C4.4 ACERT™ Industrial Engine

Tier 4 Final/Stage IV Technology
70-129.4 bkW/93.9-173.5 bhp @ 2200 rpm

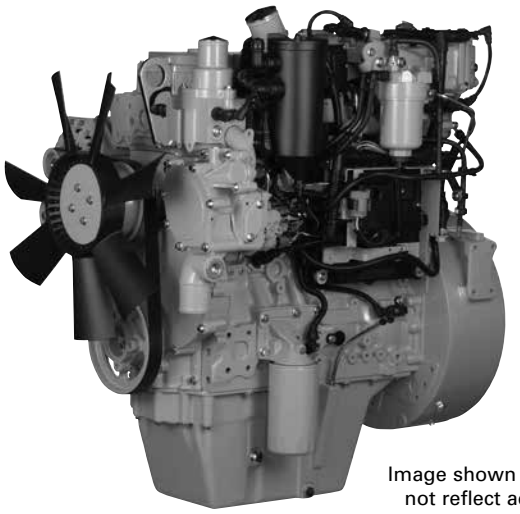


Image shown may not reflect actual engine configuration

CAT® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle Diesel

Bore ..... 105 mm (4.13 in)
Stroke ..... 127 mm (5.00 in)
Displacement ..... 4.4 L (268.5 in^3)
Aspiration ..... Turbocharged-Aftercooled (TA) or Series Turbocharged-Aftercooled (TTA)
Compression Ratio 16.5:1
Combustion System ..... Direct Injection
Rotation (from flywheel end) ... Counterclockwise
Capacity for Liquids
  Cooling System ..... 10.8 L (11.4 U.S. qts)
  Lube System (refill) sump dependent ..... 5.2-13.5 L (5.5-14.27 U.S. qts)
Engine Weight, Net Dry (approximate)
  TA ..... 400 kg (926 lbs)
  TTA ..... 420 kg (881.8 lbs)

FEATURES

Emissions
Designed to meet U.S. EPA Tier 4 Final, EU Stage IV emission standards.

Reliable, Quiet, and Durable Power
World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

High Performance
Series turbocharging with smart wastegate available on specific ratings for fast response, high power, and increased torque.

Fuel Efficiency
Fuel consumption optimized to match operating cycles of a wide range of equipment and applications.

Fuel & Oil
Tier 4 Final/Stage IV engines require Ultra Low Sulfur Diesel (ULSD) fuel containing a maximum of 15 ppm sulfur, and new oil formulations to support the new technology. Cat® engines are designed to accommodate B20 biofuel. Your Cat dealer can provide more information regarding fuel and oil.

Broad Application Range
Industry leading range of factory configurable ratings and options for agricultural, materials-handling, construction, mining, aircraft ground support, and other industrial applications.

Package Size
Ideal for equipment with narrow engine compartments. Multiple installation options minimize total package size.

Low-Cost Maintenance
Worldwide service delivers ease of maintenance and simplifies the servicing routine. Hydraulic tappets, multi-vee belts, "no ash service" aftertreatment, and 500-hour oil change intervals enable low-cost maintenance. Many service items have a choice of location on either side of the engine to enable choice of service access. The S•O•S℠ program is available from your Cat dealer to determine oil change intervals and provide optimal performance.

Quality
Every Cat engine is manufactured to stringent quality standards in order to assure customer satisfaction.

World-class Product Support Offered Through Global Cat Dealer Network
- Scheduled maintenance, including S•O•S sample
- Customer Support Agreements (CSA)
- Caterpillar Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

Web Site: For additional information on all your power requirements, visit www.cat-industrial.com.

STANDARD ENGINE EQUIPMENT

Air Inlet
Standard air cleaners.

Control System
Full electronic control system, all connectors and wiring looms waterproof and designed to withstand harsh off-highway environments, flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines.

Cooling System
Top tank temperature 108°C (226°F) as standard to minimize cooling pack size, 50:50 water glycol mix, detailed guidance on cooling system design and validation available to ensure machine reliability.

Exhaust System
Optimized DOC/SCR system supplied with a range of inlet and outlet options. DOC/DPF/SCR option available for use on higher powers. Both systems are service-free and, when in use, invisible to the operator.

Flywheels and Flywheel Housing
Wide choice of drivetrain interfaces, including but not limited to SAE2 and SAE3 configurations.

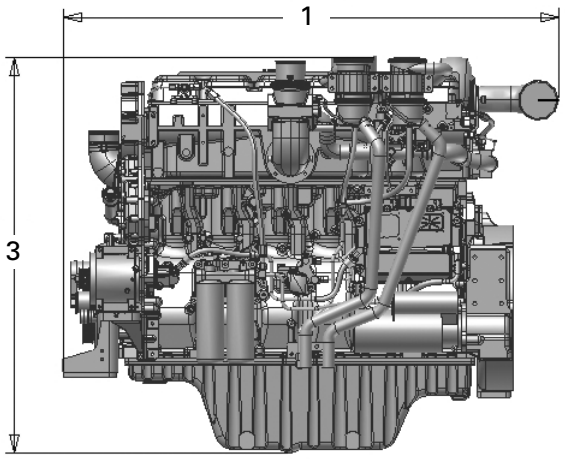
Fuel System
Electronic high pressure common rail, ACERT™ Technology, innovative filter design to ensure maximum protection of the engine.

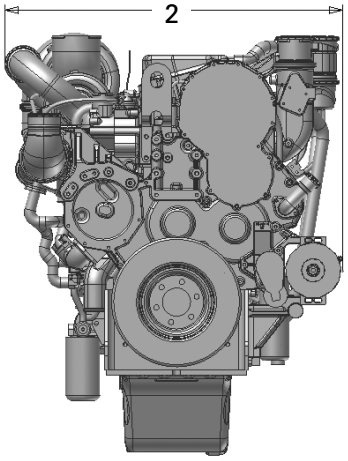
Lube System
Choice of sumps for different applications.

Power Take Off
SAE A or SAE B flanges on left-hand side, additional SAE A flange available on LHS, engine power can also be taken from the front of the engine on some applications, factory fitted compressors are also available.

General
Available with or without a balancer.

DIMENSIONS





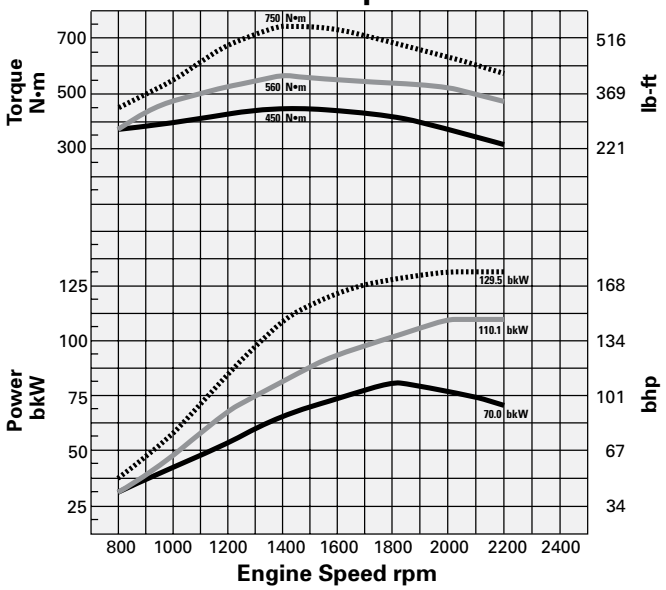
(1) Length	(2) Width	(3) Height
TA, TTA: 845.1 mm (33.3 in)	TA: 772.4 mm (30.4 in) TTA: 741.6 mm (29.1 in)	TA: 848.2 mm (33.4 in) TTA: 867.6 mm (34.1 in)

Note: Final dimensions dependent on selected options

PERFORMANCE DATA — PRELIMINARY

Turbocharged-Aftercooled — 2200 rpm

Rated Speed



Speed Range

Rating	Aspiration	Rated Speed rpm	Rated Power bkW	Rated Power bhp	Speed rpm	Peak Torque N•m	Peak Torque lb-ft
C*	TA	2200	70.0	93.9	1400	450	331.9
C	TA	2200	74.4	99.8	1400	450	331.9
C	TA	2200	82.0	109.9	1400	450	331.9
C	TA	2200	85.9	115.2	1400	500	368.8
C	TA	2200	91.0	122.0	1400	500	368.8
C	TA	2200	92.6	124.2	1400	530	390.9
C	TA	2200	97.9	131.3	1400	530	390.9
C	TA	2200	102.1	136.9	1400	560	413.1
C	TA	2200	106.0	142.1	1400	560	413.1
C*	TA	2200	110.1	147.6	1400	560	413.1
C	TTA	2200	105.0	140.8	1400	630	464.7
C	TTA	2200	112.0	150.2	1400	650	479.4
C	TTA	2200	117.0	156.9	1400	683	503.8
C*	TTA	2200	129.4	173.5	1400	750	553.2

B Rating performance data to be added when available.

RATING DEFINITIONS AND CONDITIONS

IND-C (Intermittent) is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Additional ratings are available for specific customer requirements. Consult your Cat dealer.

Rating Conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance is measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

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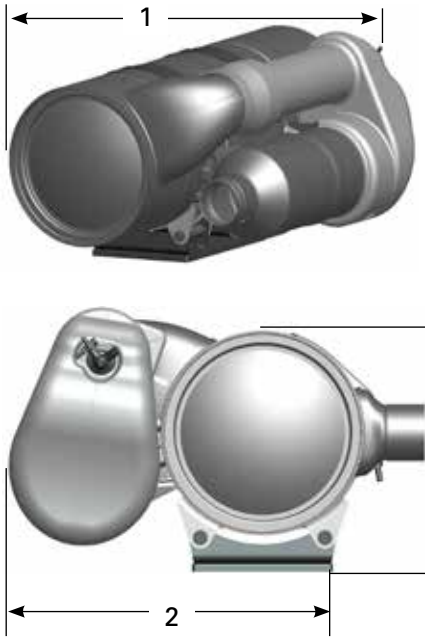
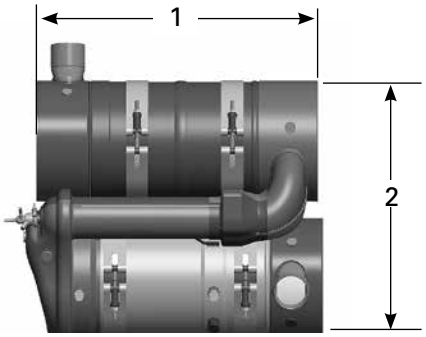
AFTERTREATMENT CONFIGURATION



Less than or equal to 92.6 bkW (124.2 bhp)
DOC/SCR CONFIGURATION
Approximate Size and Weight
(1) Length — 647 mm (25.5 in)
(2) Width — 538 mm (21.18 in)
(3) Height — 335 mm (13.19 in)
Weight — 40 kg (88 lb)

Greater than 92.6 bkW (124.2 bhp)
DOC/SCR CONFIGURATION
Approximate Size and Weight
(1) Length — 675 mm (25.6 in)
(2) Width — 565 mm (22.2 in)
(3) Height — 355 mm (13.97 in)
Weight — 45 kg (99 lb)



DOC/DPF/SCR CONFIGURATION (TTA ONLY)
Approximate Size and Weight
(1) Length — 722 mm (28.4 in)
(2) Width — 695 mm (27.4 in)
(3) Height — 430 mm (16.9 in)
Weight — 80 kg (176.4 lb)

AFTERTREATMENT FEATURES

Regeneration: The DOC/SCR modular design offers a simple, compact package while providing high levels of performance. A DOC/DPF/SCR option is available for higher power machines.

While in use, both DOC/SCR an DOC/DPF/SCR systems offer transparent operation to the user.

Mounting: Extensive range of inlets and outlets, as well as remote and on-engine installations, provide flexibility for many installations.

Service: Both DOC/SCR an DOC/DPF/SCR systems are service-free for the emissions life of the engine.

Available in 12V or 24V systems

STANDARD EMISSIONS CONTROL EQUIPMENT

DOC: Diesel Oxidation Catalyst
DPF: Diesel Particulate Filter
SCR: Selective Catalytic Reduction

3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

A range of SCR system components, including pump, tanks, and lines

LEHH0551-01 (3-13)