

Cat[®] DTH Hammer and Bits

PARTS CATALOG





DRILL FASTER. DRILL LONGER.

Drilling sets the tone for your whole operation, impacting the speed, efficiency and cost of all downstream operations. Cat[®] Down-the-Hole (DTH) Hammers and Bits offer fast and reliable operation that lets you cut down on costs, reduce time spent drilling and get to work producing.

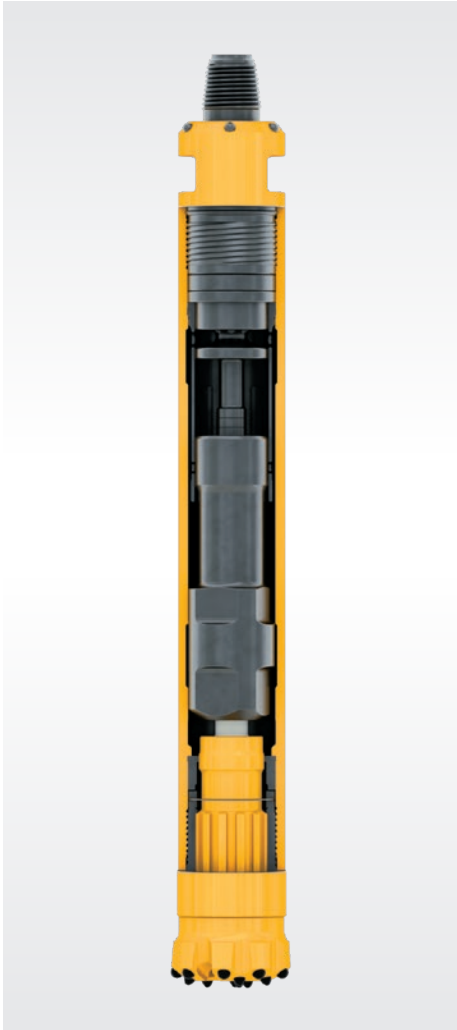
Cat DTH Hammers are designed to drill faster and last longer in even the toughest blasthole applications. Efficient design, proprietary materials and advanced heat-treating give them longer wear life than other manufacturers' models, resulting in reliable operation and a long life — even in the toughest drilling conditions.



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CAT® DTH HAMMERS



SD HAMMER

For 75-250 Mpa

This hammer is suited to a wide range of applications. The piston design is 18% heavier than comparable high-frequency hammers. The hammer's focus is high-impact load at reduced blow frequency suitable for low- or medium-hardness rock formations. It's a simple and robust design for cost-focused drilling operations.



HP HAMMER

For 250-550 Mpa

This hammer is built tough for production drilling in hard rock. It has an optimized performance curve of impact force and blow frequency for the upper range of rock hardness. In the 6-inch class, it has a tunable air valve that can be adjusted for different air packages, resulting in a perfect balance between speed and air consumption. And its reversible barrel design maximizes wear characteristics.






TF HAMMER

For 150-360 Mpa

This hammer has the same attributes of the HP hammer, but it is shorter and lighter — making it easier to handle. Additionally, this hammer design is valveless and uses shorter shank bits, giving it maximum durability with fewer part replacements required. An exclusive bit shank design features a retention system consisting of a three-piece drive chuck and an internal sleeve. The sleeve is a unique wear item that lowers drive chuck replacement costs, further driving down your operating costs.

DRILL MATCH

		6 INCH CLASS			8 INCH CLASS	
		SD	HP	TF	SD	HP
 <p>MD6200</p>	Option 1 1050CFM / 350 psi	●	●	●		
 <p>MD6250</p>	Option 1 1350CFM / 500 psi	●	●	●	●	●
	Option 2 1500CFM / 350 psi	●	●	●	●	●
 <p>MD6310</p>	Option 1500CFM / 500 psi				●	●

SD HAMMER

Advanced materials and heat-treatment provide long wear life and reliable operation, even in difficult drilling conditions.

Cat DTH Hammers are designed for cost-effective rebuilds.



SD HAMMER FEATURES

6-inch class hammer shown

Piston designed and
manufactured for longer life

Reliable and efficient
operation with foot
valve design

Maximum impact power when
paired with Cat DTH Hammer Bits

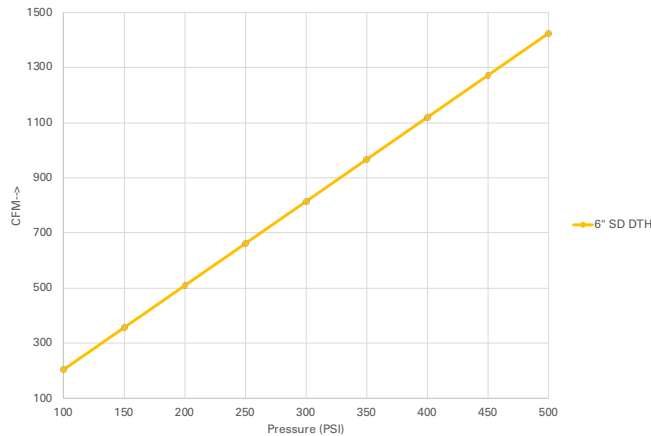
6" CLASS SD HAMMER

558-7046

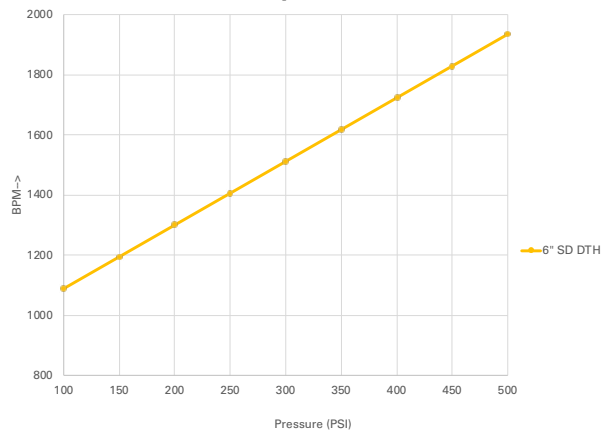
SPECIFICATIONS		
Weight (no bit)	110 kg	242.5 lbs
Outside Diameter	150 mm	5.9 in
Shoulder-to-Shoulder Length	1117 mm	44.0 in
Length (with bit retracted)	1216 mm	47.9 in
Length (with bit extended)	1245 mm	49.0 in
Hole Diameter range	165–203 mm	6.5–8.0 in
Bit Shank Type	QL60	
Connection Thread*	3 1/2 in API reg	
*Also available in BECO or other thread sizes		

OPERATING PARAMETERS		
Working Pressure	0.7–3.4 MPa	100–500 psi
Impact Rate	1512 BPM @ 300 psi	
Recommended Speed	20–30 RPM	
Air Consumption	967 SCFM @ 350 psi	1425 SCFM @ 500 psi

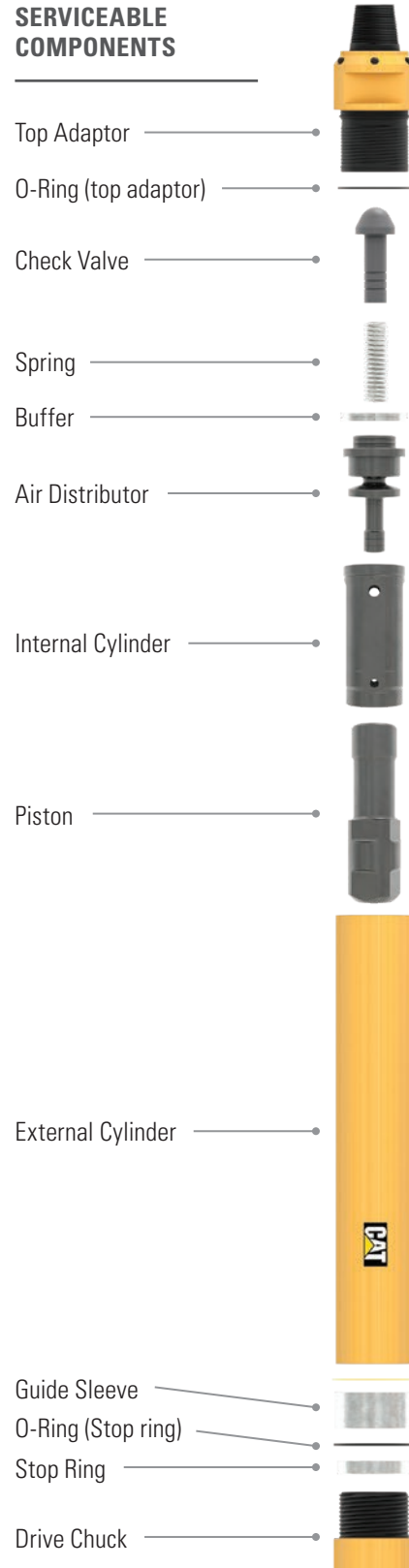
Air Consumption



Blows per minute



SERVICEABLE COMPONENTS



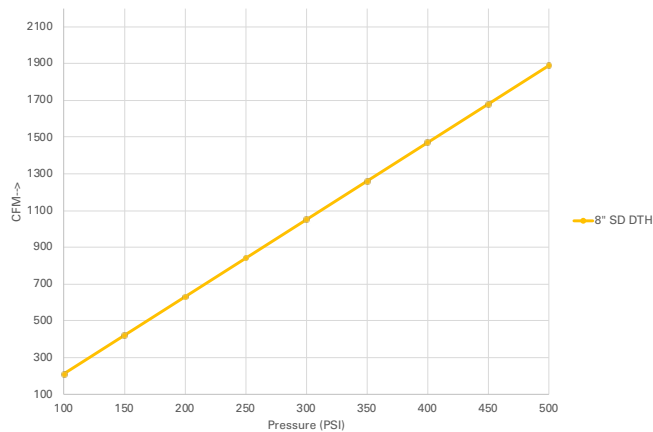
8" CLASS SD HAMMER

569-8322

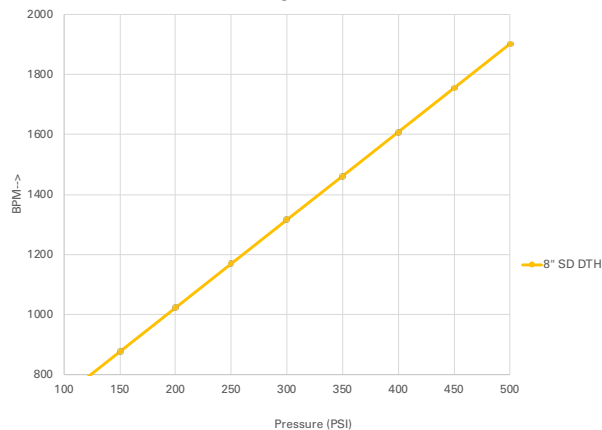
SPECIFICATIONS		
Weight (no bit)	205 kg	452 lbs
Outside Diameter	190 mm	7.5 in
Shoulder-to-Shoulder Length	1363 mm	53.5 in
Length (with bit retracted)	1490 mm	58.7 in
Length (with bit extended)	1538 mm	60.6 in
Hole Diameter range	216–254 mm	8.5–10.0 in
Bit Shank Type	QL80	
Connection Thread*	4 ½ in API reg	
*Also available in BECO or other thread sizes		

OPERATING PARAMETERS		
Working Pressure	0.7–3.4 MPa	100–500 psi
Impact Rate	1155 BPM @ 245 psi	
Recommended Speed	15–25 RPM	
Air Consumption	1260 SCFM @ 350 psi	1890 SCFM @ 500 psi

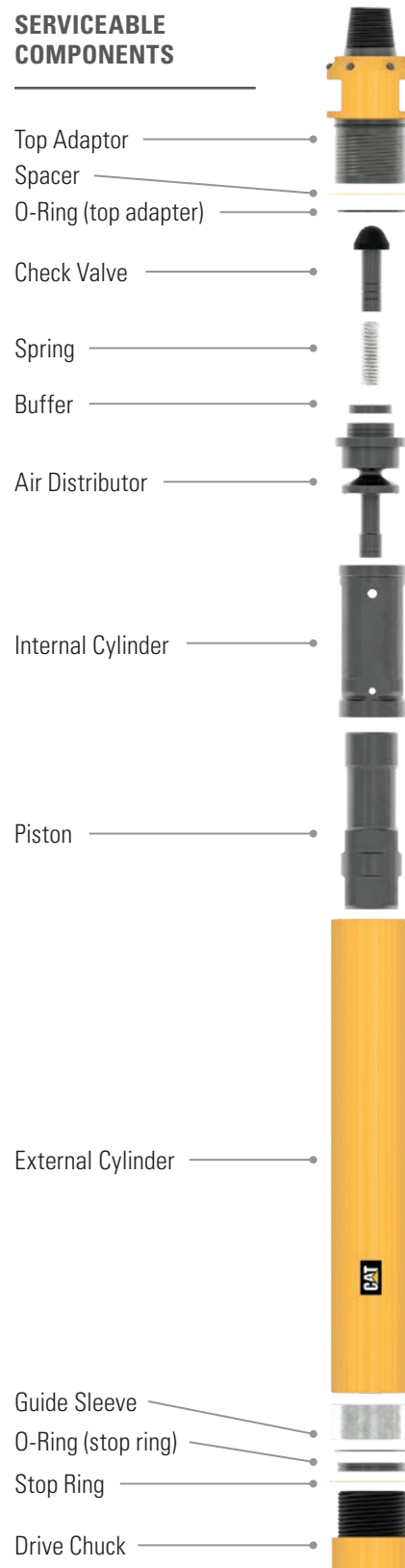
Air Consumption



Blows per minute



SERVICEABLE COMPONENTS



HP HAMMER

Advanced materials and heat-treatment provide long wear life and reliable operation, even in difficult drilling conditions.

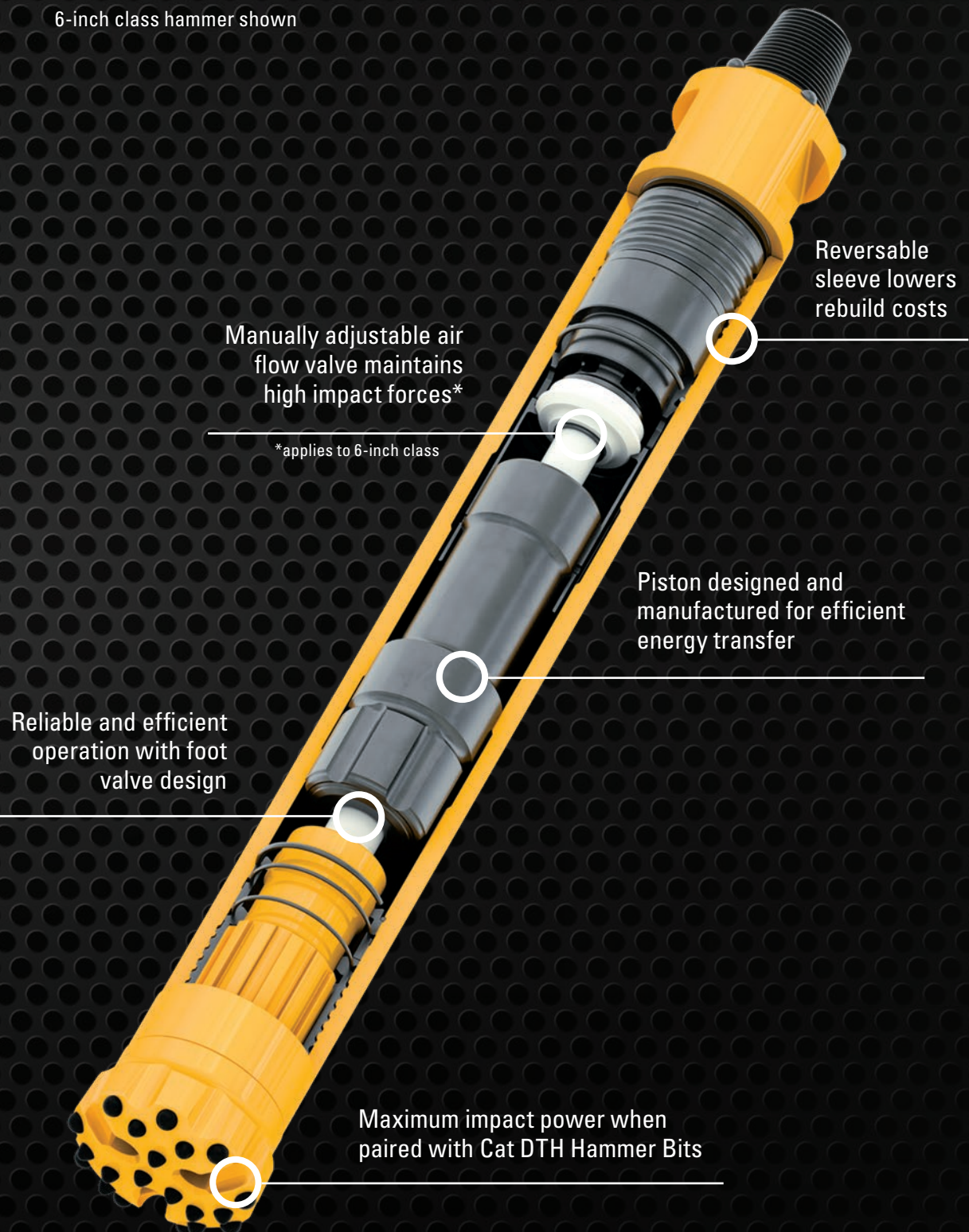
Designed for production drilling in hard rock with optimum performance curve of impact force and blow frequency.

Higher BPM allows faster RPM, resulting in greater penetration rates.



HP HAMMER FEATURES

6-inch class hammer shown



Manually adjustable air flow valve maintains high impact forces*

*applies to 6-inch class

Reversible sleeve lowers rebuild costs

Piston designed and manufactured for efficient energy transfer

Reliable and efficient operation with foot valve design

Maximum impact power when paired with Cat DTH Hammer Bits

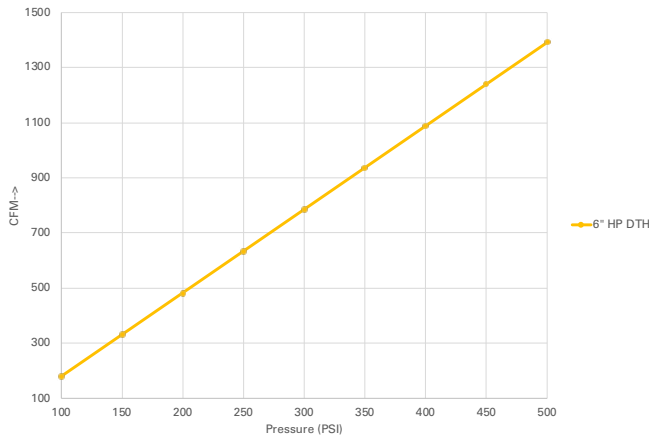
6" CLASS HP HAMMER

588-7437

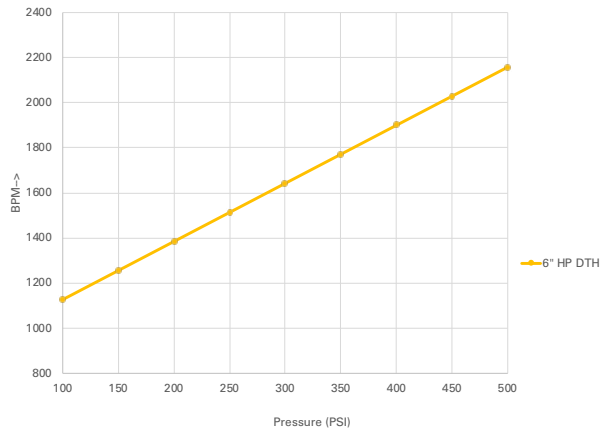
SPECIFICATIONS		
Weight (no bit)	100.5 kg	222 lbs
Outside Diameter	146 mm	5.7 in
Shoulder-to-Shoulder Length	1082 mm	42.6 in
Length (with bit retracted)	1184 mm	46.6 in
Length (with bit extended)	1218 mm	48.0 in
Hole Diameter range	165–203 mm	6.5–8.0 in
Bit Shank Type	QL60	
Connection Thread*	3 1/2 in API reg	
*Also available in BECO or other thread sizes		

OPERATING PARAMETERS		
Working Pressure	0.7–3.4 MPa	100–500 psi
Impact Rate	1643 BPM @ 300 psi	
Recommended Speed	30–60 RPM	
Air Consumption	937 SCFM @ 350 psi	1392 SCFM @ 500 psi

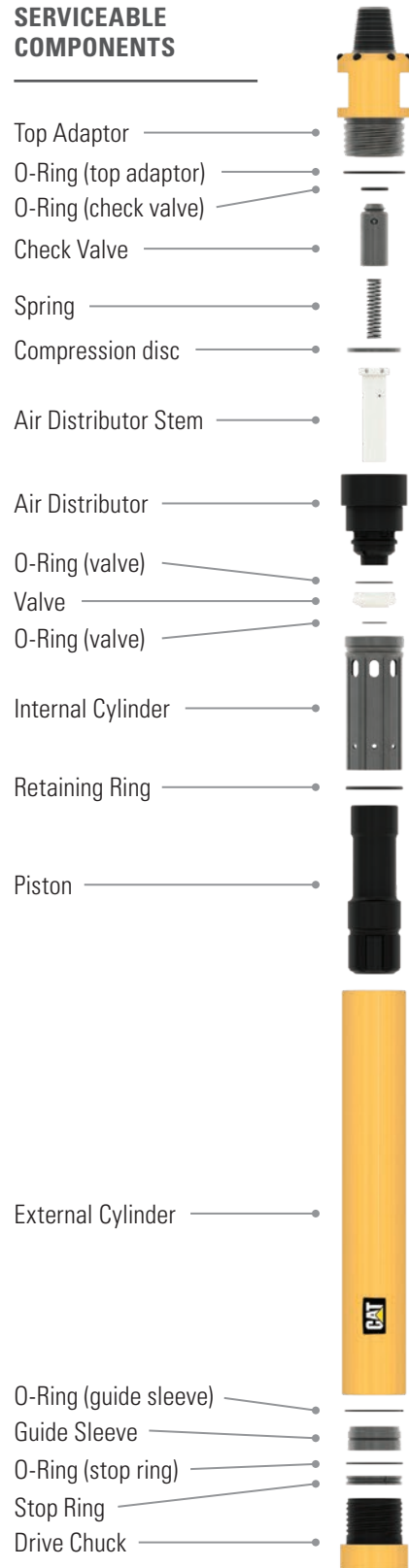
Air Consumption



Blows per minute



SERVICEABLE COMPONENTS



8" CLASS HP HAMMER

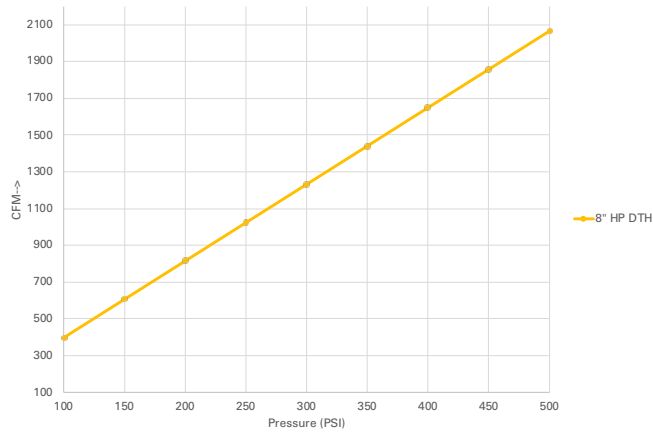
590-7920

SPECIFICATIONS		
Weight (no bit)	210 kg	462 lbs
Outside Diameter	194 mm	7.6 in
Shoulder-to-Shoulder Length	1281 mm	50.4 in
Length (with bit retracted)	1408 mm	55.4 in
Length (with bit extended)	1459 mm	57.4 in
Hole Diameter range	222-254 mm	8.75-10.0 in
Bit Shank Type	QL80	
Connection Thread*	4 1/2 in API reg	

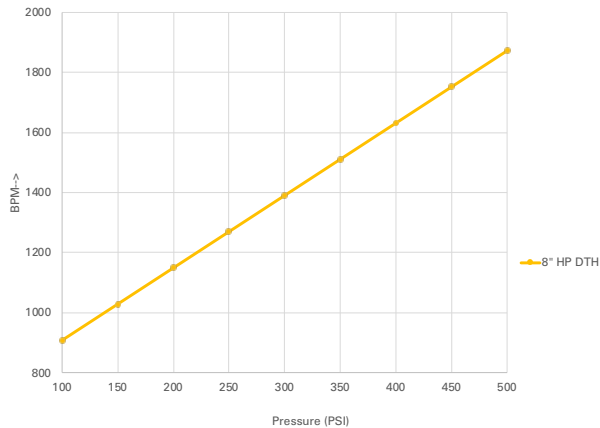
*Also available in BECO or other thread sizes

OPERATING PARAMETERS		
Working Pressure	0.7-3.4 MPa	100-500 psi
Impact Rate	1257 BPM @ 245 psi	
Recommended Speed	20-35 RPM	
Air Consumption	1441 SCFM @ 350 psi	2067 SCFM @ 500 psi

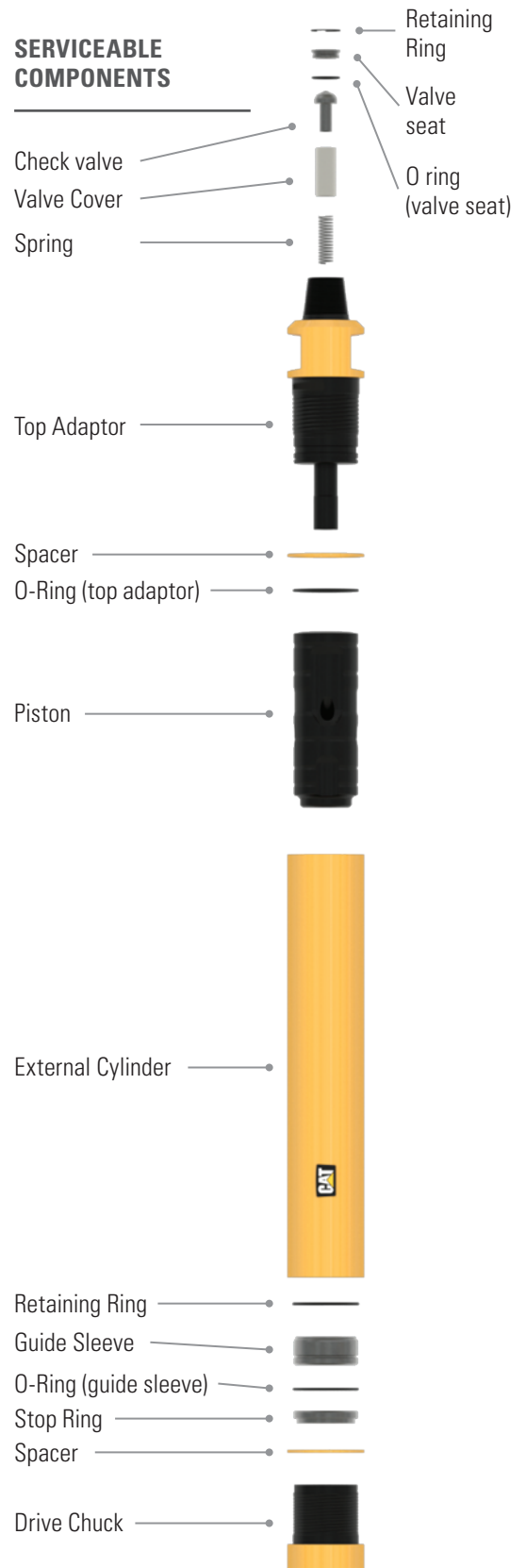
Air Consumption



Blows per minute



SERVICEABLE COMPONENTS



TF HAMMER

Advanced materials and heat-treatment provide long wear life and reliable operation, even in difficult drilling conditions.

Efficient design offers similar air consumption to HP hammers.

High frequency piston cycle delivers greater penetration rates.

30% shorter length and 25% lesser weight makes handling safe and convenient.

TF HAMMER FEATURES

6-inch class hammer shown



6" CLASS TF HAMMER

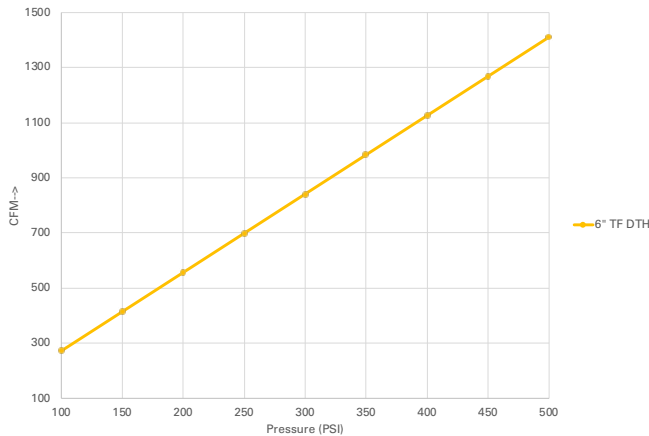
596-3353

SPECIFICATIONS		
Weight (no bit)	77.5 kg	171 lbs
Outside Diameter	149.2 mm	5.9 in
Shoulder-to-Shoulder Length	791.6 mm	31.2 in
Length (with bit retracted)	855.2 mm	33.7 in
Length (with bit extended)	885.8 mm	34.9 in
Hole Diameter range	165–190 mm	6.5–7.5 in
Bit Shank Type	TF60	
Connection Thread*	3 1/2 in API reg	

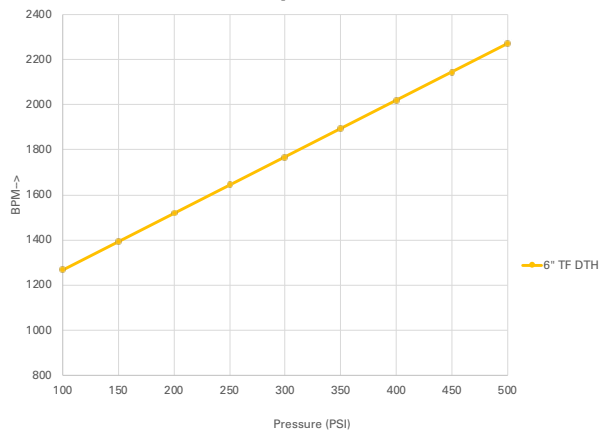
*Also available in BECO or other thread sizes

OPERATING PARAMETERS		
Working Pressure	0.7–3.4 MPa	100–500 psi
Impact Rate	1700 BPM @ 300 psi	
Recommended Speed	30–60	
Air Consumption	984 SCFM @ 350 psi	1411 SCFM @ 500 psi

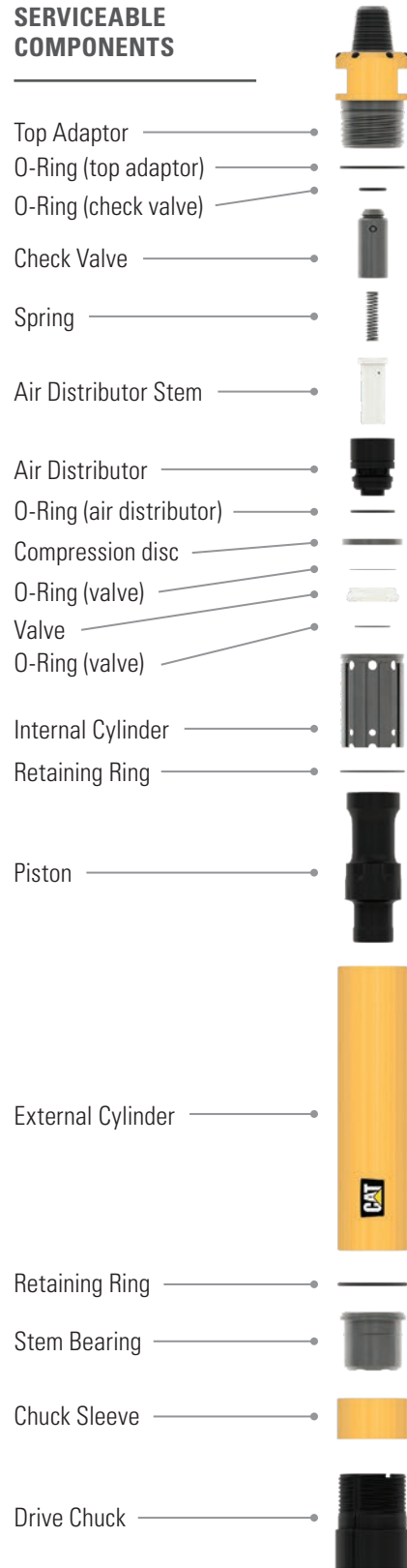
Air Consumption



Blows per minute



SERVICEABLE COMPONENTS

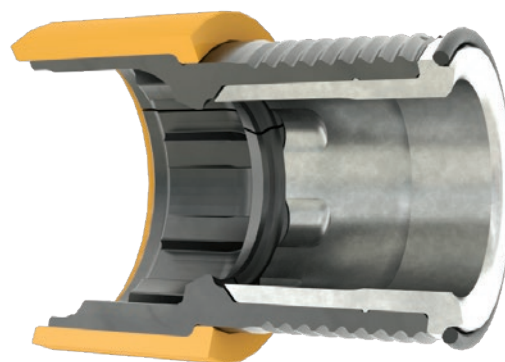


TF BIT



+ 40% lighter bit with higher spline contact area reduces chance of bit failure.

BIT RETENTION SYSTEM



+ A Caterpillar exclusive, the TF bit, with the unique bit retention system, reduces overall operating cost.

CAT® DTH DRILL BIT

CATERPILLAR OFFERS CUSTOM BIT DESIGN FOR EACH APPLICATION



FEATURES

- + Optimized airflow for material discharge
- + Upgraded foot valve design
- + Maximized insert retention
- + Quality carbides ensure long bit life

SUPERIOR MATERIALS

- + Caterpillar specified steel alloy — allows maximum hardness without sacrificing toughness
- + Alloy after treatment surface provides additional wear life
- + Manufacturing precision for repeatable results

TESTED & PROVEN

- + Dynamic simulations improve designs
- + Lab tested
- + Field proven

DTH BIT SELECTION CODE

BIT DIAMETER		SHANK		FLUSHING HOLE		GAUGE BUTTON (OUTER ROW)		INTERMEDIATE ROW & FACE	
mm	inch		ID			Qty x Size	ID	Size	ID
165	6 1/2	QL60	Q6	2		8 x 16mm	1	—	0
171	6 3/4	QL80	Q8	3		8 x 18mm	2	16mm	2
200	7 7/8	TF60	T6			8 x 19mm	3	18mm	3
203	8					9 x 16mm	4	19mm	4
216	8 1/2					9 x 18mm	5		
222	8 3/4					9 x 19mm	6		
229	9					10 x 16mm	7		
241	9 1/2					10 x 18mm	8		
251	9 7/8					10 x 19mm	9		
254	10					12 x 16mm	10		
						12 x 18mm	11		
						12 x 19mm	12		
						14 x 16mm	13		
						14 x 18mm	14		
						14 x 19mm	15		

FACE SHAPE		BUTTON TYPE	
	ID		ID
Concave	CC	All Spherical	SS
Convex	CV	Spherical + ballistic	SB
Flat Face	FF	DGR (all spherical)	DS
Concave-Convex	CCV	DGR (S+B)	DB

WEAR PROTECTION BUTTONS	
	ID
Gauge protection	GP
Back reaming	BR
Gauge protection + back reaming	GB
None	N

CAT® DTH MAINTENANCE

- + Worldwide parts availability
- + High quality Cat Parts
- + Straightforward service manuals
- + Service tools designed for a safe operation
- + Caterpillar trained service technicians



For more complete information on Cat products, dealer services and industry solutions, visit us at www.cat.com

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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