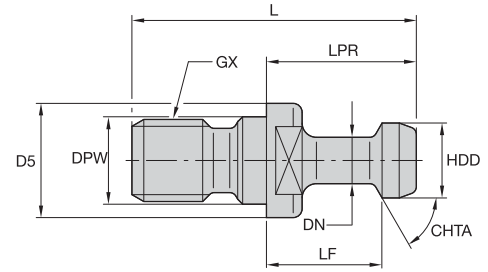
NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

Accessories

Retention Knobs BT-MAS Style



- Inch thread.
- Piloted.
- No through coolant.



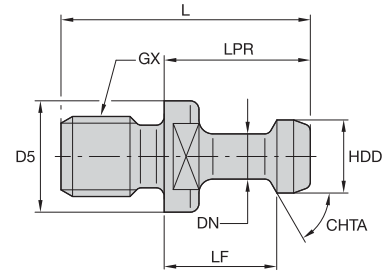
■ RK BT-MAS Style with Pilot • Inch



order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026729	RK31114	40	5/8 - 11	45°	.938	.392	.636	.589	.988	1.264	2.250	RKW40	85
1025459	RK31114B	40	5/8 - 11	90°	.938	.392	.636	.589	.988	1.264	2.250	RKW40	85
1021844	RK31118	50	1 - 8	45°	1.438	.668	1.026	.903	1.384	1.778	3.355	RKW50	110
1021800	RK31118B	50	1 - 8	90°	1.438	.668	1.026	.903	1.384	1.778	3.355	RKW50	110

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Inch thread.
- Piloted.
- No through coolant.



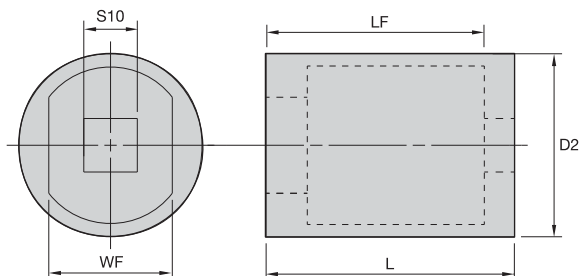
■ RK BT-MAS-Style without Pilot • Inch



order number	catalog number	system size	GX	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026730	RK32114	40	5/8 - 11	45°	.903	.392	.588	.990	1.266	2.125	RKW40	85

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Socket wrench with standard 1/2" drive to tighten retention knobs.



■ **RK Socket • Metric**

order number	catalog number	system size	D2	L	LF	S10		WF	Nm
						mm	in		
2407089	RKW40M	40	31,8	31,8	19,0	12,7	.50	18,1	115
2407091	RKW50M	50	44,5	60,3	47,6	12,7	.50	30,2	150

■ **RK Socket • Inch**

order number	catalog number	system size	D2	L	LF	S10	WF	ft. lbs.
2407088	RKW40	40	1.25	1.94	1.44	.50	.76	85
2407090	RKW50	50	1.75	1.63	1.12	.50	1.26	110



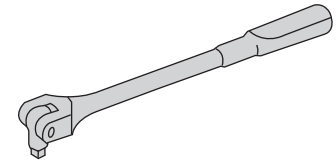


■ KM Manual Torque Wrench

order number	catalog number	KM size	wrench type	adapter	adapter drive size	driver bit	driver hex size	clamping unit hex size	torque ft. lbs.	torque Nm
2432682	TW628R	25 & 3225	ratchet	—	3/8"	301.362	5/16"	6mm	25	34
1291313	TW58	32	solid	—	—	301.361	5/16"	5mm	8	11
1099387	TW610	40	solid	—	—	301.362	5/16"	6mm	10	14
1291314	TW58R	32	ratchet	30137	3/8"	301.361	5/16"	5mm	8	11
1291316	TW610R	40	ratchet	30137	3/8"	301.362	5/16"	6mm	10	13
1291318	TW623R	50	ratchet	AHB375M10	3/8"	—	—	10mm	23	30
1291312	TW1237R	63	ratchet	AHB500M12	1/2"	—	—	12mm	37	50
1121108	TW1460R	80	ratchet	EBM14	1/2"	—	—	14mm	60	80

NOTE: All KM torque wrenches come complete with adapter and driver bit.

Accessories



■ KM LOC II and LOC Wrench

wrench catalog number	drive hex bit			
	KM32	KM40	KM50	KM63
914-15	986-6 = hex size 6mm	986-8 = hex size 8mm	986-10 = hex size 10mm	986-10 = hex size 10mm



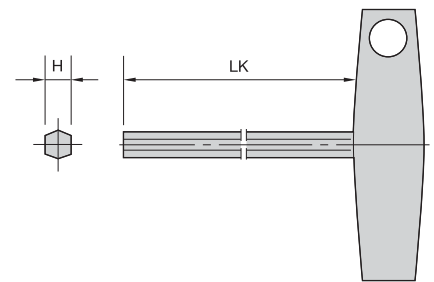
order number	drive hex bit catalog number
1863666	986-6
1131354	986-8
1131361	986-10

NOTE: Wrench and drive hex bit must be ordered separately.



■ T-Handle Hex Wrench Set • Metric

order number	catalog number	wrench set description
1192354	MW-9	set contains (mm) 1,27; 1,5; 2,0; 2,5; 3,0; 4,0; 5,0; 6,0; and 8,0



■ T-Handle Hex Wrench • Metric

order number	catalog number	hex size
1138748	170.135	5mm
1138755	170.136	6mm



■ T-Handle Wrench Set • Inch

order number	catalog number	wrench description
1192321	KW-7A	set contains sizes: 5/64, 3/32, 7/64, 1/8, 5/32, 3/16, and 7/32



■ Universal Bit Driver

order number	catalog number
1963869	driver



■ Driver Bit

order number	catalog number	hex size	Torx size	Torx Plus size
1138851	170.179	2,5mm	—	—
1150198	170.180	3mm	—	—
1138857	170.181	4mm	—	—
1962981	BT6	—	6	—
1963853	BT7	—	7	—
1963855	BT8	—	8	—
1963854	BT9	—	9	—
1963856	BT10	—	10	—
1138814	170.175	—	15	—
1138822	170.176	—	20	—
1994654	170.258	—	25	—
1984243	170.256	—	27	—
2244316	BT25IP	—	—	25IP
2244317	BT27IP	—	—	27IP

Achieve Victory with the WIDIA™ Modular Drill Family



WIDIA-Metcut™ Spade Blades

are the perfect compliment to TOP DRILL M1™ for an extensive portfolio of modular drilling.

WIDIA™ provides the complete modular holemaking solution portfolio from 8mm (.315") to 114mm (4.5") to cover a wide range of machining environments and materials.

- Fast penetration rates, less downtime, lower variability.
- Interchangeable with other conventional spade blade holders.
- Improved surface finish — elimination of secondary operations.
- Standard and special drill body/holder offering, including porting tool configurations.

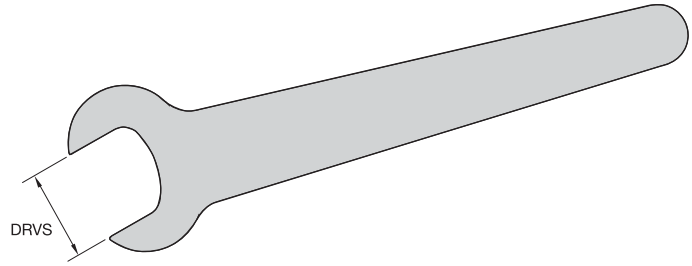
WIDIA-Metcut spade blades are great choices for:

- Cast iron and aluminum workpieces.
- Machining environments where rigidity, coolant supply, or speed and feed rates are limiting factors.
- Short run manufacturing and prototyping environments.

To learn more, contact your local Authorized Distributor or visit www.widia.com.

WIDIA 

- Standard open-ended wrenches.



ERICKSON™

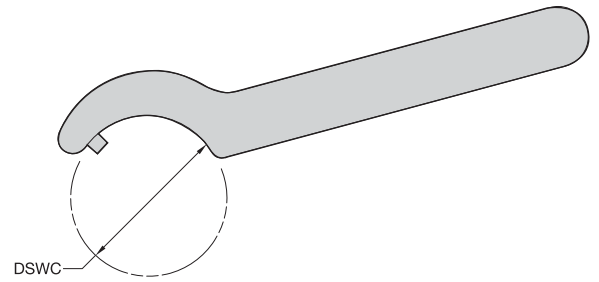
■ Wrench OEW • Metric

order number	catalog number	DRVS
1284020	OEW9M	9mm
1284011	OEW13M	13mm
1174217	OEW16M	16mm
1197387	OEW19M	19mm
1192371	OEW24M	24mm
1186649	OEW25M	25mm
1284014	OEW30M	30mm
1284015	OEW32M	32mm

■ Wrench OEW • Inch

order number	catalog number	DRVS
1025533	OEW044	7/16
1025544	OEW050	1/8
1025546	OEW062	5/8
1025547	OEW068	11/16
1025548	OEW075	3/4
1025550	OEW088	7/8
1025551	OEW094	15/16
1025552	OEW100	1
1025553	OEW106	1 1/16
1025574	OEW112	1 1/8
1025575	OEW119	1 3/16
1025576	OEW125	1 1/4
1025674	OEW138	1 3/8
1025581	OEW150	1 1/2
1025582	OEW162	1 5/8
1025583	OEW168	1 11/16
1025604	OEW175	1 3/4
1025605	OEW188	1 7/8
1025607	OEW225	2 1/4
1025608	OEW250	2 1/2

- Standard pin spanner wrenches.



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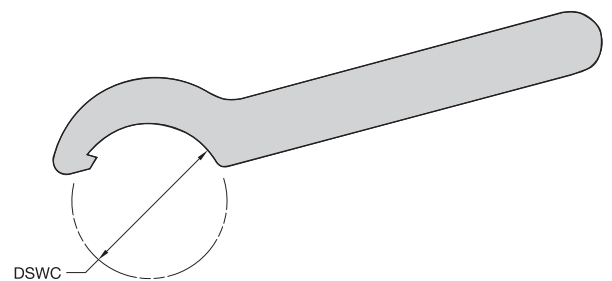
- Wrench PSW • Metric

order number	catalog number	DSWC
3367387	PSW52M	58,0mm - 62,0mm
1284310	PSW58M	52,0mm - 55,0mm
1192392	PSW68M	68,0mm - 75,0mm
1284311	PSW80M	80,0mm - 90,0mm

- Wrench PSW • Inch

order number	catalog number	DSWC
1013497	PSW350	3 1/2

- Standard hook spanner wrenches.



ERICKSON

- Wrench HSW • Metric

order number	catalog number	DSWC
1273813	HSW25M	25,0mm - 28,0mm
1273814	HSW34M	34,0mm - 36,0mm
1192229	HSW45M	45,0mm - 50,0mm
1192230	HSW58M	58,0mm - 62,0mm
1273815	HSW68M	68,0mm - 75,0mm
1192231	HSW80M	80,0mm - 90,0mm



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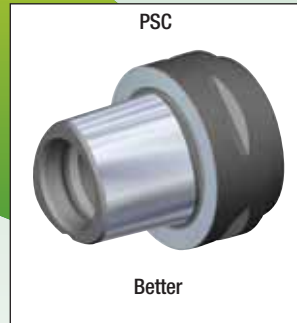
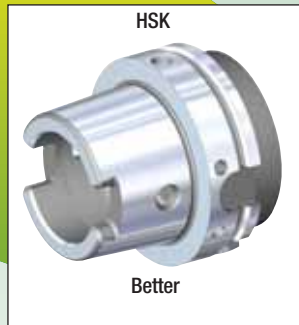
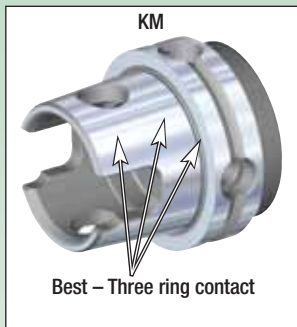


The Correct Spindle Connection and Application Guide

The Spindle Connection

Several different types of spindle connection have been developed or optimized over the last few decades. The 7/24 ISO taper became one of the most popular systems in the market. It has been successfully used in many applications, but its accuracy and high-speed limitations prevent it from growing further due to only having one ring of contact around the gage diameter/uppermost cone. The recent combination of face contact with 7/24 solid taper provides higher accuracy in the Z-axis direction, but this also presents some disadvantages, namely the loss in stiffness at higher speeds or high side loads. Most of these tools on the market are solid and the spindles have relatively low clamping force.

In 1985, WIDIA™ (Krupp WIDIA) and Kennametal initiated a joint program to further develop the concept of taper and face contact interface and a universal quick-change system — now known as KM™ and recently standardized as ISO 26622. The KM system has a very strong design, utilizing three rings of contact, the flange face, and lower as well as upper ring of contact of the cone. The polygonal taper-face connection, known as PSC, is now also standardized as ISO 26623, and in the early 1990s, the HSK system started being employed on machines in Europe and later became DIN 69893 and later ISO 12164 with two rings of contact.



(continued)

Adapter Application Guide *(continued)*

WIDIA™ has a large offering of high-performance holding products to gain the best execution from the cutting edge. The matrix below is designed to help you choose the right adapter for the required application:

toolholder type	accuracy TIR	grip	end milling		face milling	drilling	tapping	boring	modular
			rough	finishing					
Whistle Notch™	●	●●●●●	●●●●●	●●●●●	—	●●●●●	●	●●●●●	—
end mill adapters	●	●●●●●	●●●●●	●●●●●	—	●●	●	●●●●●	—
straight shank adapters	●	●●●●●	—	—	—	●●●●●	—	●●●●●	—
straight shank with flat adapters	●	●●●●●	—	—	—	●●●●●	—	●●●●●	—
screw-on milling adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●●●
tunable shell mill adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●●●
shell mill adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●
slotting cutter adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●●●
RC rapid change tap adapters	●●●●●	●●●●●	—	—	—	—	●●●●●	—	—
Morse taper adapters	●●●●●	●●●●●	●●	—	—	●●●●●	●●●●●	●●●●●	●●●
Jacobs taper adapters	●●●●●	●●●	●	—	—	●●●●●	●●●	●●●	●●●
KM™ modular adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
HSK modular adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●

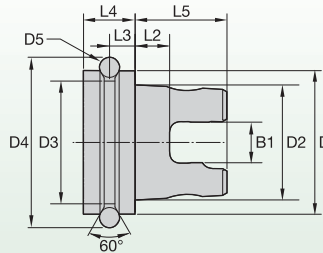
●●●●● = Excellent (first choice)

● = Good (last choice)

— = Not recommended

Taper Specifications

KM™ — ISO 26622-1

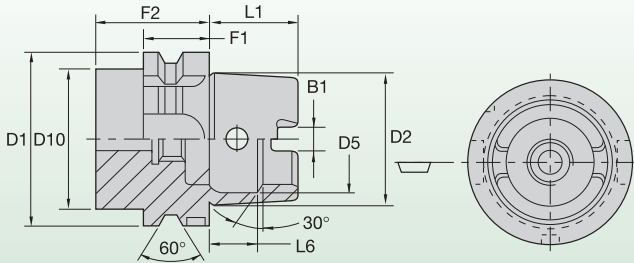


	D	D2	D3	D4	D5	L5	L2	L3	L4	B1
KM32TS	32,0	24,0	29,0	36,45	3,5	20,0	8,0	4,9	10,0	9,0
	1.260	.945	1.142	1.435	0.138	0.787	1.102	0.193	0.394	0.354
KM40TS	40,0	30,0	37,0	44,45	3,5	25,0	11,0	5,89	12,0	10,1
	1.575	1.181	1.457	1.750	0.138	0.984	0.433	0.232	0.472	0.398
KM50TS	50,0	40,0	42,7	59,4	7,0	32,0	12,0	8,9	16,0	14,1
	1.969	1.575	1.681	2.339	0.276	1.260	0.472	0.350	0.630	0.555
KM63TS	63,0	50,0	55,7	72,4	7,0	40,0	18,0	9,9	18,0	16,1
	2.480	1.969	2.193	2.850	0.276	1.575	0.709	0.390	0.709	0.634
KM80TS	80,0	64,0	72,7	89,4	7,0	45,0	18,5	11,0	22,0	20,1
	3.150	2.520	2.862	3.520	0.276	1.772	0.728	0.433	0.866	0.791

NOTE: Valid for all KM styles including XMZ and ATC.

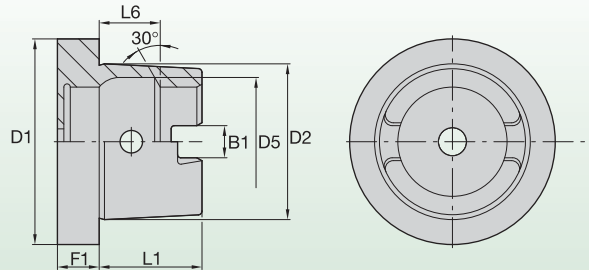
Taper Specifications

HSK — DIN 69893 Part 1, Form A



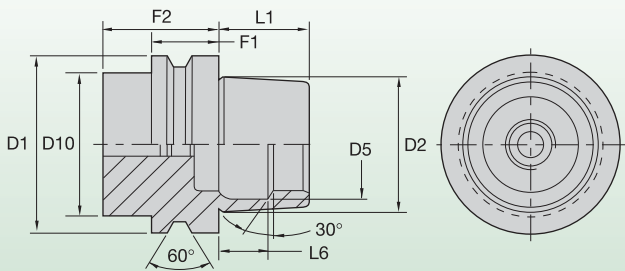
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	D10 mm (max)	L1 mm (-0,2)	L6 mm (js10)	B1 mm (±0,04)	F1 mm (-0,1)	F2 mm (min)
40A	40	30	25,50	34	20	11,42	8,05	20	35
50A	50	38	32	42	25	14,13	10,53	26	42
63A	63	48	40	53	32	18,13	12,54	26	42
80A	80	60	50	67	40	22,85	16,04	26	42
100A	100	75	63	85	50	28,56	20,02	29	45

HSK — DIN 69893 Part 1, Form C



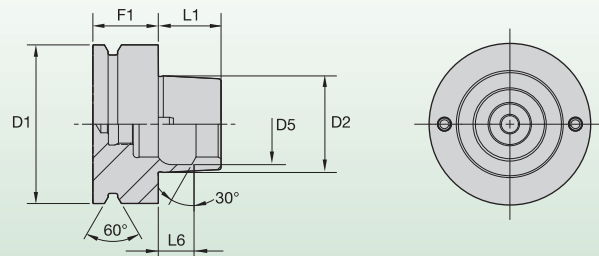
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	L1 mm (-0,2)	L6 mm (js10)	B1 mm (±0,04)	F1 mm (-0,1)
32C	32	24	21	16	8,92	7,05	10
40C	40	30	25,50	20	11,42	8,05	10
50C	50	38	32	25	14,13	10,53	12,5
63C	63	48	40	32	18,13	12,54	12,5

HSK — DIN 69893 Part 5, Form E



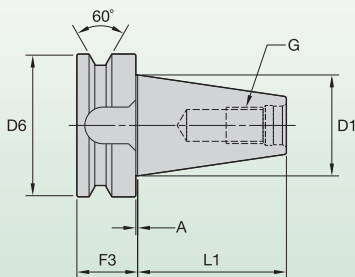
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	D10 mm (max)	L1 mm (-0,2)	L6 mm (js10)	F1 mm (-0,1)	F2 mm (min)
40E	40	30	25,5	34	20	11,42	20	35
50E	50	38	32	42	25	14,13	26	42

HSK — DIN 69893 Part 1, Form F (with Pin)



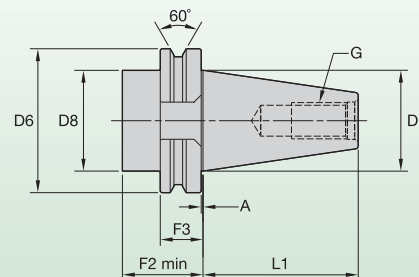
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	L1 mm (-0,2)	L6 mm (js10)	F1 mm (-0,1)
63F (pin)	63	38	32	25	14,13	26
80F (pin)	80	48	40	32	18,13	26

BTKV — Taper Face



	D1	D6	L1	F3	A	G
40	44,45 (1.750)	63,00 (2.480)	65,40 (2.575)	27,00 (1.063)	1,00 (.039)	M16 thread
50	69,85 (2.750)	100,00 (3.937)	101,80 (4.008)	38,00 (1.496)	1,50 (.059)	M24 thread

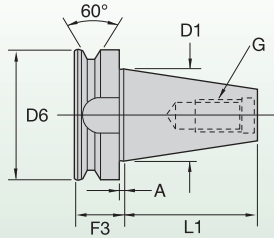
CVKV — Taper Face



	D1	D6	D8	L1	F2	F3	A	G
40	44,45 (1.750)	63,05 (2.500)	44,45 (1.750)	68,25 (2.687)	35,00 (1.375)	19,05 (.750)	1,00 (.039)	5/8-11 thread
50	69,85 (2.750)	98,41 (3.875)	69,85 (2.750)	101,60 (4.000)	35,00 (1.375)	35,00 (1.375)	1,50 (.059)	1-8 thread

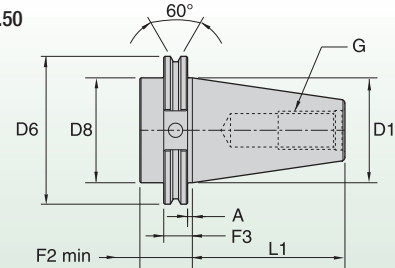
Taper Specifications

BT — JIS B6339



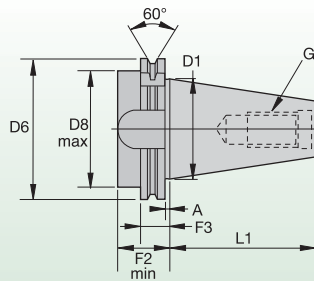
	D1	D6	L1	F3	A	G
30	31,75 (1.250)	46,00 (1.811)	48,40 (1.906)	22,00 (.866)	2,00 (.079)	M12 thread
35	38,10 (1.500)	53,00 (2.087)	56,50 (2.224)	24,00 (.945)	2,00 (.079)	M12 thread
40	44,45 (1.750)	63,00 (2.480)	65,40 (2.575)	27,00 (1.063)	2,00 (.079)	M16 thread
45	57,15 (2.250)	85,00 (3.346)	82,80 (3.260)	33,00 (1.299)	3,00 (.118)	M20 thread
50	69,85 (2.750)	100,00 (3.937)	101,80 (4.008)	38,00 (1.496)	3,00 (.118)	M24 thread

CAT (CV) — ANSI B5.50



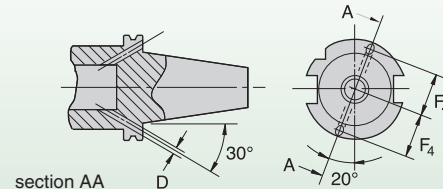
	D1	D6	D8	L1	F2	F3	A	G
30	31,75 (1.250)	46,02 (1.812)	31,75 (1.250)	47,63 (1.875)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	1/2-13 thread
40	44,45 (1.750)	63,05 (2.500)	44,45 (1.750)	68,25 (2.687)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	5/8-11 thread
45	57,15 (2.250)	82,50 (3.250)	57,15 (2.250)	82,55 (3.250)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	3/4-10 thread
50	69,85 (2.750)	98,41 (3.875)	69,85 (2.750)	101,60 (4.000)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	1-8 thread
60	107,95 (4.250)	139,70 (5.500)	107,95 (4.250)	161,93 (6.375)	38,10 (1.500)	19,05 (.750)	3,18 (.125)	1 1/7 thread

DV — DIN 69871



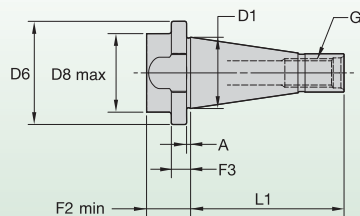
	D1	D6	D8 max	L1	F2 min	F3	A	G
30	31,75 (1.250)	49,95 (1.967)	45,00 (1.772)	47,65 (1.876)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M12 thread
40	44,45 (1.750)	63,00 (2.480)	50,00 (1.969)	68,25 (2.687)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M16 thread
45	57,15 (2.250)	82,00 (3.228)	63,00 (2.480)	82,55 (3.250)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M20 thread
50	69,85 (2.750)	97,45 (3.827)	80,00 (3.150)	101,60 (4.000)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M24 thread

Form B — Flange Coolant Entry Ports



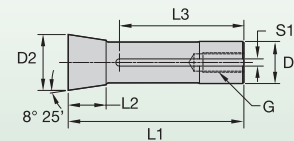
	D	F4 ±0.004
30	4,00 (.157)	21,00 (.827)
40	4,00 (.157)	27,00 (1.063)
45	5,00 (.197)	35,00 (1.378)
50	6,00 (.236)	42,00 (1.654)

QC — Erickson™ Quick Change



	D1	D6	D8 max	L1	F2 min	F3	A	G
30	31,75 (1.250)	46,03 (1.812)	35,05 (1.380)	68,33 (2.690)	19,81 (.780)	10,69 (.421)	1,96 (.077)	1/2" - 13 UNC - 2B
40	44,45 (1.750)	63,50 (2.500)	50,80 (2.000)	93,73 (3.690)	20,83 (.820)	9,88 (.389)	1,93 (.076)	5/8" - 11 UNC - 2B
50	69,85 (2.750)	88,90 (3.500)	73,66 (2.900)	127,00 (5.000)	30,73 (1.210)	15,09 (.594)	3,58 (.141)	1" - 8 UNC - 2B

R8 — Bridgeport



	D1	D2	L1	L2	L3	S1	G
R8	.469	1.241	4.000	.938	2.750	.157	7/16-20 UNF - 2B

The Importance of a Strong Connection

Many component materials are switching to lighter, high-strength materials, like titanium, to increase fuel efficiency. To save time and money, machinists are challenged to maximize metal removal rates at low cutting speeds and considerably higher cutting forces. Machine tool builders must also provide greater stiffness and damping in their spindles to minimize undesirable vibrations that deteriorate tool life and part quality.

Though these advances contribute to greater productivity, the weakest point is often the spindle connection itself, which needs high torque and must overcome high-bending applications.

Our response to this traditionally weak point has been the proven KM™ system, and now we are introducing the next generation KM4X™. The combination of the KM4X's high clamping force and interference level lead to a robust connection and extremely high stiffness and bending load capacity for unmatched performance in titanium machining.

Current Spindle Connections

To fulfill the increasing demand for high productivity, an important element to consider is the tool/spindle connection. This interface must be able to withstand high loads and maintain rigidity throughout the machining process. In most cases, the connection determines how much material can be removed on a given operation until high tool deflection or chatter result.

High-performance machining is accomplished using high feeds and depths of cut. Because of advances in cutting tools, there is a need for spindle connections that utilize available power.

Several different types of spindle connections were developed and/or optimized over the last few decades. Due to its strong cost/benefit position, the 7/24 ISO taper became one of the most popular systems on the market. It has been successfully used in many applications, but its accuracy and high-speed limitations prevent it from becoming a more advanced and productive system.

The advent of face contact represented a major step over the standard 7/24 taper. Combining face contact with a 7/24 solid taper provides higher accuracy. However, this also presents some disadvantages. Loss of stiffness at higher speeds or high side loads are some of the major flaws apparent in this system. Most of these tools are solid, and the spindles have relatively low clamping force.

This results in limited connection stiffness, as radial interference needs to be minimal. The required tolerances to achieve consistent face contact are thus very tight, leading to high manufacturing costs.

Choosing What's Right

With more materials that are tougher to machine and require considerably higher cutting forces from the machine tool, choosing the spindle interface wisely to maximize cutting edge performance is key to success.

The KM spindle connections greatly outperform the conventional 7/24 steep taper and its face taper contact derivatives HSK and PSC systems. KM4X is the best large, heavy-duty spindle connection for rigidity because it has superb balance between bending and torsion capabilities from the machine tool.



Various spindle connections commercially available today: 7/24 ISO taper, KM (ISO TS), HSK, and PSC.

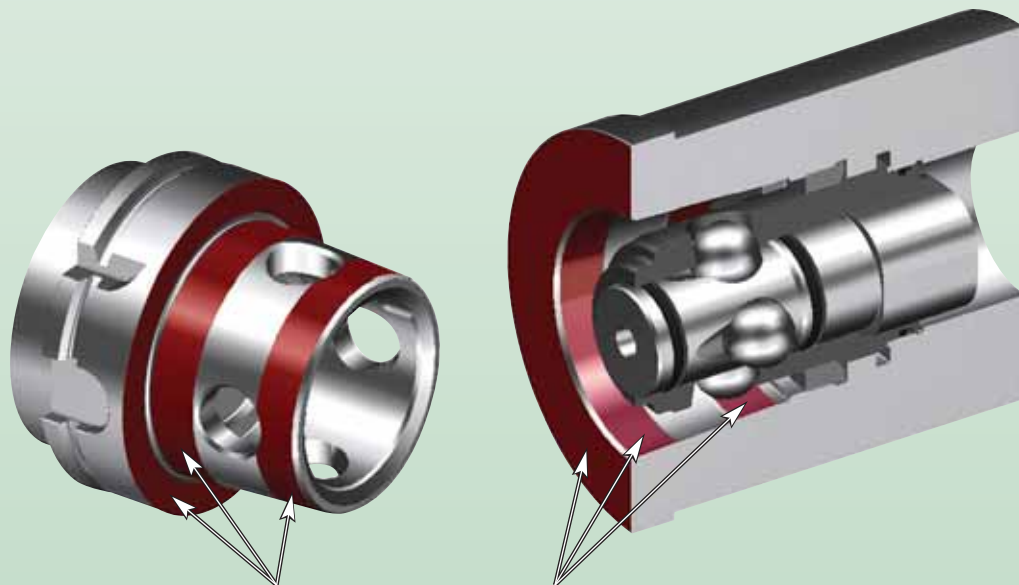
KM4X — The Next Generation Spindle Connection System

As a global tooling supplier and a true customer support partner, we recognize the need to offer tooling products for all spindle interfaces and make available solutions to provide the best cutting edges to gain maximum productivity at the spindle system connection.

KM4X is the latest version of the KM™ spindle interface targeted at heavy-duty machining operations and is a top choice for machining large, structural tough-to-machine materials like titanium for the aerospace industry.

The Latest Innovation in Spindle Interface Technology

- KM4X offers the most rigid connection able to withstand extremely high bending due to a combination of high interference and high clamping forces.
- KM4X provides 3x more bending capacity than comparable face contact systems.
- KM is the only connection that maintains stiffness at elevated rotational speeds and is suitable for a range of applications from low speeds with high torque to very high spindle speeds with low torque.
- KM4X maintains a better balance between bending and torsion capabilities.
- The ability to retrofit KM4X to an existing machine tool offers the added advantage of increasing throughput.
- Heavy-duty, rigid configuration with evenly distributed clamping force.
- Simple design enables front-loaded spindle configuration.
- Balanced-by-design for high spindle speed capacity.



KM4X three-surface contact for improved stability and accuracy.
Optimized clamping force distribution and interference fit provides higher stiffness.

Why Bending Load Capacity Is Important

When machining tough materials like titanium, cutting speeds are relatively low due to thermal effects on cutting tools. Over the years, machine tool builders responded to this issue by improving stiffness and damping on spindles and machine structures. Spindles have been designed with abundant torque at low rotational speeds. Nevertheless, the spindle connection has remained the weak link in the system.

The spindle connection must provide torque and bending capacity compatible with the machine tool specifications and the requirements for higher productivity. It becomes obvious that in end-milling applications where the projection lengths are typically greater, the limiting factor is the bending capacity of the spindle interface.

The lines on the chart to the right represent the load capacity of HSK, PSC, and KM4X. The shaded areas represent the typical requirements for heavy-duty applications in various machining processes. KM4X is the only system that can deliver the torque and bending required for achieving high-performance machining. Some systems may be able to transmit a considerable amounts of torque, but the cutting forces also generate bending moments that exceed the interface's limits before torque limits are exceeded.

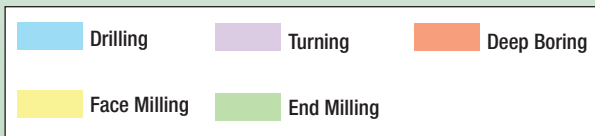
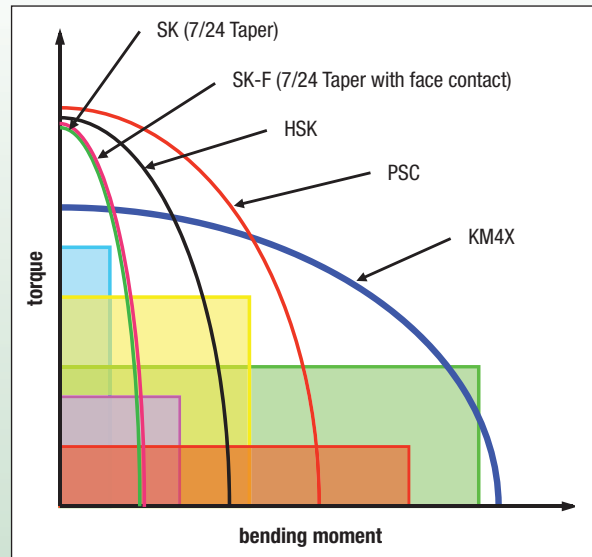
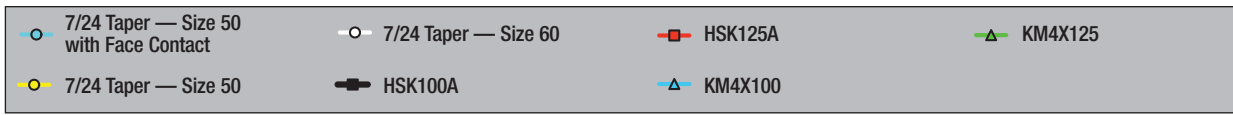
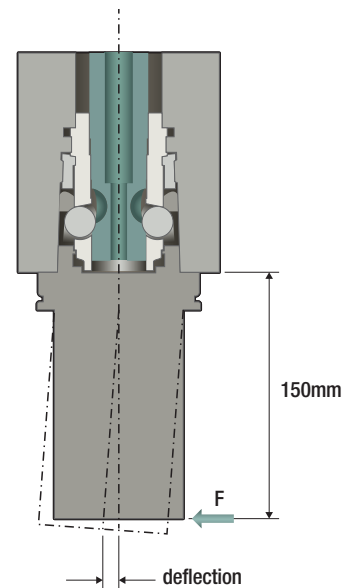
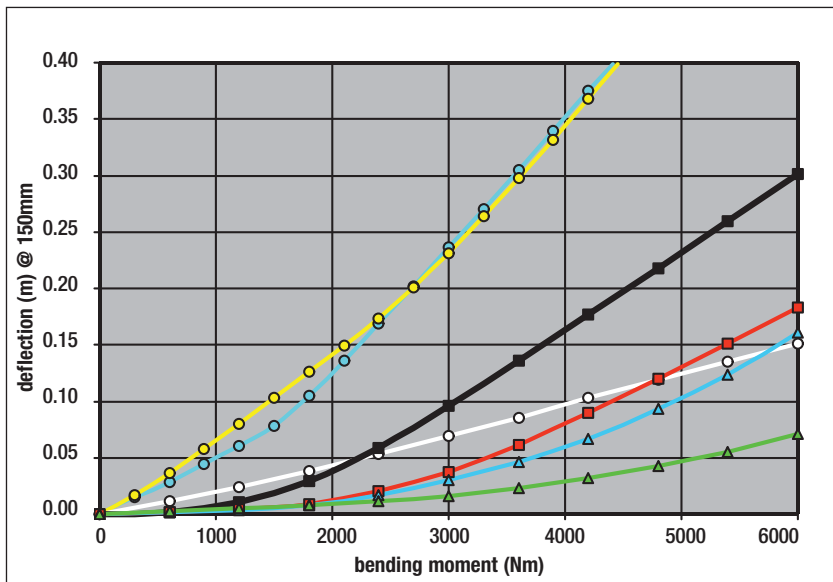
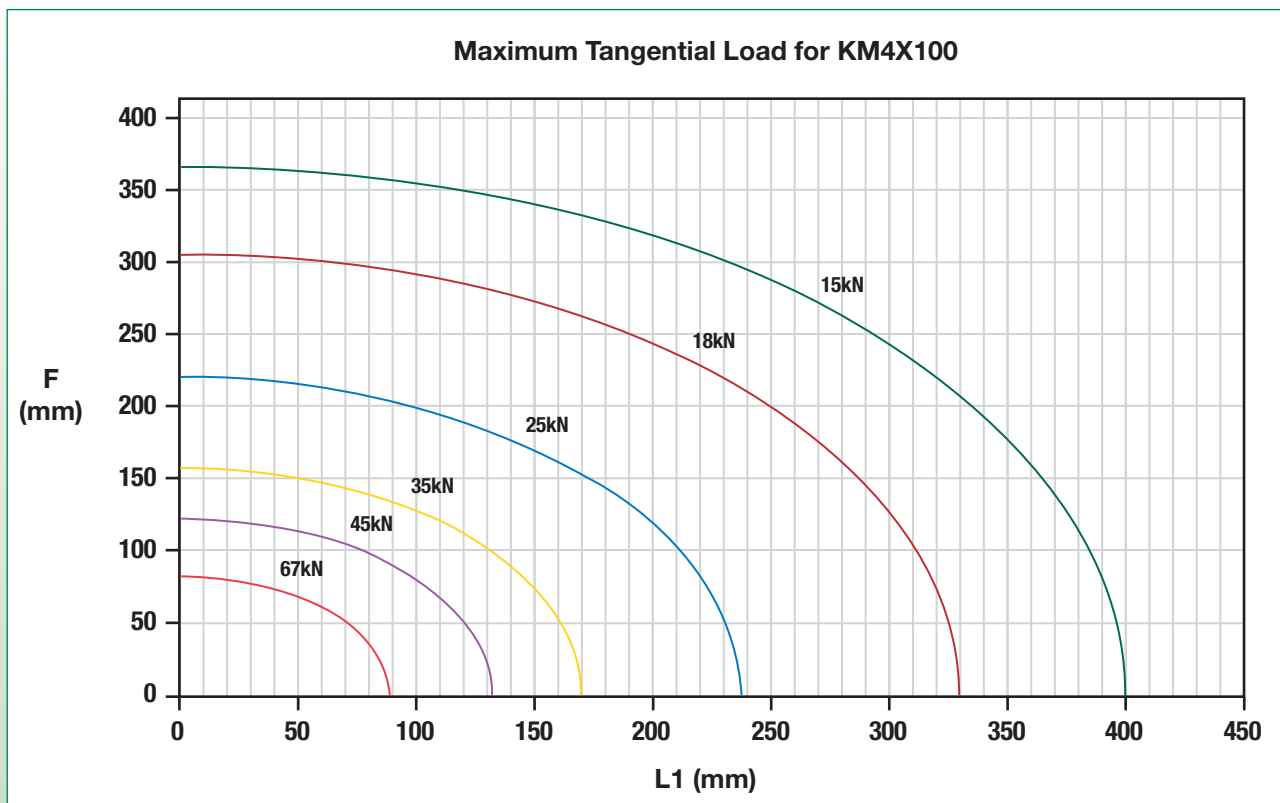


Chart shows load-deflection comparison of steep taper with and without face contact — HSK and KM4X.



Technical Information



The KM4X system is the best large, heavy-duty connection. A weak connection can fail to deliver the desired cutting edge performance. KM4X superior rigidity equals maximum productivity.



The KM Coupling

The KM Quick Change Clamping System is the first step in achieving maximum machine output. Please refer to the WIDIA Machine Utilization Strategy for more information on how we can help you increase your machine throughput. The KM joint achieves rigidity and stiffness by combining unique design elements in both the shank of the tool and the clamping mechanism. The KM joint was developed as a system and takes full advantage of both the tool shank and the mechanism to obtain maximum benefits from the space utilized.

Rigidity

All KM tooling is designed around a short 10:1 tapered shank. Extensive testing of many different lengths, angles, and interference levels provided the optimum combination of dimensions with regard to maximum stiffness. The taper is self-centering, promoting easy tool loading in both manual and automatic applications.

The three-zone contact and the ball track clamping mechanism produces a coupling that closely approaches the ultimate rigidity of a solid piece.

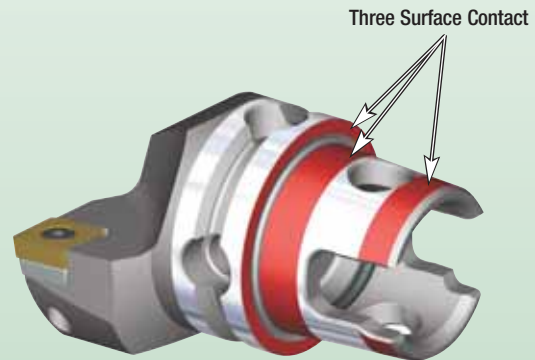
Face and Taper Contact

KM tooling is designed to have simultaneous taper and face contact. Previous efforts to achieve this were concentrated on steep taper applications. However, due to the relatively large angle of the taper, extremely tight tolerances are required on the gage diameters of both the tool and receptacle. The KM taper was designed to avoid these tight tolerances by selecting shallower taper angles that enable elastic deformation of both the taper shank and receptacle during clamping. It also permits larger interference levels* to be used while still achieving taper and face contact during clamping. These interference levels, when combined with the proper clamping force, provide superior static and dynamic stiffness. The system's interference capability enables the use of lower tolerance levels for gage diameters, decreasing manufacturing costs. The taper and face contact feature provides a radial and axial repeatability of $\pm 2,5 \mu\text{m}$ ($\pm .0001''$) for a specific cutting unit in a specific clamping unit. When more than one unit is utilized, the manufacturing and component tolerances of each must be considered. Pre-gaging cutting units before they are used enables the deviations of each tool tip location to be recorded. These deviations can be compensated for by the machine tool control offsets. Checking for deviations prior to use means the first part manufactured will be a good part.

*The difference between the gage diameters of the receptacle and the taper shank.

Clamping Mechanism

The KM clamping mechanism is housed inside of the taper shank, which contains two angled holes that function as ball tracks. A cylindrical ball canister fits inside of the taper shank, where wedge shaped forms on a central lock rod force two hardened steel balls outward. The steel balls interact with the angled holes in the tapered shank to produce clamping force. The combination of the angle in the taper shank, the angle of the canister holes, and the lock rod angle produce a measured mechanical advantage that varies between 3.5:1–7:1. The standard manual side activation mechanism has a mechanical advantage of 3.5:1 and fits into the system size diameter.



Locking Sequence

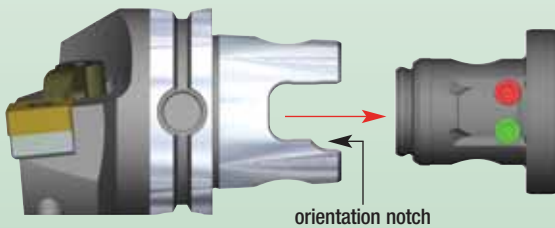
The clamping sequence starts by inserting the cutting unit into the female taper of the clamping unit. The cutting unit first makes contact at a standoff from the face of approximately 0,25mm (.010"). The cutting unit advances until the gage face makes contact with the clamping unit face, where a small amount of elastic deformation takes place at the front of the female taper as locking force is applied. The final amount of torque applied enables the tail of the cutting unit to clamp securely between the steel balls and the clamping unit inside diameter.

Sealed Coolant

Sealed through-the-tool coolant is offered on all standard KM tooling and clamping units. The coolant is sealed using O-rings in both the cutting units and clamping units. This feature ensures that coolant is directed as close as possible to the cutting edge while preventing contaminants from entering the clamping mechanism. Standard Viton® O-rings are utilized on KM.

Fail-Safe Tool Orientation

A unique feature of KM clamping is the ability to ensure that the KM cutting unit can only be installed in one orientation. The direction of this orientation feature can be changed within the clamping unit. To allow greater flexibility, standard KM clamping units are shipped without this feature installed. For more details on this feature, refer to the KM operating instructions section.



Summary

KM coupling offers a very rigid joint with a high degree of repeatability while maintaining a compact envelope. This permits a high degree of versatility without sacrificing cutting performance.

Accuracy and Repeatability

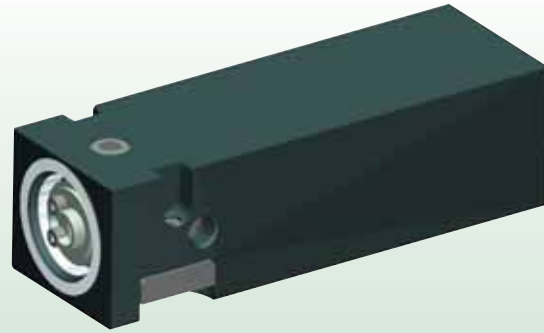
Accuracy and repeatability of the coupling are shown in the table below. Accuracy is measured over a gage insert in different cutting units changed in and out of a clamping unit. Accuracy will decrease with inserts of varying tolerances and nose radii. Station-to-station accuracy on a turret requires that all clamping units be set in the same position on the machine tool mechanically or that variations are recorded as offsets in the machine control. Repeatability is measured over the nose radius of a cutting unit through many cycles of changing the cutting unit in and out of a clamping unit.

	accuracy	repeatability
axial	0,13mm (+/- .005")	0,0025mm (+/- .0001")
radial	0,13mm (+/- .005")	0,0025mm (+/- .0001")
cutting edge height	0,4mm (+/- .016")	0,0025mm (+/- .0001")

Manual Clamping System

Characteristics

- KM Manual Quick Change tooling is the most economical way to reduce downtime for setup and tool change and is an important first step toward further automation. The machine tool builder or the customer can easily install KM Manual Quick Change tooling.
- All KM manual clamping units require approximately three turns of the activation screw and a specified amount of torque to lock the cutting tool.
- The KM Manual Quick Change clamping mechanism is rigid and compact, with an easily accessible activation screw. The high mechanical advantage of the ball track makes it simple to apply the required locking force.
- All KM Manual Quick Change clamping units accept external and internal cutting tools. Right- or left-hand tooling can be used interchangeably, and cutting tools can be inverted if required. KM Manual Quick Change clamping units support through-the-tool coolant.



- The KM Manual Quick Change clamping mechanism can adapt to a wide variety of machine tool mounting configurations including flange mounts, square, round, and VDI shanks.

KM-LOC II™ Clamping System

The KM-LOC II clamping device is the latest addition to the WIDIA™ KM modular quick-change tooling family. An evolutionary step from the conventional KM manual clamping system, the KM-LOC II employs a cam and a preloaded disc spring pack to provide positive, stop-to-stop locking and unlocking in only 145° of movement.

The spring pack supplies the correct clamping force without using a torque wrench, while the cam permits quick and easy clamping/unclamping in less than one half of a turn. The KM-LOC II clamping device is compact to adapt to a wide variety of machine tool mounting configurations including flange mounts, square, round, and VDI shanks.

The KM-LOC II is capable of handling through-the-tool coolant pressure of 100 bar (1500 psi), and the design permits lubrication of internal components without disassembly. The design also enables the external installation of an orientation screw that restricts the cutting tool to a single orientation.



The latest KM-LOC II clamping device offers all of the features and benefits of our industry-proven KM Modular Quick Change Tooling System and reduces the time required for manual tool changes.

Automatic Clamping System • Spring-Pack Activated

Characteristics

Automatic KM clamping systems enable tools to be locked or unlocked with the push of a button by the machine operator or changed automatically by the machine tool. These units also allow tools to be changed quickly and provide a high level of automation at a moderate cost.

Operation

The pull on the lock rod for the automatic KM clamping unit is provided by disc springs that are an integral part of the clamping unit. Release is accomplished by pushing on the back of the clamping unit with a hydraulic cylinder mounted on the turret assembly. Many machine tool builders design and build the turrets for their machines to be equipped with the KM Automatic Clamping Units.



KM Manual Clamping Operating Instructions

Locking

Before inserting the KM unit into the clamping mechanism (Figure 1), clean the contact face and taper.

Turning the torque screw clockwise locks the cutting unit in position. For maximum safety, tighten the unit to the specified torque using a torque wrench. This ensures that the proper clamping forces are exerted.

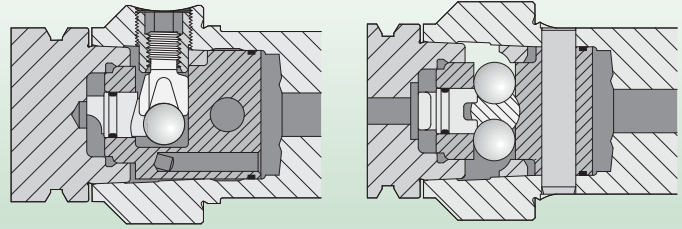


Figure 1

Operating Position

With the balls locked in position (Figure 2), and the face and self-locking taper fully engaged, the cutting unit and clamping unit are rigidly secured together.

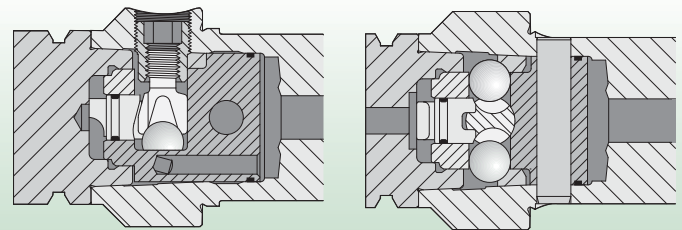


Figure 2

Unlocking

Rotate the torque screw counterclockwise (Figure 3) until initial resistance is felt. In this position, the locking balls are free of the cutting unit, but the taper interference is still holding the KM unit in the clamping unit. At this point, the bump-off pin is in position to free the cutting unit from the interference fit.

Continue to rotate the torque screw slowly until the cutting unit is no longer making face contact (Figure 4) and is released from the taper. The torque screw will stop rotating and more resistance will be felt. Do not turn the torque screw any further.

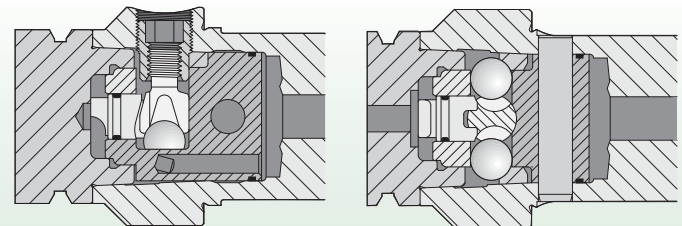


Figure 3

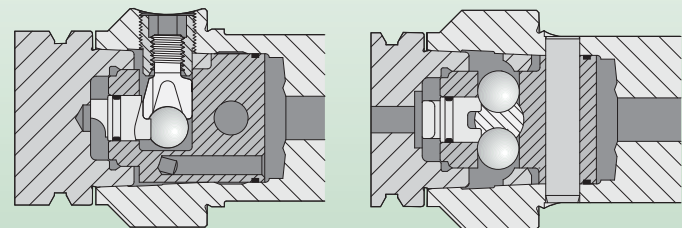
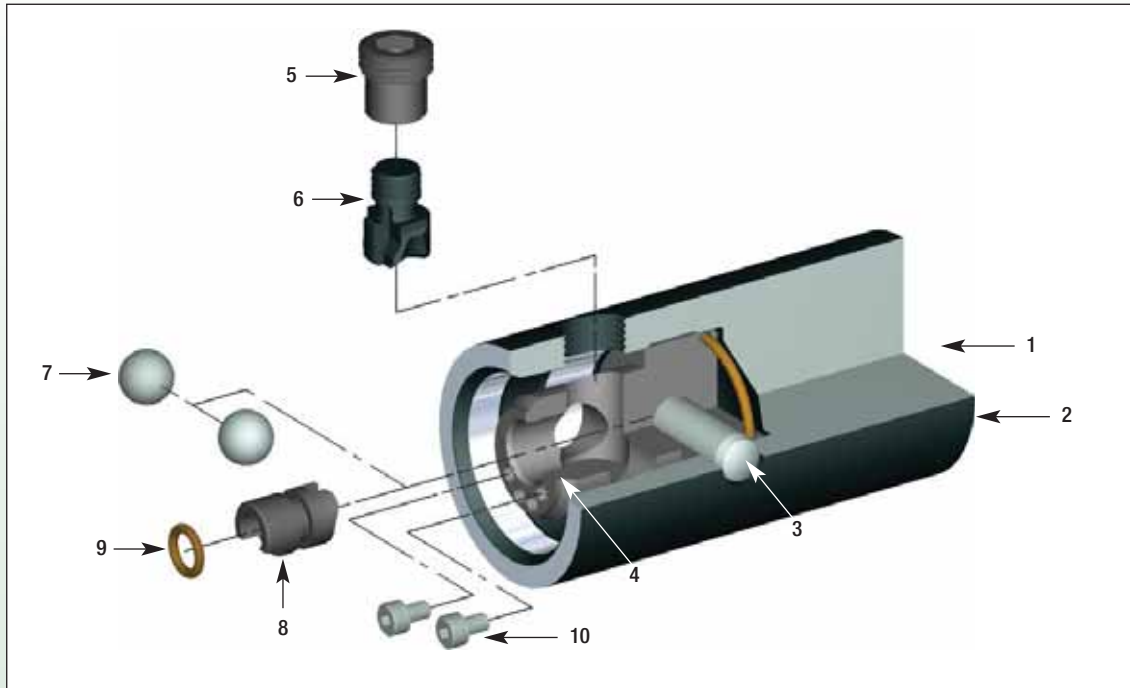


Figure 4

CAUTION

Continuing to rotate the torque screw may damage the clamping components.

Clamping Components



KM Clamping Components • Functional Definitions

1. Clamping Unit Assembly

- Assembly is designed to adapt KM tooling to a wide variety of machine tools.

2. Clamping Unit Body

- Primary detail of the clamping unit assembly, less additional hardware.

3. Canister Pin or Canister Screw

- Secures ball canister to clamping unit body.

4. Pin Canister or Screw Canister

- Main component of KM clamping mechanism holds and locates the locking balls and bump-off pin.

5. Torque Screw

- Rotation moves the lockrod:
 - a. Clockwise rotation advances lockrod, securing cutting unit (not shown).
 - b. Counterclockwise rotation retracts lockrod, releasing cutting unit (not shown).

6. Lockrod

- Dual function:
 - a. Acts as a wedge when advanced between locking balls, causing them to move outward in the ball canister and pushing the locking balls into the ball tracks of the cutting unit (not shown).
 - b. Acts as a wedge when retracted using a raised, tapered key to force the bump-off pin against the cutting unit (not shown).

7. Locking Balls (2)

- Precision, chrome alloy-steel hardened balls used to transmit pull-back force to the cutting unit.

8. Bump-Off Pin

- Dual function:
 - a. Releases cutting unit from the clamping mechanism.
 - b. Prevents lockrod from rotating.

9. Bump-Off Pin O-Ring

- Prevents coolant and contaminants from contacting KM clamping components.

10. Bump-Off Pin Screws (2)

- Secures bump-off pin in ball canister.

**Assembly/Disassembly Instructions • Repair Adjustment/Retiming Procedures
for KM Manual Tooling Clamping Unit**

- Proper KM repair package catalog and order numbers:

catalog number	3S order number	3L order number
KM32-PKG 3S or 3L	1023697	1023698
KM40-PKG 3S or 3L	1023699	1023700
KM50-PKG 3S or 3L	1023726	1023725
KM63-PKG 3S or 3L	1013701	1013702
KM80-PKG 3S or 3L	1144980	1023701

- Pair of pliers.
- WIDIA™ recommends and uses GLEITMO™ 805.
- Order number 1567575 for one grease cartridge.
- Order number 1567577 for a 1,000 gram tin.
- Clean towels or shop rags.
- Solvent or degreaser that does not leave residue (used to clean inside the taper and canister upon disassembly). Should the unit become contaminated, you can use a degreasing agent or something similar to clean the surfaces.

CAUTION

DO NOT USE silicone cleaner or WD-40™-type lubricants.

- T-wrench or metric-hex Allen wrench fits torque screw hex head for:

KM32™ units.....	5mm
KM40™ units.....	6mm
KM50™ units.....	10mm
KM63™ units.....	12mm
KM80™ units.....	14mm

- Hex Allen wrench fits small socket head screws to hold bump-off pin in place for:

KM32 units.....	2mm
KM40 units.....	2,5mm
KM50 units.....	3mm
KM63 units.....	5mm
KM80 units.....	5mm

NOTE: All KM repair packages include the bump-off pin, lock rod, torque screw, two chrome balls, two socket head cap screws, and O-ring.

KM Manual

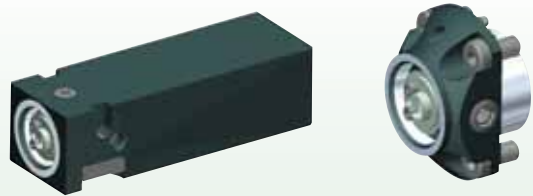
Standard KM Manual units require a torque wrench to activate. Using the proper torque wrench value is critical. Tighter is not better because over tightening can cause damage.

The specific operating torque of the KM manual clamping units is listed on each unit (torque value information is listed to the right).

The KM connection must be kept clean and free from nicks and burrs. KM plugs are available to ensure cleanliness when a cutting unit is not engaged in the clamping unit.

When a KM head is unlocked, the head will bump-off. KM's 10:1 taper is self-locking, and therefore, requires a mechanical release. This is accomplished within the design of the KM System and does not require operator intervention.

After the head has been released, you will need to turn the torque screw another 3/4–1-1/2 turns. This rotation will feel free of resistance. When the free turning motion stops, the head can be pulled from the clamping unit. Do not turn the lock screw further, as damage can occur to the lockrod and/or bump-off pin.



KM size	torque (ft. lbs.)	torque (Nm)	activation drive size
KM32	7–9	10–12	5mm
KM40	9–12	12–16	6mm
KM50	20–25	27–34	10mm
KM63	35–40	47–54	12mm
KM80	58–63	79–85	14mm

Operator Maintenance

All tooling showing damage must be replaced. Burrs and nicks should be removed by stoning and/or polishing.

- Use plugs to protect clamping units when they are not in use.
- Use spindle wipers to clean the clamping units.
- For spindle wipers, refer to page J31.

(continued)

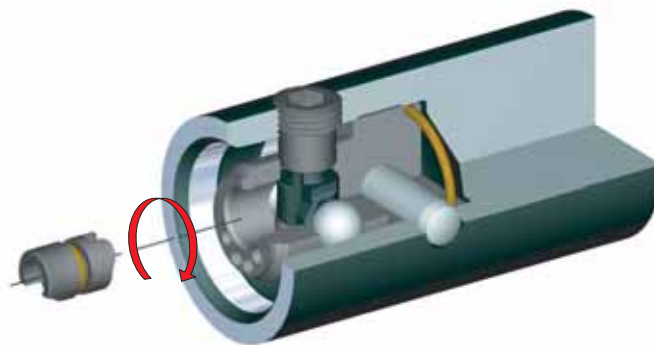
Assembly/Disassembly Instructions • Disassembly Procedure *(continued)*

1. Remove the two socket-head cap screws that retain the bump-off pin (see Frame 1).
2. Grip the exposed end of the bump-off pin with pliers and pull straight out. Some resistance may be felt due to the O-ring seal around the bump-off pin (see Frame 2).
3. Using the appropriate metric wrench, remove the torque screw. The lockrod should come out with the torque screw. Separate the torque screw from the lockrod, remembering the lockrod has left-hand threads (see Frame 3).
4. Remove the locking balls from within the canister. Grease can cause them to stick inside. Pushing the balls one at a time towards the center of the canister then turning the clamping unit upside down and tapping it against your palm will usually dislodge them. If you must hit the clamping unit harder, be certain you do not damage the gage or locking face of the unit. A small magnetic screwdriver also works well (see Frame 4).
5. Normally, no further disassembly should be attempted. If the clamping unit body or canister has been damaged, it should be replaced with a new unit. You can also contact your WIDIA™ Sales office for instructions on how to send the unit to a WIDIA Repair facility.

Frame 1



Frame 2



(continued)

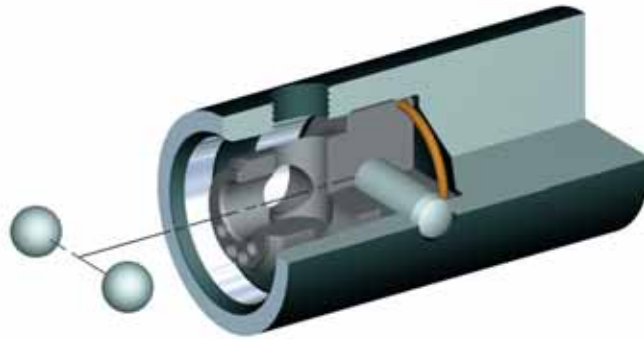
Assembly/Disassembly Instructions • Disassembly Procedure *(continued)*

6. Clean locking balls, torque screw, lockrod, and bump-off pin of all grease and inspect for wear, burrs, or obvious damage. If rebuilding the unit with a repair parts package, we recommend using all new components contained in the kit. If you are not using the repair package, but are retiming or adjusting the unit, inspect the external threads on the torque screw and lockrod, the locking ball contact surfaces on the lockrod, and the mating surfaces between the lockrod and bump-off pin. Discard any components of questionable condition and replace with new ones. Note the condition of the raised taper key on the lockrod as you will need this later.

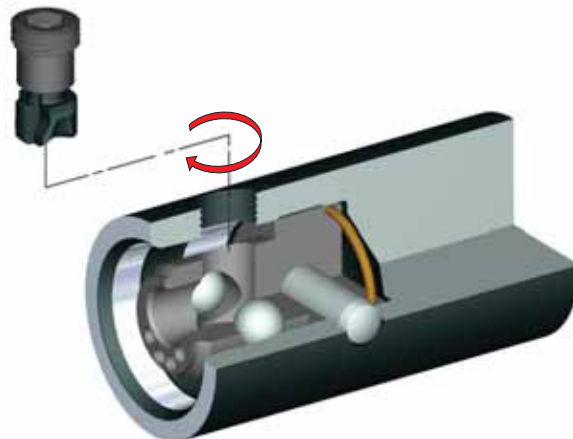
7. Inspect inside the KM taper for damage and/or contamination. Clean the taper and canister with solvent. Allow the unit to dry before reassembling. Inspect the torque screw threads in the body for damage.

8. If the unit is equipped for through-coolant capability, you may want to verify that the coolant passages are clear. Clean if required.

Frame 3



Frame 4

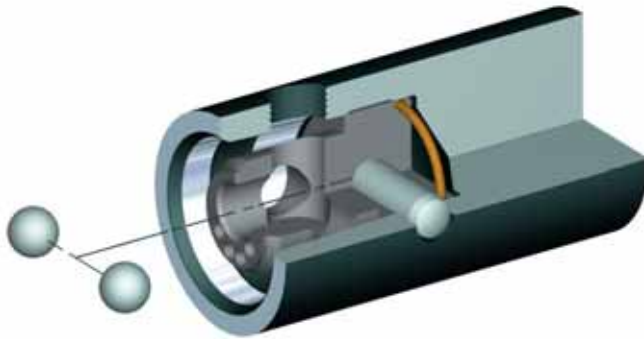


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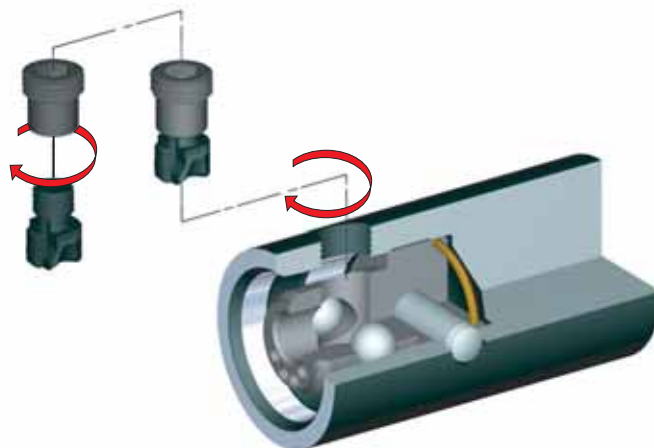
Assembly/Disassembly Instructions • Assembly/Retiming Procedure *(continued)*

1. Place a small amount of GLEITMO™ 805 grease into the canister where the locking balls make contact, paying particular attention to the inner top surface of the locking ball bores.
2. Lightly coat both locking balls with grease. Insert the balls, one at a time, into the canister's central bore until it bottoms, then move the ball outward into the locking ball bores, not the torque screw hole (see Frame 5).
3. Lightly coat the threads of the lockrod and torque screw with grease and thread them together finger tight (left-hand threads). The torque screw and lockrod must remain tightly together during the reassembly procedure and rotated as one piece throughout (see Frame 6).
4. Make sure the balls are pushed radially into the bores. Using the metric Allen or T-handle wrench, thread the torque screw lockrod assembly into the body until it makes soft contact with the balls. Be certain the torque screw and lockrod rotate together by looking down into the canister as you thread them. If the lockrod and torque screw become unthreaded, you should remove them, re-tighten, and start Step 4 again.
5. Look into the canister through the bump-off pin bore and note the raised key on the lockrod. Position the key facing outward through the bump-off pin bore, centering it in the bore by backing out the torque screw only enough to properly align the key.
6. Place a KM cutting unit into the clamping unit. If cutting unit does not drop into place, go to Step 7. If the cutting unit drops into place, remove it, push the balls radially back out into the ball bores, and turn the torque screw/lockrod assembly inward a full turn (360°). Repeat Step 6 as many times as necessary until the unit does not drop into the taper.

Frame 5



Frame 6

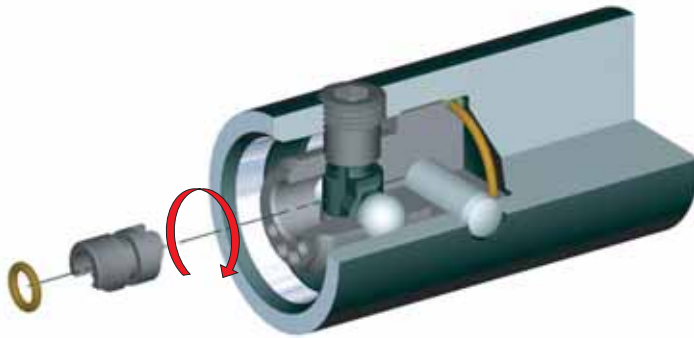


(continued)

Assembly/Disassembly Instructions • Assembly/Retiming Procedure *(continued)*

7. Thread the torque screw/lockrod assembly outward one full turn (360°), making sure the raised key faces outward. Place a KM cutting unit into the clamping unit. It should drop into the taper easily. If it does not, repeat Step 7.
8. Insert the bump-off pin without its O-ring into the bore, being certain the angled surface of the bump-off pin will ride on the angled surface of the lockrod (see Frame 7).
9. When the bump-off pin is properly seated, its largest diameter should be below the end of the canister — it should not rotate. The pin is rotationally restrained by the lockrod key, in the bump-off pin keyway.
10. If all is correct, remove the bump-off pin, install its O-ring, lightly coat with grease paying particular attention to the slot, and reinstall into the bore.
11. Reinstall the socket-head cap screws that retain the bump-off pin (see Frame 8). Check for proper operation of the unit by pushing down on the end of the bump-off pin with your finger while tightening and loosening the torque screw through its full travel. You should feel the bump-off pin move in and out as the direction of the torque screw changes.
12. As a final check, rotate the torque screw outward until it stops. Install a KM cutting unit and tighten the torque screw to the proper torque required for locking. Ensure that there is no air gap between the locking faces of the cutting unit and the clamping unit. Loosen the torque screw. Initially, resistance will be felt while loosening the screw, and again when bumping off the tool from the taper. Only use light force to loosen the screw after the tool has been bumped off. Do not force the torque screw loose after tool bump-off or damage may result. Remove the cutting unit and install protective plastic or steel plug.

Frame 7



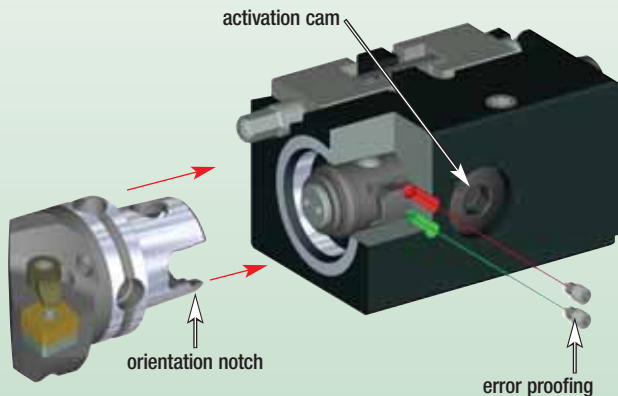
Frame 8



KM-LOC II™ Clamping Units

Operating Instructions

All KM-LOC II Clamping Units utilize disc springs to develop the correct tightening torque. This unique system does not require a torque wrench to achieve proper clamping torque. The KM LOC II System provides consistent clamping forces designed to last 50,000 cycles.



KM-LOC II Locking Sequence

Always ensure that the KM cutting unit and clamping unit are free of dirt and contaminants. When installing the cutting head into the clamping unit, note the key relations of the male and female tapers. The flange face will have about 1 mm (.040") standoff from the gage face before lock up. If the amount of standoff is greater than this, the unit is either error proofed or the tapers are contaminated. Rotate the head 180° for correct, free-state standoff.

Next, insert a wrench with the properly sized metric bit into the cam socket. Rotating the cam socket clockwise 145° (where it will stop) locks the head into the clamping unit. The dimples on both the cam and clamping unit body are aligned when a positive stop is reached.

KM-LOC II Unlocking Sequence

Remove chips or foreign material from around the cutting unit flange and clamping body. Insert the metric bit into the cam and rotate counterclockwise to unlock the unit. During this procedure, the lockrod will make contact with the inside of the cutting unit (this could feel like a positive stop), continue the counterclockwise turn until the head moves apart from the gage face.

When unlocked, a KM head will bump off. The KM System utilizes a 10:1 self-locking taper that requires a mechanical release.

KM-LOC II Clamping Units

The KM-LOC II

Under normal use, the KM-LOC II unit is designed to last 50,000 cycles. The KM-LOC II units are greased at the factory during assembly. To keep the unit functioning properly, it should be periodically greased and, if operating under normal conditions, done regularly every six months.

Approximate grease amounts are as follows:

- KM32™0.2–0.3 fl. oz
- KM40™0.3–0.4 fl. oz.
- KM50™0.5–0.6 fl. oz.
- KM63™0.5–0.6 fl. oz.

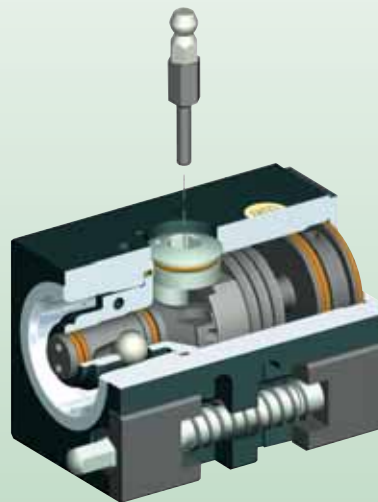
WIDIA™ uses and recommends GLEITMO™ 805, a white, high-performance grease paste.

Order number 1567575 for one grease cartridge.

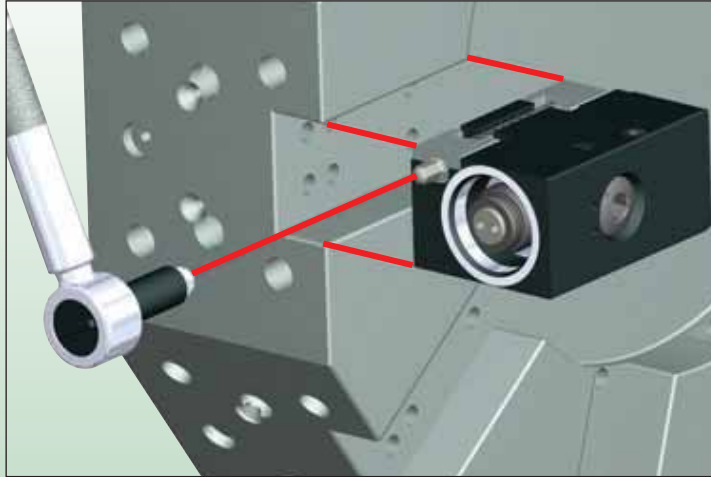
Order number 1567577 for a 1,000 gram tin.

How to Grease the KM-LOC II

Remove the standard M4 socket-set screw from the bottom of the cam hex, and thread the grease assembly into the tapped hole. An assembled grease fitting and adapter are in the spare parts package included with every clamping unit.



KM-LOC II™ Mounting Wedges • Tightening Torque



catalog number	wedge screw hex size	LBF	Nm
KM40 CL2SR/L 1260B	6	30–34	41–46
KM40 CL2SR/L 1660C	7	43–47	58–64
KM40 CL2SR/L 1660D	7	43–47	58–64
KM40 CL2SR/L 2060D	7	43–47	58–64
KM40 CL2SR/L 2560M	7	43–47	58–64
KM40 CL2SR/L 3260P	7	43–47	58–64
KM50 CL2SR/L 1675D	7	43–47	58–64
KM50 CL2SR/L 2075D	8	58–62	79–84
KM50 CL2SR/L 2575M	7	43–47	58–64
KM50 CL2SR/L 2575P	7	43–47	58–64
KM63 CL2SR/L 2090E	8	58–62	79–84
KM63 CL2SR/L 3290P	8	58–62	79–84

NOTE: Use a six-point socket.

Automatic Clamping System

Operating Instructions

The KM automatic clamping system uses a disc spring package to supply force to the lock rod — driving the locking balls and providing clamping force to the cutting unit. The mechanical advantage of the clamping mechanism is designed specifically for a given spring force to supply proper clamping force. Once the cutting unit is clamped in the KM automatic clamping unit, it is securely held in place until released by applying force to the end of the spring end cap. In most cases, this is accomplished using a hydraulic cylinder. KM automatic clamping units contain sealed coolant ports as well as a system for distributing air through the unit.

Air serves two functions: (1) air is used to clean the taper and face area during tool change; (2) it is also used to detect improper tool change. Air is routed to the intersection of the taper and the face. If the faces of the cutting unit and the clamping unit do not totally seal after a tool change, air will continue to escape and can be used to detect a tool change fault. KM automatic clamping units are available in several configurations for application on a wide variety of machines.



KM-TS™ • WIDIA™ Modular Tool Changing

KM-TS is engineered to provide machine tool builders the capability to design a machine around a very rigid and proven system while maintaining full automation. It is the ultimate in flexible tooling systems and is equipped with four holes in the V-groove.

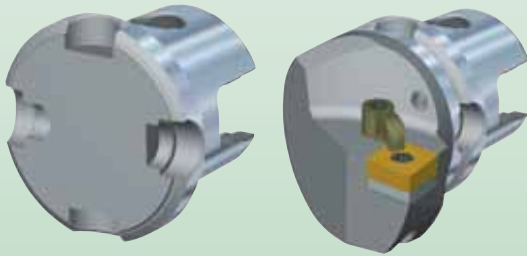
The next generation of multifunction mill-turn machines demand flexible and high-tech tooling systems. Previously, the V-groove in the KM system permitted automatic tool changing but without the capability for tool identification chips.

Tool Changing Location Features

- Two horizontally opposed holes in the V-groove for the tool changer and storage in the tool magazine. Within these two holes are counterbored holes that can be used for tool orientation.
- Two vertically oriented holes in the V-groove for tool identification chip and balancing.

Additional New Features

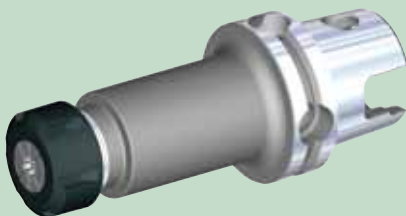
- A standard hardness of 50–54 HRC makes the tool durable enough to withstand the forces generated during high-speed tool changes and enables long-term use.
- Optimal toughness from the taper to the insert pocket seat ensures maximum protection against wear at all contact points and the highest stability under high cutting loads.
- The KM-TS tools have a silver, satin-finished surface that provides durability and long-lasting appearance.



Automatic tool changer configuration

Summary of Benefits

- A proven spindle interface for Daewoo®, Nakamura-Tome™, Takisawa™, and many other builders.
- Full compatibility with KM63™ and WIDIA UT63™ tools and adapters.
- Use with manual and fully automatic tool changing on lathes and modern mill/turn machines.
- Precision-ground tool taper and locating face.
- Optimal coolant supplied directly onto the cutting point, guaranteeing the highest-level of performance.
- For dry machining, the coolant hole can be easily closed with a screw.



KM63XMZ™



Automatic tool changer configuration

KM63XMZ has been engineered to work specifically on Mazak® INTEGREX® Mark IV Series of INTEGREX machines. The Mazak INTEGREX combines a high-powered turning center and a full-function machining center to produce parts in a single setup. KM63XMZ is an integral part of the success and ingenuity of these machines.

A standard hardness of 50–54 HRC enables long-term use and durability to withstand the forces generated during high-speed tool changes. KM63XMZ standard material provides optimal toughness from the taper to the insert pocket seat. This ensures maximum protection against wear at all contact points and the highest stability under high cutting loads. The tools have a silver, satin-finished surface that provides a durable and long-lasting appearance.

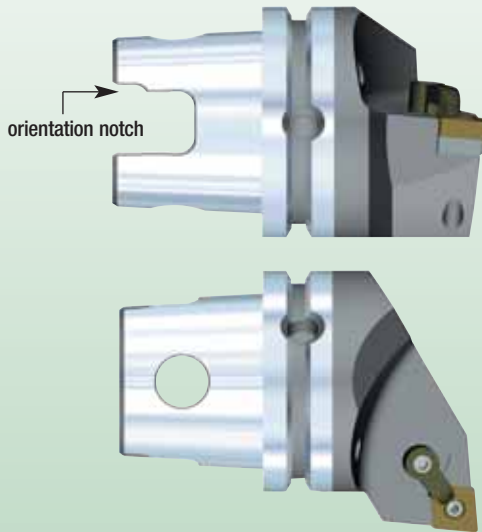
Conventional machine tools require multiple setups, extra manpower for part handling, in-process inventory, larger floor space, and increased tooling and workholding expenses.

- KM63XMZ will help reduce your overall manufacturing cost with multitask piece part processing.
- KM63XMZ will optimize your machining operations — however challenging your particular application!
- The world's most economical, rigid, and accurate modular quick-change tooling!
- Dramatically reduce your machine downtime and increase productivity!
- Large product selection for your machining needs!
- Special design tools available for unique applications!
- A proven tooling system for multitasking machines like the Mazak INTEGREX Machine Tool System!

KM63XMZ Tool Orientation Specification

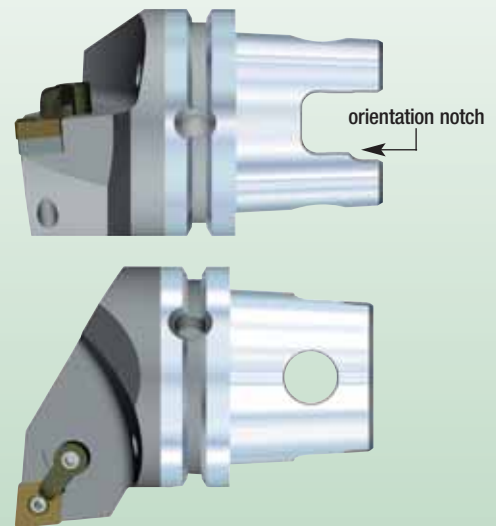
Left-Hand Orientation

For turning clockwise toward the main spindle.
Catalog Number: KM63XMZMCLNLF12Y



Right-Hand Orientation

For turning counterclockwise toward the main spindle.
Catalog Number: KM63XMZMCLNR12Y

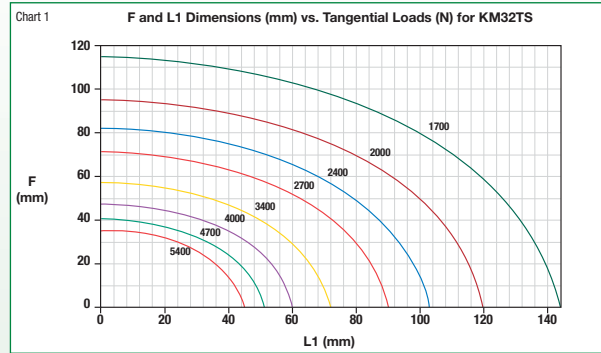


Operating Conditions

The KM tooling joint is an extremely rigid and stable system that is specifically designed to supply consistent results. As with any mechanical coupling, KM has limits that, if exceeded, could result in mechanical damage to the joint and/or its components. To help you stay within these limits, WIDIA™ has established maximum safe tangential loads for each system size. These loads are described as a certain amount of force at the standard “F” and “L1” dimensions for each given system size.

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.



Example

Example of Calculation:

Where: P = rated tangential load
 K = empirical coefficient depending on KM system size and the units of measure

- KM32™ K=190200
- KM40™ K=383600
- KM50™ K=887400
- KM63™ K=1718000
- KM80™ K=3085800

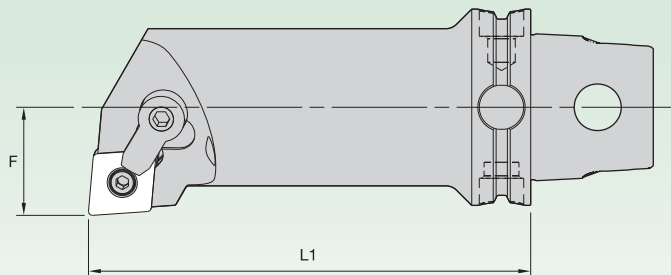
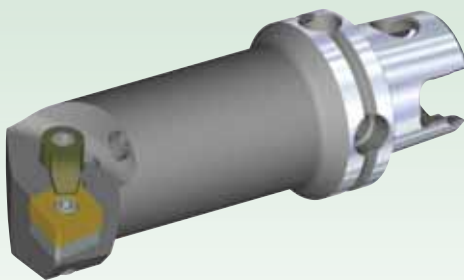
Given: The KM integral shank boring bar, ordering code KM40TS S32G-MCLNR12

Dimensions: L1 = 90mm (3.543")
 F = 22mm (0.866")

Required: What is maximum permissible tangential load?

$$P = \frac{K}{\sqrt{(0.8 L1)^2 + F^2}}$$

$$P = \frac{383600}{\sqrt{(0.8 \times 90)^2 + 22^2}} = 5095 \text{ N}$$



Operating Conditions

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

The following example illustrates how to use Charts 1, 3, 5, and 7

Given: KM40™ integral shank boring bar, ordering code KM40TS-S32G-MCLNR12

Dimensions: KM40 integral shank boring bar, ordering code KM40TS-S32G-MCLNR12 — L1 = 90mm, F = 22mm

Required: What is maximum permissible tangential load?

Solution: To determine the tangential load:

- Determine the correct chart to use. (This is a KM40 tool, so use Chart 3).
- Find the intersection point of the two lines that correspond to the dimensions L1 = 90mm, F = 22mm. These two lines intersect just above the 6670 N (1500 lbs) curve.
- The permissible tangential load is the approximate load at the point of intersection. The point of intersection is at approximately 6890 N (1550 lbs).

As you can see from the calculation, the actual value is 6790 N (1528 lbs). Small variations are to be expected from reading the approximate location on the chart but should be inconsequential.

Safe cutting conditions are achieved when the actual tangential load that is being put on the KM tooling does not exceed the maximum permissible tangential force. To help you determine the approximate value of your actual tangential force, Charts 2, 4, 6, and 8 have been developed (pages K26–K35). They show the relationship between depth of cut and feed rate at various tangential forces.

They are recommended when using standard CNMG and TNMG insert geometries to machine plain carbon steels (AISI 1000 series), most alloy steels (AISI 4000 series), and some tool and stainless steels (H11, 316).

The following example illustrates how to use Charts 2, 4, 6, and 8

Given: KM40 integral shank boring bar, ordering code KM40TS-S32G-MCLNR12
feed rate: 0.016 IPR
depth of cut: .200" (doc)

Required: What is approximate tangential force?

Solution: To determine the tangential force:

- Determine the correct chart to use. (This is a KM40 tool, so use Chart 4).
- Find the intersection point of the two lines that correspond to the 0.016 IPR feed rate and the .200" doc.
- The approximate tangential force is the force at the point of intersection. The point of intersection is at approximately 4450 N (1000 lbs).

Please remember that these are approximate values and should be used only as a reference. If there is any doubt whether these charts are accurate enough, the actual cutting force should be calculated.

These charts were designed to determine conditions within the limits of the various KM tooling system sizes. However, in actual cutting conditions, there are many other limitations, such as insert strength or excessive overhangs, that may limit the cutting forces to values far lower than those represented in the charts.

Operating Conditions • KM32TS™ • Metric

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Chart 1 **F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM32TS**

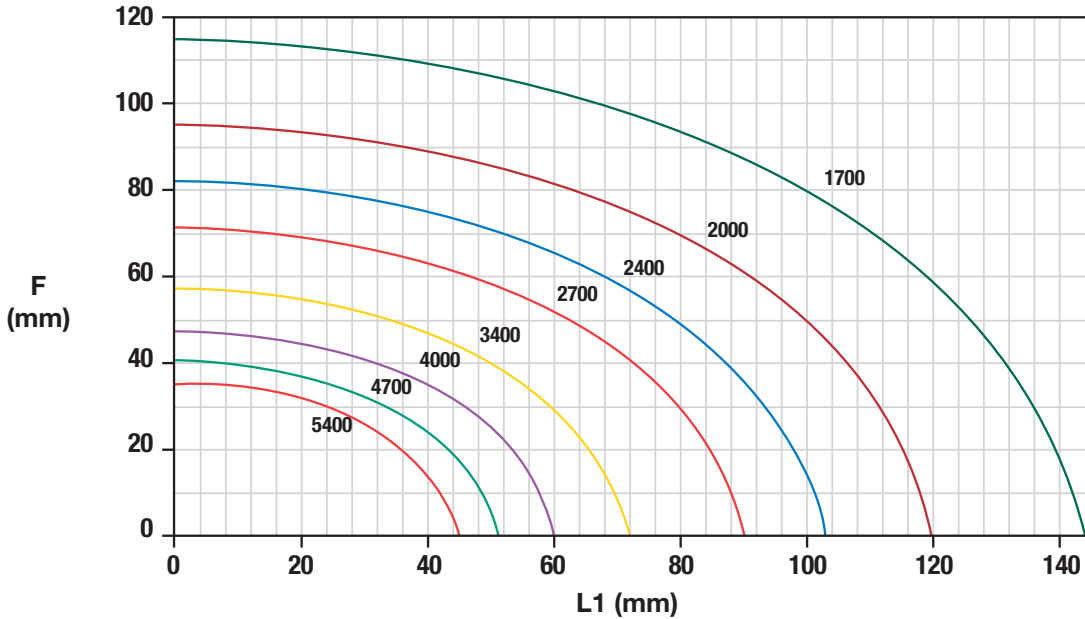
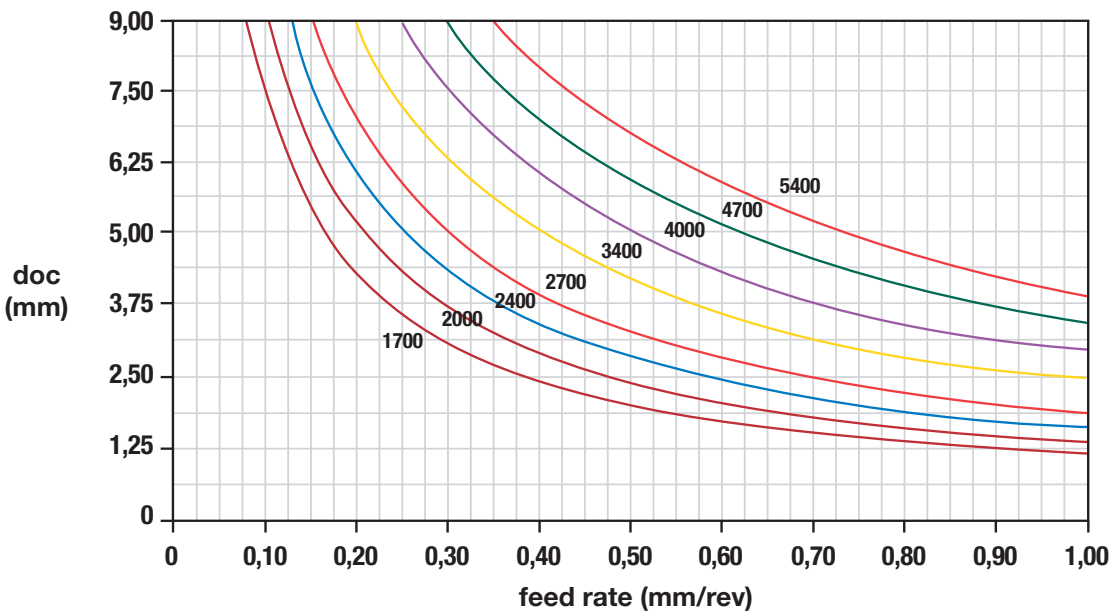


Chart 2 **Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM32TS**

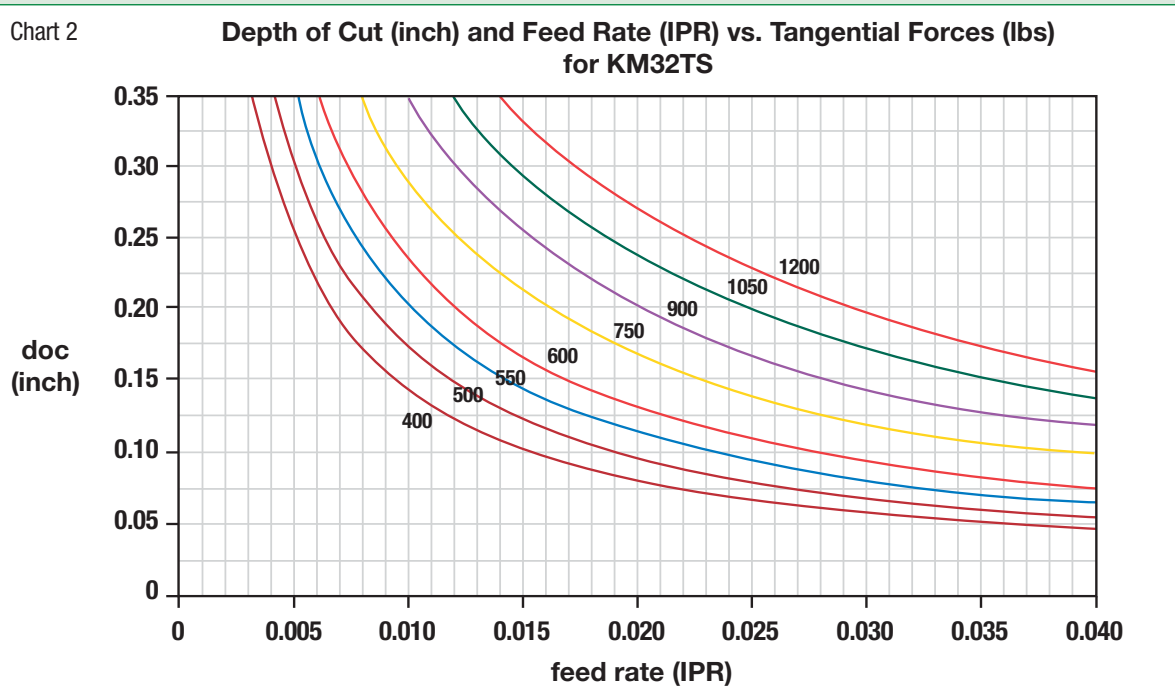
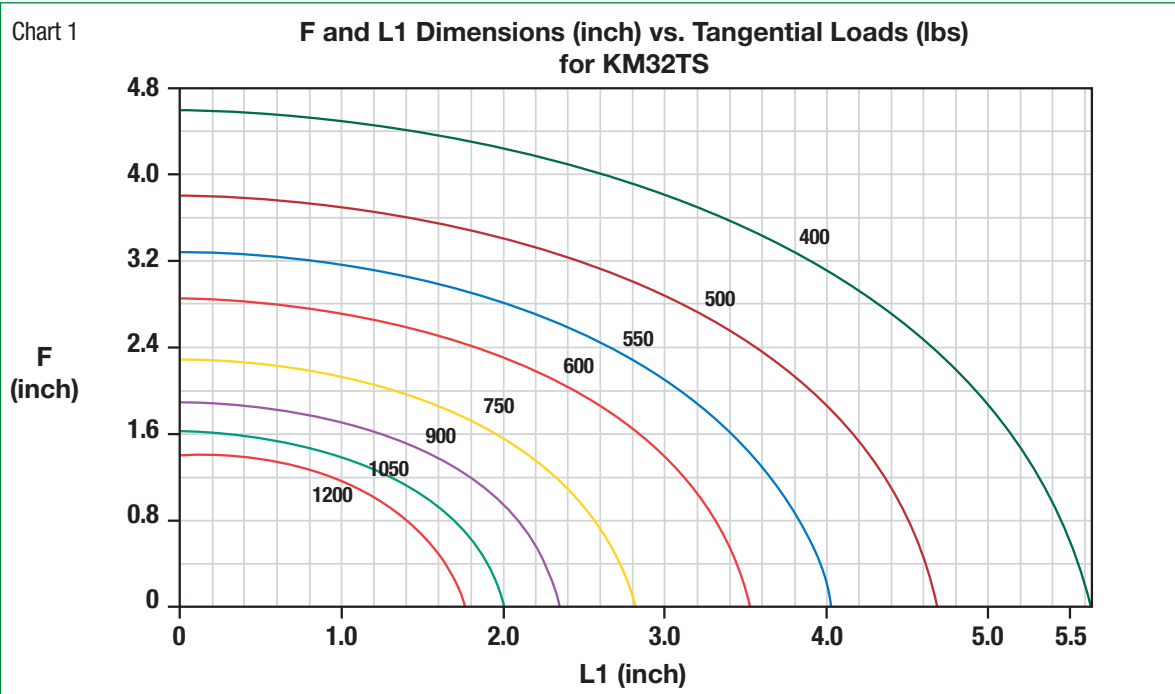


Technical Information

Operating Conditions • KM32TS™ • Inch

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.



Operating Conditions • KM40TS™ • Metric

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Chart 3

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM40TS

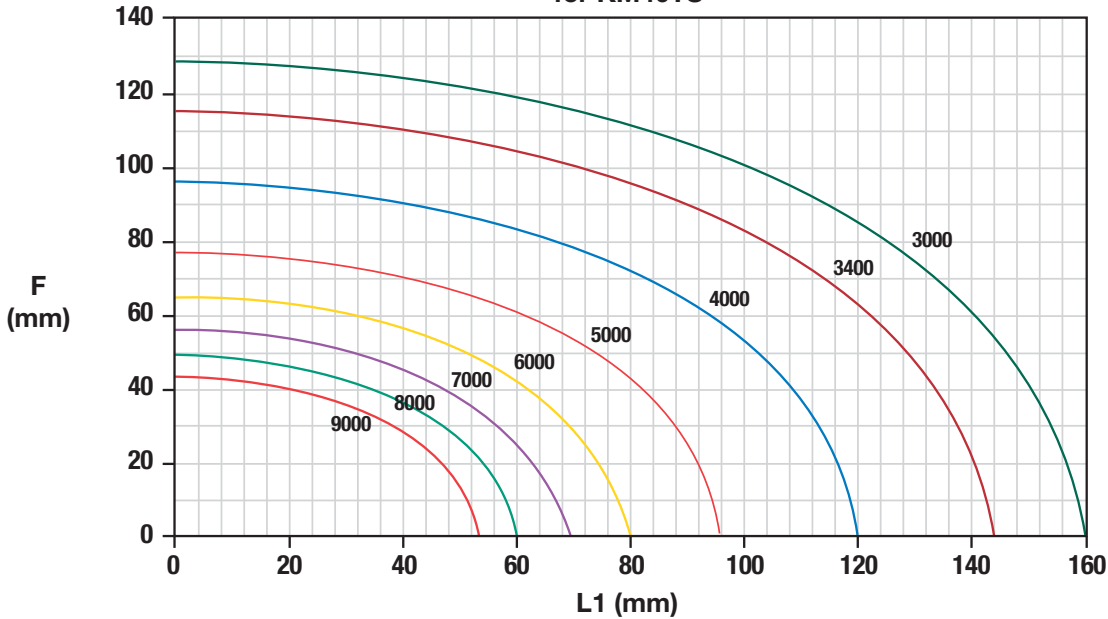
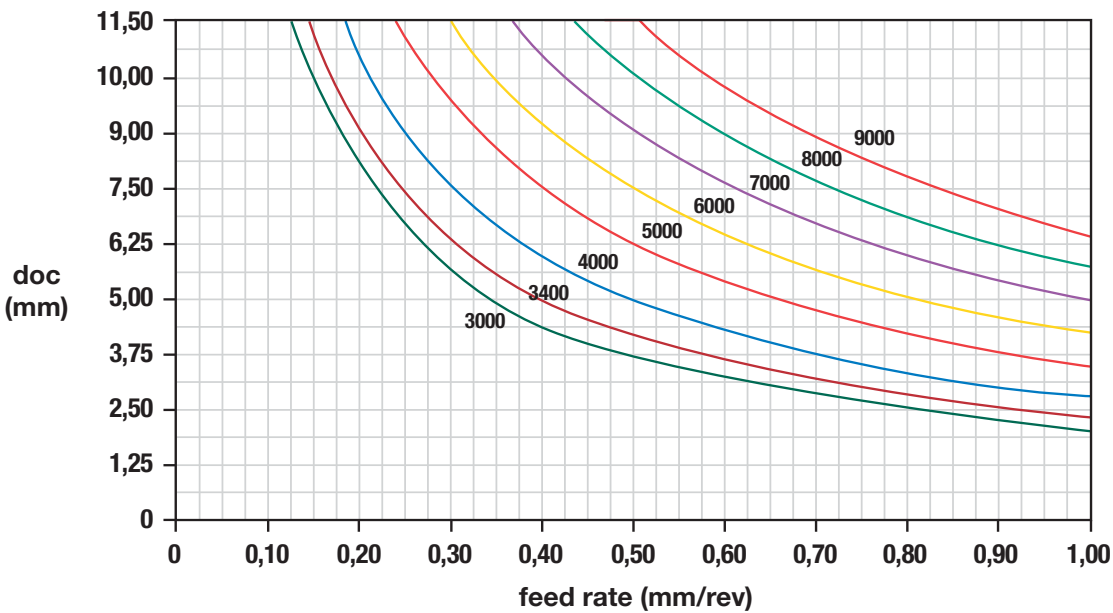


Chart 4

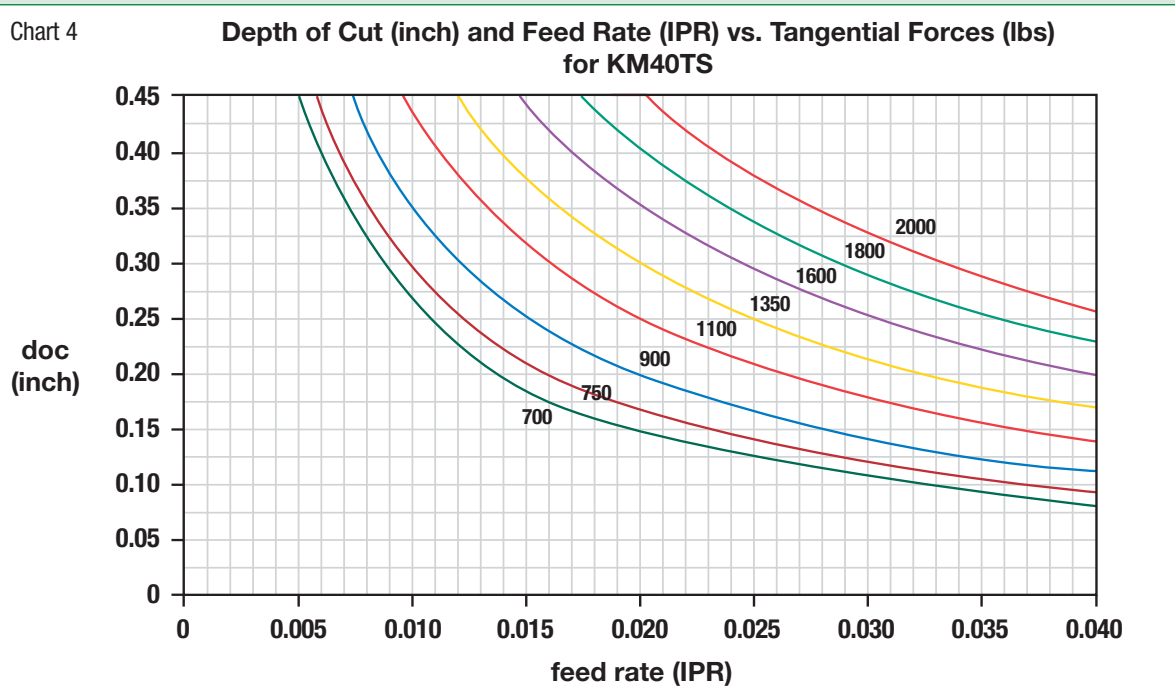
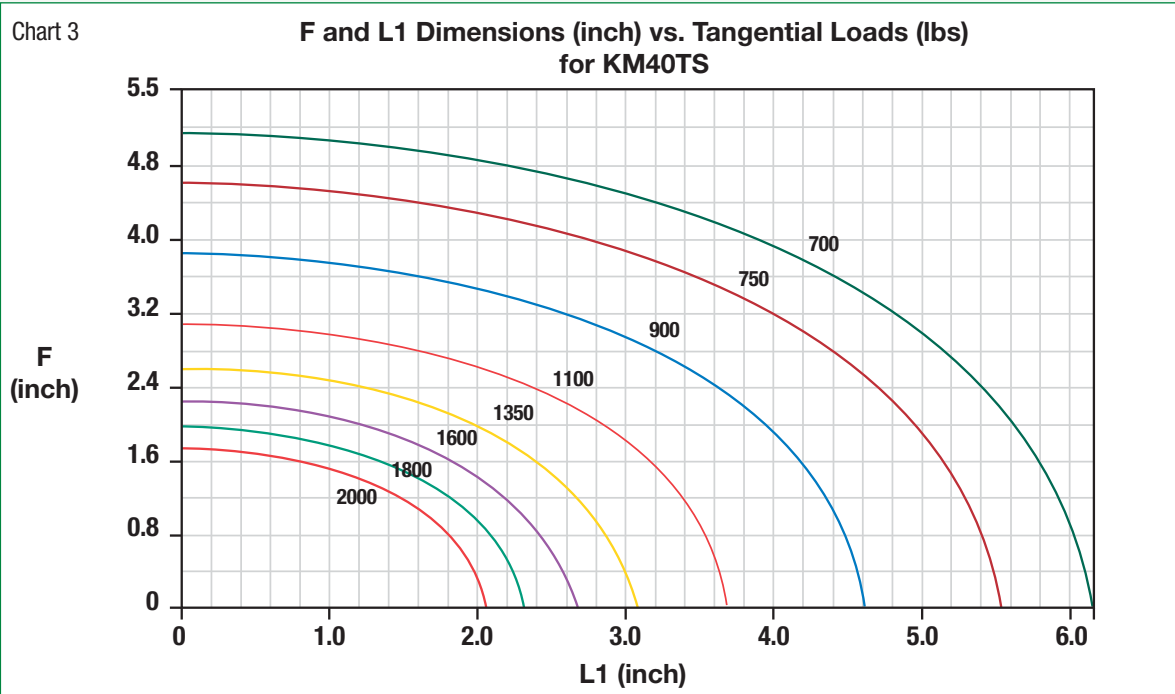
Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM40TS



Operating Conditions • KM40TS™ • Inch

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.



Operating Conditions • KM50TS™ • Metric

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Chart 5

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM50TS

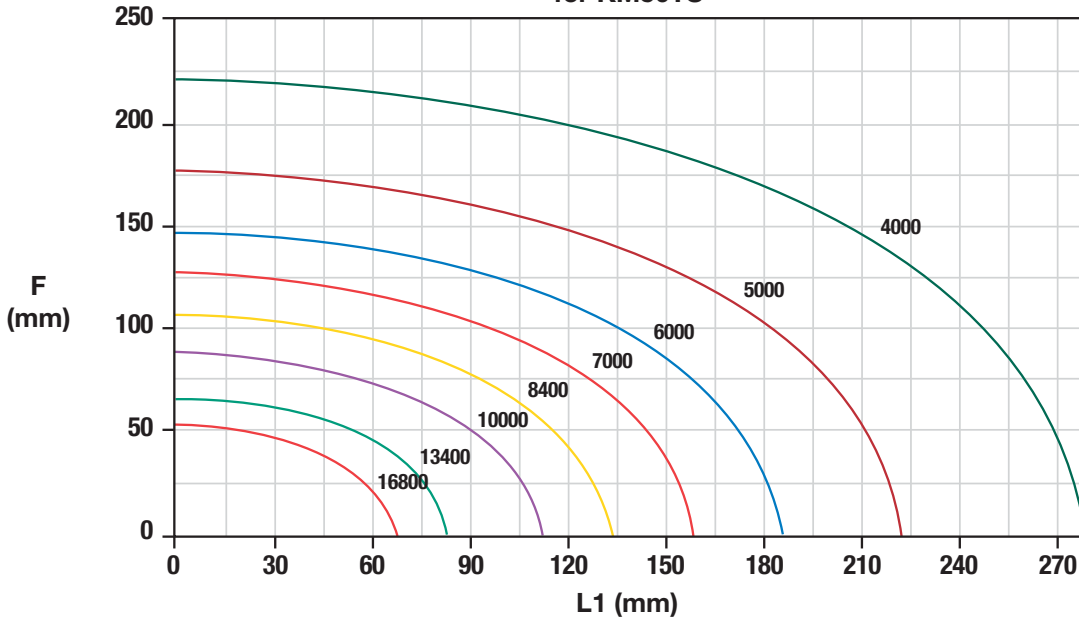
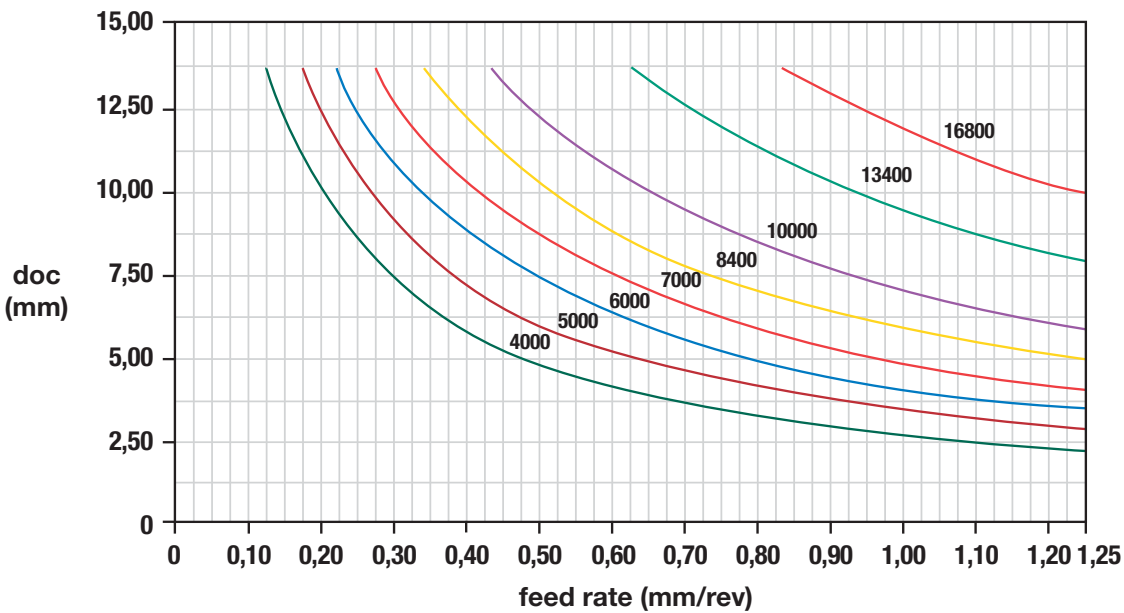


Chart 6

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM50TS

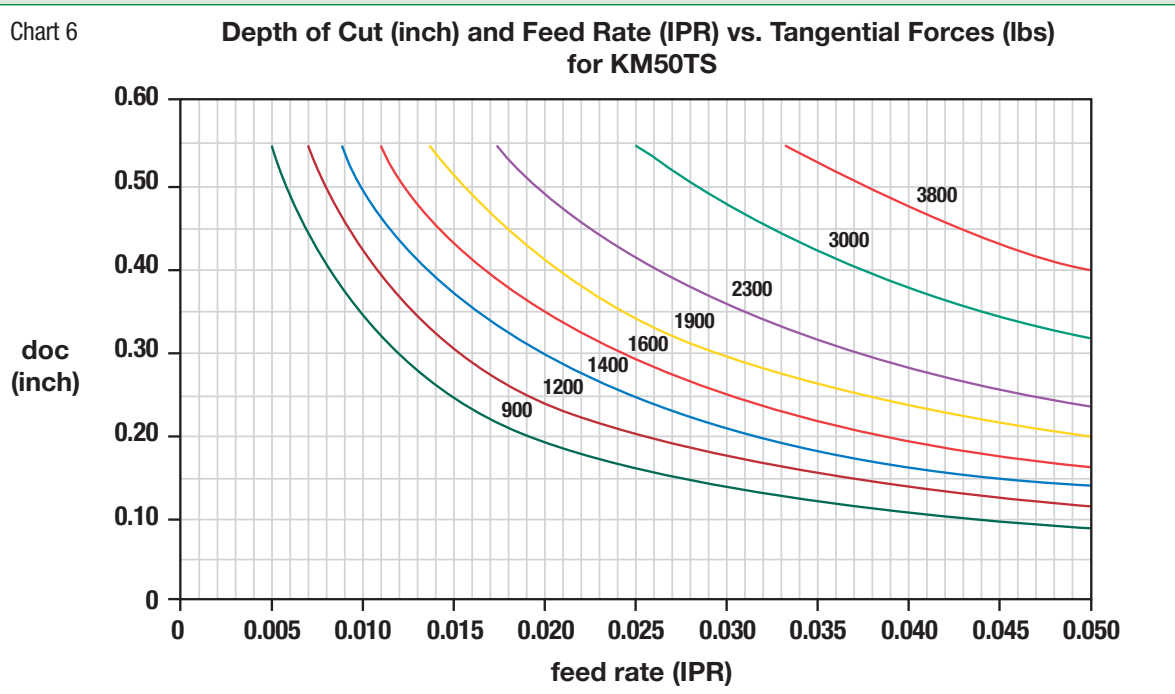
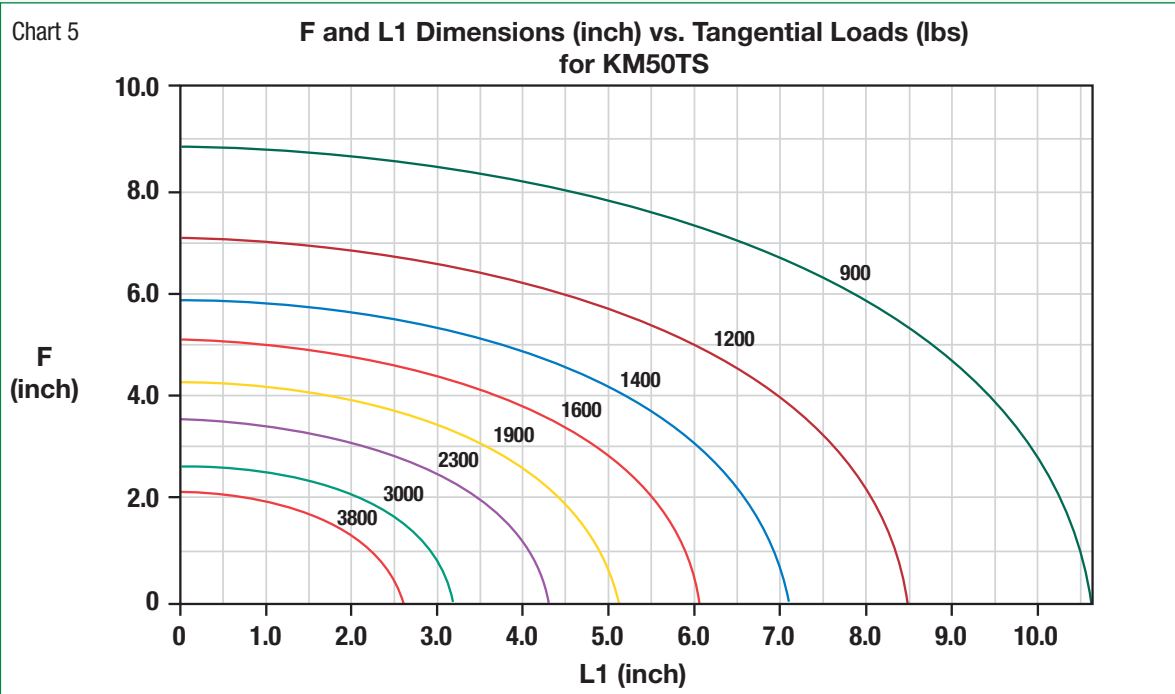


Technical Information

Operating Conditions • KM50TS™ • Inch

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.



Operating Conditions • KM63TS™ and KM63XMZ™ • Metric

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Chart 7

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM63TS and KM63XMZ

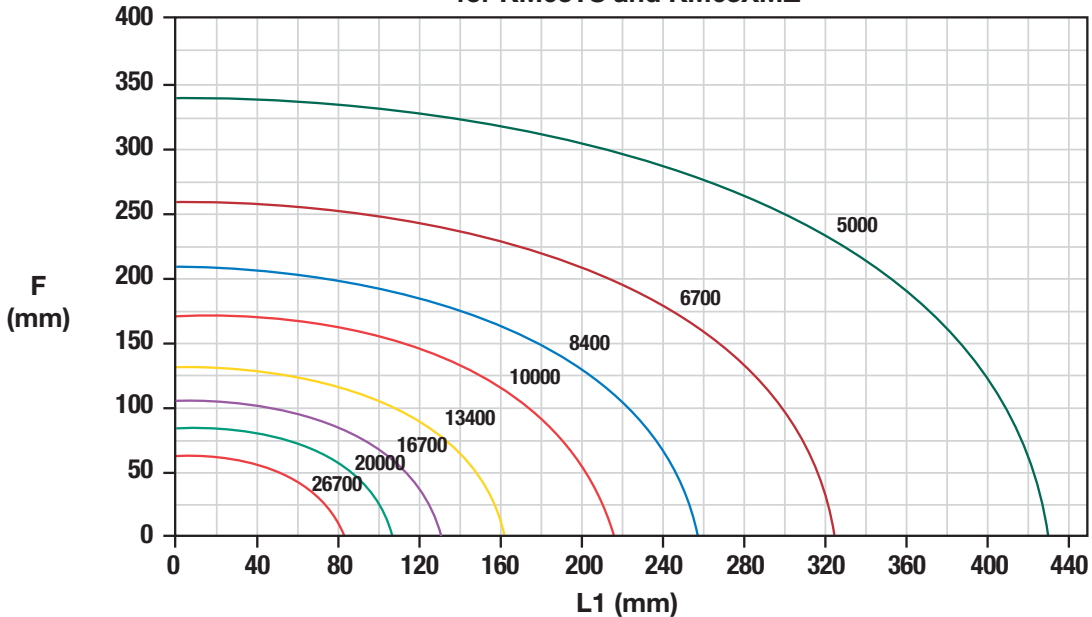
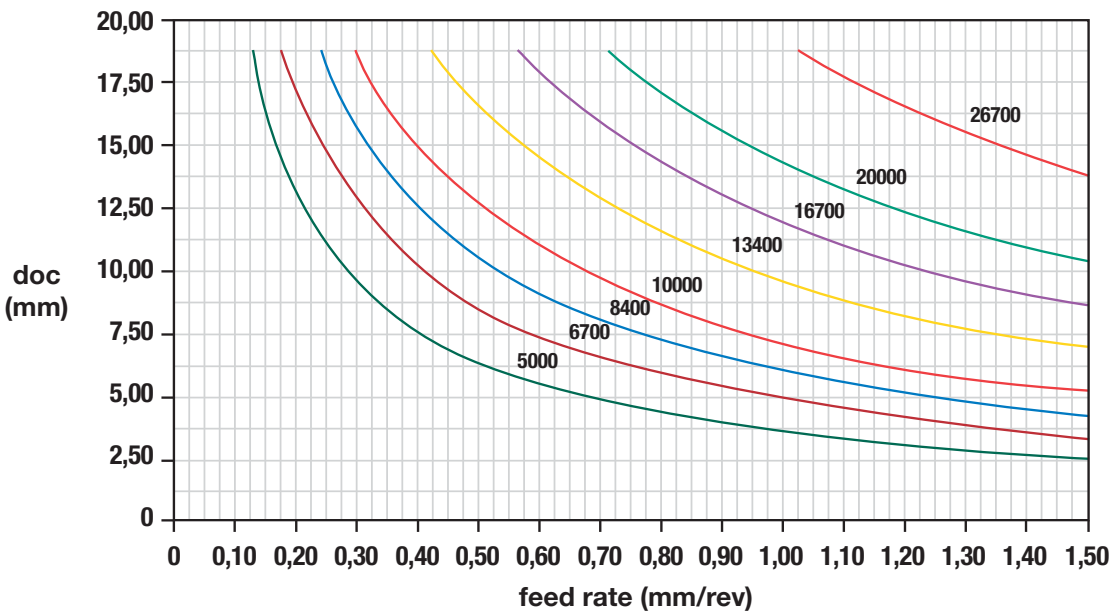


Chart 8

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM63TS and KM63XMZ

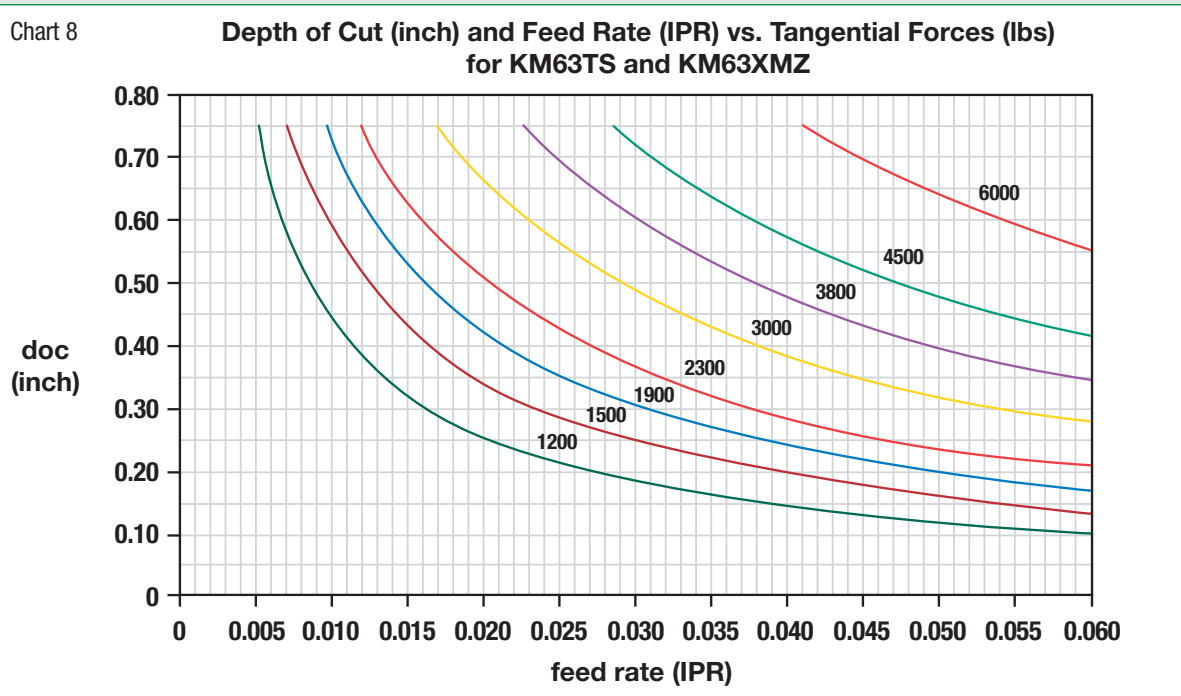
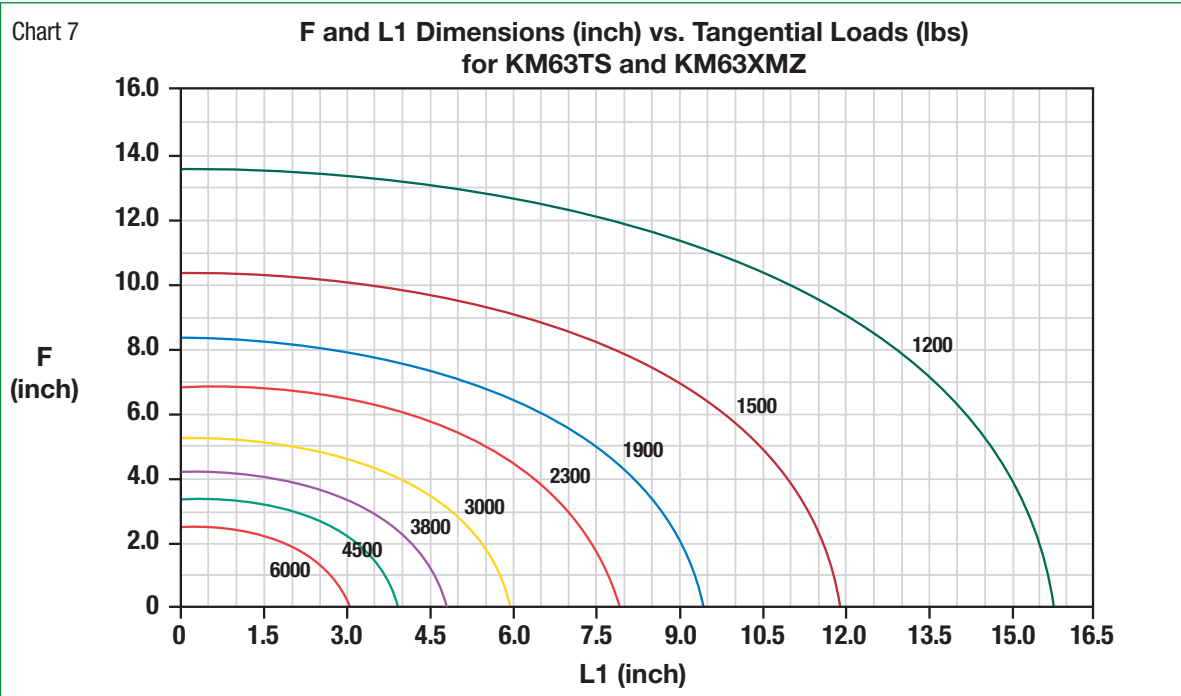


Technical Information

Operating Conditions • KM63TS™ and KM63XMZ™ • Inch

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.



Technical Information

Operating Conditions • KM80TS™ and KM80ATC™ • Metric

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Chart 9

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM80TS and KM80ATC

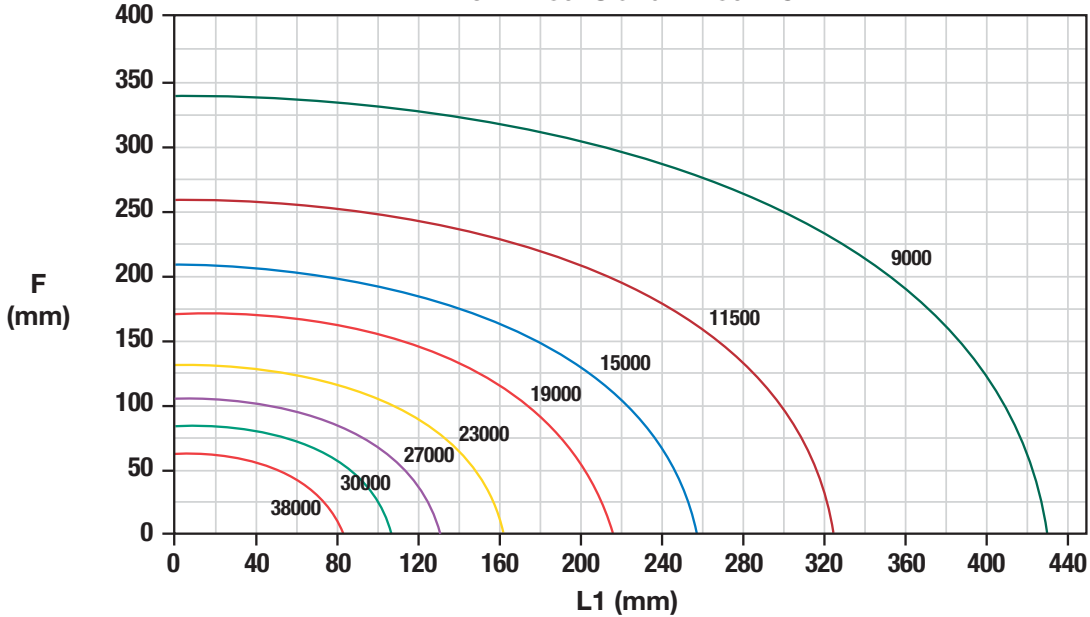
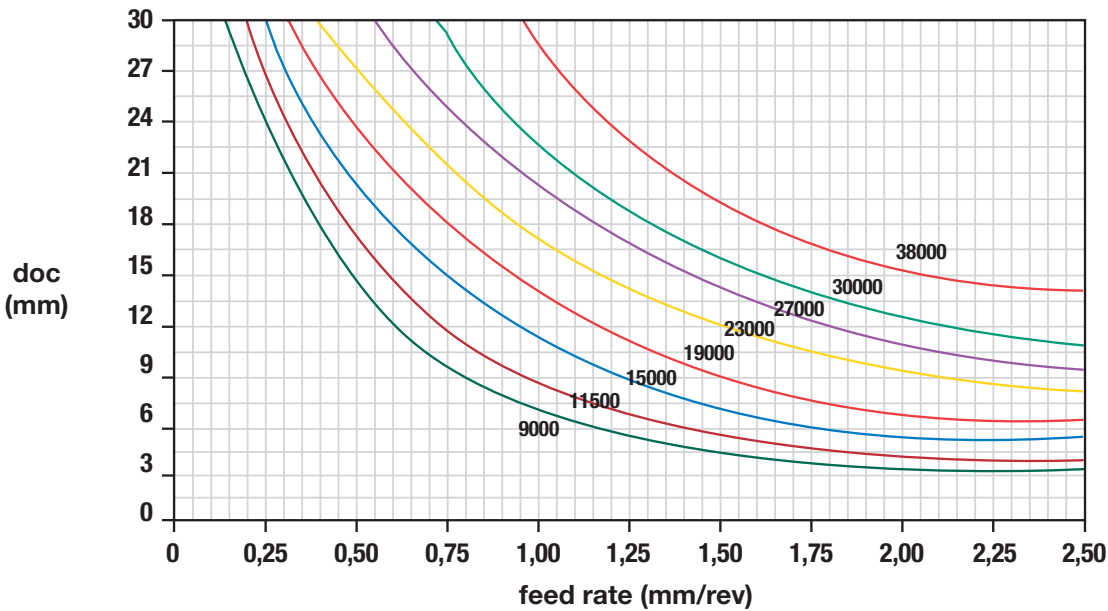


Chart 10

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM80TS and KM80ATC

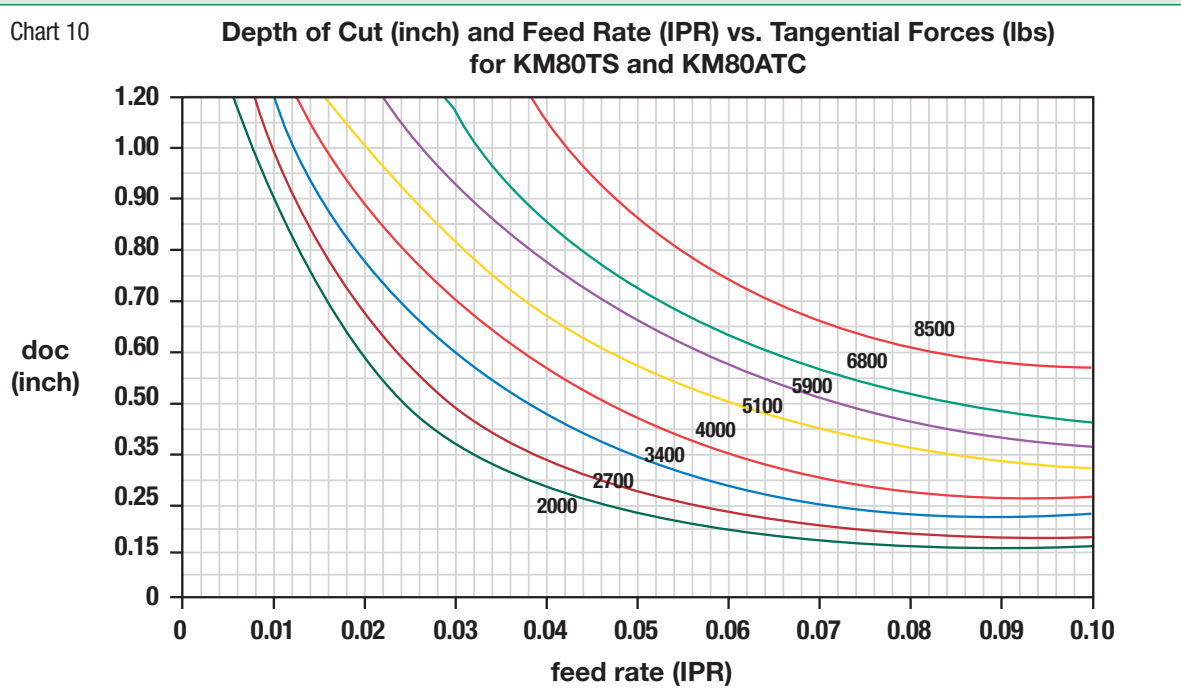
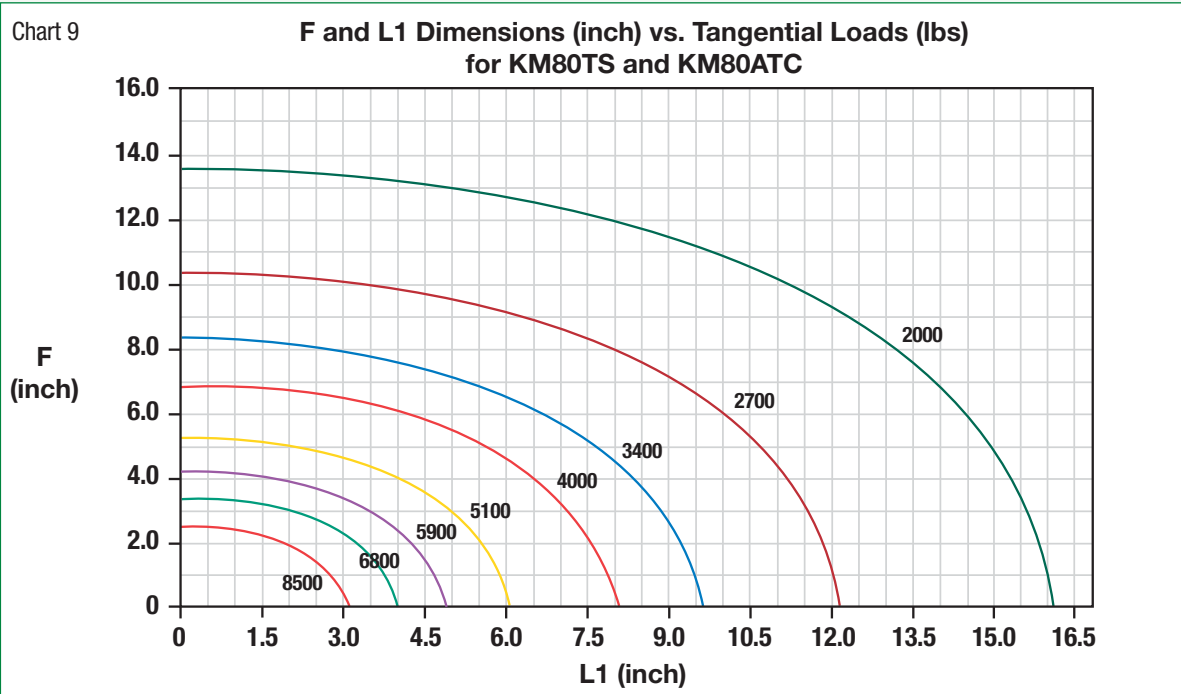


Technical Information

Operating Conditions • KM80TS™ and KM80ATC™ • Inch

IMPORTANT

Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

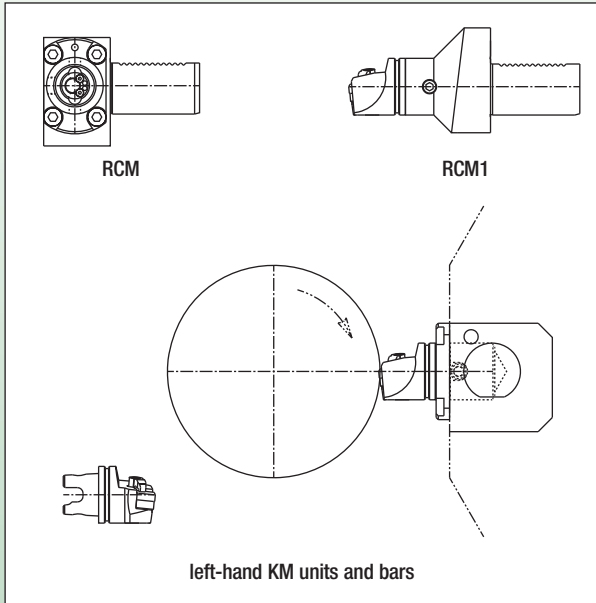


Technical Information

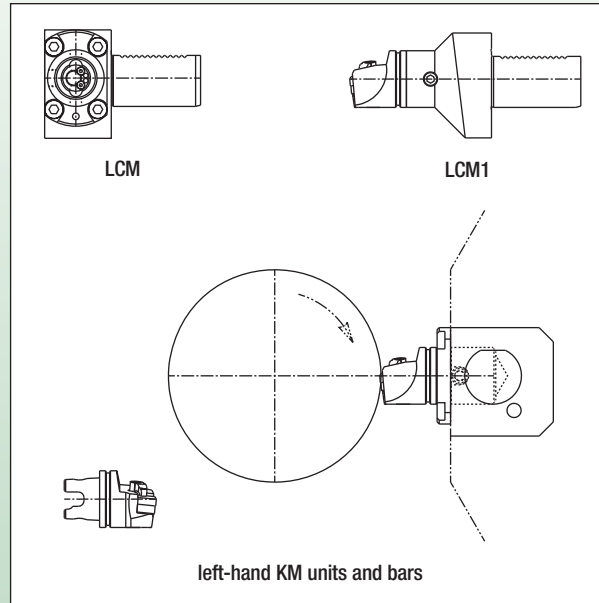
VDI Application Guide

Clockwise Spindle Rotation

VDI Clamp Wedge • Top

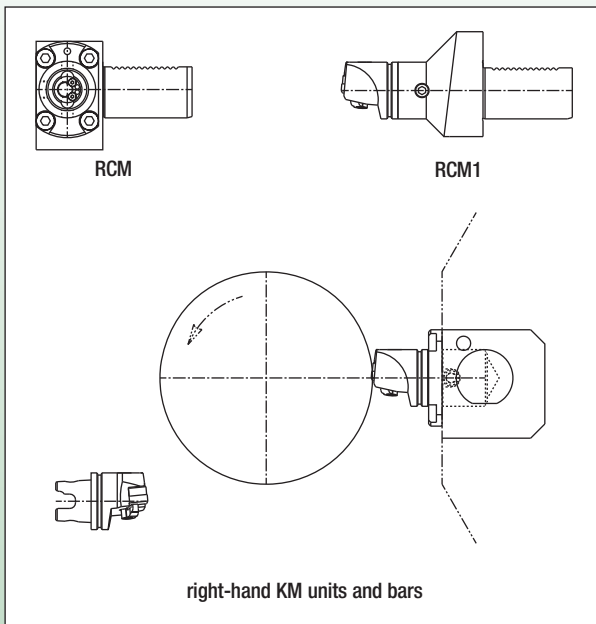


VDI Clamp Wedge • Bottom

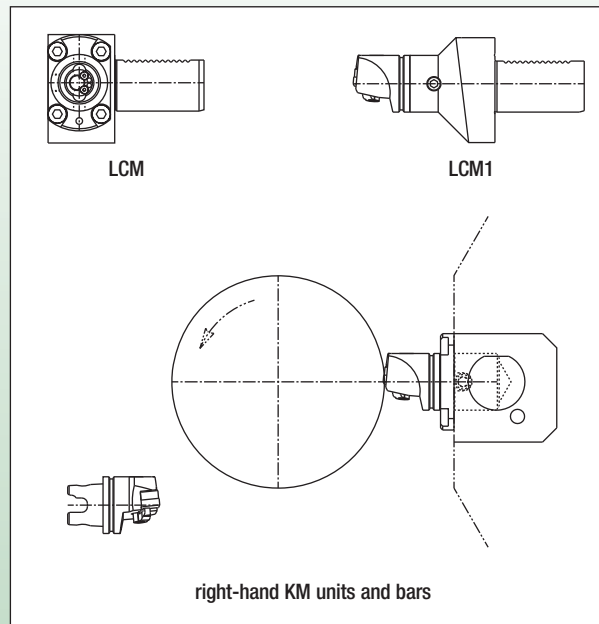


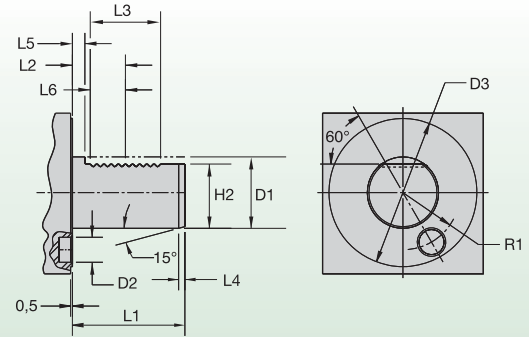
Counterclockwise Spindle Rotation

VDI Clamp Wedge • Top

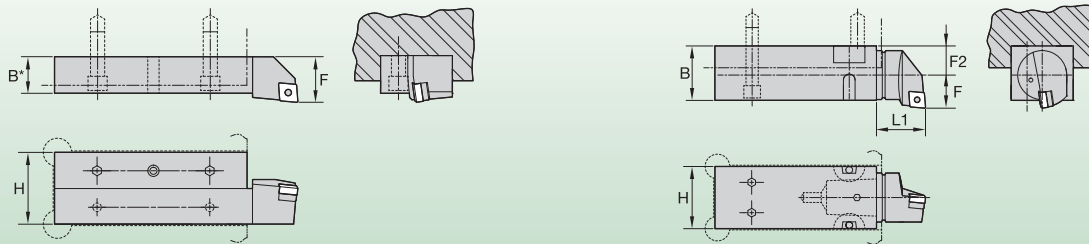


VDI Clamp Wedge • Bottom



**VDI Standard Dimensions
DIN 69880**


D1	D2	D3	L1	L2	L3	L4	L5	L6	H2	R1
30,00	14,00	68,00	55,00	29,70	40,00	2,00	7,00	20,00	27,00	25,00
1.181	0.551	2.677	2.165	1.169	1.575	0.079	0.276	0.787	1.063	0.984
40,00	14,00	83,00	63,00	29,70	40,00	3,00	7,00	20,00	36,00	32,00
1.575	0.551	3.268	2.480	1.169	1.575	0.118	0.276	0.787	1.417	1.260
50,00	16,00	98,00	78,00	35,70	48,00	3,00	8,00	24,00	45,00	37,00
1.969	0.630	3.858	3.071	1.406	1.890	0.118	0.315	0.945	1.772	1.457
60,00	16,00	123,00	94,00	43,70	56,00	4,00	10,00	28,00	55,00	48,00
2.362	0.630	4.843	3.701	1.720	2.205	0.157	0.394	1.102	2.165	1.890

Mounting Details • NCM Square Shank Conversion


KM Toolholder Replacement — Square Shank Toolholder — Style MCLNL shown

Toolholder Replacements • Metric

KM replacement unit	square shank equivalent	B*	B	H	L1	F	F2
KM32-NCM4040	20 x 20	20	40	40	45	22	23
KM32-NCM5040	25 x 25	25	40	50	45	22	23
KM40-NCM5044	25 x 25	25	44	50	40	27	23
KM40-NCM6444	32 x 32	32	44	64	40	27	23
KM50-NCM6454	32 x 32	32	54	64	50	35	28

*For MCLNR/L holders.

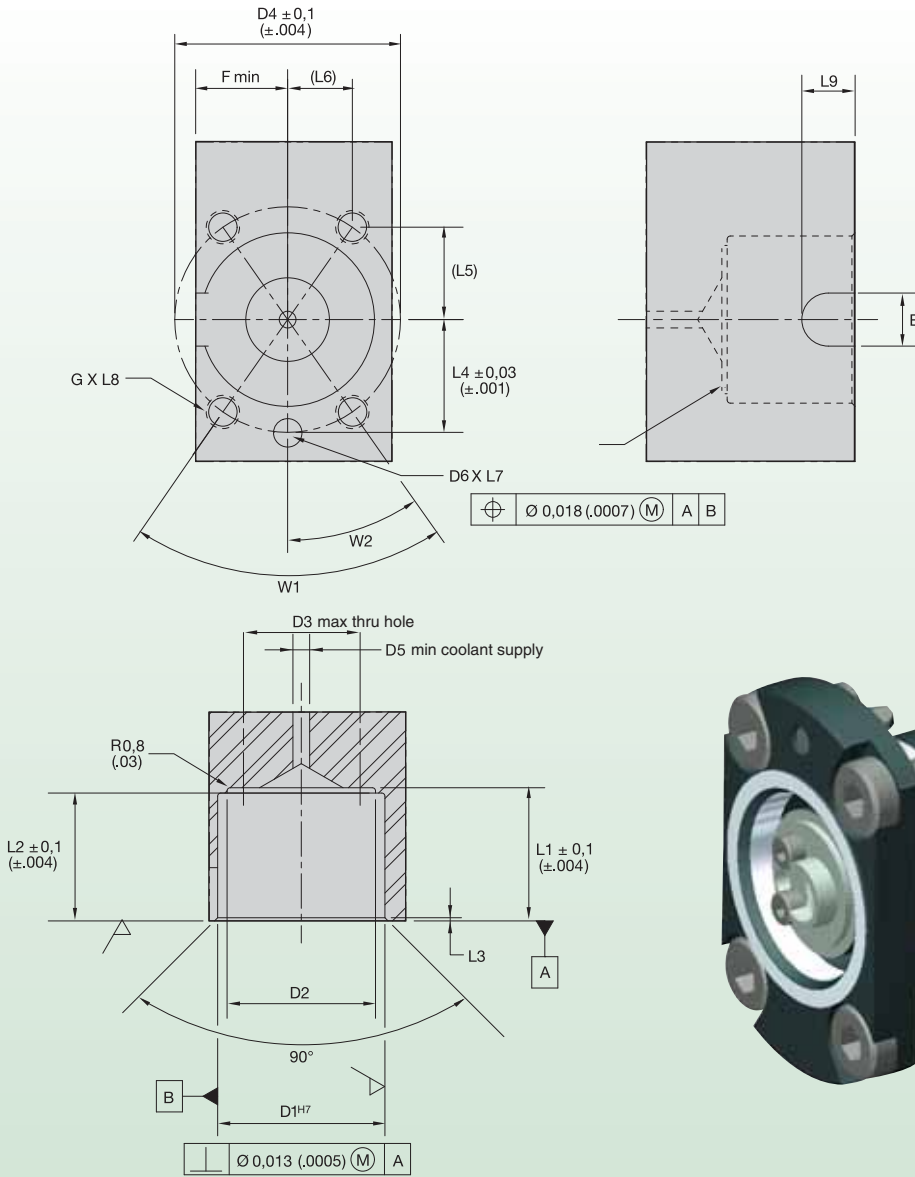
Toolholder Replacements • Inch

KM replacement unit	square shank equivalent	B*	B	H	L1	F	F2
KM32-NCM2425	3/4 x 3/4	3/4	1.562	1.500	1.378	0.866	0.884
KM32-NCM3225	1 x 1	1	1.562	2.000	1.378	0.866	0.884
KM40-NCM3228	1 x 1	1	1.750	2.000	1.575	1.063	0.937
KM40-NCM4028	1-1/4 x 1-1/4	1-1/4	1.750	2.500	1.575	1.063	0.937
KM50-NCM4034	1-1/4 x 1-1/4	1-1/4	2.125	2.500	1.969	1.378	1.122

*For MCLNR/L holders.

NOTE: F equals the dimension from the centerline of the KM cutting unit over the nose radius of the gage insert.
 F2 equals the dimension from the back of the clamping unit to the centerline of the KM cutting unit (see column F2 above).
 The offset is identical with most KM cutting units, except for positive lead angle units and neutral units.

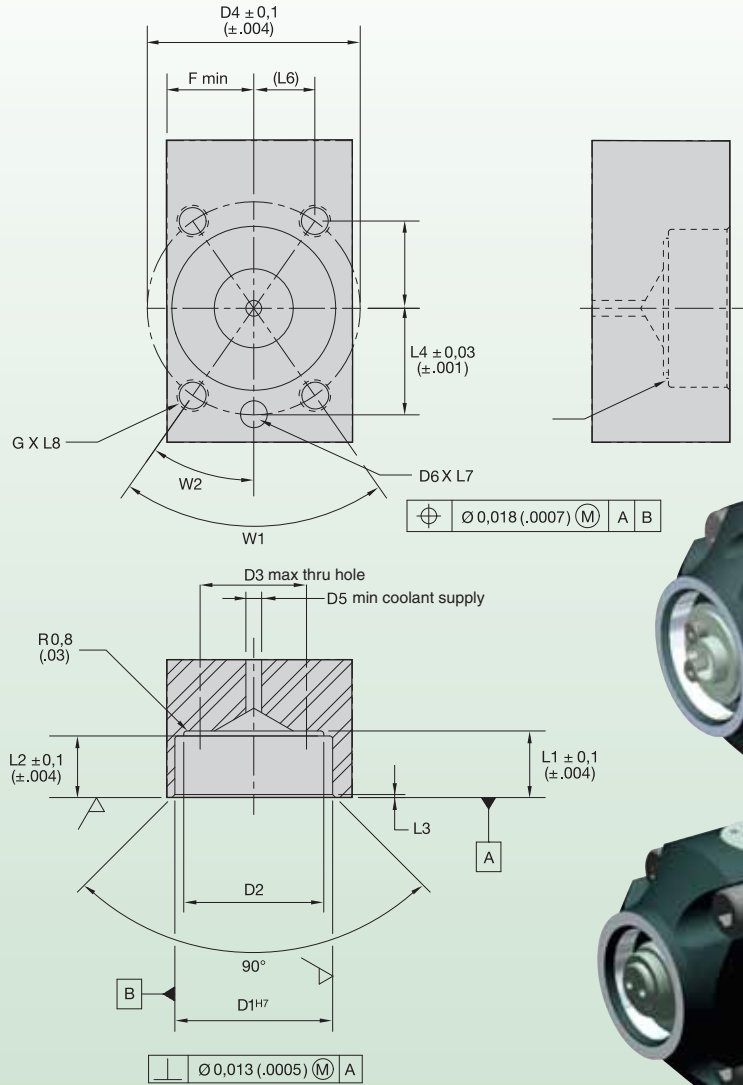
NCM-F



KM size	D1	D2	D3	D4	D5	D6	F	L1	L2	L3	L4	L5	L6	L7	L8	L9	B	G	W1	W2	O-ring
KM32	32,02	30,30	24,00	43,00	4,00	6,370/ 6,348	18,01	26,37	25,20	0,50	21,50	17,61	12,33	11,18	11,00	11,51	11,00	M6	70°	35°	OR00987103V75
	1.261	1.193	0.945	1.693	0.157	.2508/ .2499	0.709	1.038	0.992	0.020	0.847	0.693	0.486	0.440	0.433	0.453	0.433				
KM40	40,02	35,51	29,01	54,00	5,00	6,370/ 6,348	22,00	31,88	30,61	0,80	27,00	22,12	15,49	11,18	18,01	12,75	12,70	M8	70°	35°	OR01174103V75
	1.575	1.398	1.142	2.126	0.197	.2508/ .2499	0.866	1.255	1.205	0.031	1.063	0.871	0.610	0.440	0.709	0.502	0.500				
KM50	50,03	42,80	37,01	67,01	6,50	7,958/ 7,935	27,51	39,88	38,61	1,00	33,50	27,44	19,22	12,70	18,01	18,24	17,50	M10	70°	35°	OR1487103V75
	1.970	1.685	1.457	2.638	0.256	.3133/ .3124	1.083	1.570	1.070	0.039	1.319	1.080	0.757	0.500	0.709	0.718	0.689				
KM63	63,03	53,90	48,01	81,99	8,00	14,079/ 14,054	35,99	46,89	45,62	1,50	41,00	31,70	25,99	19,99	35,00	23,50	21,49	M12	78°42'	39°21'	OR01925103V75
	2.481	2.122	1.890	3.228	0.315	.5543/ .5533	1.417	1.846	1.796	0.059	1.614	1.248	1.023	0.787	1.378	0.925	0.846				
KM80	80,03	66,60	60,00	105,00	9,00	16,079/ 16,054	45,00	58,39	57,12	1,50	52,50	41,61	32,01	25,00	50,00	23,50	23,00	M16	75°8'	37°34'	OR02425103V75
	3.151	2.622	2.362	4.134	0.354	.6330/ .6320	1.772	2.300	2.249	0.059	2.067	1.638	1.260	0.984	1.969	0.925	0.906				

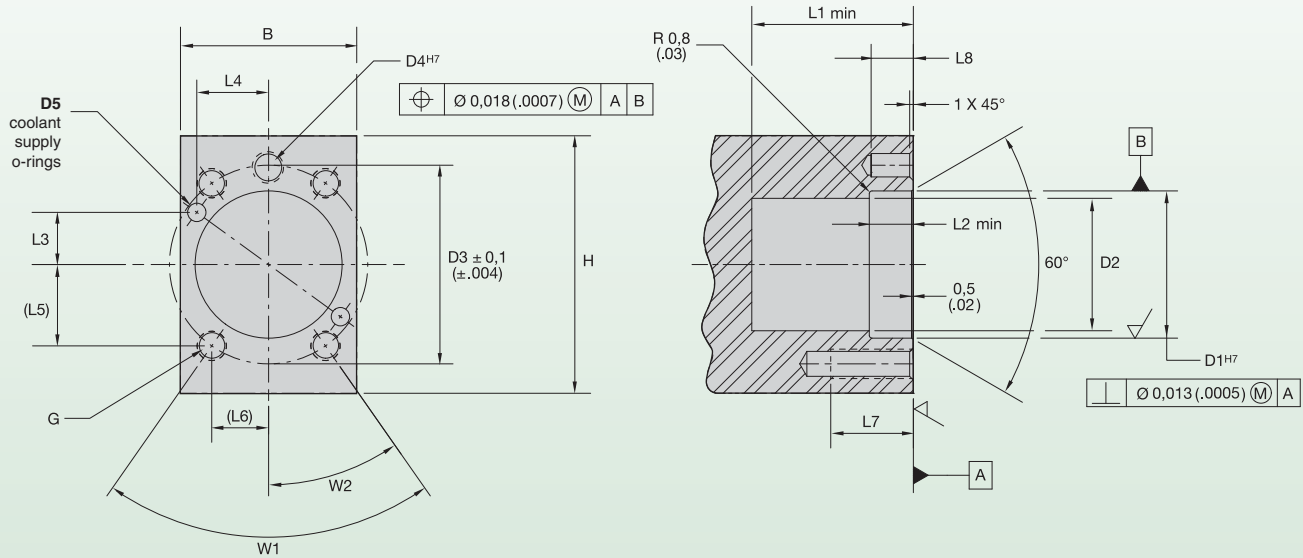
NOTE: Contact WIDIA™ for the latest dimensional data.

KM LOC-II™ CL2NS/T-EF Flanges • KM Manual NCM-EF Flanges



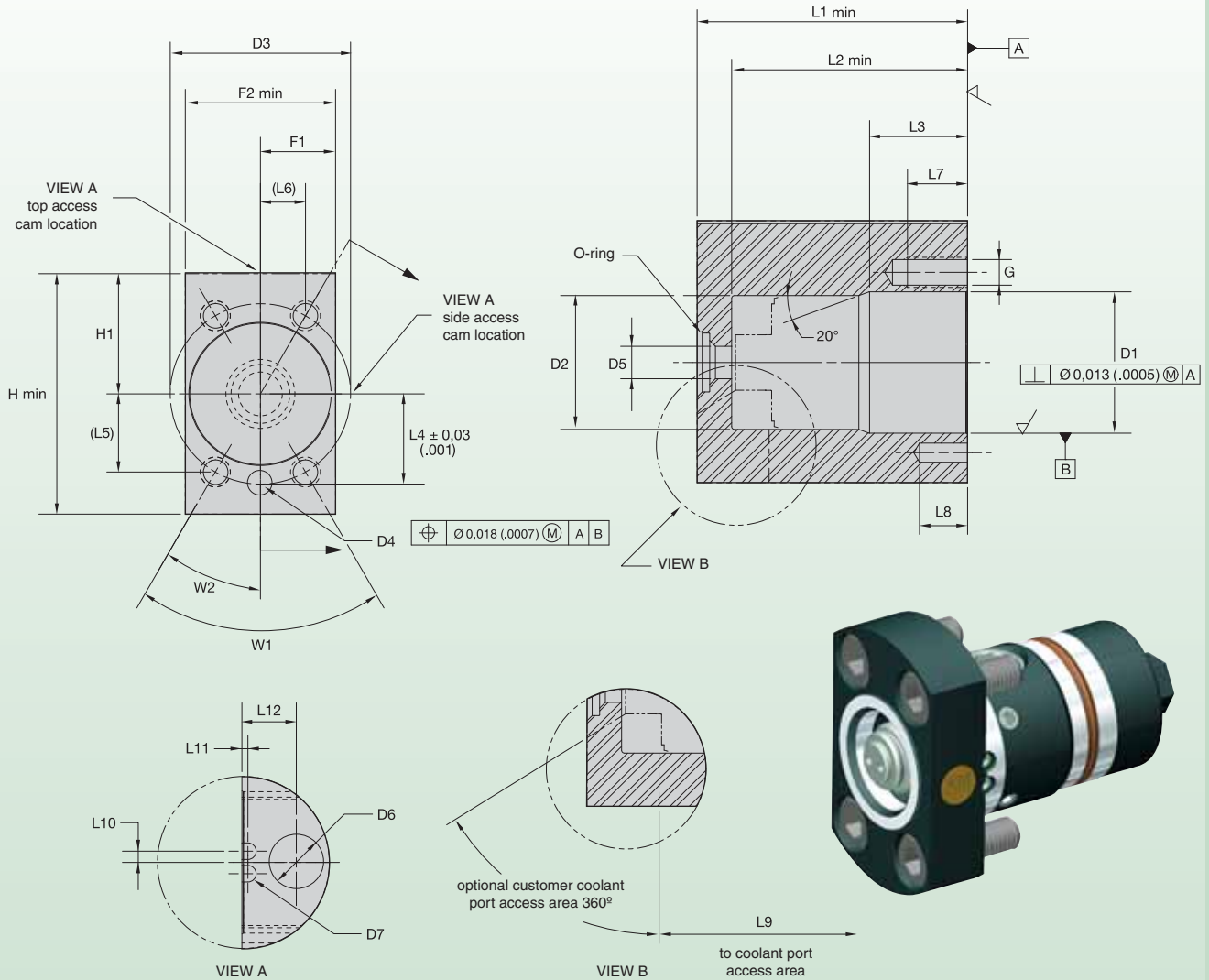
KM size	D1	D2	D3	D4	D5	D6	F	L1	L2	L3	L4	L5	L6	L7	L8	G	W1	W2	O-ring
KM32	32,02	30,30	24,00	43,00	4,00	6,370/6,348	18,01	13,87	12,70	0,50	21,50	17,61	12,33	11,18	11,00	M6	70°	35°	OR00987103V75
	1.261	1.193	0.945	1.693	0.157	.2508/.2499	0.709	0.546	0.500	0.020	0.847	0.693	0.486	0.440	0.433				
KM40	40,02	35,51	29,01	54,00	5,00	6,370/6,348	22,00	16,89	15,62	0,80	27,00	22,12	15,49	11,18	18,01	M8	70°	35°	OR01174103V75
	1.575	1.398	1.142	2.126	0.197	.2508/.2499	0.866	0.665	0.615	0.031	1.063	0.871	0.610	0.440	0.709				
KM50	50,03	42,80	37,01	67,01	6,50	7,958/7,935	27,51	21,87	20,60	1,00	33,50	27,44	19,22	12,70	18,01	M10	70°	35°	OR1487103V75
	1.97	1.685	1.457	2.638	0.256	.3133/.3124	1.083	0.861	0.811	0.039	1.319	1.080	0.757	0.500	0.709				
KM63	63,03	53,90	48,01	81,99	8,00	14,079/14,054	35,99	21,87	20,60	1,50	41,00	31,70	25,99	19,99	30,00	M12	78°42'	39°21'	OR01925103V75
	2.481	2.122	1.890	3.228	0.315	.5543/.5533	1.417	0.861	0.811	0.059	1.614	1.248	1.023	0.787	1.181				
KM80	80,03	66,60	60,00	105,00	9,00	16,079/16,054	45,00	26,89	25,62	1,50	52,50	41,61	32,01	25,00	50,00	M16	75°8'	37°34'	OR02425103V75
	3.151	2.622	2.362	4.134	0.354	.6330/.6320	1.772	1.059	1.009	0.059	2.067	1.638	1.260	0.984	1.969				

KM-LOC CLNS/T-EF



KM size	D1	D2	D3	D4	L1	L2	L3	L4	L5	L6	L7	L8	B	G	H	W1	W2	O-ring
KM32	32,00	30,00	43,00	6,35	30,00	10,00	11,30	16,15	17,6	12,30	19,50	11,50	40,00	M6	60,00	70°	35°	OR00145070V75
	1.260	1.181	1.693	0.250	1.181	0.394	0.445	0.646	0.693	0.484	0.768	0.453	1.575					
KM40	40,00	36,00	54,00	6,35	44,00	12,00	14,18	19,56	22,10	15,50	22,50	11,50	48,00	M8	70,00	70°	35°	OR00176070V75
	1.575	1.417	2.126	0.250	1.732	0.472	0.558	0.770	0.870	0.610	0.886	0.453	1.890					
KM50	50,00	47,00	67,00	7,95	49,00	14,00	18,25	23,90	27,40	19,20	25,50	13,00	58,00	M10	85,00	70°	35°	OR00208070V75
	1.969	1.850	2.638	0.313	1.929	0.551	0.719	0.941	1.079	0.756	1.004	0.512	2.283					

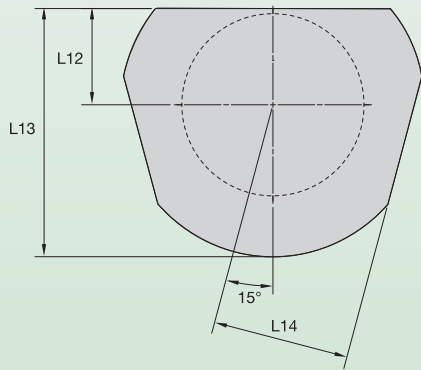
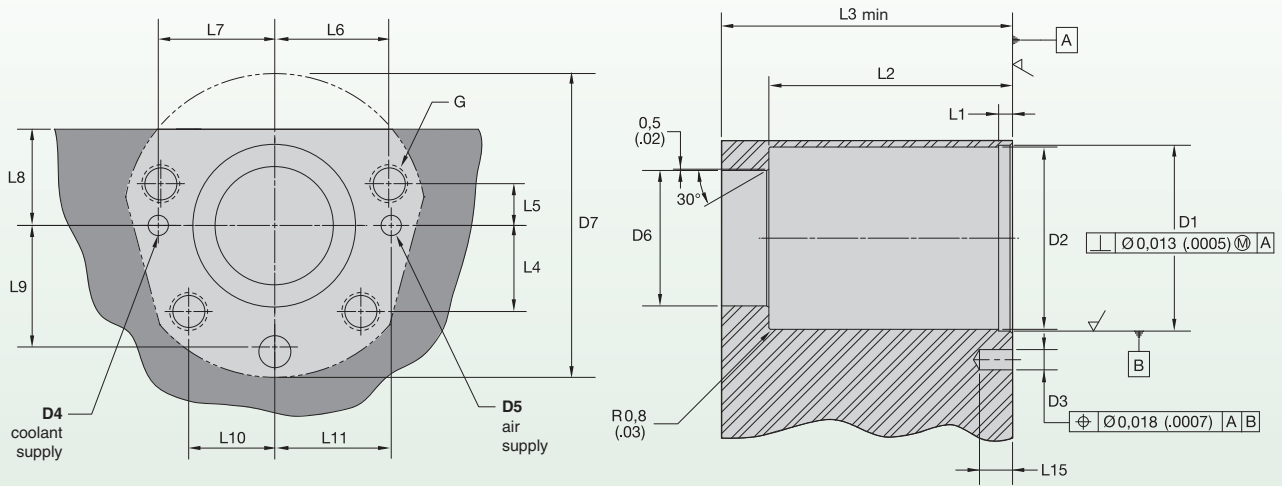
KM LOC-II™ CL2NS/T-EF Flanges • KM Manual NCM-EF Flanges



KM size	D1	D2	D3	D4	D5	D6	D7	F	F1	H	H1	L1	L2
KM40	47,04	44,54	60,00	6,36	10,80	15,00	5,50	50,00	25,00	80,00	40,00	90,00	78,50
	1.852	1.754	2.362	0.250	0.425	0.591	0.217	1.969	0.984	3.150	1.575	3.543	3.091
KM50	58,29	54,10	74,00	7,94	10,80	18,00	6,50	64,00	32,00	96,00	48,00	100,00	88,00
	2.295	2.130	2.913	0.313	0.425	0.709	0.256	2.520	1.260	3.780	1.890	3.937	3.465
KM63	74,04	69,92	94,00	14,04	12,80	20,00	6,50	78,00	39,00	122,00	61,00	115,00	100,80
	2.915	2.753	3.701	0.553	0.504	0.787	0.256	3.071	1.535	4.803	2.402	4.528	1.535

KM size	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	G	W1	W2	O-ring
KM40	32,75	30,00	25,98	15,00	20,00	16,00	65,50	3,75	2,00	18,10	M10	60	30	OR00614070V90
	1.289	1.181	1.023	0.591	0.787	0.630	2.579	0.148	0.079	0.713				
KM50	38,00	37,00	32,04	18,50	21,00	16,00	75,75	5,30	6,75	24,25	M12	60	30	OR00614070V90
	1.496	1.457	1.261	0.728	0.827	0.630	2.982	0.209	0.266	0.955				
KM63	47,20	47,00	40,70	23,50	20,00	16,00	87,50	6,45	5,00	26,00	M16	60	30	OR00739070V90
	1.858	1.850	1.602	0.925	0.787	0.630	3.445	0.254	0.197	1.024				

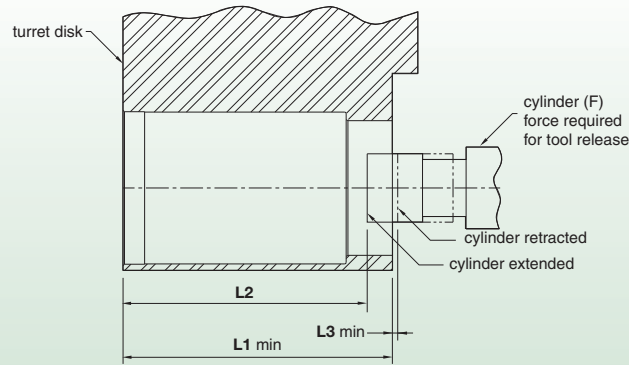
KM RACA and NAC



KM size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4
KM32	52,00	51,60	10,08	5,00	5,00	47,08	85,00	9,00	72,00	85,00	24,00
	2.047	2.032	0.397	0.196	0.196	1.853	3.346	0.354	2.835	3.346	0.945
KM40	62,00	61,70	10,08	7,70	7,70	55,08	100,00	10,00	78,50	95,00	30,00
	2.441	2.421	0.397	0.303	0.303	2.168	3.937	0.394	3.091	3.74	1.181
KM50	72,00	71,70	12,08	8,00	8,00	65,08	120,00	10,00	97,00	115,00	34,00
	2.835	2.815	0.475	0.315	0.315	2.562	4.724	0.394	3.819	4.528	1.339
KM63	85,00	84,60	16,08	9,50	9,50	75,08	140,00	12,00	124,50	145,00	35,35
	3.346	3.327	0.633	0.374	0.374	2.956	5.512	0.472	4.902	5.709	1.392

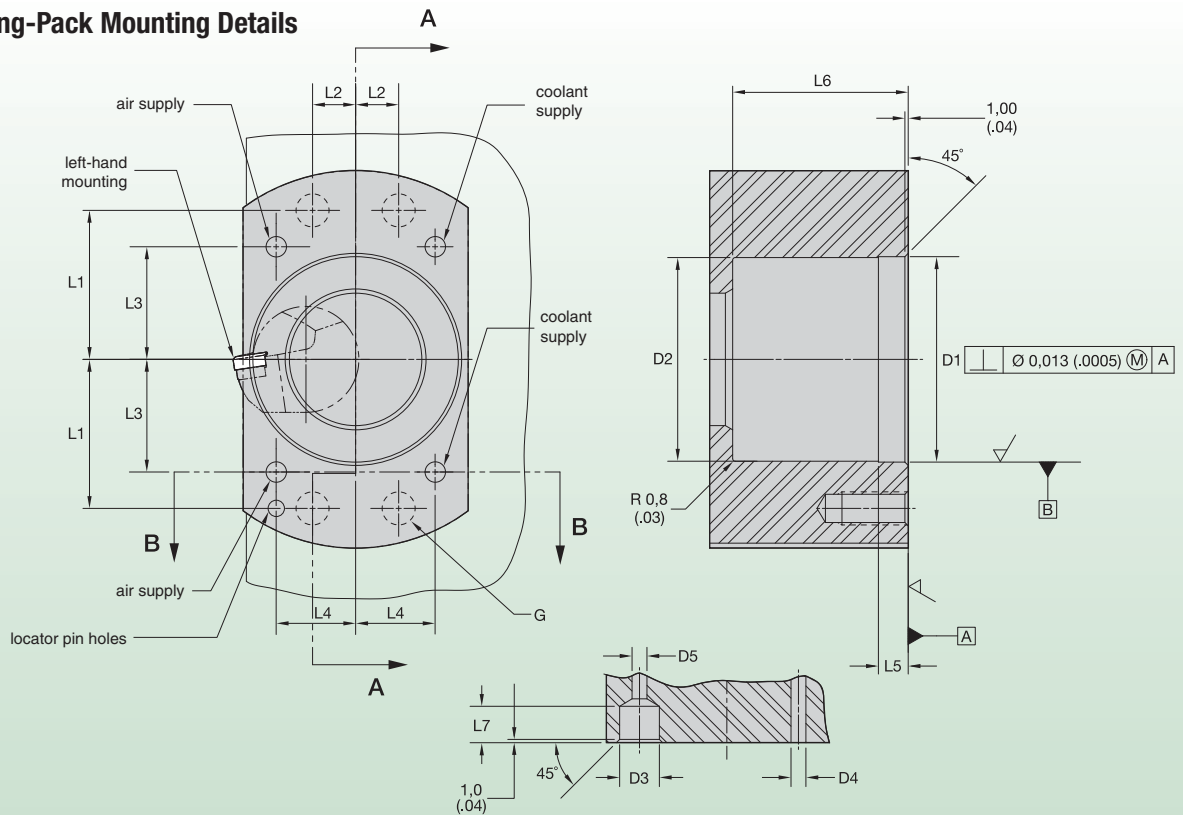
KM size	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	G
KM32	11,50	32,00	32,00	27,50	34,00	24,00	32,00	27,50	70,00	38,00	14,50	M8-1,25x20 (.79) deep
	0.453	1.260	1.260	1.083	1.339	0.945	0.945	1.083	2.756	1.496	0.571	
KM40	15,00	37,00	39,50	33,00	40,00	26,50	39,50	34,00	84,00	46,00	22,00	M10-1,5x25 (.98) deep
	0.591	1.457	1.555	1.299	1.575	1.043	1.043	1.339	3.307	1.811	0.866	
KM50	16,50	45,00	46,00	42,00	48,00	34,00	46,00	42,00	102,00	54,00	22,00	M12-1,75x25 (.98) deep
	0.650	1.772	1.811	1.654	1.890	1.339	1.339	1.654	4.016	2.126	0.866	
KM63	18,80	51,70	55,00	46,00	55,00	42,15	55,00	47,00	117,00	65,00	24,00	M16-2,0x30 (1.18) deep
	0.740	2.035	2.165	1.811	2.165	1.659	1.659	1.850	4.606	2.559	0.945	

KM RACA and NACA Spring-Pack Cylinder



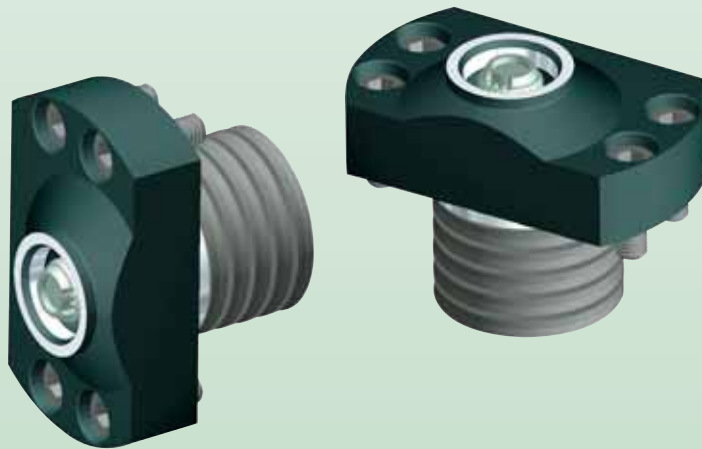
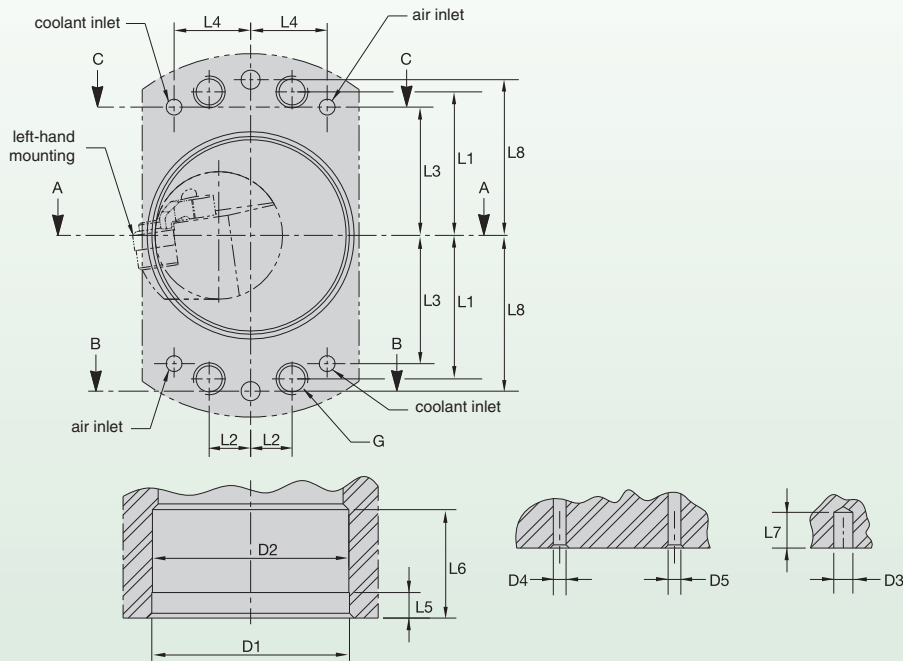
KM size	L1	L2	L3
KM32	85,00	76,50	3,00
	3.346	3.012	0.118
KM40	95,00	83,20	3,00
	3.740	3.276	0.118
KM50	115,00	103,00	3,00
	4.528	4.055	0.118
KM63	145,00	131,00	3,00
	5.709	5.157	0.118

NCA Spring-Pack Mounting Details



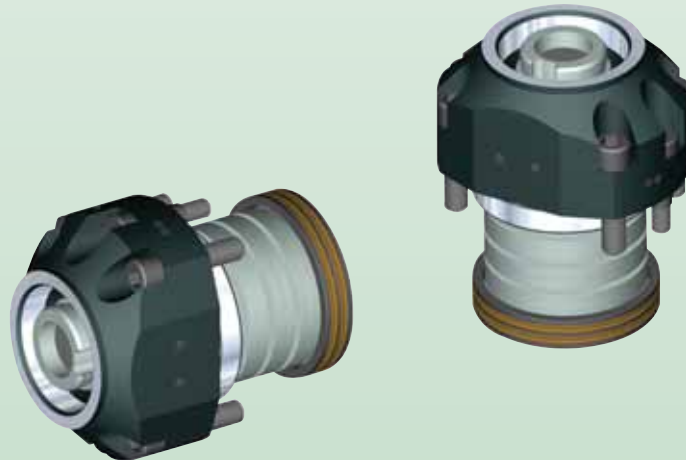
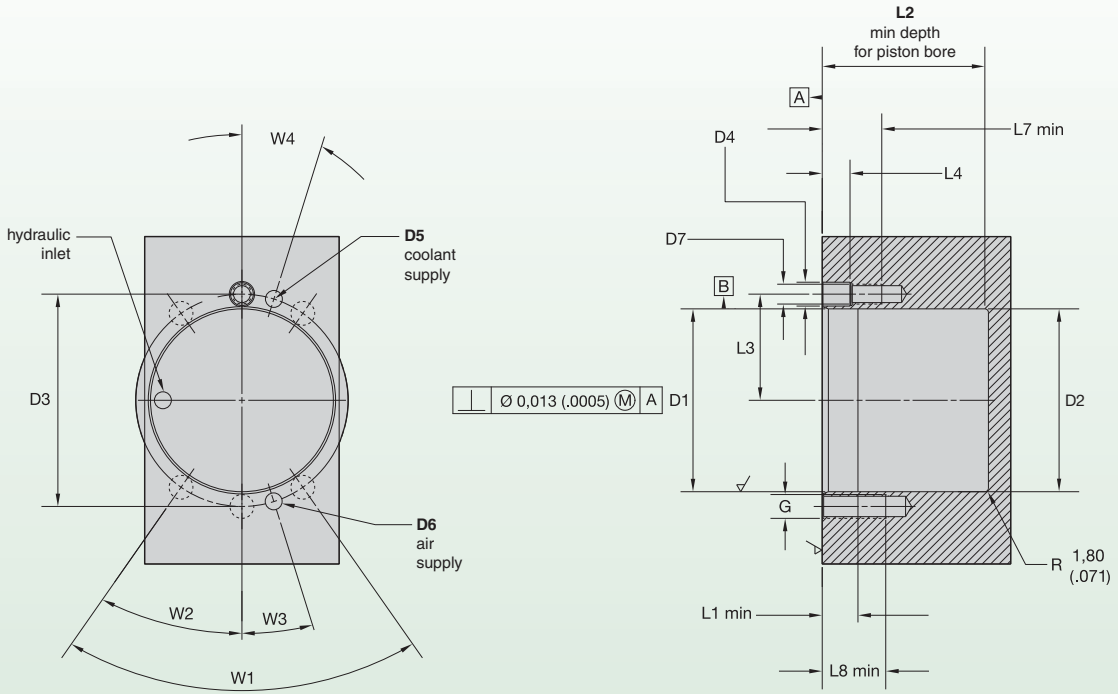
KM size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	G
KM32-NCA-DS31	51,00	50,50	8,00	3,20	3,20	36,00	10,50	27,50	19,50	6,00	44,00	9,00	M8-1,25x20 (.79) deep
	2.008	1.988	0.315	0.126	0.126	1.417	0.413	1.083	0.768	0.236	1.732	0.354	
KM40-NCA-DS40	62,00	61,50	12,00	4,50	4,50	45,00	13,00	34,01	24,00	9,00	53,01	11,00	M10-1,5x20 (.79) deep
	2.441	2.421	0.472	0.177	0.177	1.772	0.512	1.339	0.945	0.354	2.087	0.433	
KM50-NCA-DS50	78,00	71,50	15,00	5,50	5,50	56,00	16,00	42,00	28,00	6,00	74,00	12,00	M12-1,75x30 (1.18) deep
	3.071	2.815	0.591	0.217	0.217	2.205	0.630	1.654	1.102	0.236	2.913	0.472	

KM32 NCA



KM size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	G
KM32-NCA-DS16	51,00 2.008	50,80 2.000	6,04 0.238	5,00 0.197	5,00 0.197	29,37 1.156	10,69 0.421	23,93 0.942	20,09 0.791	20,00 0.787	65,00 2.559	11,20 0.441	32,25 1.270	M8-1,25x15 (.59) deep

XGL – Static



KM size	D1	D2	D3	D4	D5	D6	D7	G	L1	L2	L3	L4	L7	L8	W1	W2	W3	W4
KM80	92,177 3.629	92,177 3.629	107,00 4.213	12,045 .4742	6,35 0.25	6,35 0.25	M10	M12	18,00 0.709	81,95 3.226	53,525 2.107	14,00 0.551	30,00 1.181	32,00 1.26	70°	35°	17°30'	17°30'

Taper and Face Quick-Reference Identification

HSK hollow-stub taper shanks are a widely used DIN standard for machine tools. HSK tools have a simultaneous 1:10 taper, which generates two surface contact areas: face and taper. Compared with traditional steep-taper shanks, HSK shanks are shorter, hollow, and clamp from the inside. They also incorporate drive keys that engage milled key-slots in machine spindles and offer higher static and dynamic stiffness than standard steep taper tooling.

HSK tooling includes seven toolholder shank forms: A, B, C, D, E, F, and T. Various machine-spindle receivers are available for each. However, the choice of form depends on application requirements such as torque and spindle speed.



HSK-A
for general-machining service

Form A

Form A for automatic tool change is the most common shank, typically used on new machining centers and for general service. Form A has a drive slot in the small end of the tapered shank and features coolant through the center, using a coolant tube thread mount inside the shank cavity. In many applications, wrench access holes are provided through the taper as an option for manual clamping and automatic tool change shanks. Form A shanks have mounting holes for an electronic chip.

There are eight different sizes of form A ranging from 32–160mm (1.260–6.299") flange diameter.



HSK-B
greater flange support than form A for heavier work

Form B

Form B is also for automatic tool change. It is similar in appearance to form A but dimensionally different. Form B provides greater flange support for heavy machining, even though its taper shank size is smaller than form A. This style of shanks have drive slots in the flange and drive keys in the taper. Coolant for form B is fed through ports in the flange. Mounting holes for an electronic chip are also a feature of form B.

For form B there are seven different shank sizes from 40–160mm (1.575–6.299") flange diameter.



HSK-C
similar to form A but for manual tool change applications

Forms C and D

Forms C and D for manual tool changes are variations of forms A and B, but the gripper groove and chip holes are eliminated. These two forms always have their access holes through the taper for manual clamping. These manual forms are typically used on transfer lines and non-rotating applications for NC lathes.



HSK-D
similar to form B but for manual tool change applications

There are six different shank sizes for form C ranging from 32–100mm (1.260–3.937") flange diameter. Form D has five different shank sizes from 40–100mm (1.575–3.937") flange diameter.

(continued)

Taper and Face Quick-Reference Identification *(continued)*



HSK-E
balanced-by-design for higher speeds



HSK-F
balanced-by-design with greater flange support for higher speeds



HSK-T

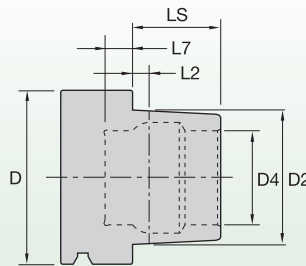
Forms E and F

Forms E and F with automatic tool change are also variations of forms A and B. These forms are intended for high-speed machining. Design features, such as drive slots, the orientation notch, and chip holes, have been removed to help eliminate imbalance. As a result, these forms are driven by the locking taper and are suitable only for light machining applications such as high-speed metalcutting and woodworking machines.

Form E offers five different shank sizes ranging from 25–63mm (.984–2.480") flange diameter. There are three shank sizes for form F from 50–80mm (1.969–3.150") diameter on the flange.

Form T

Form T shanks are similar to form A, but these tools offer a tighter keyway that reduces cutting height variation. This gives form T improved repeatability over form A. These shanks have new centerline technology for variance and high productivity. They are also available in a wide range of standard toolholders.



flange diameter D										
forms A and T	form B	form C	form D	form E	form F	D2 mm	D4 mm	LS mm	L2 mm	L7 mm
-	-	-	-	25	-	19	14	13	2,5	6
32	40	32	40	32	-	24	17	16	3,2	8
40	50	40	50	40	50	30	21	20	4	8
50	63	50	63	50	63	38	26	25	5	10
63	80	63	80	63	80	48	34	32	6,3	10
80	100	80	100	-	-	60	42	40	8	12,5
100	125	100	-	-	-	75	53	50	10	12,5
125	160	-	-	-	-	95	67	63	12,5	16
160	-	-	-	-	-	120	85	80	16	16

 WIDIA™ primary offering  Secondary styles available upon request

Taper Face Contact V-Flange

The 7/24 Taper Face Contact Spindle Interface, is being found on machining centers and multitasking machines. The basic principle of this system takes the standard 7/24 steep-taper tool and adds material to the back face of the toolholder flange as well as to the front face of the spindle. This is controlled so that the two parts have both face and taper contact when locked into position. The distinctive features of the system are the lead-in chamfers on the drive slots and ground back V-flange. The surface contact creates a system with higher static and dynamic stiffness than a regular 7/24 taper and increased axial and radial accuracy.

Capable of being utilized in a variety of machining applications ranging from low-speed, heavy milling applications to high speeds greater than 20,000 RPM. The systems accuracy, repeatability, and stability should be equal or greater to the performance of current equivalent Taper Face tooling on the market in all applications.

Technology

With the Taper Face System, toolholders are axially supported on the taper and flange face, which brings about higher rigidity and precision than a conventional 7/24 toolholder. The system utilizes elastic deformation of the machine spindle to achieve simultaneous fitting of both the taper and flange face. Although the tapers are fit prior to clamping the mechanism, the faces are not yet secured because of a small amount of clearance between them. When the toolholder is pulled in by the drawbar mechanism, the machine spindle expands by elastic deformation and the faces are fit, completing the simultaneous fit between both taper and face. This synchronized fit prevents additional axial displacement of the taper providing high accuracy and superior surface finish in operations such as face milling.



Taper face tool's axial position is maintained even at high rotational speed.



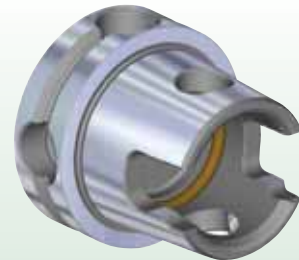
- One surface contact.
- Relatively low stiffness.
- Possible runout due to taper fitment.
- Low axial accuracy.



- Two surface contact.
- Higher static and dynamic stiffness.
- Higher axial and radial accuracy.
- Rigid system.



- Two surface contact.
- Higher axial and radial accuracy.
- Less mass — faster quick change and higher speeds.
- Higher stiffness than 7/24 tapers.



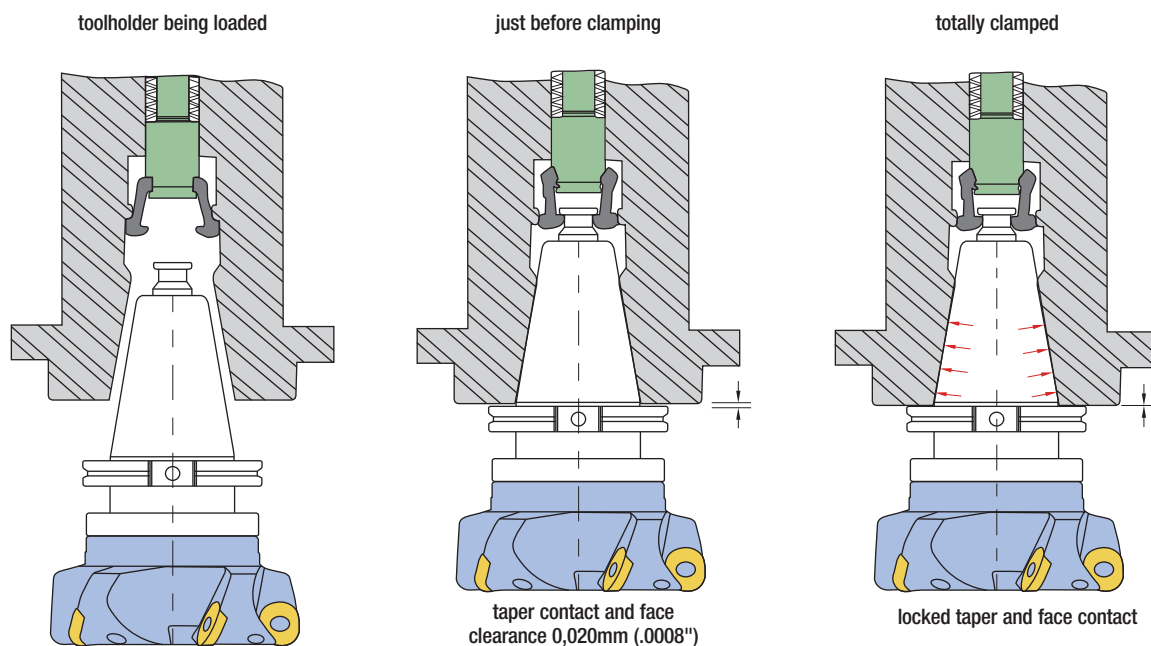
- Three surface contact.
- Superior static and dynamic stiffness.
- Static and rotating applications.
- Higher maximum speed.
- Higher stiffness than HSK and 7/24 tapers.

Safety

In some cases, standard 7/24 steep-taper tooling can be used in a face contact 7/24 taper spindle. However, the combination does not offer the same stability or advantages of face contact. As a caution, some spindles have a safety switch that shuts the spindle down if face contact is not achieved. In these cases, tools will need taper face contact for the spindle to operate.

Similar to all interfaces with face contact, special care should be taken regarding the cleanliness of the mating faces as high contact pressures are present. Adequate filtration systems for coolant must be used.

Locking Principle



Technical Information

Steep Taper V-Flange



Steep taper form B coolant

Taper Size

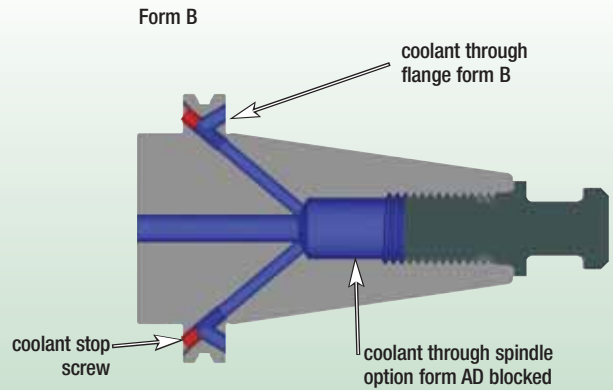
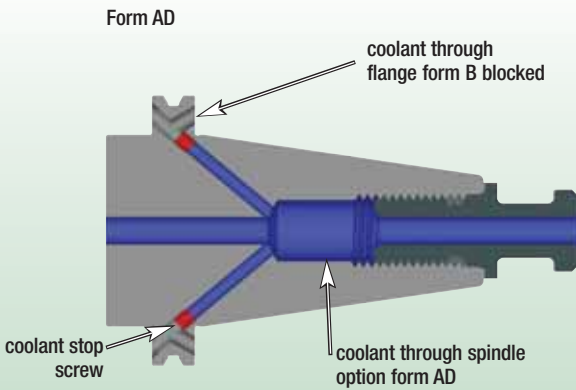
Taper size should be chosen with realistic considerations. When selecting cutting parameters, keep in mind that a machine with a 30 taper spindle will not achieve the same heavy cuts or use cutters as large those on a 50 taper machine.

Pull-Back System

When troubleshooting a problem, assume that the toolholder is at fault is not the correct course of action. The spring pack, drawbar, gripper, and retention knob are major components for the successful operation of a machine tool because wear or breakage of these parts is a major concern.

- **Spring pack** — Can become weak or out of adjustment. This can cause chatter during a milling operation, which causes damage to the adapter taper, spindle taper, cutter, or workpiece.
- **Gripper fingers** — If worn, they may not grip the retention knob correctly, enabling the adapter to move, resulting in chatter and damage to the adapter.
- **Retention knob** — A worn or incorrect retention knob will not enable proper gripping for pull back on the taper. This is a very serious safety hazard due to the movement of the adapter. Using an improper knob may result in a lack of any detectable gripping force.

Spindles are now running at higher rates — quickly burning seals, making it difficult to seal coolant as it passes through the drawbar. One option is to direct the coolant around the spindle bearings and enter through the spindle face and toolholder flange.



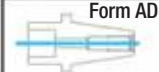








WIDIA™ toolholders are positioned in the AD coolant form with self-sealing, nylon-coated screws. The coolant screws are designed to completely seal the tool and prevent coolant leakage under pressures up to 1500 psi. However, if form B coolant is desired, the coolant stop screws must be backed out into the form B position.

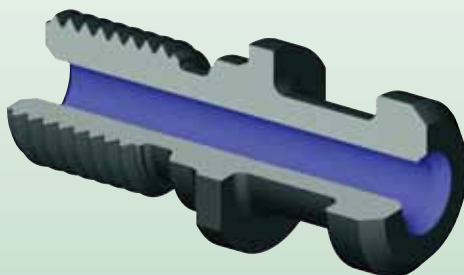
Form B toolholders can be converted back through the drawbar form AD by simply threading the coolant stop screw and stopping below the flange coolant entry hole. Changing coolant form can be achieved many times before it is necessary to replace the coolant stop screw.

All form B capable tooling is supplied with a label designating the required screw components for each steep taper size and information necessary for selecting a wrench to adjust the coolant stop screws.

IMPORTANT

When choosing a desired coolant form, the correct retention knob should be used in conjunction with the coolant form applied.

					
			40	(2x) MS2221S	2,5mm
			50	(2x) MS1296S	3mm



Form AD
(through-coolant hole)



Form B
(no hole through or half hole)

Balancing

WIDIA™ offers a range of balanced and balanced-by-design toolholders capable of extending spindle and tool life and improving part quality at higher machining speeds.



Definitions for Balance

Standard Toolholder

A toolholder that may contain uncorrected features (unbalanced drive slots, notches, locking screws, etc.). Standard toolholders have no compensating features added to correct balance, such as basic, low-speed applications.

Balanceable

A toolholder with a built-in mechanism that can adjust to correct any unbalance inaccuracies incurred during normal manufacturing. The fully assembled tool (toolholder and cutting tool) can be balanced as a system using a balancing device.

Balanced-by-Design

A toolholder designed with compensating features to correct any unbalance caused by uneven drive slots, notches, locking screws, etc. The balanced toolholder is capable of being used in high-speed applications. Small, residual unbalance may result due to normal manufacturing tolerances within the shank standards.

Balanced

A toolholder has been balanced to predetermined specification after manufacture by checking the balance condition with a balancing device. This may be followed by physically removing material from the toolholder, such as holes and/or slots.

When machining at higher speeds, responsible machining practices must be observed. Unbalance is caused by uneven mass distribution in the tool or toolholder. Potential sources of unbalance are movable parts (adjustable cartridges, set screws, spindle spring pack, and clamping mechanisms), manufacturing tolerances, and design.

Forces caused by unbalance increase with the rotational speed squared. Excessive unbalance can cause premature wear to the tool and spindle bearing, which can adversely affect surface finish and accuracy.

Balancing

The balance quality is usually specified by the balance grade G, according to ISO 1940-1 and ANSI S2.19 standards.

The balance quality grade (G) was derived from practical experience, which is expressed in millimeters per second (mm/s) and ranges from 0,16–4000. For rotating tooling and general machinery parts, it is usually specified to be G 2.5 or G 6.3. A lower number designates better balance quality.

The permissible residual unbalance can be calculated by the following equation:

$$U_{\text{per}} = \frac{9549 \times G \times M}{n}$$

Where:

U_{per} = permissible unbalance, expressed in gram millimeters (gmm)
G = desired balance grade
M = rotor mass in kilograms (kg)
n = operating speed in rotations per minute (RPM)

Example:

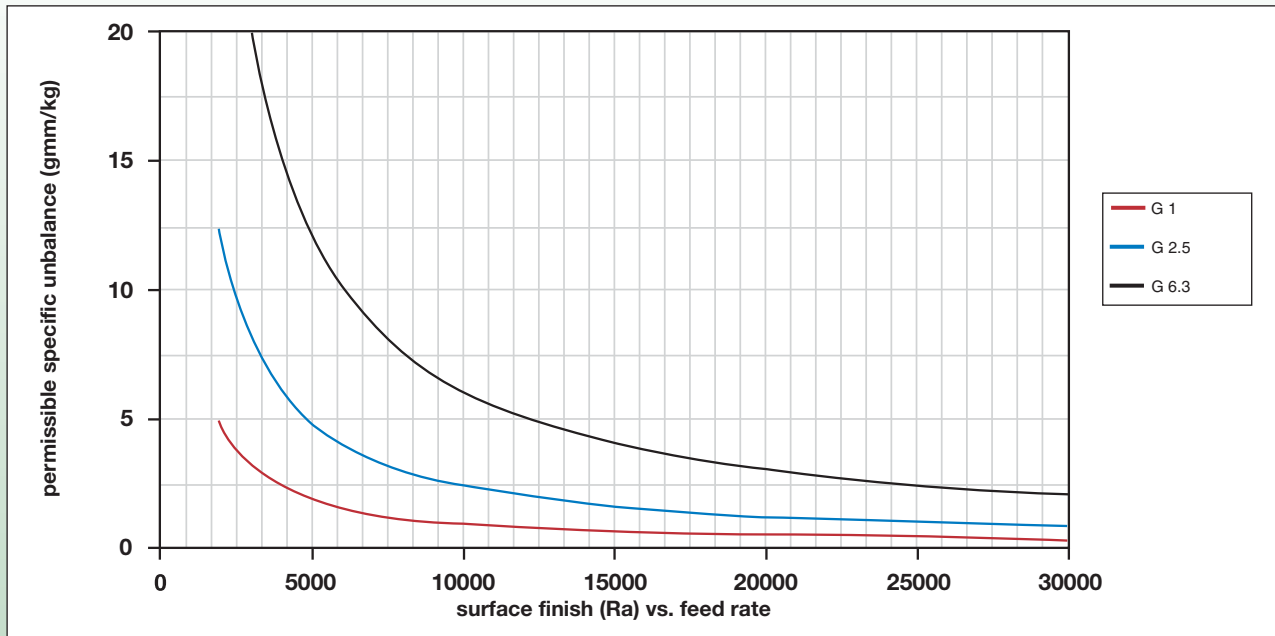
Rotor mass = 2 kg
n = 10,000 RPM
Desired balancing grade = G 6.3

$$U_{\text{per}} = \frac{9549 \times 6.3 \times 2}{10,000} = 12 \text{ gmm}$$

The same value can be obtained from the chart on the following page. It gives the permissible specific unbalance in gram millimeters (gmm) as a function of the rotational speed and the balance quality (G). For the example above, at 10,000 RPM and for grade G 6.3, the maximum residual unbalance would be 6 gmm/kg. The toolholder assembly (including the tool) has a mass equal to 2 kg, the permissible unbalance is [(6 gmm/kg) x 2 kg], which equals 12 gmm.

(continued)

Balancing (continued)



From the approach described in ISO 1940-1, the requirements for maximum residual unbalance become very strict as speed increases. For example, a G 2.5 balancing grade can become unpractical at 25,000 RPM for a tool with a mass of 1 kg. The chart shows that the maximum residual unbalance would be 1 gmm, which could be very time consuming to be achieved or even beyond the accuracy of the balancing machine.

Comparing the cutting forces can provide a reference for the balancing requirements. Generally, finishing operations generate lower cutting forces and require a better balance quality. Though rotating components should always be balanced, in most cases it is sufficient to keep the unbalance forces to 5–10% of the cutting forces.

Balancing

The permissible residual unbalance can be calculated by the following equation:

$$F = U \times (n/9,549)^2 \text{ (Newtons)}$$

Where:

U = unbalance in gram millimeters (gmm)

N = rotational speed (RPM)

In this particular case, the unbalanced induced force would be $F = 1 \times (25,000/9,549)^2 = 6,9 \text{ N}$. The cutting forces generated are likely to be orders of magnitude greater than that.

Good balancing quality does not necessarily guarantee safe operation at higher speeds. Other variables (spindle connection, type of operation, cutting parameters, machine stiffness, bearing condition, etc.) should always be considered.

Unbalance can be corrected by material removal (drilling, milling, grinding), material addition (set screws), and material redistribution (balancing rings or set screws).

For a given unbalance, the following formula can be used to determine the hole depth (L) necessary to correct for the unbalance*:

** Formula for steel components only.*

$$L = \frac{D - \sqrt{D^2 - U \times 1300/d^2}}{2}$$

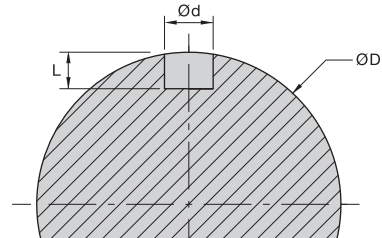
Where:

U = unbalance (gmm)

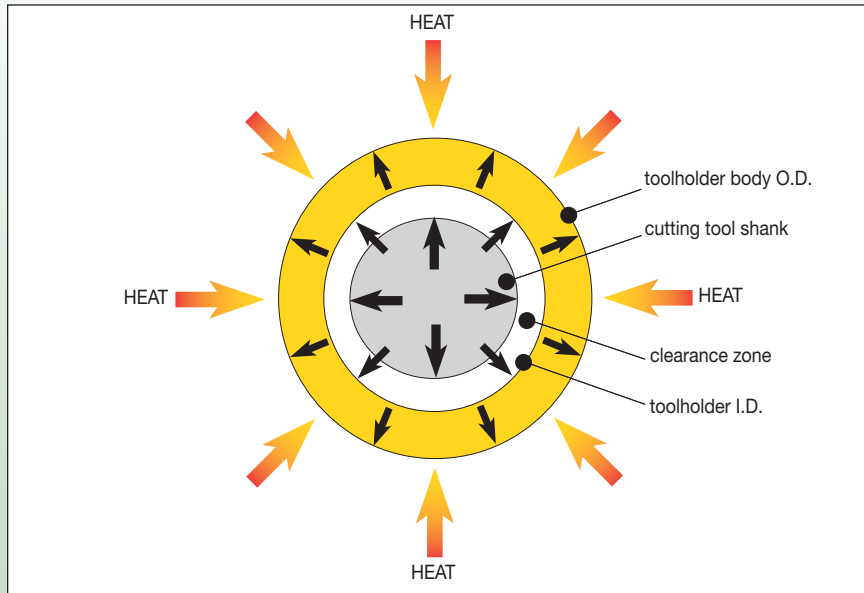
D = diameter of placement (mm)

d = hole diameter (flat bottom) (mm)

L = hole depth (mm)



Shrink Fit



The Concept

Heat shrinking is not a new process in the machine tool industry. However, the concept was only recently implemented as a quick-change toolholding mechanism for clamping cylindrical cutting tools for high-speed machining applications.

The Shrink Fit process begins by applying a quick and precise heat to the holding end of a toolholder. This causes the internal bore, which is slightly smaller than the shank of a cutting tool, to expand, allowing a tool to be inserted. As the toolholder cools, the bore shrinks to create 360° of uniform pressure along the entire length of the bore, resulting in an evenly distributed clamping force that mechanical toolholding cannot beat.

Due to the design, flatted-style, Weldon®, and Whistle Notch™ cutting tool shanks can employ Shrink Fit technology. To gain full benefits of the technology, fully cylindrical tool shanks are recommended. As long as the heating processes are kept within the elastic range of the toolholder material, this clamping operation can be repeated for several thousand cycles.

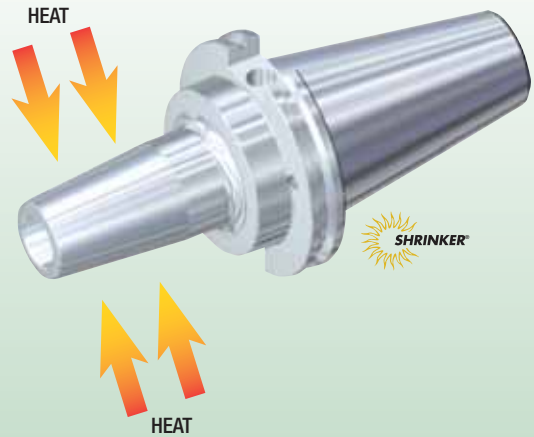
Shrink Fit Tooling Advantages:

- Low runout — cutting tools are gripped 360° along the entire length of the cutting tool shank for an evenly distributed clamping force.
- Clamping forces are greater than collets or hydraulic chucks.
- During testing, tool material properties break down and shear before slippage occurs.
- Slim and short toolholder profile designs are achievable because no moving parts are used.
- Well suited for high-speed operations because their symmetry provides the best possible balance.
- Sealing stop screws are not required — designed interference between the cutting tool and toolholder forms a seal that enables coolant to flow only through designated passages.

These advantages enable Shrink Fit technology to work at greater speeds and feeds, produce better finishes, deliver increased tool and spindle life, and generate more productivity.

Heat-Activating Systems

Shorter cycle time, less cooling downtime, localized heating, and integrated cooling systems are essential for a safe and simple heating system. Shrink Fit heating systems include induction, hot-air, and open-flame methods, with induction being the easiest and fastest of these systems.



Toolholders

- Slim design.
- Balanced.
- Flatted-style, Weldon®, and Whistle Notch™ shanks can be gripped. Optimal results are obtained with smooth, cylindrical shank cutting tools — without flats and/or notches.
- Avoid using carbide tools with polished shanks. This will reduce torque values by 60%.

HT (High Torque) Shrink Fit Toolholders

HT Shrink Fit holders have a high interference level that offers 30–50% greater torque than competitive systems. This line is only to be used with carbide tools because of their low thermal expansion coefficient. These toolholders require a machine with at least 10 kW of power to apply heat quick enough to avoid heating the tool.

GP (General Purpose) Shrink Fit Toolholders

GP toolholders enable the use of all materials and extensions because they have lower interference levels. Operators should use this style if not generating high cutting forces.



Ideal Surface Quality

- Metric (ISO standard) Ra ≥0,8 μm surface finish.
- Inch (industry standard) Ra ≥32 μin surface finish.

(continued)

Shrink Fit *(continued)*

Straight shank toolholder extensions are a great complement to the Shrink Fit system. Use caution and do not overheat Slim Line products. Overheating can cause warping or other permanent damage. Toolholder life drastically reduces if activating heat is not properly controlled.



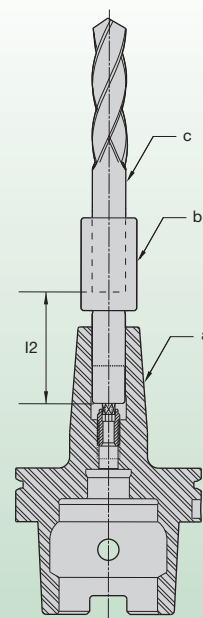
Cutting Tool Requirements

metric (ISO standard)			
cutting tool shank diameters			tolerance
3mm	2,997	3,000	h4 0.000/-0.003
4mm	3,996	4,000	h4 0.000/-0.004
5mm	4,995	5,000	h5 0.000/-0.005
6mm	5,992	6,000	h6 0.000/-0.008
8mm	7,991	8,000	
10mm	9,991	10,000	
12mm	11,989	12,000	
14mm	13,989	14,000	
16mm	15,989	16,000	
18mm	17,989	18,000	
20mm	19,987	20,000	
25mm	24,987	25,000	0.000/-0.013
32mm	31,984	32,000	0.000/-0.016
40mm	39,984	40,000	0.000/-0.016
50mm	49,984	50,000	0.000/-0.003

inch (industry standard)			
cutting tool shank diameters			tolerance
1/8	.1249	.1247	-0.0001/-0.0003
3/16	.1874	.1872	-0.0001/-0.0003
1/4	.2499	.2496	-0.0001/-0.0004
5/16	.3124	.3121	-0.0001/-0.0004
3/8	.3749	.3746	-0.0001/-0.0004
7/16	.4375	.4371	0.0000/-0.0004
1/2	.5000	.4996	0.0000/-0.0004
9/16	.5625	.5621	0.0000/-0.0004
5/8	.6250	.6246	0.0000/-0.0004
11/16	.6875	.6871	0.0000/-0.0004
3/4	.7500	.7495	0.0000/-0.0005
7/8	.8750	.8745	0.0000/-0.0005
1	1.0000	.9995	0.0000/-0.0005
1-1/4	1.2500	1.2495	0.0000/-0.0005
1-1/2	1.5000	1.4995	0.0000/-0.0005
2	2.0000	1.9995	0.0000/-0.0005

Axial Adjustment Gages

Cutting tool length adjustment is performed using a special axial adjusting gage (b) before shrinking the cutting tool into the toolholder. This gage (b) is placed on the toolholder (a) along with the cutting tool (c). The length difference of the setting gage (l2) is calculated into the required tool assembly length. The whole assembly can then be placed into a length presetter for adjustment. Rotating the gage moves the axial stop screw and presets the assembled tool to the required length. After removing the gage, the cutting tool can then be shrunk into the toolholder.



Technical Information

Standard Styles

WIDIA™ hydraulic chucks provide optimum performance for clamping full-cylindrical straight shanks, such as solid carbide drills and end mills. Activation of the chuck is achieved by turning the piston screw, which pressurizes the hydraulic fluid and exerts force on a thin-walled membrane along the length of the clamping bore. This highly concentric clamping force not only holds the tool shank more securely, but also produces a dampening effect that reduces vibration and helps eliminate microcracking on cutting edges.

A safety stop prevents chuck damage caused by over-tightening either with or without the cutting tool in place. Another unique feature is the special spiral wiper groove in the chuck's clamping bore that securely grips oily tool shanks. All WIDIA hydraulic chucks utilize a range of sealed, cutting-tool-reducing sleeves to maximize chuck versatility. Reducing sleeves can also be used for converting bores from inch to metric and vice versa.



Slim Line

Slim Line hydraulic chucks have a sophisticated shape for universal application and maximum precision. After the chucking process, safety is guaranteed if a minimum clamping force or a transmittable torque (determined according to the clamping diameter) is reached. This is achieved through the clamping screw operation and the stroke of the clamping piston that force the hydraulic oil into the thin-walled expansion chamber with high pressure.



Standard/HP Line

Our proven Standard Line hydraulic chucks have an external adjustment screw for radial alteration up to 3/8" of the cutting-tool length. This feature eliminates the need to remove the cutting tool or retention knob to make fine adjustments. Standard Line chucks are prebalanced and can also be used with SEFAS™ chamfering rings. Please see the toolholder sections of this catalog for information regarding balancing quality.



Trend Line

New Trend Line hydraulic chucks offer maximum precision at an attractive price. This system provides the same accuracy specifications as the Standard Line except with an axial back-up screw through the chuck bore to achieve the 3/8" radial adjustment of the cutting tool length. SEFAS chamfering rings also can be used with our Trend Line chucks.



Basic Line

Basic Line hydraulic chucks have a high-quality runout specification of .0001. These chucks are balanced-by-design for speeds up to 10,000 RPM. Like the Trend Line, Basic Line chucks utilize an axial back-up screw through the chuck bore to achieve a 3/8" radial adjustment. Larger body diameters give this chuck a higher torque transmission (grip) of 220 ft. lbs. Please note that the standard SEFAS chamfering ring cannot be used in this chuck design.

General Design

Function

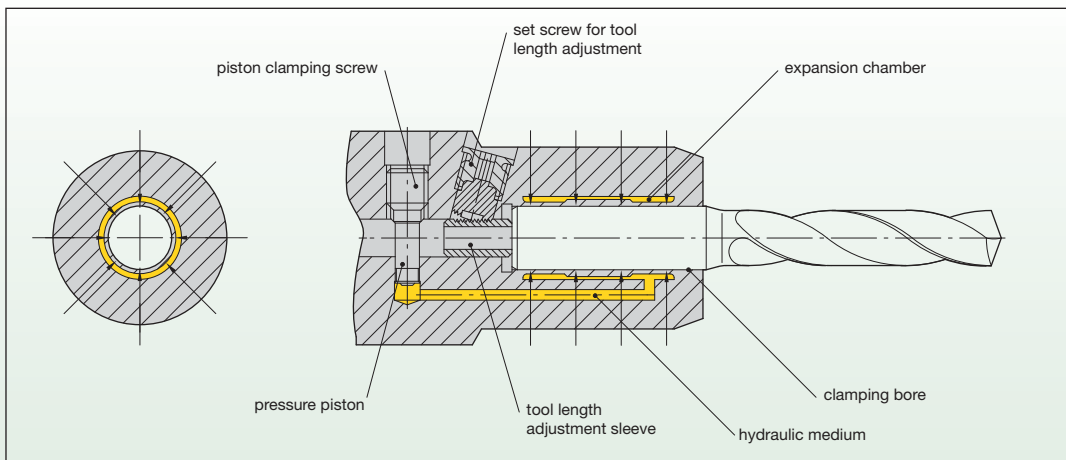
Tightening the piston clamping screw exerts force on the pressure piston, which presses the hydraulic fluid, exerting force on the thin-walled expansion sleeve. This pressure causes the sleeve to compress around the tool shank, creating a highly concentric clamping force.

Effect

The hydraulic clamping system has a dampening effect. Vibration in a mechanical clamping system can cause microcracking on insert cutting edges. This is prevented by the hydraulic expansion chuck and results in higher production quality and up to 4x better tool life.

Accuracy

The accuracy shown is based on a round shank (no flats) with h6 tolerance and no reducing sleeve.



Features

- Turning the external set screw adjusts axial tool length. There is no need to remove the cutting tool or coolant supply unit for standard designs.
- Maintained contact with the tool-length adjusting sleeve ensures that the tool is safely held. 10mm of adjustment is provided.
- A sealed bore and a large hole through the tool-length adjusting screw enable maximum coolant to flow through coolant-fed cutting tools.
- A uniquely designed piston clamping screw prevents damage from overtightening and accidentally actuating the hydraulic mechanism without a tool in the chuck.
- High-performance balanced chucks can be converted to balanceable chucks by adding a set of WIDIA™ balance rings that compensate for cutter imbalance and optimize performance.
- Wiper grooves inside the bore safely grip oily shanks, sealing the bore to eliminate contamination from chips, dirt, or coolant.
- SEFAS™ chamfering rings can be added to chucks, reducing the need for step drills and secondary chamfering operations.
- A wide assortment of reducer sleeves are available to increase the application range of hydraulic chucks. When using a bushing, the runout could be up to twice as high as the example shown.

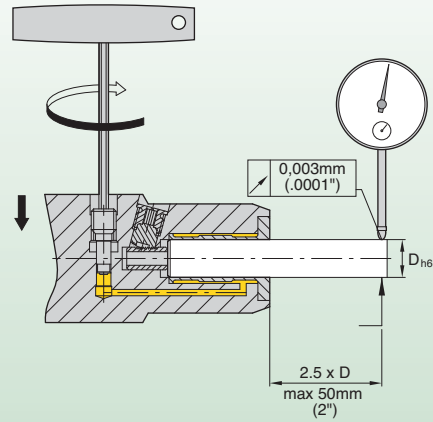
(continued)

General Design *(continued)*

Application

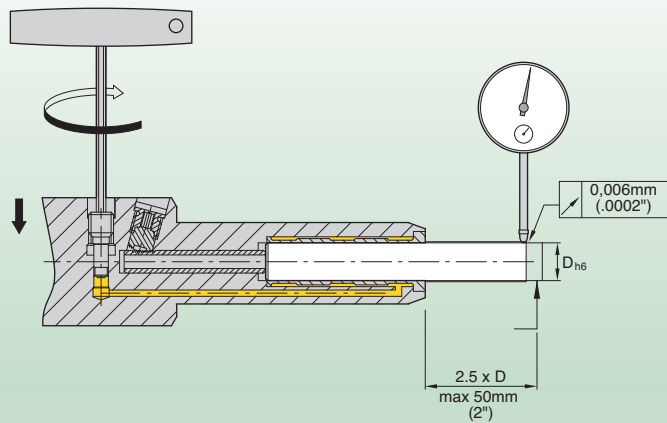
Hydraulic expansion chucks work best when clamping these style shanks:

- Shanks to DIN-6535 — forms HA, HB, and HE.
- Shanks to DIN-1835 — forms A and B (with shank tolerance h6 and Ra minimum of 0,3 µm).
- Forms HA and A — plain cylindrical shank, 6–32mm diameter.
- Forms HB and B — Whistle Notch™ shank, 6–20mm maximum diameter.
- Form HE — Whistle Notch shank, 6–20mm maximum diameter. (WIDIA™ suggests the use of a reducer collet).
- Inch straight shanks:
 - 1/4–5/8" (.0004 under nominal diameter maximum).
 - 3/4–1-1/4" (.0005 under nominal diameter maximum).



Slim Line Design

Weldon® shanks with a maximum diameter of 20mm (3/4") can be gripped without reducer collets. However, WIDIA recommends using reducer collets for all flatted shanks. Highest accuracy is obtained with plain, cylindrical shanks.



Using a sleeve gives higher grip torque:

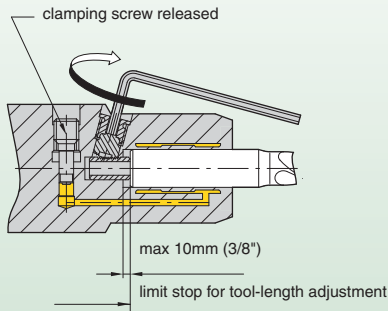
Formula: $\frac{\text{sleeve bore} \times \text{chuck torque}}{\text{chuck bore}} = \text{assembled torque}$

Example: $\frac{12\text{mm (sleeve bore)} \times 220\text{ Nm}}{20\text{mm (chuck bore)}} = 132\text{ Nm}$

While chart shows for a 12mm Hydraulic Chuck = 70 Nm approx.
2x grip advantage

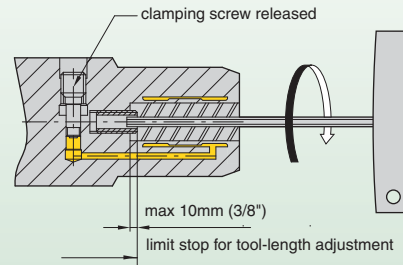
Setting Up New Hydraulic Chucks

**Length adjustment for:
Standard/HP Line and Slim/Standard Line**



1. Remove all grease from the hydraulic chuck before using.
2. Insert the cutting tool into the clamping bore as far as the stop pin/stop screw will allow.
3. Adjust the cutting tool length with a hex wrench.

**Length adjustment for:
Trend Line, Basic Line, and Slim/Trend Line**

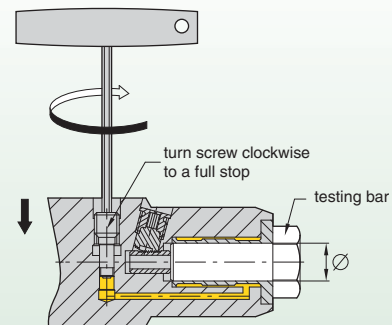


4. Always tighten the clamping screw with a hex wrench as far as the limit stop by hand tightening. Never try to adjust the stop pin when the hydraulic chuck is in the clamped position.
5. The tool is now clamped and ready for use.

Maintenance

WIDIA™ hydraulic chucks are maintenance-free and deliver long service life. It is important that the clamping function be checked with a test pin on a regular basis. Any dirt in the bore can be removed with a nylon cleaning brush.

- The clamping function can be tested quickly and easily using the test pin.
- Insert the test pin into the clamping bore as far as the stop pin/stop screw allow.
- Tighten the clamping screw with a hex wrench as far as the limit stop by hand tightening.
- The chuck is functioning correctly if the test pin cannot be moved by normal hand pressure.



Reducing sleeves are available; see page I3.



Cleaning brushes are available; see page J5.



Test pins are available; see page J4.



IMPORTANT

Never tamper with the oil-loading orifice (sealed with a cap) as this could destroy the clamping ability of the hydraulic chuck and require it to be sent to WIDIA for service.

In the event of small tool crashes or misuse of the chuck, please contact your local WIDIA Service and Repair Department to have your WIDIA hydraulic chuck serviced or repaired by qualified WIDIA service technicians.

The HPMC (High-Performance Milling Chuck) System

Application

The HPMC System is ideal for holding round shank cutting tools and extensions on various applications because it offers greater versatility. This makes it an excellent choice for end mills, reamers, indexable cutters, drills, straight shank extensions, and boring systems. The HPMC System, with its powerful gripping torque, provides the maximum performance for tough roughing and high metal removal applications, as well as delivering first-rate accuracy for finishing applications — all with the same chuck.

These toolholders are through-coolant capable with the use of supplied backup screws. Threaded holes in the chucks accept set screws for fine balancing, and reducing sleeves allow the same holder to be converted for smaller gripping sizes.



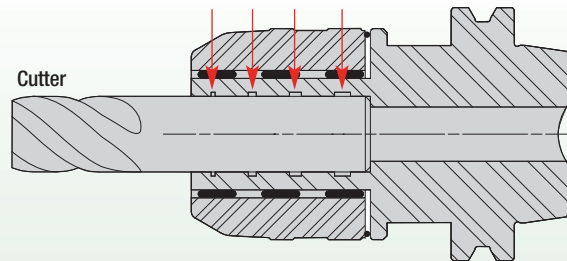
Design

The HPMC System is comprised of an inner chuck body, a needle roller bearing assembly, and a thick-walled outer locknut. The inner chuck body, with radial and axial grooves at the inside bore, acts as a master collet by compressing around the cutting tool, exerting a very strong grip. The chuck bore is compressed by roller bearings as they track up a taper of approximately 4°. The roller bearings are held in a retainer (four per window to maximize contact) at an angle slightly skewed from that of the chuck taper angle. The locknut bearing retainer's wall thickness is greater than that of the chuck body nose. Therefore, as the locknut is rotated clockwise, the roller bearings track in a helical movement, gradually climbing the shallow taper.

There are no threads in the HPMC System. As the two tapers are forced together, a tremendously high, uniform force is created. This squeezes the chuck body inward, conforming it to the cutting tool shank. Radial grooves assist the internal diameter by evenly collapsing inward, which improves gripping torque, accuracy, and prevents fretting. Force continues to be applied until the locknut's back face bottoms out on the chuck's body face. This is the maximum gripping torque position. Oil residue left on cutting tool shanks can cause slippage, but axial grooves minimize this by draining contaminants.

Shallow contact angles produce a self-locking effect, so the chuck will not release during operation. Because of this strong grip, no torque wrench is required. Also, the high gripping force of the HPMC enhances its ability to transmit energy to the machine tool, so vibration, deflection, and runout are minimized. The cutting tool shank offers an advantage over collet chucks because there is no axial drawback as the locknut is tightened.

A single toolholder provides 5–10% more gripping torque for heavy milling, and the same chuck is versatile enough to do finishing work, too.



To get the maximum accuracy out of the HPMC System, tighten the locknut to the face stop and then back off half a turn. As this is done, be sure the O-ring on the back face of the locknut stays in contact with the chuck face.

Stop screws are included with all HPMC Systems for length adjustment or coolant feed. These screws are designed with a cone face and reversible flat face and an O-ring for coolant sealing options.

HPMC Systems are subjected to sub-zero treatment to stabilize the material and prevent pitting on the bearing contact surface. This helps to ensure long, worry-free tool life.

(continued)

The HPMC (High-Performance Milling Chuck) System *(continued)*

Cutting Tool Requirements

The outside diameter of the cutting tool shank and the inside diameter of the HPMC System must be wiped with a clean dry cloth before assembly. Any contamination will increase runout and reduce gripping force.

Carefully monitor the cutting tools used in these chucks so they do not exceed h6 (nominal to $-.0005''$) on the shank diameter. Use tools as close to nominal as possible. Cutting tool shank roundness should be within $0,003\text{mm}$ ($.0001''$). Undersized tools cause excessive stress and may cause chuck failure.

Optimal chuck performance is attained when the cutting tool shank is round, without flats. Cutting tools with small flats may be held, but they will increase runout. Whistle and flatted cutting tool shanks are recommended in conjunction with reducing sleeves. For best performance, keep shank flats to a minimum.

The minimum length of engagement is 2x the diameter of the cutting tool shank. Short holding length may cause the tool and/or chuck to break. This could dislodge the cutting tool and result in serious injury to the operator.

The milling chuck should never be tightened without a cutting tool inside the bore. High gripping forces will cause permanent deformation to the inside diameter.

Maintenance Operations

Greasing the needle bearing is the only required maintenance. Follow the procedure below to ensure maintenance is properly performed:

1. Tighten the locknut clockwise to obtain clearance from the retaining ring.
2. Remove the retaining ring from the chuck.
3. Unlock the locknut counterclockwise, and lift the nut assembly from the chuck.
4. Wipe off old grease from the milling chuck and all other components.
5. Recoat the needle bearings in the locknut liberally with a quality, water-resistant grease.
6. Regrease the outside diameter of the milling chuck where the locknut is housed.
7. Reinstall the locknut on the milling chuck body and tighten to gain clearance for reinserting the retaining ring.
8. Tighten and loosen the locknut several times. Recheck the retaining ring for correct fitting.
9. Wipe away any excess grease.

Please contact the WIDIA™ Service and Repair Department to have your WIDIA products serviced or repaired by qualified WIDIA service technicians.

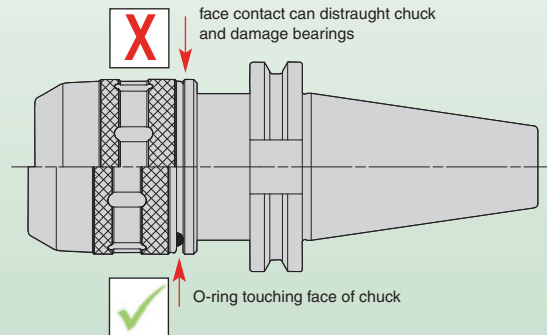
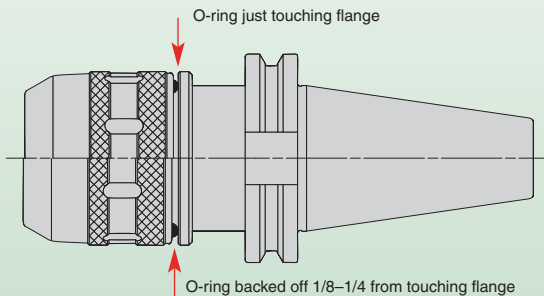
Setting the Accuracy of the Milling Chuck

Heavy Milling

- Tighten the locknut all the way down with a milling chuck wrench until the O-ring on the locknut just touches the flange of the milling chuck body (O-ring should not be compressed).
- Accuracy $10\text{--}20\ \mu\text{m}$ ($.0004\text{--}.0008''$) at 3x diameter up to 50mm (2").

Finish Cut

- Back the locknut off $1/8\text{--}1/4$ of a turn from above position.
- Best accuracy — $5\ \mu\text{m}$ ($.0002''$) at 3x diameter up to 50mm (2").



CAUTION

DO NOT over tighten the milling chuck without a tool shank inserted. This may cause serious damage to the milling chuck or loss of performance.

Tunable Tooling System (TTS)

Overview

When machining with extended length setups, undesirable regenerative vibrations (chatter) can arise, causing poor surface finish, dimensional control issues, and tool breakage. To avoid chatter, machine operators are generally forced to reduce cutting parameters, which decreases metal removal rates and diminishes productivity.

Cutting force fluctuates when chip thickness varies. This is caused by waves left on the workpiece from the previous pass. These waves may create chatter when the cutting tool and workpiece interact. Continued chatter can further produce variation in cutting force, leading to more vibration. If not addressed, the amplitude of vibration may eventually reach levels that cause the tool to bounce out of the workpiece or even result in catastrophic failure.

This problem can be approached in many different ways. Chatter can be avoided by drastically reducing cutting speeds to increase process damping (friction between flank face and workpiece), which dissipates energy to reduce vibrations. Another approach utilizes milling cutters that have inserts with differential spacing. This minimizes the regenerative effect by creating a disturbance on the wave pattern left on the workpiece. However, this approach provides limited success as chip loads are no longer evenly distributed over the cutting edges and may require the feed rate to be restricted. Also, because the spacing is not even, the surface quality could be negatively affected.

The problem with these solutions is that they do not allow high metal removal rates to be maintained. To uphold high rates, the dynamic stiffness of the system must be increased. Dynamic stiffness is proportional to the product of static stiffness and damping ratio. Static stiffness can be increased through using shorter setups or larger toolholder diameters. Materials with a higher modulus of elasticity can also increase static stiffness.

The WIDIA™ Tunable Tooling System (TTS) provides a means for maximizing the dynamic stiffness of boring bars and milling adapters by suppressing vibrations with a passive dynamic absorber. TTS is designed with an internal mass that vibrates close to the natural frequency of the most dominant vibration mode in the system. The motion of the internal mass will dissipate energy and prevent chatter. The overall result depends on a machine's dynamic characteristics* and the rigidity of the connection between tool and machine tool. Manufacturing tolerances, preload, and wear may change the dynamic response of a machine and adversely affect overall results.

**Machines from same builder and model are not dynamically identical.*

While passive dampening improves the dynamic stiffness of an extended reach tool, the damping mechanism will not perform the same with every machine. Not only does the natural frequency of the tool affect its dynamic stiffness, frequencies inherent to the machine do as well. Because machine tools have their own dynamic signature, a tool that is tuned on one machine may not be tuned on another. Unlike other products on the market that are pretuned, WIDIA tunable boring bars and milling adapters are tunable. They allow users to adjust the passive damper, optimally tuning the tool for a specific machine or setup. This enables extended reach tooling to be retuned to match a machine's dynamic signature, even as it changes over time. A key benefit of WIDIA's tunable boring bars and milling adapters is that they can be optimally tuned for any given setup. While WIDIA standard tunable products come pretuned from the factory, it may be beneficial to further optimize them once installed.

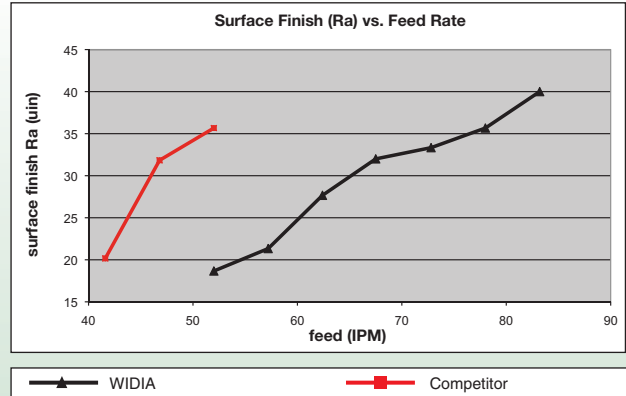


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Tunable Tooling System (TTS) *(continued)*

With the WIDIA™ TTS System, longer L:D ratio toolholders can be used for larger DOC, better surface finishes, and longer tool life. When TTS is applied to milling adapters, using greater insert density on milling cutters or increasing ADOC or WOC enables higher MRR. Better surface finishes and tool life can also be expected from these adjustments.

The benefits of using WIDIA's Tunable Systems go beyond increased metal removal rates. In metalcutting tests, a good correlation between dynamic stiffness and vibration levels were measured at the spindle. Vibrations can not only cause premature tool life, but also limit spindle bearing life. Preventing vibration from propagating through the machine promotes longer life for spindle-related components and maintains machine accuracy over time.



Surface finish measurements comparing a pretuned milling adapter from a competitor and a WIDIA's optimally tuned adapter on the spindle. An increase of up to 50% in feed rate for similar surface finish values can be noticed.

Dynamic Stiffness

Figure 1 shows the relative dynamic stiffness of a tunable boring bar as a function of adjusting screw tightness — loose to tightened (left to right).

The chart shows that for the given bar, optimal tuning occurs at about 70% or when the relative performance equals 1.

It is also important to note that performance decreases more severely when the tool is over-tuned, compared to when it is under-tuned. For this reason, it is best to slightly under-tune the system.

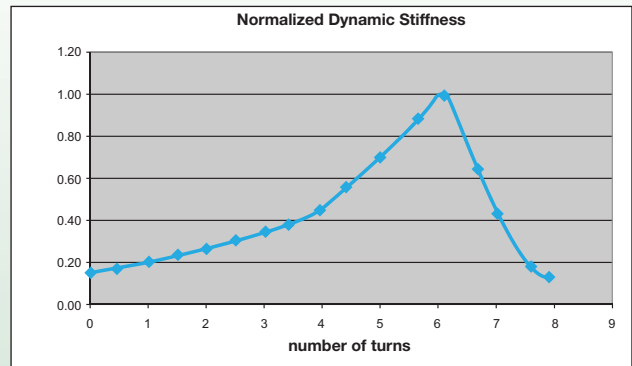
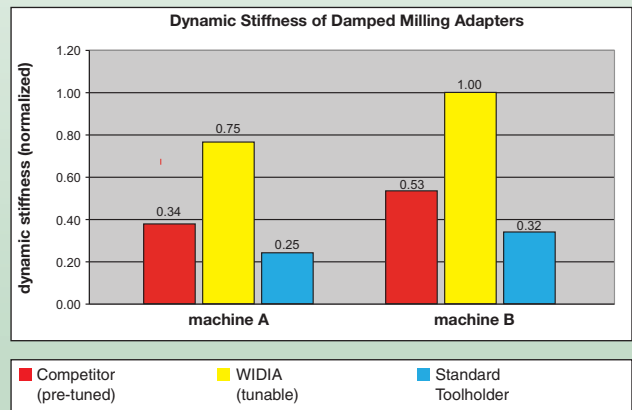


Fig. 1

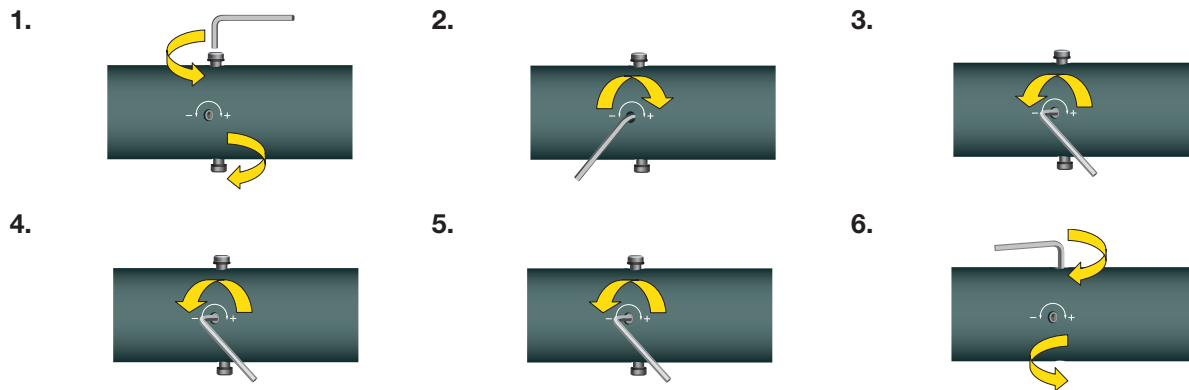


Tunable Milling Adapters

The WIDIA™ Tuned Tooling System offers a full line of tunable milling adapters capable of performing at maximum output without the hindrance of vibration. Tunable milling adapters are through-coolant capable, and, because the internal damper can be adjusted to alleviate chatter, they provide optimum surface finish and longer tool life.

General Guidelines for Milling with Extended Reach Adapters

1. Loosen both clamping screws.
2. Turn the adjusting screw in the positive direction until it becomes snug. The adjusting screw becomes snug when it locks the tuner mass.
3. Turn the screw one complete turn in the negative direction and take a test cut.
4. Repeat Step 3 until good surface finish is achieved. You may need to use small increments to find an optimal position.
5. Back the adjusting screw off a 1/4–1/2 turn in the negative direction.
6. Tighten both clamping screws and take a test cut to confirm desired results.



**The TTS Milling Adapters will need to be re-tuned if the milling cutter is replaced with another with different mass.*

Tunable Boring Bars

The WIDIA™ complete portfolio of Tunable Boring Bars helps prevent chatter and other problems associated with an internal dampening package designed for deep-hole boring applications.

Advantages

Optimal Rigidity

Eliminates vibration to improve surface quality and tolerance.

Increased Productivity

Larger depth of cut and better chip removal by up to 10:1 (steel) and 15:1 (carbide) length-to-diameter ratio.

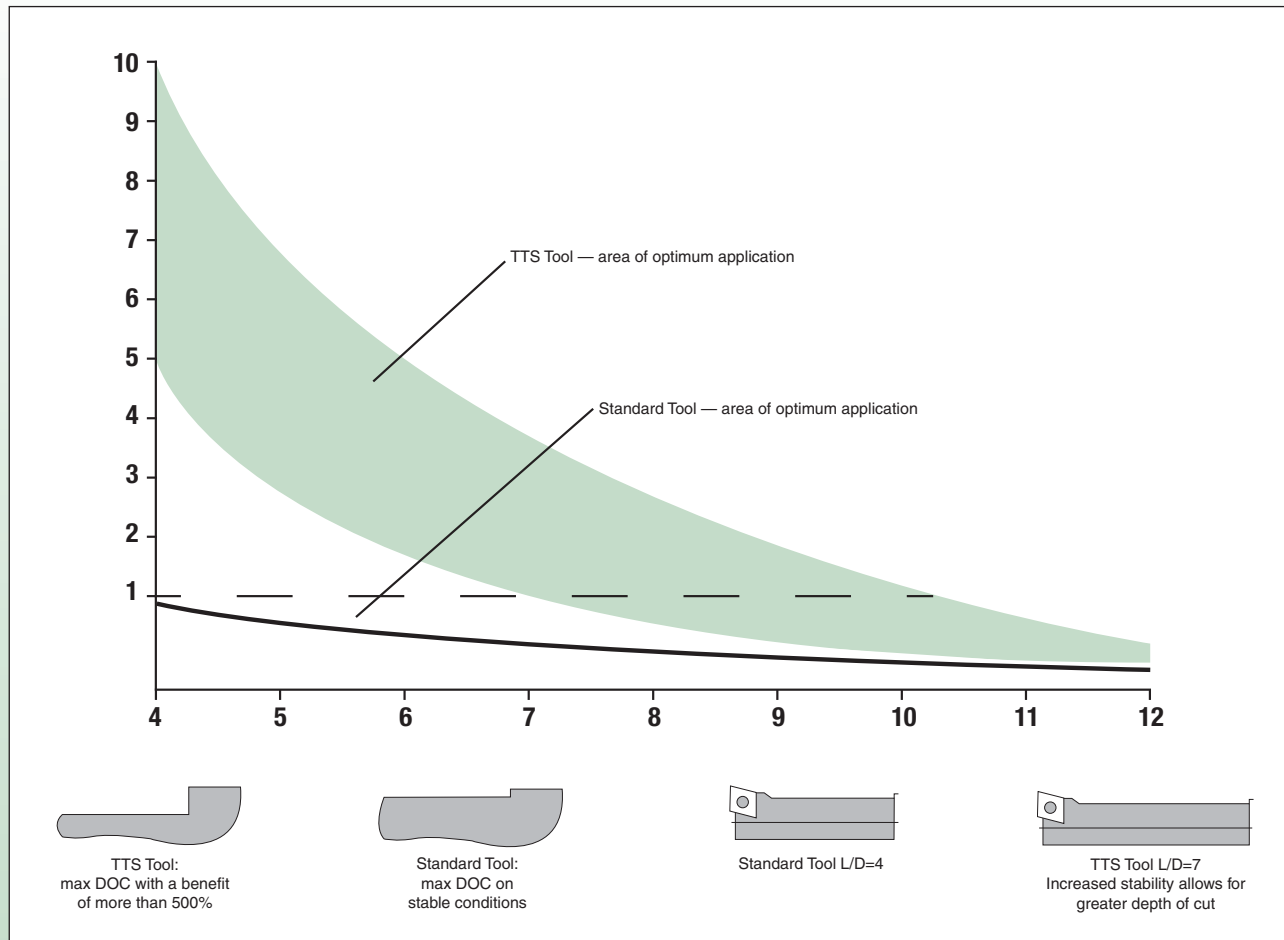
Machining without Chatter or Vibration

Less noise exposure and improved results.

Tunable Damping Mechanism

To account for different vibration behavior, bars can be tuned on the machine, and tools can be adjusted.

Relative Stability



NOTE: This chart illustrates how KM™ Tunable Boring Bars provide greater stability than standard toolholders, even in larger tool length-to-diameter ratios. Increased stability enables greater depth of cut.

Technical Information

General Guidelines for Boring with Extended Reach Bars

1. Select the largest boring bar diameter possible. Larger diameter bars are stiffer and more stable. Remember to leave enough space for chip evacuation.
2. While larger diameters are more stable, the diameter may also be too large, preventing proper chip evacuation, affecting surface finish, or damaging the bar. Ensure the bar diameter is not so large that it will interfere with chip evacuation.
3. Keep the overhang length of the tunable boring bar as short as possible. For Tunable Boring Bars, select the shortest bar possible.
4. Balance machining parameters to prevent the occurrence of uncontrolled vibrations and resonance.
5. The tool setting angle should be as close as possible to 90°.
6. Make sure the insert is in the correct center position.
7. By choosing a small corner radius you can reduce forces on the workpiece.
8. Use cutting heads with a negative back-rake angle that is as small as possible.
9. Using inserts with a positive chip former is preferred.
10. Change inserts when any flank wear is detected because radial back forces will increase in proportion to wear.

Selecting the Correct Bar

WIDIA™ offers TTS Boring Bars with KM™ back-ends or straight shanks, KM front-ends, or bolt-on head connections, and they are available in either steel or carbide.

To find the appropriate boring bar, first consider that the length-to-diameter ratio (L:D) should always be kept as small as possible. The smaller the L:D ratio, the greater the stiffness and stability of the bar.

The L:D ratios of Tunable Boring Bars are fixed, where straight shank tunable bar L:D ratios are not. When using straight shank bars, the overhang length should be kept as small as possible.

Please note that only standard pretuned straight shank tunable bars are pretuned at the factory for 10:1 L:D. If the straight shank bar is mounted with less than 10:1 L:D, it may be necessary to retune the bar. This is discussed in more detail in the "Tuning the Bar" section.

Holding Method

The holding method is as critical to performance as selecting and tuning the boring bar. The connection between the boring bar and the machine should be as rigid as possible. Rigid connections enable the tuner mass to function more effectively. The minimum holding length of the bar should be 2.5x the diameter of the bar.

Various connection methods are shown below and listed from most stable to least stable:

Face and Taper Contact with Interference Fit

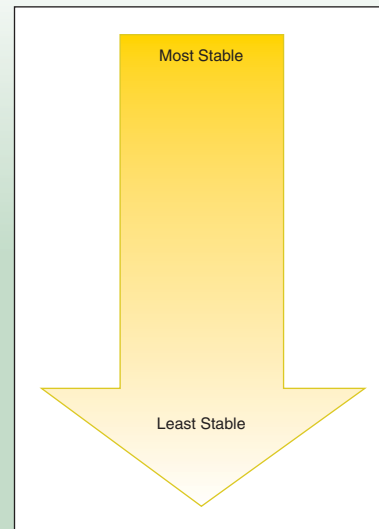
Example: KM Tunable Boring Bar clamped with short overhang
KM clamping unit on turret

Split Sleeve/Full Cylindrical Contact

Example: Straight Shank Tunable Boring Bar with split sleeve

Screw Clamping

Example: Straight Shank Tunable Boring Bar with screw clamping on bar flat



Tuning the Bar

Standard tunable boring bars are pretuned at our factory. Though they may work right out of the box on some machines, for others, they may chatter because of differences in dynamic response. Chatter can be eliminated by optimally tuning the boring bar for a given setup, and the key benefit of our tunable boring bars is that they can be adjusted for any application. Therefore, corrections can be made to put the tool in tune with your machine, optimizing dynamic stiffness and negating chatter.

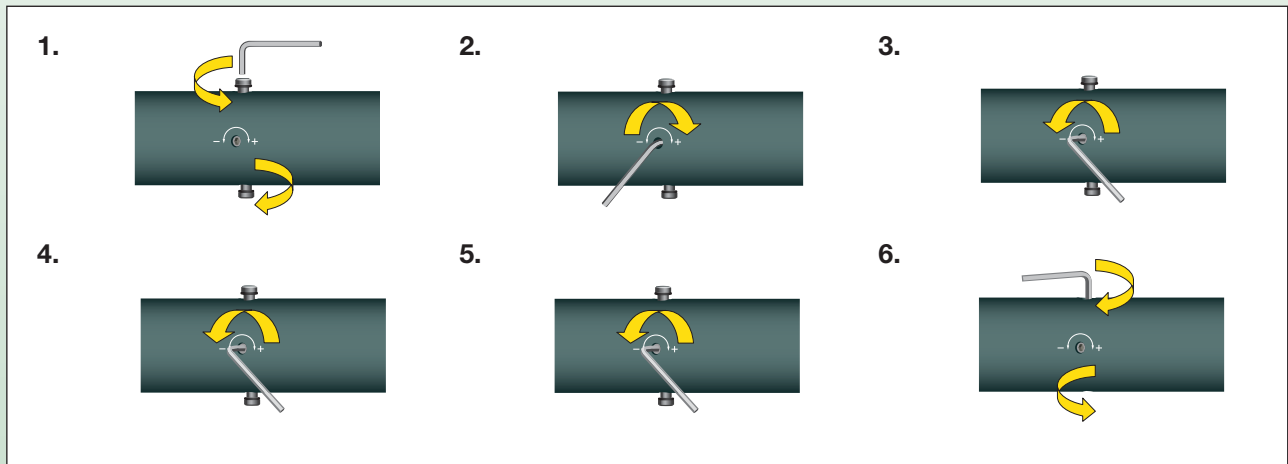
Several factors influence the required adjusting screw setting on tunable boring bars, including:

- Overhang and L:D ratio.
- Depth of cut.
- Overall dynamics and rigidity of the machine.

When retuning, it is best to slightly under-tune the bar. For this reason, the tuning process focuses on identifying the adjusting screw setting where chatter starts, and then backing off the screw by a 1/2 turn in the negative direction.

Retuning a Tunable Boring Bar

1. Loosen both clamping screws.
2. Turn the adjusting screw in the positive direction until it becomes snug. The adjusting screw becomes snug when it locks the tuner mass.
3. Turn the screw one complete turn in the negative direction and take a test cut.
4. Repeat Step 3 until chatter is eliminated.
5. (A) Once chatter is eliminated, note that it starts between the current screw setting and one turn in the positive direction. Make 1/4 turn adjustments within this range, taking test cuts for each setting, until you can identify the adjusting screw setting that causes chatter to start. (B) Once the adjusting screw setting that causes chatter is determined, back the adjusting screw off a 1/2 turn in the negative direction.
6. Tighten both clamping screws and take a test cut to confirm desired results.



Screw-On Adapters

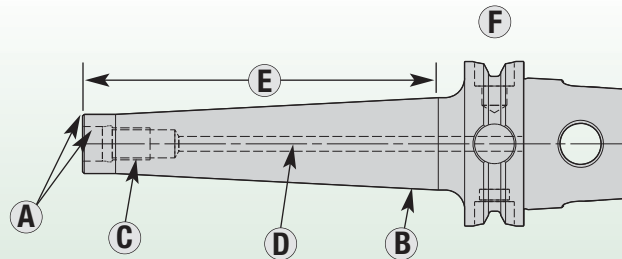
The universal design of WIDIA™ Screw-On Milling Cutter Adapters enables old and new tool styles to be used interchangeably yet maintain a rigid connection. All adapters offer superior runout accuracy, high metal removal rates, and through-coolant capability. Screw-On Milling Cutter Adapters can be used with WIDIA's wide range of best-in-class inserts to guarantee excellent cutting results, performance, and productivity.

Screw-On products can also be used with a variety of machining applications ranging from low-speed milling applications to rates greater than 20,000 RPM, with the added feature of coolant directed to the cutting edge. The system's accuracy, repeatability, and stability should be equal or greater to the performance of any similar systems on the market today in all applications.



Features, Functions, and Benefits

- All adapters have through-coolant capability.
- All products are stock standard products.
- High accuracy — low runout.
- Stable system for helix, pocket milling, contour cutting, and ramping.
- KM™, HSK, and steep taper prebalanced to G6.3 at 16,000 RPM.
- Extensions and reducers are designed with through-coolant provision.
- The fine-tuned Screw-On indexable end mill cutters and the KM/Erickson™ toolholders together with a wide range of best-in-class inserts ensure excellence in cutting results, performance, and productivity.



- A. Ground pilot and face for high rigidity and accuracy.
- B. Extended shanks have slow taper for added rigidity.
- C. Thread locking system.
- D. Through coolant on all adapters.
- E. Designed for long reach.
- F. Balanced.

Applying Screw-On Adapters

Heavy-Metal Adapters

- Devibration extensions with heavy metal (Densimet™ D176).
- Internal threads with accurate mating surface for best possible concentric and axial runout with the extended tools.
- Through-coolant capability.

Reducers

- Adapter uses Screw-On tools with smaller size.
- Through-coolant capability.
- Mating surface helps generate accurate concentric and axial runout.

Extensions with Weldon® Shank

- Screw-On type extension with Weldon shank, as per DIN 1835-B.
- Shank manufactured as per DIN 1835-B, internal-coolant capability.

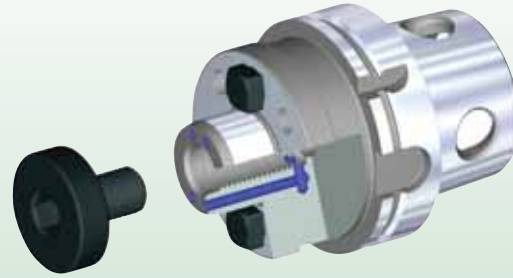
Extensions

- Adapter uses Screw-On tools with larger thread size.
- Through-coolant capability.
- Mating surface helps generate accurate concentric and axial runout.

Through-Coolant Shell Mill Adapters

Shell mill adapters with high-pressure and high-volume through-coolant capability are now available as standard offerings. Their unique design enables maximum coolant flow to be channeled directly to a tool's cutting edge.

These latest shell mill adapters with through coolant are ideal for holding indexable milling cutters. Together, the toolholder and cutter ensure excellence in tool life, surface quality, and productivity. With this combination, high-pressure or high-volume coolant can dramatically improve surface finishes, reduce tool wear, decrease cutting force, and control chip shape and evacuation. This makes through-coolant shell mill adapters perfect for machining hardened steels and other difficult-to-cut materials like titanium.



Options

- Extended lengths available in standard stocked offering.
- Drive keys upgraded to high-strength material, allowing for high-torque capability.
- Adapters are set for form AD coolant and can be converted to form B flange coolant using adjusting screws.
- No extra components necessary to buy for standard tools.

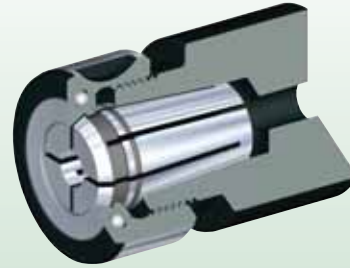
Coolant Flow Options

- Through holes in the face of the pilot.
- Through the center.

Collet Chuck Styles

TG Collet Chucks

Primarily for gripping straight shanks, TG collet chucks are the Erickson™ industry standard. These chucks offer flexibility for drilling, milling, and tapping applications and are also capable of gripping Whistle Notch™ cutters. TG collet chucks should be used for medium to light operations.

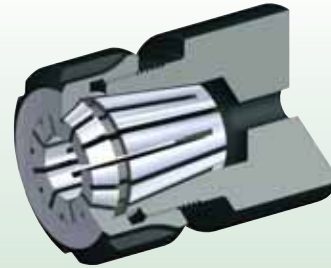


TG collet chucks have a range of dedicated milling and tap collets available. Balanceable locknuts are offered for operating at relatively high speeds. Sealing/coolant locknuts and bonded collets are also available for chucks utilizing through coolant.

- Clamping range of 0,3mm (.016").
- Good rigidity and gripping power of 3:1.
- Good concentricity.

ER Collet Chucks

As the DIN 6499 industry standard, ER collet chucks are designed to grip straight shanks. They are flexible for drilling, light milling, and tapping applications. ER collet chucks are used for medium to light applications at medium speeds.



Dedicated tap collets are available for this style collet chuck. For ER collet chucks using through coolant, sealing and coolant locknuts are available.

- Wide clamping range of 1mm (.040").
- Fair rigidity and gripping power of 2:1.
- Good concentricity.

(continued)

Collet Chuck Styles *(continued)*

DA Collet Chucks

DA collet chucks are an Erickson™ industry standard. They are intended for gripping straight shanks, but the DA style also has the ability to grip drill margins. This eliminates center drilling by shortening the drill. DA collet chucks also offer flexibility for drilling, milling, and tapping.

Milling and tap collet styles dedicated to the DA style are available. These chucks can also make use of bonded collets when employing through coolant. DA collet chucks can utilize three styles of locknuts.

- Clamping range of 0,8mm (.031")
- Fair rigidity and gripping power of 1:1.
- Concentricity >0,025mm (.001")

**DA — 01 Series
Extended Nose Style**

Long nosepiece bearing and compensating locknut delivery offer proper axial position and prevent twisting. This style is ideal when extreme accuracy is required.



**DA — 04 Series
Close Center Style**

Designed at the minimum safe outside diameter to solve close center problems. This style should be used where reach and close proximity of workpiece problems are encountered.



**DA — 08 Series
Stub Nose Style**

This DA style has a compensating nose ring with the locknut that allows collets to find their own axial position and prevent twisting. They should be used when better rigidity is required.



TG • Tremendous Grip

- Provides Tremendous Grip and accuracy for all drilling applications.
- 0,4mm [1/64" (.016")] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy.

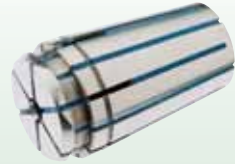
ERICKSON



TGC • Tremendous Grip Coolant

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range collapse.
- Design enables flutes of drills to enter collet, unlike competitive designs.

ERICKSON



TGHP • Tremendous Grip High Precision

- Twice as accurate as standard TG- and ER-style collets.
- Available from stock in all popular sizes.
- Can be used in all standard TG-style collet chucks.
- 0,25mm (.010") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

ERICKSON



TGCHP • Tremendous Grip Coolant High Precision

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

ERICKSON



TGNP • Tremendous Grip Non-Pullout, Weldon® Style

- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill holders.
- 0,13mm (.005") range of collapse.
- Fits all standard TG-style collet chucks.

ERICKSON



TGST • Tremendous Grip Single-Angle Tap Collet

- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



TGSTC • Tremendous Grip Single-Angle Tap Collet, Coolant Style

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

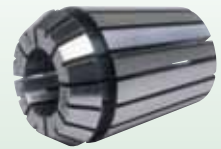
ERICKSON



ER • Single Angle

- Provides good grip and accuracy for all drilling applications.
- Wide clamping range.
- Available in both inch and metric bores.
- 1mm (.040") range of collapse.
- Manufactured to DIN 6499 Class 2 accuracy.

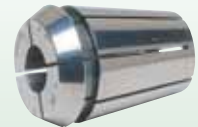
ERICKSON



ERTC • Single-Angle Tap Collet

- Designed to grip taps on shank and square to eliminate slippage.
- Fits all standard ER-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



ERTCT • Single-Angle Tap Collet with Axial Compensation

- Designed to grip taps on shank and square to eliminate slippage.
- Tension only, cost-effective solution for machines that require axial compensation for tapping.
- Fits all standard ER-style collet chucks.

ERICKSON



DA • Double-Angle

- 0,8mm [1/32" (.031")] range of collapse.

ERICKSON



DAC • Double-Angle Coolant

- Rubber-filled slots seal coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



DANP • Double-Angle Non-Pullout — Weldon® Style

- Designed to grip end mills with Weldon-style shanks.
- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill adapters.
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

ERICKSON



TG Collet Series

The TG collet series is the first choice when high precision, gripping torque, and versatility are required. These single-angle collet chucks grip at approximately 3:1 for grip torque versus tightening torque without a stop screw.

The taper's slow angle produces a sticking action, so collets must be snapped into the locknut before assembling the locknut onto the chuck. Follow the procedure on page K79 for assembly/disassembly instructions.

Standard Collet

- 0,40mm (.016") maximum collapse.



Bonded Seal Collet

- 0,13mm (.005") maximum collapse.
- 100 bar (1,500 psi) coolant pressure.



DA Collet Series

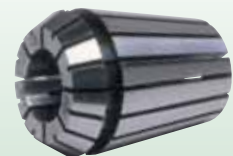
DA-style collet chucks have a grip of approximately 1:1 tightening torque versus grip torque.



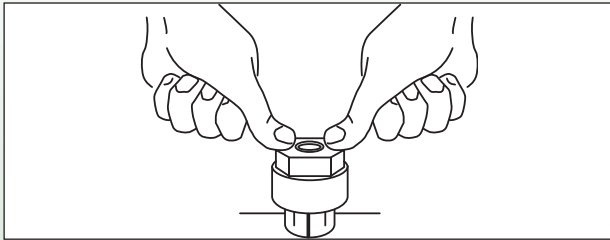
ER Collet Series

The ER collet series is an international standard style used for many applications. Collets from this series are ideal for boring, milling, reaming, tapping, and grinding.

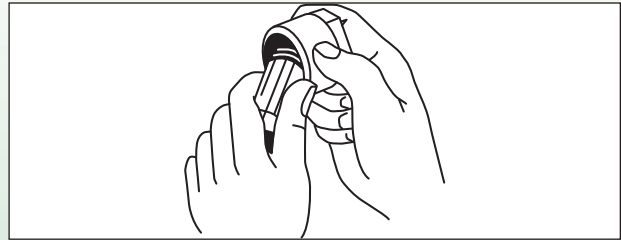
ER collets are manufactured from alloy steel and hardened for long life. They offer a grip of approximately 2:1 tightening torque versus grip torque. See page K79 for assembly/disassembly instructions.



TG and ER Collet Assembly/Disassembly Instructions



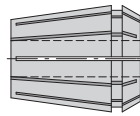
- First, place the locknut with nose ring over collet nose. Apply force on the locknut until it snaps into place. The nose ring is now seated into the collet undercut and should turn freely.



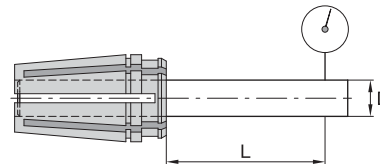
- To remove the collet from the locknut, hold the nut firmly in one hand and apply a bending action on the collet with the other hand until the collet snaps free from the nose ring.

NOTE

Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet. The full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety. Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers. Never try to stretch collets by clamping oversized cutting tools.

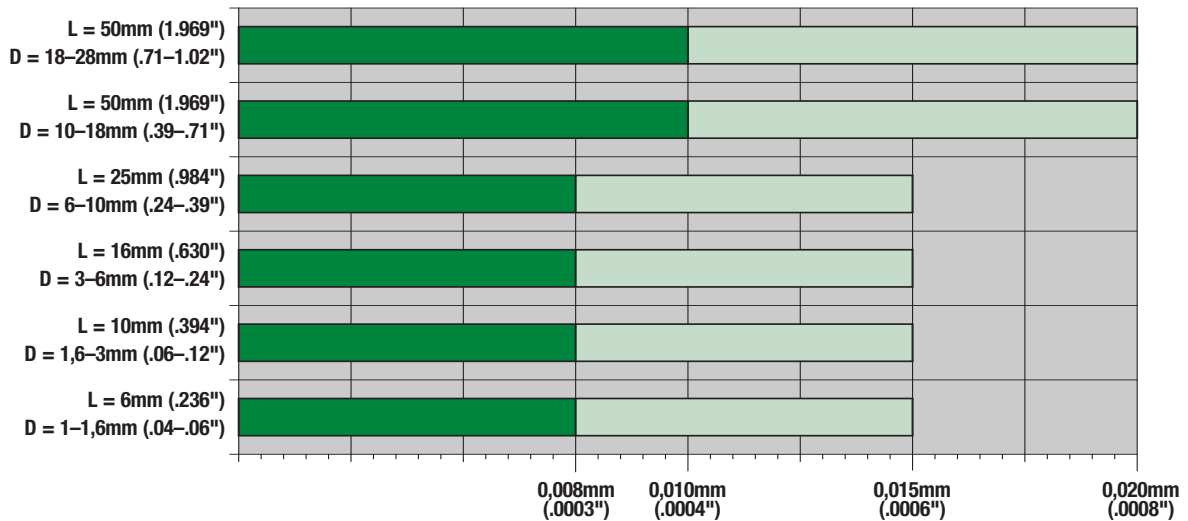


ER-Style Collet



TG-Style Collet

Maximum Runout Error



TGHP (precision) = DIN 6499 Class 1
 TG (standard) = ER — DIN 6499 Class 2

Gripping Strength Comparison Chart • Metric

ER collet chuck based on ER40		TG collet chuck based on TG100		standard hydraulic		Slim Line hydraulic	
mm	Nm	mm	Nm	mm	Nm	mm	Nm
3	—	3	—	3	—	3	—
4	—	4	—	4	—	4	—
5	—	5	—	5	—	5	—
6	38	6	—	6	12	6	26
8	52	8	115	8	30	8	50
10	70	10	144	10	40	10	80
12	103	12	300	12	70	12	115
14	108	14	312	14	100	14	160
16	118	16	325	16	135	16	200
18	156	18	339	18	180	18	250
20	206	20	384	20	220	20	230
25	255	25	536	25	500	25	—
32	—	32	569	32	700	32	—
40	—	40	—	40	—	40	—
50	—	50	—	50	—	50	—

Gripping Strength Comparison Chart • Inch

ER collet chuck based on ER40		TG collet chuck based on TG100		standard hydraulic		Slim Line hydraulic	
in	ft. lbs.	in	ft. lbs.	in	ft. lbs.	in	ft. lbs.
1/8	—	1/8	—	1/8	—	1/8	—
3/16	—	3/16	—	3/16	—	3/16	—
1/4	28	1/4	—	1/4	9	1/4	19.2
5/16	38	5/16	85	5/16	22	5/16	—
3/8	52	3/8	106	3/8	30	3/8	59
7/16	—	7/16	—	7/16	—	7/16	—
1/2	76	1/2	221	1/2	55	1/2	89
9/16	80	9/16	230	9/16	74	9/16	—
5/8	87	5/8	240	5/8	100	5/8	148
11/16	115	11/16	250	11/16	129	11/16	—
3/4	152	3/4	283	3/4	148	3/4	155
7/8	—	7/8	—	7/8	—	7/8	—
1	188	1	395	1	369	1	—
1 1/4	—	1 1/4	420	1 1/4	516	1 1/4	—
1 1/2	—	1 1/2	—	1 1/2	—	1 1/2	—
2	—	2	—	2	—	2	—

NOTE: Torque values in in. lbs.
 Minimum values calculated for maximum bore size and minimum shank size.
 Maximum values calculated for minimum bore size and maximum shank size.

Gripping Strength Comparison Chart • Metric

	milling chuck		Shrink Fit			
			standard (Nm)		high torque (Nm)	
	mm	Nm	min	max	min	max
	3	—	3.3	11	—	—
	4	—	5.2	16	—	—
	5	—	6.8	20	—	—
	6	—	19	116	—	—
	8	—	26	176	—	—
	10	—	91	312	—	—
	12	—	132	445	269	582
	14	—	169	546	346	723
	16	—	253	587	444	779
	18	—	304	865	540	1101
	20	1127	412	1049	654	1292
	25	1666	901	1896	1233	2227
	32	2347	1033	2079	1338	2384
	40	—	1907	3482	2432	4007
	50	—	2651	4465	3029	4843

Gripping Strength Comparison Chart • Inch

	milling chuck		Shrink Fit			
			standard (ft. lbs.)		high torque (ft. lbs.)	
	in	ft. lbs.	min	max	min	max
	1/8	—	3.2	13	—	—
	3/16	—	4.6	19	—	—
	1/4	—	13	86	—	—
	5/16	—	18	117	—	—
	3/8	—	53	196	—	—
	7/16	—	65	269	—	—
	1/2	—	111	340	225	455
	9/16	—	160	410	285	535
	5/8	—	172	442	307	576
	11/16	—	262	648	427	814
	3/4	831	336	797	509	970
	7/8	—	363	791	524	951
	1	1229	674	1382	939	1647
	1 1/4	1731	784	1445	1115	1775
	1 1/2	—	1132	1818	1389	2075
	2	—	1942	3049	2357	3465

NOTE: Torque values in in. lbs.
Minimum values calculated for maximum bore size and minimum shank size.
Maximum values calculated for minimum bore size and maximum shank size.



Services and Support

ToolBOSS .....	.L2
Advanced Tool Management Software (ATMS) .....	.L3
WIDIA Services .....	.L4-L7
Customer Application Support .....	.L8-L9
WIDIA Shop .....	.L10-L13

ToolBOSS™ Secure point of use solutions — tooling at the right place at the right time.

Combined with our powerful WIDIA ToolBOSS Management Software, the 28 LEVEL cabinet provides a versatile, high-capacity solution to meet the unpredictable challenges of logistics and supply chain management.

- Cut tooling inventory.
- 24/7 stock availability.
- Unique reconfiguring.
- Decrease tooling spend.
- Reduce administrative costs.
- Accountability.
- Reduced cost per location.



Drawer Options

19 different drawer sizes available.

Compatibility

Fully compatible with existing ToolBOSS units.

Diagnostics

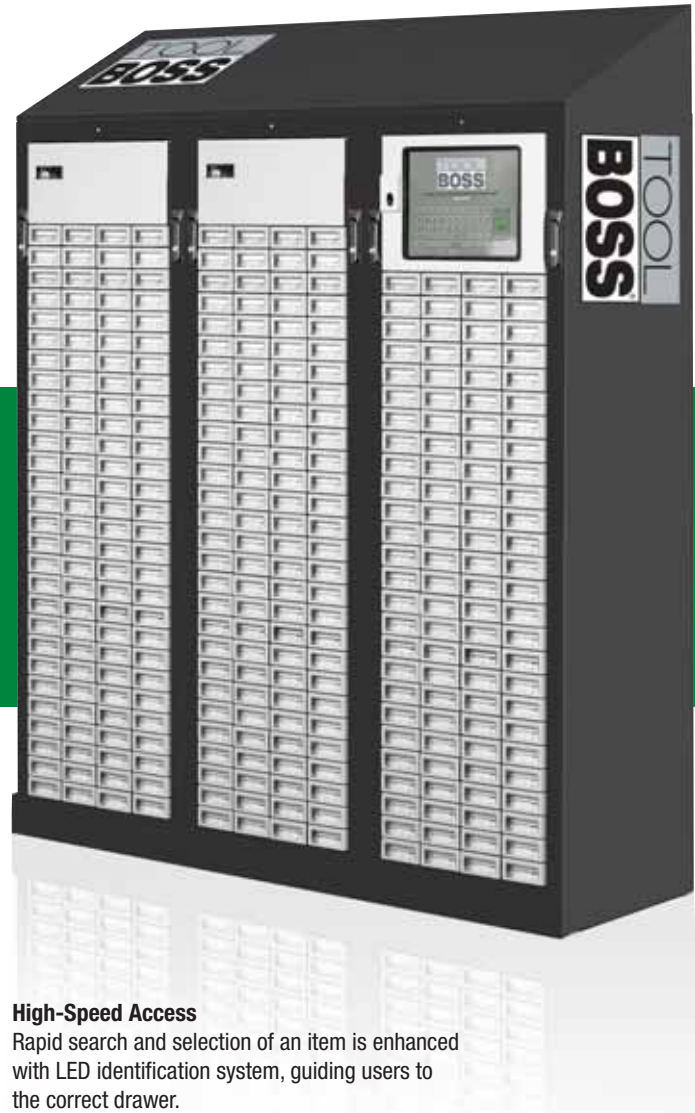
Built-in tray diagnostic port, facilitating improved remote system support, diagnosis, and repair.

Efficiency

Multiple drawers can be selected in one transaction, minimizing the time required to manage large stock volumes.

Future-Port

USB interface, as well as a DCS expansion port, for use with RFID and other ancillary equipment.



High-Speed Access

Rapid search and selection of an item is enhanced with LED identification system, guiding users to the correct drawer.

Traceability

Software provides a complete audit trail, tracking component usage details.

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Expandable up to 10 units per system, providing up to 1.121 secure locations.

To learn more about ToolBOSS, contact your local Authorized Distributor or visit www.widia.com.

Reduce tool spend and productivity costs — quickly and easily

ATMS is a powerful, cost effective software solution for tool management. It's an all-inclusive package, providing full tool management with inventory control, purchasing, and full audit trail.

Increase Productivity

- Eliminate downtime from stock-outs.
- Achieve up to 66% setup time reduction.

Improve Your Bottom Line

- Reduce on-hand inventory up to 55% in six months.
- Slash tool consumption up to 30%.
- Reduce acquisition costs up to 90%.

atms

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Anyone Can Regrind Your Tools — Only We Truly Recondition Them

Why recondition?

Our Reconditioning Services help optimize the total value of your metalcutting tools throughout their entire life cycle by giving them “like-new” performance characteristics — with rapid turnaround time — so the tools you need are always on-hand and perform just like new.

By sending your worn drills and end mills for reconditioning, you get:

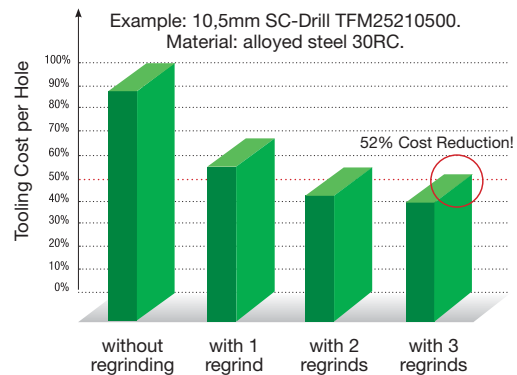
- Proprietary geometry.
- Certified coatings.
- Superior quality.
- Like-new performance.
- Fast turnaround time.
- Application support throughout the entire tool life cycle.

Most tooling can be reconditioned up to five times.

Reconditioning Services make perfect sense

Our Reconditioning Services deliver considerable savings throughout the life of your cutting tools and can reduce your overall tooling costs by more than 50%.

Reduce Tooling Costs by More than 50%



To learn more about Reconditioning, contact your local Authorized Distributor or visit www.widia.com.

Get Cash for Your Used Carbide



Why recycle?

It's the right thing to do!

It's easy for your company to be environmentally conscious with our Carbide Recycling Program.

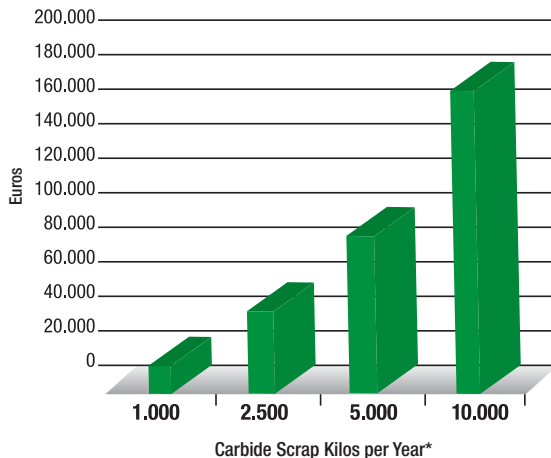
By sending us your used carbide tools, you help preserve and protect the environment and ensure that these products are recycled responsibly.

It's profitable!

Not only does WIDIA make it easy for your company to be environmentally conscious, we offer an added incentive — it is profitable.

Through our Carbide Recycling Program, get the full value of your investment in metalcutting tools, improve profitability, and reduce your overall tooling spend. When you send us your used carbide, we will reward you with cash.

Your Potential Annual Returns*



**Actual returns may vary based on current market value for carbide recycled materials.*

It's EASY!

Our Carbide Recycling Program is available on the web and is easy to use. You can request a quote, arrange to send us your used carbide, and check the status of your shipment.

Services and Support



Green Boxes for green companies

The Green Box™ program is a safe and efficient way for you to package and ship your spent carbide tools to an authorized recycling location.

Qualified used carbide includes mixed coated and uncoated metalcutting tools free of chips, oil, and steel contamination. Material must be free of braze.

To learn more about Recycling, contact your local Authorized Distributor or visit www.widia.com.

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We are deeply committed to designing and manufacturing environmentally responsible products that deliver high performance and proven value. With decades of experience in tooling and manufacturing, and the synergies of superior engineering, leading technology, and customized solutions, we offer some of the most effective opportunities for sustainable manufacturing in the industry. Our comprehensive range of products and excellent customer service make us your complete supplier of sustainable tooling solutions.

Sustainable Engineering

Leading the way with innovation, engineering, and service in standard and custom tooling — a proven methodology and partnership.

Successful project engineering requires planning, teamwork, and disciplined execution. Through our extensive experience in developing and implementing new project engineering strategies, we have pioneered a proven methodology to help you manufacture new products and bring them to market quickly. Service deliverables are carefully outlined and jointly agreed to before the project begins. We formally evaluate progress and results with you throughout the project through our stage-gate management systems.

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Services and Support



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Contact Us

Our customers are important to us. We want to provide you the best customer service in the industry. If you have a comment or question, please send it to us. We strive to respond to all inquiries within 24 hours.

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Whether your operation is turning, milling, or holmaking, WIDIA brands are the high-performance tooling you need. We offer standard and custom solutions for the general engineering market.

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Get fast and reliable answers to your toughest metalcutting problems.

Our Customer Application Support (CAS) Team is the metalworking industry's leading help desk resource for tooling application solutions and problem resolution!

- Easy access to proven metalworking expertise.
- Service level excellence.
- Best-in-class application support tools and technology.

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- Fast telephone response.
- Quick technical solutions.
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Services Provided:

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- Operating parameters.
- Troubleshooting.
- Process optimization.
- Hardware support.

Best-in-Class Support Tools and Technology:

- Tooling performance experts.
- Materials database.
- Application calculators.



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Easy access to proven metalworking expertise!

WIDIA™ Customer Application Engineers assist customers and engineering groups throughout the world with expert tool selection and application recommendations for the entire range of WIDIA tooling.

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Belgium	English/French	0800 80410*	0800 80411*	eu.techsupport@widia.com
China	Chinese	440-889-2237	+86-21-58999985	w-cn.techsupport@widia.com
Denmark	English	808 89295*	808 89297*	na.techsupport@widia.com
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Israel	English	1809 449907	1809 439845	na.techsupport@widia.com
Italy	Italian	800 916568*	800 917749*	eu.techsupport@widia.com
Japan	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Korea (South)	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Malaysia	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Netherlands	English	0800 0201131*	0800 0201135*	na.techsupport@widia.com
New Zealand	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
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Poland	Polish	00800 4411943*	00800 4411940*	eu.techsupport@widia.com
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South Africa	English	0800 981644*	0800 981645*	na.techsupport@widia.com
Sweden	English	020798794	020790477	na.techsupport@widia.com
Taiwan	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Thailand	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
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* Toll-free number.

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Services and Support



■ **Men's Performance Polo**

100% polyester. Moisture wicking, antimicrobial, and raglan sleeves.

- Color: black/black silk

size	minimum order quantity	order number
S	12	5047847
M	12	5047848
L	12	5047849
XL	12	5047850
XXL	12	5047851
XXXL*	12	5047852

*XXXL sizes include a surcharge.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ Solid Performance Polo

100% polyester. No curl/rib-knit jacquard collar. Antimicrobial.

- Color: olive green

size	minimum order quantity	order number
S	1	5047853
M	1	5047854
L	1	5047855
XL	1	5047856
XXL	1	5047857
XXXL*	1	5047858

*XXXL sizes include a surcharge.

Discounts available for minimum orders of 6 or more.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ Clique Softshell Jacket

Clique by Cutter & Buck®. Softshell 98% polyester, 2% spandex. Bonded polyester microfleece lining, reflective piping, velcro cuffs, and inside zip pocket.

- Color: black

size	minimum order quantity	order number
S	12	5047871
M	12	5047872
L	12	5047873
XL	12	5047874
XXL	12	5047875
XXXL*	12	5047876

*XXXL sizes include a surcharge.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ 1/4-Zip Pullover

98% polyester, 2% spandex. Moisture wicking. 6.5 oz.

- Color: stone/graphite

size	minimum order quantity	order number
S	1	5047877
M	1	5047878
L	1	5047879
XL	1	5047880
XXL	1	5047881
XXXL*	1	5047882

*XXXL sizes include a surcharge.

Discounts available for minimum orders of 6 or more.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ **Pinnacle Cap**

Unstructured cap made of laundered cotton for a soft, comfortable fit. The contrast stitching and contrast underbill give this cap added styling. Pre-curved visor, six sewn eyelets, and hook-and-loop closure.

- Color: black/khaki

size	minimum order quantity	order number
one size	24	5047895

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ **Atlas Sport Bag**

Durable, rugged sport bag features top bungee cord for extra storage. Adjustable, removable shoulder strap and top grab handles with handle wrap, and mesh zippered side pocket for water bottle (water bottle not included). Large main compartment for spacious storage and removable floor board for extra durability. Front zippered gusset pocket.

- Color: black

size	minimum order quantity	order number
one size	13	5047896

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.



■ **14 oz. Lucent Co-Molded Tumbler**

Dual-wall construction with a SAN liner and rubberized SAN outer shell. FDA-compliant materials feature a stainless steel rim with twist action. Spill-resistant lid and a non-skid bottom for stability. BPA free.

- Color: green/black

size	minimum order quantity	order number
one size	48	5047900

Available in Canada, China, Germany, India, Malaysia, Singapore, UK, and USA.



■ **Titleist® DT SoLo® Golf Balls**

The New DT SoLo golf ball will appeal to a broad range of golfers seeking the combination of long distance, exceptional feel, responsive short game control, and cut-proof cover durability.

- Color: white

size	minimum order quantity	order number
one size	6 boxes	5047897

*1 box = 12 balls.

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.



■ **Metro Pen**

Clip color matches grip. Comfort grip for easy writing. Medium point. Black ink.

- Color: green

size	minimum order quantity	order number
one size	250	5047898

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.



■ **Franklin Covey® by A.T. Cross® – Norwich Ballpoint Pen**

Contemporary detailing and a rubberized grip make the sporty Franklin Covey Norwich a unique blend of style and function. The Norwich is engineered to sit comfortably in your hand providing hours of effortless writing. Backed by a lifetime mechanical guarantee, the Norwich will be there to get you through even the most arduous projects.

- Color: satin chrome

size	minimum order quantity	order number
one size	50	5047899

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.

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1013352	CV40ZEM044175	E26	1013715	50TG0469	I18	1013934	75TG0531	I26	1014124	100DA035M	I66
1013353	CV40EM044450	E26	1013716	75TG0734	I26	1013935	100TG0531	I36	1014125	100DA040M	I66
1013374	CV40EM050462	E26	1013717	75TG0062	I24	1013936	150TG0531	I44	1014126	100DA045M	I66
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1013380	CV50EM025250	E66	1013723	75TG0109	I24	1013942	150TG0562	I45	1014132	100DA075M	I66
1013381	CV50EM031250	E66	1013744	100TG0109	I34	1013943	75TG0578	I26	1014133	100DA080M	I66
1013382	CV50EM038850	E66	1013745	75TG0125	I25	1013974	100TG0578	I36	1014134	150TG1187	I45
1013383	CV50EM044250	E66	1013746	100TG0125	I34	1013975	75TG0594	I26	1014135	150TG1219	I46
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1013405	CV50EM0751000	E66	1013748	75TG0141	I25	1013977	150TG0594	I45	1014137	150TG1250	I46
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1021745	KM50ECMS60U	A49	1025546	0EW062	H21, J44	1025811	20ER010M	I54	1026289	CV50EM150600	E67
1021746	KM50NCM4034	A46	1025547	0EW068	H17, J44	1025812	20ER020M	I54	1026290	CV50EM200962	E67
1021747	KM50NCMS32	A48	1025548	0EW075	H13, H15, H19-20, J44	1025813	20ER030M	I54	1026338	CV50SA150600	G22
1021748	KM50NCM6454	A46	1025550	0EW088	H21, J44	1025834	20ER040M	I54	1026340	BT50SA150600	D86
1021749	KM50NCMEF	A51	1025551	0EW094	H15, H19-20, J44	1025835	20ER050M	I54	1026342	QC50SA125600	G22
1021750	KM50NCADS50	A56	1025552	0EW100	A109, E22, G5, G12, H17, J44	1025836	20ER060M	I54	1026343	QC50SA150600	G22
1021752	KM50NACADS70DT	A57	1025553	0EW106	H6-7, J44	1025837	20ER080M	I54	1026369	16ERTCT6	I60
1021753	KM63NCMEF	A51	1025574	0EW112	J44	1025838	20ER090M	I55	1026370	16ERTCT8	I60
1021800	RK31118B	J38	1025575	0EW119	H15, J44	1025839	20ER100M	I55	1026371	16ERTCT10	I60
1021816	KM40TF	J26	1025576	0EW125	H13, H17-20, J44	1025840	20ER110M	I55	1026372	20ERTCT025	I60
1021817	KM50TF	J26	1025581	0EW150	A109, E22, E60, G5, G12, G26, H13, H17, H22, J44	1025841	20ER120M	I55	1026373	25ERTCT010	I60
1021818	KM63TF	J26	1025582	0EW162	J44	1025842	20ER130M	I55	1026379	CV50JT3268	E77
1021844	RK31118	J38	1025583	0EW168	D73, E57, F51, H15, J44	1025843	20ER140M	I55	1026380	CV40ZEM050175	E26
1021918	NP101	H13	1025600	CV40TG075600	E18	1025844	20ER150M	I55	1026381	CV40ZEM062175	E26
1021920	NP201	H13	1025603	CV50TG075279G	E56	1025845	20ER160M	I55	1026382	CV40ZEM075175	E26
1021948	LN101	H13	1025604	0EW175	H13, J44	1025846	20ER170M	I55	1026383	CV40ZEM100175	E26
1021950	LN181	H13	1025605	0EW188	A106, A163, E18, G4, G11, H6, J44	1025847	20ER180M	I55	1026394	25ERTCT031	I60
1022702	NP181	H13	1025607	0EW225	A106, A163, E18, G4, G11, G19, H6, J44	1025848	20ER190M	I55	1026395	32ERTCT10	I60
1022726	NP301	H13	1025608	0EW250	J44	1025849	20ER200M	I55	1026396	32ERTCT025	I60
1022827	S1045PKG	C48, C63, D15, E26, E66, G6, G14, G27	1025635	CV50TG075579G	E56	1025850	20ER210M	I55	1026397	32ERTCT031	I60
1022884	LN201	H13	1025637	SS100TG05098G	H6	1025851	20ER220M	I55	1026398	32ERTCT050	I60
1022886	LN301	H13	1025638	SS150TG100925	H6	1025852	20ER230M	I55	1026399	32ERTCT012P	I60
1023407	MS1132PKG	A147, A211, A256, A283	1025641	QC30TG075253	G4	1025853	20ER240M	I55	1026400	16ERTC8	I59
1023476	T1SET	I81	1025642	QC40TG075211	G11	1025854	20ER250M	I55	1026401	16ERTC10	I59
1023697	KM32PKG3S	A46, A48, A50, A52-54, A117, A176, A239, B89, B136, C18, C36, C51, D58, D90, E36, E78, F36, F69	1025643	QC40TG075211	G11	1025855	20ER260M	I55	1026402	16ERTC12	I59
1023698	KM32PKG3L	A47, A51, A55, C51, C66, D18, D58, D90, E36, E78, F36	1025644	CV50EM050662	E66	1025856	20ER270M	I55	1026403	16ERTC025	I59
1023699	KM40PKG3S	A46, A48-50, A52-54, A116, A176, A239, A270, A328, B89, B136, C18, C36, C51, C66, D58, D90, E36, E78, F36, F69	1025645	CV50EM062575	E66	1025857	20ER280M	I55	1026404	CV40ZEM012138	E26
1023700	KM40PKG3L	A47, A51-52, A55, B58, C66, D58, D90, E36, E78, F36, F69	1025646	CV50EM088375	E66	1025858	20ER290M	I55	1026405	CV40ZEM012450	E26
1023701	KM80PKG3L	A51	1025647	CV50EM100400	E66	1025859	20ER300M	I55	1026406	CV40ZEM018138	E26
1023725	KM50PKG3L	A47, A51, A55, A239, B58, C66, D90, E78	1025648	CV50EM125400	E67	1025860	20ER310M	I55	1026407	CV40ZEM018450	E26
1023726	KM50PKG3S	A46, A48-50, A52-54, A176, A239, A270, A328, B89, B136, C18, C36, C51, C66, D58, D90, E36, E78, F36, F69	1025649	CV50EM150462	E66	1025861	20ER320M	I55	1026408	CV40ZEM025138	E26
1023735	S843	A102, A159, A223	1025650	CV50EM200560	E67	1025862	20ER330M	I55	1026409	CV40EM025450	E26
1023740	S852	A102, A159, A223	1025651	CV50EM220050	E67	1025863	20ER340M	I55	1026410	CV40ZEM031138	E26
1023754	S862	A102, A159, A223	1025652	CV50EM250560	E67	1025864	20ER350M	I55	1026411	CV40ZEM031450	E26
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1026730	RK32114	.J38	1080547	100TGC160M	.131	1082885	100TGNP120M	.131	1086629	200DAC0344	.167
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1080495	100TGC0281	.135	1080575	100DAC0281	.167	1086527	75TGSTC043	.128	1086856	HSK63AER40120M	.B75
1080496	100TGC0297	.135	1080576	100DAC0297	.167	1086528	75TGSTC050	.129	1087255	DWG ELS06038	.E26, G6
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1080509	100TGC0500	.135	1080589	100DAC0500	.168	1086562	HSK100AER20100M	.B122	1092289	180DAC100M	.166
1080510	100TGC0516	.136	1080590	100DAC0516	.168	1086563	HSK100AER25100M	.B123	1092290	180DAC120M	.166
1080511	100TGC0531	.136	1080591	100DAC0531	.167-68	1086566	HSK63AER32100M	.B75	1092291	180DAC140M	.166
1080512	100TGC0547	.136	1080592	100DAC0547	.167-68	1086567	HSK63ATG050160M	.B73	1092292	180DAC160M	.166
1080513	100TGC0562	.136	1080593	100DAC0562	.167-68	1086568	HSK63ATG075115M	.B73	1092293	180DAC180M	.166
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2628561KM80ATCSTAR24A309	2978741CV50ZSER32106E57	2993254CV50BTGF075800E52	302668332MHC140MI4
2634420DV50BHCSL12200MF45	2978742CV50SER32106E57	2993255CV50BTGF100275E52	302668432MHC150MI4
2634421DV50BHCSL14200MF45	2978763CV50ZSER40106E57	2993256CV50BTGF100400E52	302668532MHC160MI4
			2978764CV50SER40106E57	2993257CV50BTGF100600E52	302668632MHC170MI4
			2978765BT40SER32035MD33	2993258CV50BTGF100800E52	302668732MHC180MI4
			2978766BT50SER32046MD73	3005662DWG 249618-23R05A274	302668832MHC200MI4
			2978767BT50SER40046MD73	3019233DV40BHCSLT06170MF8	302668932MHC220MI4
			2978768LNEC32MD33, D73, E19, E57, F16, F51, J9	3019234DV40BHCSLT08170MF8	302669032MHC250MI4
			2978769LNEC32MD33, D73, E19, E57, F16, F51, J9	3019235DV40BHCSLT10170MF8	3026691		

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3035366	KLSZ7M	A174, A305	3100358	CV40BHPMC075591	E15	3101118	12SMC080M	.I8	3523093	DV50BHPMC25165M	F48
3035367	KLS32M	A174	3100359	CV40BHPMC100374	E15	3101119	12SMC100M	.I8	3523094	DV50BHPMC32090M	F48
3049855	KM63XMHZDC1690Y	A298	3100360	CV40BHPMC100591	E15	3101120	12SMC120M	.I8	3523095	DV50BHPMC32165M	F48
3055503	KM63TSHCSL06160M	A228	3100361	CV40BHPMC125591	E15	3101121	12SMC140M	.I8	3540027	606256	A91, A147, A211, A256, A282
3055504	KM63TSHCSL08160M	A228	3100362	CV40BHPMC125472	E15	3101122	12SMC160M	.I8	3545087	KM80ATCSTAR2525	A309
3055505	KM63TSHCSL10160M	A228	3100403	CV50BHPMC075354	E51	3101123	12SMC180M	.I9	3545088	KM80ATCSTAR2525	A309
3055506	KM63TSHCSL12170M	A228	3100404	CV50BHPMC075650	E51	3101124	12SMC200M	.I9	3545089	KM80ATCSTAR3232	A309
3055507	KM63TSHCSL14170M	A228	3100405	CV50BHPMC100354	E51	3101125	12SMC220M	.I9	3545090	KM80ATCSTAR3232	A309
3055508	KM63TSHCSL16170M	A228	3100406	CV50BHPMC100531	E51	3101126	12SMC250M	.I9	3575690	HSK63TPCMNN12115	B53
3055509	KM63TSHCSL18170M	A228	3100407	CV50BHPMC100650	E51	3103485	KM63XZMCLNLF12Y	A279	3575691	HSK63TPDMNL15115	B53
3055510	KM63TSHCSL20170M	A228	3100408	CV50BHPMC125354	E51	3103486	KM63XZMCLNLF16Y	A279	3578486	BT30HPMC20085M	D8
3055511	KM63XMHZCSL06160MY	A294	3100409	CV50BHPMC125531	E51	3103487	KM63XZMCLNLF16Y	A279	3578487	BT40BHPMC20075M	D31
3055512	KM63XMHZCSL08160MY	A294	3100410	CV50BHPMC125650	E51	3103488	KM63XZMCLNLF1504Y	A279	3578488	BT40BHPMC20120M	D31
3055513	KM63XMHZCSL10160MY	A294	3100411	BT30HPMC075335	D8	3103489	KM63XZMCLNLF16Y	A279	3578489	BT40BHPMC25085M	D31
3055514	KM63XMHZCSL12170MY	A294	3100412	BT40BHPMC075295	D31	3103490	KM63XZMCLNLF16Y	A279	3578490	BT40BHPMC25120M	D31
3055515	KM63XMHZCSL14170MY	A294	3100413	BT40BHPMC075472	D31	3103491	KM63XZMCLNLF16Y	A279	3578491	BT40BHPMC32090M	D31
3055516	KM63XMHZCSL16170MY	A294	3100414	BT40BHPMC100335	D31	3103492	KM63XZMCLNLF16Y	A279	3578492	BT40BHPMC32120M	D31
3055517	KM63XMHZCSL18170MY	A294	3100415	BT40BHPMC100472	D31	3110267	TTAAG12MX1	J2	3578563	BT50BHPMC20105M	D71
3055518	KM63XMHZCSL20170MY	A294	3100416	BT40BHPMC125354	D31	3110268	TTAAG14MX1	J2	3578564	BT50BHPMC20165M	D71
3061086	HSK100AHCSL06200M	B116	3100417	BT40BHPMC125472	D31	3110269	TTAAG044X1	J3	3578565	BT50BHPMC25105M	D71
3061087	HSK100AHCSL08200M	B116	3100418	BT50BHPMC075413	D71	3110270	TTAAG050X1	J3	3578566	BT50BHPMC25165M	D71
3061088	HSK100AHCSL10200M	B116	3100419	BT50BHPMC100413	D71	3110271	TTAAG065X1	J3	3578567	BT50BHPMC32105M	D71
3061089	HSK100AHCSL12200M	B117	3100420	BT50BHPMC125413	D71	3138953	KM80ATCSTG075160	A322	3578568	BT50BHPMC32165M	D71
3061090	HSK100AHCSL14200M	B117	3100539	HSK100AHCPMC075453	B120	3180556	KM63XZMCLNLF12115Y	A277	3582592	BT30DC08092M	D14
3061091	HSK100AHCSL16200M	B117	3100540	HSK100AHCPMC100512	B120	3273853	20SMC060M	.I8	3583293	BT40DC13096M	D38
3061092	HSK100AHCSL18200M	B117	3100541	HSK100AHCPMC125531	B120	3273854	20SMC080M	.I8	3583294	BT50DC13110M	D76
3061263	HSK100AHCSL20200M	B117	3100542	HSK100AHCPMC20115M	B120	3273855	20SMC100M	.I8	3583505	DV40DC13090M	F24
3061264	HSK40AHCSL06160M	B30	3100543	HSK100AHCPMC32135M	B120	3273856	20SMC120M	.I8	3583506	DV50DC13090M	F56
3061265	HSK40AHCSL08160M	B30	3100544	HSK63AHPMC075433	B72	3273857	20SMC160M	.I8	3594191	KM80ATCPVTT056374	A319
3061266	HSK40AHCSL10160M	B31	3100545	HSK63AHPMC100472	B72	3273858	32SMC060M	.I8	3594313	KM80ATCPVTT125472	A319
3061267	HSK40AHCSL12170M	B31	3100546	HSK63AHPMC125472	B72	3273859	32SMC080M	.I8	3594314	KM80ATCPVTT150512	A319
3061268	HSK40AHCSL14170M	B31	3100547	HSK63AHPMC20110M	B72	3273860	32SMC100M	.I8	3594315	KM80ATCPVTT100453	A319
3061269	HSK40AHCSL16170M	B31	3100548	HSK63AHPMC32120M	B72	3273861	32SMC120M	.I8	3594316	KM80ATCPVTT075413	A319
3061270	HSK40AHCSL18170M	B31	3101010	75SMC0125	.I9	3273862	32SMC160M	.I8	3594317	KM80ATCPVTT062850	A319
3061271	HSK40AHCSL20170M	B31	3101012	75SMC0250	.I9	3273863	32SMC200M	.I8	3594645	CV50WNA038282	E63
3061272	HSK40CHCSL06140M	B144	3101073	75SMC0188	.I9	3273864	32SMC250M	.I8	3594646	CV50WNA038469	E63
3061273	HSK40CHCSL08140M	B144	3101074	75SMC0312	.I9	3303949	KM80ATCNSR3	A315	3594647	CV50WNA038669	E63
3061275	HSK40CHCSL12150M	B145	3101075	75SMC0375	.I9	3353311	CKC5	A88-89, A144-145, A208	3594648	CV50WNA050273	E63
3061276	HSK40CHCSL14150M	B145	3101076	75SMC0438	.I9	3367387	PSW52M	D71, E15, E51, F13, F48, J45	3594649	CV50WNA050460	E63
3061277	HSK40CHCSL16150M	B145	3101077	75SMC0500	.I9	3367388	MCSS12030M	D8	3594650	CV50WNA050660	E63
3061278	HSK40CHCSL18150M	B145	3101078	75SMC0563	.I9	3367389	MCSS16040M	D31, D71, E15, E51, F13, F48	3594651	CV50WNA062266	E63
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3062812	LNHSER20M	A337, A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	3101081	75SMC080M	.I8	3377242	HSK63TSTAR2525M	.B51	3594654	CV50WNA075450	E63
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3063114	LNHSER32M	A107, A164, A232, A337, A264, A296, A323, B35, B47, B75, B103, B123, B147, B153, B159, B168, B178, B182, C11, C29, C47, C61, D11, D35, D75, E21, E59, F19, F53, H9, J11	3101083	75SMC120M	.I8	3387620	HSK63TKM40070M	B58	3594656	CV50WNA082823	E63
3063115	LNHSER40M	A164, A232, A337, A264, A296, A323, B75, B103, B123, B159, C11, C29, C47, C61, D11, D35, D75, E21, E59, F19, F53, J11	3101084	75SMC140M	.I8	3449440	KM80XGL1724179	A59	3594657	CV50WNA088450	E63
3065820	KM63TSCCLN12	A203	3101085	75SMC160M	.I8	3479819	DV40SER32027M	F16	3594658	CV50WNA088650	E63
3065821	KM63TSCCLN12	A203	3101086	10SMC0125	.I9	3479820	DV50SER32027M	F51	3594659	CV50WNA100300	E63
3065822	KM63TSCCLN16	A203	3101087	10SMC0188	.I9	3479821	DV50SER40027M	F51	3594660	CV50WNA100450	E63
3065883	KM63TSCCLN16	A203	3101088	10SMC0250	.I9	3480215	KM80ATCSTAR20	A309	3594661	CV50WNA100650	E63
3065884	KM63TSCCLN12	A203	3101089	10SMC0312	.I9	3487458	KM63XZMCLNLF1504115Y	A277	3594662	CV50WNA125300	E63
3065885	KM63TSCCLN12	A203	3101090	10SMC0375	.I9	3487459	KM63XZMCLNLF1506115Y	A277	3594663	CV50WNA125450	E63
3065886	KM63TSCCLN16	A203	3101091	10SMC0500	.I9	3487460	KM63XZMCLNLF16115Y	A278	3594664	CV50WNA125650	E63
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3065893	KM63TSCCLN16	A206	3101094	10SMC060M	.I8	3487472	KM63XZMCLNLF16115Y	A278	3594667	CV50WNA200535	E63
3065894	KM63TSCCLN15	A206	3101095	10SMC0750	.I9	3487473	KM63XZMCLNLF16115Y	A278	3594668	CV50WNA200735	E63
3065897	KM63TSCCLN15	A206	3101096	10SMC0875	.I9	3487474	KM63TSMCMNN12115	A190	3594669	CV50WNA250535	E63
3065898	KM63TSCCLN22	A206	3101097	10SMC060M	.I8	3487475	KM63TSMCMNN1504115	A191	3594670	CV50WNA250735	E63
3065899	KM63TSCCLN22	A206	3101098	10SMC080M	.I8	3487476	KM63TSMCMNN1506115	A191	3598813	KM80ATCPVTT050374	A321
			3101099	10SMC100M	.I8	3487477	KM63TSMCMNN16115	A191	3598814	KM80ATCPVTT056374	A321
			3101100	10SMC120M	.I8	3487478	KM63TSMCMNN1504115	A191	3598815	KM80ATCPVTT062394	A321
			3101101	10SMC140M	.I8	3487479	KM63TSMCMNN1506115	A191	3598816	KM80ATCPVTT062850	A321
			3101102	10SMC160M	.I8	3487480	KM63TSMCMNN16115	A191	3598817	KM80ATCPVTT075630	A321
			3101103	10SMC180M	.I8	3487571	KM63XZMCLNLF08115Y	A278	3598818	KM80ATCPVTT075413	A321
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			3101105	12SMC0125	.I9	3487603	KM63TSMCMNNL08115	A192	3598820	KM80ATCPVTT100453	A321
			3101106	12SMC0188	.I9	3503748	KM63TSS0065M	A239	3598821	KM80ATCPVTT125472	A321
			3101107	12SMC0250	.I9	3523084	DV40BHPMC20085M	F13	3599304	KM80ATCPVTT050374	A319
			3101108	12SMC0312	.I9	3523085	DV40BHPMC20150M	F13	3599305	KM80ATCPVTT062394	A319
			3101109	12SMC0375	.I9	3523086	DV40BHPMC25095M	F13	3599306	KM80ATCPVTT075630	A319
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150TG1219	.146	16ER0375	.156	180DA075M	.166	200DA0172	.167
150TG1234	.146	16ER0406	.156	180DA080M	.166	200DA0188	.167
150TG1250	.146	16ER040M	.154	180DA085M	.166	200DA0203	.167
150TG1266	.146	16ER045M	.154	180DA090M	.166	200DA020M	.165
150TG1281	.146	16ER050M	.154	180DA095M	.166	200DA0219	.167
150TG1297	.146	16ER055M	.154	180DA100M	.166	200DA0234	.167
150TG130M	.142	16ER060M	.154	180DA105M	.166	200DA0250	.167
150TG1312	.146	16ER065M	.154	180DA110M	.166	200DA025M	.165
150TG1328	.146	16ER070M	.154	180DA115M	.166	200DA0266	.167
150TG1344	.146	16ER075M	.154	180DA120M	.166	200DA0281	.167
150TG1359	.146	16ER080M	.154	180DA125M	.166	200DA0297	.167
150TG1375	.146	16ER085M	.155	180DA130M	.166	200DA030M	.165
150TG1391	.146	16ER090M	.155	180DA135M	.166	200DA0312	.167
150TG1406	.146	16ER095M	.155	180DA140M	.166	200DA0328	.167
150TG140M	.142	16ER100M	.155	180DA145M	.166	200DA0344	.167
150TG1422	.146	16ERS000M	.157	180DA150M	.166	200DA0359	.167
150TG1438	.146	16ERS000SET2	.157	180DA155M	.166	200DA035M	.166
150TG1453	.146	16ERTC025	.159	180DA160M	.166	200DA0375	.167
150TG145M	.142	16ERTC045034M	.158	180DA165M	.166	200DA0391	.167
150TG1469	.146	16ERTC055043M	.158	180DA170M	.166	200DA040M	.166
150TG1484	.146	16ERTC060049M	.158	180DA175M	.166	200DA045M	.166
150TG1500	.146	16ERTC070055M	.158	180DA180M	.166	200DA050M	.166
150TG150M	.142	16ERTC080062M	.158	180DA185M	.166	200DA055M	.166
150TG160M	.142	16ERTC090070M	.158	180DA190M	.166	200DA060M	.166
150TG180M	.142	16ERTC10	.159	180DA195M	.166	200DA065M	.166
150TG190M	.142	16ERTC12	.159	180DA200M	.166	200DA070M	.166
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150TG210M	.142	16ERTCT10	.160	180DAC0266	.167	200DA080M	.166
150TG220M	.143	16ERTCT6	.160	180DAC0281	.167	200DA085M	.166
150TG250M	.143	16ERTCT8	.160	180DAC0297	.167	200DA090M	.166
150TG255M	.143	180DA0047	.167	180DAC0312	.167	200DA095M	.166
150TG260M	.143	180DA0062	.167	180DAC0328	.167	200DA100M	.166
150TG270M	.143	180DA0078	.167	180DAC0344	.167	200DAC0125	.167
150TG280M	.143	180DA0094	.167	180DAC0359	.167	200DAC0141	.167
150TG300M	.143	180DA0109	.167	180DAC0375	.167	200DAC0156	.167
150TG320M	.143	180DA0125	.167	180DAC0391	.167	200DAC0172	.167
150TG340M	.143	180DA0141	.167	180DAC0406	.167	200DAC0188	.167
150TG350M	.143	180DA0156	.167	180DAC0422	.167	200DAC0234	.167
150TG360M	.143	180DA0172	.167	180DAC0438	.167	200DAC0250	.167
150TG380M	.143	180DA0188	.167	180DAC0453	.167	200DAC0266	.167
150TG400M	.143	180DA0203	.167	180DAC0469	.167	200DAC0281	.167
150TGCE	.J5	180DA0219	.167	180DAC0484	.168	200DAC0312	.167
150TGCHP1000	.145	180DA0234	.167	180DAC0500	.168	200DAC0328	.167
150TGCHP1250	.146	180DA0250	.167	180DAC0516	.168	200DAC0344	.167
150TGCHP1500	.146	180DA0266	.167	180DAC0531	.167-68	200DAC0375	.167
150TGNP0500	.144	180DA0281	.167	180DAC0547	.167-68	200DAC0391	.167
150TGNP0625	.145	180DA0297	.167	180DAC0562	.167-68	200DAC060M	.166
150TGNP0750	.145	180DA030M	.165	180DAC0578	.167-68	200DAC080M	.166
150TGNP0875	.145	180DA0312	.167	180DAC0594	.167-68	200DAC100M	.166
150TGNP1000	.145	180DA0328	.167	180DAC0609	.167-68	200DAS000M	.169
150TGNP1250	.146	180DA0344	.167	180DAC060M	.166	20ER0062	.156
150TGNP1500	.146	180DA0359	.167	180DAC0625	.167-68	20ER0094	.156
150TGNP250M	.143	180DA035M	.166	180DAC0641	.167-68	20ER010M	.154
150TGNP320M	.143	180DA0375	.167	180DAC0656	.167-68	20ER0125	.156
150TGS000M	.147	180DA0391	.167	180DAC0672	.167-68	20ER0156	.156
150TGST037P	.148	180DA0406	.167	180DAC0688	.167-68	20ER0188	.156
150TGST050P	.148	180DA040M	.166	180DAC0703	.167-68	20ER020M	.154
150TGST075	.148	180DA0422	.167	180DAC0719	.167-68	20ER0219	.156
150TGST075P	.148	180DA0438	.167	180DAC0734	.167-68	20ER0250	.156
150TGST100	.148	180DA0453	.167	180DAC0750	.167-68	20ER0281	.156
150TGST100P	.148	180DA045M	.166	180DAC080M	.166	20ER030M	.154
150TGST112	.148	180DA0469	.167	180DAC100M	.166	20ER0312	.156
150TGST1125	.148	180DA0484	.168	180DAC120M	.166	20ER0344	.156
150TGST125P	.148	180DA0500	.168	180DAC140M	.166	20ER0375	.156
150TGST137	.148	180DA050M	.166	180DAC160M	.166	20ER040M	.156
150TGST150	.148	180DA0516	.168	180DAC180M	.166	20ER040M	.154
150TGST150P	.148	180DA0531	.167-68	180DAC200M	.166	20ER0438	.156
150TGST162	.148	180DA0547	.167-68	180DANP0375	.167	20ER0469	.156
150TGST175	.148	180DA055M	.166	180DANP0500	.168	20ER0500	.156
16ER0062	.156	180DA0562	.167-68	180DANP0625	.167-68	20ER050M	.154
16ER0094	.156	180DA0578	.167-68	180DANP0750	.167-68	20ER060M	.154
16ER010M	.154	180DA0594	.167-68	180DANP100M	.166	20ER070M	.154
16ER0125	.156	180DA0609	.167-68	180DANP120M	.166	20ER080M	.154
16ER0156	.156	180DA060M	.166	180DANP160M	.166	20ER090M	.155
16ER015M	.154	180DA0625	.167-68	180DAS000M	.169	20ER100M	.155
16ER0188	.156	180DA0641	.167-68	200DA0047	.167	20ER110M	.155
16ER020M	.154	180DA0656	.167-68	200DA0062	.167	20ER120M	.155
16ER0219	.156	180DA065M	.166	200DA0078	.167	20ER130M	.155
16ER0250	.156	180DA0672	.167-68	200DA0094	.167	20ERS000M	.157
16ER025M	.154	180DA0688	.167-68	200DA0109	.167	20ERS000SET1	.157
16ER0281	.156	180DA0703	.167-68	200DA010M	.165	20ERS000SET2	.157
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20ERTC10	.159	25ERTC080062M	.158	32ER0562	.156	32MHC200M	.14
20ERTC100080M	.158	25ERTC090070M	.158	32ER0594	.156	32MHC220M	.14
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20MHC060M	.14	25MHC050M	.14	32ER180M	.155	40ER0438	.156
20MHC070M	.14	25MHC060M	.14	32ER190M	.155	40ER0469	.156
20MHC080M	.14	25MHC070M	.14	32ER200M	.155	40ER0500	.156
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25ER0625	.156	300DAC0156	.167	32ERTCT062	.160	40ER250M	.155
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40ERTCT031	.160	50TGC0266	.117	75HC0312	.15	75TG085M	.123
40ERTCT037	.160	50TGC0281	.117	75HC0375	.15	75TG090M	.123
40ERTCT043	.160	50TGC0312	.117	75HC040M	.15	75TG095M	.123
40ERTCT050	.160	50TGC0328	.117	75HC0438	.15	75TG100M	.123
40ERTCT056	.160	50TGC0344	.117	75HC0500	.15	75TG105M	.123
40ERTCT062	.160	50TGC0359	.117	75HC050M	.15	75TG110M	.123
40ERTCT069	.160	50TGC0375	.117	75HC0562	.15	75TG115M	.123
40ERTCT075	.160	50TGC0391	.117	75HC060M	.15	75TG120M	.123
40ERTCT081	.160	50TGC0406	.117	75HC0625	.15	75TG125M	.123
40ERTCT087	.160	50TGC0422	.117	75HC080M	.15	75TG130M	.123
50HC0125	.15	50TGC0438	.117	75HC100M	.15	75TG135M	.123
50HC0188	.15	50TGC0453	.118	75HC120M	.15	75TG140M	.123
50HC0250	.15	50TGC0469	.118	75HC140M	.15	75TG145M	.123
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50HC100M	.15	50TGC120M	.115	75SMC0500	.19	75TG190M	.123
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50TG0109	.116	50TGCHP0312	.117	75SMC100M	.18	75TG0281	.125
50TG0125	.116	50TGCHP0375	.117	75SMC120M	.18	75TG0297	.125
50TG0141	.116	50TGCHP0438	.117	75SMC140M	.18	75TG0422	.125
50TG0156	.116	50TGCHP0500	.118	75SMC160M	.18	75TG0438	.125
50TG015M	.114	50TGCHP060M	.114	75TG0062	.124	75TG0453	.125
50TG0172	.117	50TGCHP080M	.115	75TG0078	.124	75TG0469	.125
50TG0188	.117	50TGCHP100M	.115	75TG0094	.124	75TG0484	.126
50TG0203	.117	50TGCHP120M	.115	75TG0109	.124	75TG0500	.126
50TG020M	.114	50TGHP0125	.116	75TG0125	.125	75TG0516	.126
50TG0219	.117	50TGHP0188	.117	75TG0141	.125	75TG0531	.126
50TG0234	.117	50TGHP0250	.117	75TG0156	.125	75TG0547	.126
50TG0250	.117	50TGHP0312	.117	75TG0172	.125	75TG0562	.126
50TG025M	.114	50TGHP0375	.117	75TG0188	.125	75TG0578	.126
50TG0266	.117	50TGHP040M	.114	75TG0203	.125	75TG0594	.126
50TG0281	.117	50TGHP0438	.117	75TG0219	.125	75TG0609	.126
50TG0297	.117	50TGHP0500	.118	75TG0234	.125	75TG060M	.126
50TG030M	.114	50TGHP060M	.114	75TG0250	.125	75TG0625	.122
50TG0312	.117	50TGHP080M	.115	75TG0266	.125	75TG0641	.126
50TG0328	.117	50TGHP100M	.115	75TG0281	.125	75TG0656	.126
50TG0344	.117	50TGHP120M	.115	75TG0297	.125	75TG0672	.126
50TG0359	.117	50TGST006P	.121	75TG030M	.122	75TG0688	.126
50TG035M	.114	50TGST012P	.121	75TG0312	.125	75TG0703	.126
50TG0375	.117	50TGST025	.121	75TG0328	.125	75TG0719	.126
50TG0391	.117	50TGST025021M	.120	75TG0344	.125	75TG0734	.126
50TG0406	.117	50TGST028021M	.120	75TG0359	.125	75TG0750	.126
50TG040M	.114	50TGST031	.121	75TG035M	.122	75TG075M	.122
50TG0422	.117	50TGST032025M	.120	75TG0375	.125	75TG080M	.123
50TG0438	.117	50TGST035027M	.120	75TG0391	.125	75TG085M	.123
50TG0453	.117	50TGST037	.121	75TG0406	.125	75TG090M	.123
50TG045M	.114	50TGST040032M	.120	75TG040M	.122	75TG095M	.123
50TG0469	.118	50TGST043	.121	75TG0422	.125	75TG100M	.123
50TG0484	.118	50TGST045034M	.120	75TG0438	.125	75TG110M	.123
50TG0500	.118	50TGST050	.121	75TG0453	.125	75TG115M	.123
50TG050M	.114	50TGST050040M	.120	75TG045M	.122	75TG120M	.123
50TG0516	.118	50TGST056	.121	75TG0469	.125	75TG125M	.123
50TG0531	.118	50TGST060049M	.120	75TG0484	.125	75TG130M	.123
50TG055M	.114	50TGST062	.121	75TG0500	.126	75TG135M	.123
50TG060M	.114	50TGST063050M	.120	75TG050M	.122	75TG140M	.123
50TG065M	.114	50TGST070055M	.120	75TG0516	.126	75TG145M	.123
50TG070M	.114	50TGST071056M	.120	75TG0531	.126	75TG150M	.123
50TG075M	.115	50TGST080062M	.120	75TG0547	.126	75TG155M	.123
50TG080M	.115	50TGST090070M	.120	75TG055M	.122	75TG160M	.123
50TG085M	.115	50TGST10	.121	75TG0562	.126	75TG165M	.123
50TG090M	.115	50TGST100080M	.120	75TG0578	.126	75TG170M	.123
50TG095M	.115	50TGST110090M	.120	75TG0594	.126	75TG175M	.123
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75TGCHP0688	126	BT30EM12060M	D15	BT40BEM08050M	D41	BT40BHPVTT10120M	D22
75TGCHP0750	126	BT30EM16060M	D15	BT40BEM10063M	D41	BT40BHPVTT10160M	D22
75TGCHP080M	122	BT30EM20080M	D15	BT40BEM12063M	D41	BT40BHPVTT12090M	D22
75TGCHP100M	123	BT30ER16060M	D10	BT40BEM14063M	D41	BT40BHPVTT12120M	D22
75TGCHP120M	123	BT30ER16100M	D10	BT40BEM16063M	D41	BT40BHPVTT12160M	D22
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75TGCHP160M	123	BT30ER20060M	D10	BT40BEM20063M	D41	BT40BHPVTT125630	D23
75TGCHP180M	123	BT30ER20100M	D10	BT40BEM25090M	D41	BT40BHPVTT14090M	D22
75TGCHP200M	123	BT30ER25060M	D11	BT40BER16060M	D34	BT40BHPVTT14120M	D22
75TGHP0125	125	BT30ER25100M	D11	BT40BER16120M	D34	BT40BHPVTT14160M	D22
75TGHP0188	125	BT30ER32070M	D11	BT40BER16150M	D34	BT40BHPVTT16090M	D22
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75TGHP0312	125	BT30ER40100M	D11	BT40BER20120M	D34	BT40BHPVTT16160M	D22
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75TGHP0562	126	BT30HCT062394	D7	BT40BER32070M	D35	BT40BHPVTT20120M	D22
75TGHP060M	122	BT30HCT075413	D7	BT40BER32120M	D35	BT40BHPVTT20160M	D22
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75TGHP0750	126	BT30HCT10080M	D7	BT40BER40080M	D35	BT40BHPVTT32105M	D22
75TGHP080M	122	BT30HCT12085M	D7	BT40BER40120M	D35	BT40BHPVTTHT050354	D25
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75TGHP0500	126	BT30HPVTT031295	D5	BT40BHC20095M	D28	BT40BHPVTTHT100394	D25
75TGHP0625	126	BT30HPVTT038295	D5	BT40BHC25115M	D28	BT40BHPVTTHT100630	D25
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75TGST025	128	BT30HPVTT06075M	D4	BT40BHCSL12170M	D27	BT40BHPVTTHT125413	D25
75TGST025P	129	BT30HPVTT062295	D5	BT40BHCSL14170M	D27	BT40BHPVTTHT125630	D25
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75TGST062	129	BT30HPVTT18090M	D4	BT40BHCT038335	D29	BT40BHPVTTHT18120M	D24
75TGST068	129	BT30HPVTT20090M	D4	BT40BHCT050354	D29	BT40BHPVTTHT18160M	D24
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75TGST081	129	BT30HPVTTHT056295	D6	BT40BHCT075374	D29	BT40BHPVTTHT20120M	D24
75TGST087	129	BT30HPVTTHT062295	D6	BT40BHCT100453	D29	BT40BHPVTTHT20160M	D24
75TGST10	128	BT30HPVTTHT068354	D6	BT40BHCT125472	D29	BT40BHPVTTHT25100M	D24
75TGST12	128	BT30HPVTTHT075354	D6	BT40BHPMC075295	D31	BT40BHPVTTHT32105M	D24
75TGST6	128	BT30HPVTTHT12075M	D6	BT40BHPMC075472	D31	BT40BHSK32050M	D59
75TGST8	128	BT30HPVTTHT14075M	D6	BT40BHPMC100335	D31	BT40BHSK40060M	D59
75TGSTC025	128	BT30HPVTTHT16075M	D6	BT40BHPMC100472	D31	BT40BHSK50070M	D59
75TGSTC031	128	BT30HPVTTHT18090M	D6	BT40BHPMC125354	D31	BT40BHSK63075M	D59
75TGSTC037	129	BT30HPVTTHT20090M	D6	BT40BHPMC125472	D31	BT40BKM32040M	D58
75TGSTC043	128	BT30KM3240	D18	BT40BHPMC20075M	D31	BT40BKM32090M	D58
75TGSTC050	129	BT30SM2C050118	D17	BT40BHPMC20120M	D31	BT40BKM40040M	D58
75TGSTC062	129	BT30SM2C075118	D17	BT40BHPMC25085M	D31	BT40BKM40100M	D58
75TGSTC068	129	BT30SM2C100177	D17	BT40BHPMC25120M	D31	BT40BKM50060M	D58
75TGSTC075	129	BT30SM2C16035M	D16	BT40BHPMC32090M	D31	BT40BKM50120M	D58
75TGSTC087	129	BT30SM2C16050M	D16	BT40BHPMC32120M	D31	BT40BRFX185060MG	D56
8ER010M	154	BT30SM2C22040M	D16	BT40BHPVTT025354	D23	BT40BRFX245060MG	D56
8ER015M	154	BT30SM2C22050M	D16	BT40BHPVTT025630	D23	BT40BRFX320060MG	D56
8ER020M	154	BT30SMC050118	D17	BT40BHPVTT031354	D23	BT40BRFX420060MG	D56
8ER025M	154	BT30SMC075118	D17	BT40BHPVTT031630	D23	BT40BRFX550065MG	D56
8ER030M	154	BT30SMC100177	D17	BT40BHPVTT038354	D23	BT40BSM2C050177	D50
8ER035M	154	BT30SMC16035M	D16	BT40BHPVTT038630	D23	BT40BSM2C050400	D50
8ER040M	154	BT30SMC16050M	D16	BT40BHPVTT044354	D23	BT40BSM2C075177	D50
8ER045M	154	BT30SMC22040M	D16	BT40BHPVTT050354	D23	BT40BSM2C075400	D50
8ER050M	154	BT30SMC22050M	D16	BT40BHPVTT050630	D23	BT40BSM2C100177	D50
8ERS000M	157	BT30SMC27045M	D17	BT40BHPVTT06090M	D22	BT40BSM2C100400	D50
BT30DA188060M	D13	BT30ST06032M	D18	BT40BHPVTT06120M	D22	BT40BSM2C16050M	D48
BT30DA208060M	D12	BT30ST08032M	D18	BT40BHPVTT06160M	D22	BT40BSM2C16075M	D48
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BT30EM018236	D15	BT30TG075075M	D9	BT40BHPVTT075354	D23	BT40BSM2C22100M	D48
BT30EM025236	D15	BT30WN06050M	D14	BT40BHPVTT075630	D23	BT40BSM2C22150M	D48
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BT30EM050236	D15	BT30WN12055M	D14	BT40BHPVTT08160M	D22	BT40BSM2C22150M	D48
BT30EM06050M	D15	BT30WN14055M	D14	BT40BHPVTT088354	D23	BT40BSM2C22150M	D48
BT30EM062236	D15	BT30WN16055M	D14	BT40BHPVTT088630	D23	BT40BSM2C22150M	D48
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BT40BSMC125236	D50	BT40EM125250	D43	BT50BHPVTT08100M	D62	BT50BSMC16100M	D82
BT40BSMC125500	D50	BT40EM125335	D43	BT50BHPVTT08160M	D62	BT50BSMC16150M	D82
BT40BSMC150236	D50	BT40EM32110M	D42	BT50BHPVTT088394	D63	BT50BSMC200236	D84
BT40BSMC150500	D50	BT40JT33045M	D55	BT50BHPVTT088787	D63	BT50BSMC200400	D84
BT40BSMC16050M	D48	BT40MT1050M	D55	BT50BHPVTT100394	D63	BT50BSMC22045M	D82
BT40BSMC16075M	D48	BT40MT2050M	D55	BT50BHPVTT100787	D63	BT50BSMC22100M	D82
BT40BSMC16100M	D48	BT40MT3070M	D55	BT50BHPVTT10100M	D62	BT50BSMC22150M	D82
BT40BSMC22055M	D48	BT40MT4095M	D55	BT50BHPVTT10160M	D62	BT50BSMC250236	D84
BT40BSMC22100M	D48	BT40RC1067M	D54	BT50BHPVTT12100M	D62	BT50BSMC250400	D84
BT40BSMC22150M	D48	BT40RC2094M	D54	BT50BHPVTT12160M	D62	BT50BSMC27045M	D83
BT40BSMC27055M	D49	BT40SA100400	D52	BT50BHPVTT125394	D63	BT50BSMC27100M	D83
BT40BSMC27100M	D49	BT40SA125400	D52	BT50BHPVTT125787	D63	BT50BSMC27150M	D83
BT40BSMC27150M	D49	BT40SER32035M	D33	BT50BHPVTT14100M	D62	BT50BSMC32045M	D83
BT40BSMC32060M	D49	BT40STRC1074M	D54	BT50BHPVTT14160M	D62	BT50BSMC32100M	D83
BT40BSMC32100M	D49	BT40STRC2089M	D54	BT50BHPVTT16100M	D62	BT50BSMC32150M	D83
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BT40BSFF075325	D44	BT40TG100080M	D32	BT50BHPVTT18160M	D62	BT50BSMC40150M	D83
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BT40BSFF125500	D44	BT40TG100150M	D32	BT50BHPVTT20160M	D62	BT50BST12087M	D86
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BT40BTDMSMC1001050	D46	BT50BHCBO20105M	D70	BT50BHPVTTHT32100M	D64	BT50CS16150M	D85
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BT40BWN10063M	D39	BT50BHCSL20200M	D67	BT50BKM32090M	D90	BT50CS32150M	D85
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BT40BWN14063M	D39	BT50BHCSLT08200M	D66	BT50BKM40100M	D90	BT50CS40150M	D85
BT40BWN16063M	D39	BT50BHCSLT10200M	D66	BT50BKM50060M	D90	BT50CS40200M	D85
BT40BWN18063M	D39	BT50BHCT025354	D69	BT50BKM50120M	D90	BT50CS50075M	D85
BT40BWN20063M	D39	BT50BHCT038374	D69	BT50BKM63060M	D90	BT50CS50150M	D85
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BT40BWN32100M	D39	BT50BHCT062394	D69	BT50BKM80080M	D90	BT50DA188150M	D76
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BT40CS22055M	D51	BT50BHCT125472	D69	BT50BRFX550065MG	D89	BT50EM050295	D79
BT40CS22150M	D51	BT50BHPMC075413	D71	BT50BRFX720070MG	D89	BT50EM06063M	D79
BT40CS27055M	D51	BT50BHPMC100413	D71	BT50BSM2C050400	D84	BT50EM06150M	D79
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BT40CS40080M	D51	BT50BHPMC25105M	D71	BT50BSM2C16100M	D82	BT50EM100600	D79
BT40DA108070M	D37	BT50BHPMC25165M	D71	BT50BSM2C16150M	D82	BT50EM100800	D79
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BT40DA188100M	D37	BT50BHPMC32165M	D71	BT50BSM2C22100M	D82	BT50EM12080M	D79
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KM80ATCHPVTT150512	A319	KM80ATCSM2C40045M	A327	KM80TSETAL3232M	A244	KM80TSDSKNR19	A249
KM80ATCHPVTT16100M	A318	KM80ATCSM2C50055M	A327	KM80TSETAR16	A244	KM80TSDSKNR25	A249
KM80ATCHPVTT18100M	A318	KM80ATCSM2C60060M	A327	KM80TSETAR20	A244	KM80TSDSRNL19	A249
KM80ATCHPVTT18160M	A318	KM80ATCSSF075350	A326	KM80TSETAR24	A244	KM80TSDSRNL25	A249
KM80ATCHPVTT200551	A319	KM80ATCSSF100450	A326	KM80TSETAR2525M	A244	KM80TSDSRNR19	A249
KM80ATCHPVTT20105M	A318	KM80ATCSSF125500	A326	KM80TSETAR3232M	A244	KM80TSDSRNR25	A249
KM80ATCHPVTT25115M	A318	KM80ATCSSF150550	A326	KM80TSHPVTT031335	A259	KM80TSDSMNL25	A250
KM80ATCHPVTT32120M	A318	KM80ATCSSF200650	A326	KM80TSHPVTT038630	A259	KM80TSDSMNR25	A250
KM80ATCHPVTT40130M	A318	KM80ATCSTAL20	A309	KM80TSHPVTT044374	A259	KM80TSDSMVJNL16	A250
KM80ATCHPVTT50140M	A318	KM80ATCSTAL24	A309	KM80TSHPVTT050374	A259	KM80TSDSMVJNR16	A250
KM80ATCHPVTTHT050374	A321	KM80ATCSTAL2525	A309	KM80TSHPVTT056374	A259	KM80TSDSMVUNL16	A251
KM80ATCHPVTTHT056374	A321	KM80ATCSTAL3232	A309	KM80TSHPVTT062394	A259	KM80TSDSMVUNR16	A251
KM80ATCHPVTTHT062394	A321	KM80ATCSTAR20	A309	KM80TSHPVTT062850	A259	KM80TSDSMWLN16	A251
KM80ATCHPVTTHT062850	A321	KM80ATCSTAR24	A309	KM80TSHPVTT075413	A259	KM80TSDSMWLN08	A251
KM80ATCHPVTTHT075413	A321	KM80ATCSTAR2525	A309	KM80TSHPVTT075630	A259	KM80TSDSMWLN08	A251
KM80ATCHPVTTHT075630	A321	KM80ATCSTAR3232	A309	KM80TSHPVTT088413	A259	KM80TSDSNEL3	A255
KM80ATCHPVTTHT088413	A321	KM80ATCTG075160	A322	KM80TSHPVTT100453	A259	KM80TSDSNEL4	A255
KM80ATCHPVTTHT100453	A321	KM80ATCTG100394	A322	KM80TSHPVTT10090M	A258	KM80TSDSNEL5	A255
KM80ATCHPVTTHT12095M	A320	KM80ATCTG150492	A322	KM80TSHPVTT10170M	A258	KM80TSDSNEL6	A255
KM80ATCHPVTTHT12160M	A320	KM80ATCWNEM06065M	A324	KM80TSHPVTT10170M	A258	KM80TSDSNER3	A255
KM80ATCHPVTTHT125472	A321	KM80ATCWNEM08065M	A324	KM80TSHPVTT12095M	A258	KM80TSDSNER4	A255
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KM80ATCHPVTTHT18100M	A320	KM80ATCWNEM14080M	A324	KM80TSHPVTT150512	A259	KM80TSDSNL5	A255
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KM80ATCHPVTTHT20105M	A320	KM80ATCWNEM18085M	A324	KM80TSHPVTT18100M	A258	KM80TSDSNR3	A255
KM80ATCHPVTTHT25115M	A320	KM80ATCWNEM20085M	A324	KM80TSHPVTT18160M	A258	KM80TSDSNR4	A255
KM80ATCHPVTTHT32120M	A320	KM80ATCWNEM25100M	A324	KM80TSHPVTT200551	A259	KM80TSDSNR5	A255
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KM80ATCMCKNL25	A310	KM80ATCWNEM40115M	A324	KM80TSHPVTT25115M	A258	KM80TSDSPCLNL16	A252
KM80ATCMCKNR19	A310	KM80NCMEF	A51	KM80TSHPVTT32120M	A258	KM80TSDSPCLNL19	A252
KM80ATCMCKNR25	A310	KM80NCMF	A50	KM80TSHPVTT40130M	A258	KM80TSDSPCLNL25	A252
KM80ATCMCLNL19	A311	KM80P	J30	KM80TSHPVTT50140M	A258	KM80TSDSPCLNR12	A252
KM80ATCMCLNL25	A311	KM80PKG3L	A51	KM80TSHPVTTHT050374	A261	KM80TSDSPCLNR16	A252
KM80ATCMCLNR19	A311	KM80PKG3S	A50, A269, A328, B136, C36, C66, D90, E78, F69	KM80TSHPVTTHT056374	A261	KM80TSDSPCLNR19	A252
KM80ATCMCLNR25	A311	KM80PKGS	A343	KM80TSHPVTTHT062394	A261	KM80TSDSPCLNR25	A252
KM80ATCMCRNL19	A311	KM80PKGS	A343	KM80TSHPVTTHT062850	A261	KM80TSDSPRDCN20	A252
KM80ATCMCRNL25	A311	KM80PKGS	A343	KM80TSHPVTTHT075413	A261	KM80TSDSPRDCN25	A252
KM80ATCMCRNR19	A311	KM80PKGS	A343	KM80TSHPVTTHT075630	A261	KM80TSDSPRGL25	A253
KM80ATCMCRNR25	A311	KM80TF	J26	KM80TSHPVTTHT088413	A261	KM80TSDSPRGL32	A253
KM80ATCMSDNN19	A312	KM80TSBA100276	A257	KM80TSHPVTTHT100453	A261	KM80TSDSPRGR25	A253
KM80ATCMSDNN25	A312	KM80TSBA125295	A257	KM80TSHPVTTHT10090M	A260	KM80TSDSPRGR32	A253
KM80ATCMSKNL19	A312	KM80TSBA150413	A257	KM80TSHPVTTHT12160M	A260	KM80TSDSPSDNN19	A253
KM80ATCMSKNL25	A312	KM80TSBA200512	A257	KM80TSHPVTTHT125472	A261	KM80TSDSPSDNN25	A253
KM80ATCMSKNR19	A312	KM80TSBA25075M	A257	KM80TSHPVTTHT14095M	A260	KM80TSDSPSRNL19	A254
KM80ATCMSKNR25	A312	KM80TSBA32075M	A257	KM80TSHPVTTHT16100M	A260	KM80TSDSPSRNL25	A254
KM80ATCMSRNL19	A313	KM80TSBA40105M	A257	KM80TSHPVTTHT18100M	A260	KM80TSDSPSRNR19	A254
KM80ATCMSRNL25	A313	KM80TSBN125075M	A271	KM80TSHPVTTHT18160M	A260	KM80TSDSPSRNR25	A254
KM80ATCMSRNR19	A313	KM80TSBN140130M	A271	KM80TSHPVTTHT20105M	A260	KM80TSDSPSSL19	A254
KM80ATCMSRNR25	A313	KM80TSBN150160M	A271	KM80TSHPVTTHT25115M	A260	KM80TSDSPSSL25	A254
KM80ATCMVUNL16	A313	KM80TSBN150250M	A271	KM80TSHPVTTHT32120M	A260	KM80TSDSPSSNR19	A254
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KM80ATCNEL5	A315	KM80TSDAT2575MG	A268	KM80TSMCLNL16	A245	KM80TSS63080M	A270
KM80ATCNEL6	A315	KM80TSDAT3275MG	A268	KM80TSMCLNL19	A245	KM80TSS80120M	A269
KM80ATCNER3	A315	KM80TSDAT4085MG	A268	KM80TSMCLNL25	A245	KM80TSS80160M	A269
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KM80ATCNER5	A315	KM80TSEM062354	A266	KM80TSMCLNR16	A245	KM80TSSMC125158	A267
KM80ATCNER6	A315	KM80TSEM075354	A266	KM80TSMCLNR19	A245	KM80TSSMC125394	A267
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KM80ATCNLS4	A315	KM80TSEM100354	A266	KM80TSMCRNL16	A246	KM80TSSMC200216	A267
KM80ATCNRS3	A315	KM80TSEM12070M	A266	KM80TSMCRNL19	A246	KM80TSSMC250225	A267
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KTC031	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1234	A340	PSW58M	B72, B120, D31, D71, E15, E51, F13, F48, J45
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KTC045034M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1430	A243-244, A273, A275, A309, B51-52	QC30DA188206	G5
KTC045036M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1460	A50-51	QC30DA208181	G5
KTC050	I73	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1488	A86-87, A99-100, A157, J7	QC30DA308162	G5
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KTC060049M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1561	A257, A285	QC30EM038175	G6
KTC070055M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1595	A90, A146, A209-210, A282, B56	QC30EM050175	G6
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KTC080063M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS1878	A286	QC30EM075213	G6
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KTC112090M	I72	LNHSER20M	A263, B46, B74, B102, B122, C10, C28, C46, C60, D10, D34, D74, E20, E58, H11, J10	MS2049	A273, A276	QC30JT3219	G9
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North America

- **United States**
General Sales: 800-979-4342
Technical Support: 888-539-5145
w-na.service@widia.com

- **Canada**
General Sales: 800-979-4342
Technical Support: 888-539-5145
w-ca.service@widia.com

- **Mexico**
General Sales: 001-888-402-4963
w-mx.service@widia.com

Central/South America

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w-ar.service@widia.com

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w-br.service@widia.com

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w-cl.service@widia.com

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General Sales: 305-595-5175
paxi@bellsouth.net

Africa

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General Sales: +20 2-263-9828
w-uk.service@widia.com

- **South Africa**
General Sales: +27 11-397-3540
w-za.service@widia.com

Europe

- **Austria**
General Sales: +43-2236-379898
Technical Support: 0800 291630
w-at.service@widia.com

- **Belgium**
General Sales: +32 4 248 48 48
Technical Support: 0800 80410
w-be.service@widia.com

- **Czech Republic**
General Sales: 800 900 840
w-cz.service@widia.com

- **France**
General Sales: +33 1 69 77 83 83
Technical Support: 080 5540 379
w-fr.service@widia.com

- **Germany**
General Sales: +49 6172 737-0
Technical Support: 0800 1015774
w-de.service@widia.com

- **Great Britain**
General Sales: 0800 072 4528
Technical Support: 0800 028 2996
w-uk.service@widia.com

- **Hungary**
General Sales: +36 96 618 158
w-hu.service@widia.com

- **Ireland**
General Sales: +44 28-9084-9433
w-ie.service@widia.com

- **Italy**
General Sales: +39 02-895-961
Technical Support: 800 916568
w-it.service@widia.com

- **Luxembourg**
General Sales: +32 4 248 48 48
w-be.service@widia.com

- **Netherlands**
General Sales: +31 26 384 48 51
Technical Support: 0800 0201131
w-nl.service@widia.com

- **Poland**
General Sales: +48 61 6656501
Technical Support: 00800 4411943
w-pl.service@widia.com

- **Portugal**
General Sales: +351 22 4119 400
w-pt.service@widia.com

- **Russia**
General Sales: 81080021431044
w-ru.service@widia.com

- **Slovakia**
General Sales: 0800-044053
w-sk.service@widia.com

- **Spain**
General Sales: +34 93706 06 10
w-es.service@widia.com

- **Turkey**
General Sales: +90 216-574-4780
w-tr.service@widia.com

East/Asia Pacific

• **Australia**

General Sales: 613 9755 5302
w-au.service@widia.com

• **Bahrain**

General Sales: 00 971 (0) 5572371
w-uk.service@widia.com

• **China**

General Sales: +86 400 889 2136
 Technical Support: +86 400 889 2136
w-cn.service@widia.com

• **Dubai**

General Sales: +971 433 911 46
w-uk.service@widia.com

• **Hong Kong**

General Sales: +86 21 3860 8288
w-cn.service@widia.com

• **India**

General Sales: +91 80 2219 8341
w-in.service@widia.com

• **Indonesia**

General Sales: +62 81 1148 8217
w-sg.service@widia.com

• **Israel**

General Sales: 972 3 556 2211
w-il.service@widia.com

• **Japan**

General Sales: 813 3820 2855
w-jp.service@widia.com

• **Korea**

General Sales: +82 2-2109-5505
w-kr.service@widia.com

• **Kuwait**

General Sales: 00 971 (0) 5572371
w-uk.service@widia.com

• **Malaysia**

General Sales: (6) 03-5569 9080
w-my.service@widia.com

• **New Zealand**

General Sales: 613 9755 5302
w-nz.service@widia.com

• **Pakistan**

General Sales: +92 21 2465305
itsystem@brain.net.pk

• **Philippines**

General Sales: +65 6 2659222
w-sg.service@widia.com

• **Singapore**

General Sales: +65 6 265-9222
w-sg.service@widia.com

• **Taiwan**

General Sales: +886-4-2350 1920
w-tw.service@widia.com

• **Thailand**

General Sales: 662 642 3455
w-th.service@widia.com

• **Vietnam**

General Sales: +84 8 3520 2764
w-sg.service@widia.com





Metalcutting Safety

IMPORTANT SAFETY INSTRUCTIONS

Read before using the tools in this catalog!

Projectile and Fragmentation Hazards

Modern metalcutting operations involve high spindle and cutter speeds and high temperatures and cutting forces. Hot metal chips may fly off the workpiece during metalcutting. Although cutting tools are designed and manufactured to withstand high cutting forces and temperatures, they can sometimes fragment, particularly if they are subjected to over-stress, severe impact, or other abuse.

To avoid injury:

- Always wear appropriate personal protective equipment, including safety goggles, when operating metalcutting machines or working nearby.
- Always make sure all machine guards are in place.

Breathing and Skin Contact Hazards:

Grinding carbide or other advanced cutting tool materials produce dust or mist containing metallic particles. Breathing this dust or mist — especially over an extended period — can cause temporary or permanent lung disease or make existing medical conditions worse. Contact with this dust or mist can irritate eyes, skin, and mucous membranes and may make existing skin conditions worse.

To avoid injury:

- Always wear breathing protection and safety goggles when grinding.
- Provide ventilation control and collect and properly dispose of dust, mist, or sludge from grinding.
- Avoid skin contact with dust or mist.

For more information, read the applicable Material Safety Data Sheet provided by Kennametal and consult General Industry Safety and Health Regulations, Part 1910, Title 29 of the Code of Federal Regulations.

These safety instructions are general guidelines. Many variables affect machining operations. It is impossible to cover every specific situation. The technical information included in this catalog and recommendations on machining practices may not apply to your particular operation. For more information, consult Kennametal's Metalcutting Safety booklet, available at www.widia.com. For specific product safety and environmental questions, contact our Corporate Environmental Health and Safety Office at 724.539.5066 or fax 724.539.5372.

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Application, Geometry, and Feature Icons

Shank — Cylindrical Whistle Notch™ DIN 1835/E	Shank — Cylindrical with Flat	Shank — Cylindrical with Flat and Flange	Shank — Cylindrical with Flat and Flange
Shank — Cylindrical with Square	Shank — HSK DIN 69893	Shank — HSK DIN 69893	Shank — HSK DIN 69893 Form A
Shank — HSK DIN 69893 Form A	Shank — HSK DIN 69893 Form C	Shank — HSK DIN 69893 Form C	Shank — HSK DIN 69893 Form E
Shank — HSK DIN 69893 Form E	Shank — HSK DIN 69893 Form F	Shank — HSK DIN 69893 Form F with Pin	Shank — HSK Turning ISO 12164-3
Shank — HSK Turning ISO 12164-3	Shank — KM Micro	Shank — KM4X	Shank — KM-ATC
Shank — KM-TS ISO 26622	Shank — KM-TS ISO 26622	Shank — KM-XMZ	Shank — M16 Drawbar
Shank — M24 Drawbar	Shank — R8 Bridgeport	Shank — Screw-On	Shank — SK BT JIS B 6339
Shank — SK BT Taper Face Contact	Shank — SK CAT(CV) ANSI B5.50	Shank — SK CAT(CV) ANSI B5.50 1"–8 UNC Drawbar	Shank — SK CAT(CV) ANSI B5.50 5/8"–11 UNC Drawbar
Shank — SK CAT(CV) Taper Face Contact	Shank — SK DV DIN 69871	Shank — SK QC Erickson Quick Change 1"–8 UNC Drawbar	Shank — SK QC Erickson Quick Change 5/8"–11 UNC Drawbar
Shank — SK QC Erickson™ Quick Change	Speed — 20,000 min ⁻¹ Maximum	Speed — 3,000 min ⁻¹ Maximum	Speed — 30,000 min ⁻¹ Maximum
Speed — 6,000 min ⁻¹ Maximum	Speed — No Rotation	Tapping — Through Coolant	Tapping — Through Coolant 50 bar (725 psi) Maximum
Tunable			

DIN — German Institute for Standardization
ISO — International Standardization Organization

Application, Geometry, and Feature Icons

Accuracy — 3µm or Less	Accuracy — 5µm or Less	Accuracy — 6µm or Less	Axial Adjustment
Axial Adjustment — End	Axial Adjustment — Side	Balance — G 2.5@ 15,000 min ⁻¹	Balance — G 2.5@ 15,000 min ⁻¹
Balance — G 2.5@ 20,000 min ⁻¹	Balance — G 2.5@ 25,000 min ⁻¹	Balance — G 2.5@ 33,000 min ⁻¹	Balance — G 6.3@ 15,000 min ⁻¹
Balance — G 6.3@ 15,000 min ⁻¹	Balance — G 6.3@ 20,000 min ⁻¹	Balance — G 6.3@ 20,000 min ⁻¹	Balance — G 6.3@ 30,000 min ⁻¹
Balanced-by-Design	Collet — ER DIN 6499	Compensation — None	Compensation — Tension and Compression
Compensation — Tension Only	Coolant — No Coolant	Coolant — Through Coolant	Coolant — Through Coolant 100 bar (1500 psi) Maximum
Coolant — Through Coolant 70 bar (1000 psi) Maximum	Coolant — Through Coolant 100 bar (1500 psi) Maximum	Coolant — Through Coolant Nozzle	Drilling — No Coolant
Drilling — Through Coolant	Milling — No Coolant	Milling — Side and Face	Milling — Slotting
Milling — Through Coolant	Reaming — Through Coolant	Shank — 1"—8 UNC Drawbar	Shank — 1/2"—13 UNC Drawbar
Shank — 5/8"—11 UNC Drawbar	Shank — Cylindrical Kenbore™	Shank — Cylindrical Plain	Shank — Cylindrical Plain ≤h6
Shank — Cylindrical ROTALEX™	Shank — Cylindrical VDI DIN 69880	Shank — Cylindrical Weldon® ≤h6	Shank — Cylindrical Weldon 2 Flat
Shank — Cylindrical Weldon DIN 1835/B	Shank — Cylindrical Weldon	Shank — Cylindrical Weldon DIN 6535/1835	Shank — Cylindrical Whistle Notch™
Shank — Cylindrical Whistle Notch ≤h6	Shank — Cylindrical Whistle Notch 2°	Shank — Cylindrical Whistle Notch 5°	Shank — Cylindrical Whistle Notch with Drive and Flange

TOOLING SYSTEMS

World and Corporate Headquarters

Kennametal Inc.
WIDIA Products Group
1600 Technology Way
Latrobe, PA 15650 USA
Phone: 800.979.4342
E-mail: w-na.service@widia.com

European Headquarters

Kennametal Europe GmbH
WIDIA Products Group
Rheingoldstrasse 50
CH 8212 Neuhausen am Rheinfall
Switzerland
Phone: (41) 52.6750.100
E-mail: w-ch.service@widia.com

Asia-Pacific Headquarters

Kennametal (Singapore) Pte. Ltd.
WIDIA Products Group
ICON@IBP #01-02/03/05
3A International Business Park
Singapore 609935
Phone: (65) 6.2659222
E-mail: w-sg.service@widia.com

India Headquarters

Kennametal India Limited
WIDIA Products Group
8/9th Mile, Tumkur Road
Bangalore - 560 073
Phone: +91 (80) 2839 4321
E-mail: w-in.service@widia.com

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