

Image shown may not reflect actual engine

CATERPILLAR® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Bore	145 mm (5.71 in.)
Stroke	162 mm (6.38 in.)
Displacement	32.1 liters (1959 in ³)
Aspiration	Turbocharged/ATAAC
Rotation (from flywheel end) ...	Counterclockwise
Engine Weight, Net Dry (approximate)	2435 kg (5368 lbs.) (does not include twin turbo model)

FEATURES

Emissions

Meets Tier 2 emissions requirements. Tier 2 refers to EPA (U.S.) standards.

Worldwide Supplier Capability

- Caterpillar
- Casts engine blocks, heads, and cylinder liners
 - Machines critical components
 - Assembles complete engine

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

Testing

- Prototype testing on every model
- proves computer design
 - verifies system torsional stability
 - tests functionality on every model
- Every Caterpillar® engine is dynamometer tested under full load to ensure proper engine performance.

Full Range of Attachments

Wide range of bolt-on system expansion attachments, factory designed and tested.

Unmatched Product Support Offered Through Worldwide Caterpillar Dealer Network

- More than 1,800 dealer outlets
- Caterpillar factory-trained dealer technicians service every aspect of your industrial engine
- 99.7% of parts orders filled within 24 hours worldwide
- Caterpillar parts and labor warranty
- Preventive maintenance agreements available for repair before failure options
- Scheduled Oil Sampling program matches your oil sample against Caterpillar set standards to determine:
 - internal engine component condition
 - presence of unwanted fluids
 - presence of combustion by-products

Web Site

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

STANDARD ENGINE EQUIPMENT

Air Inlet System

Air-to-air aftercooled (ATAAC)
Twin turbo

Control System

Electronic governing, PTO speed control
Programmable ratings
Cold mode start strategy
Automatic altitude compensation
Power compensation for fuel temperature
Programmable low and high idle and total engine limit
Electronic diagnostics and fault logging
Engine monitoring system
J1939 Broadcast (diagnostic and engine status)
ADEM™ A4

Cooling System

Thermostats and housing, vertical outlet
Jacket water pump, centrifugal
Water pump, inlet

Exhaust System

Exhaust manifold, dry
Optional exhaust outlet

Flywheels and Flywheel Housing

SAE No. 0 or SAE No. 1 flywheel housing

Fuel System

MEUI injection
Fuel filter, secondary (2 micron high performance)
Fuel transfer pump
Fuel priming pump
ACERT™ Technology

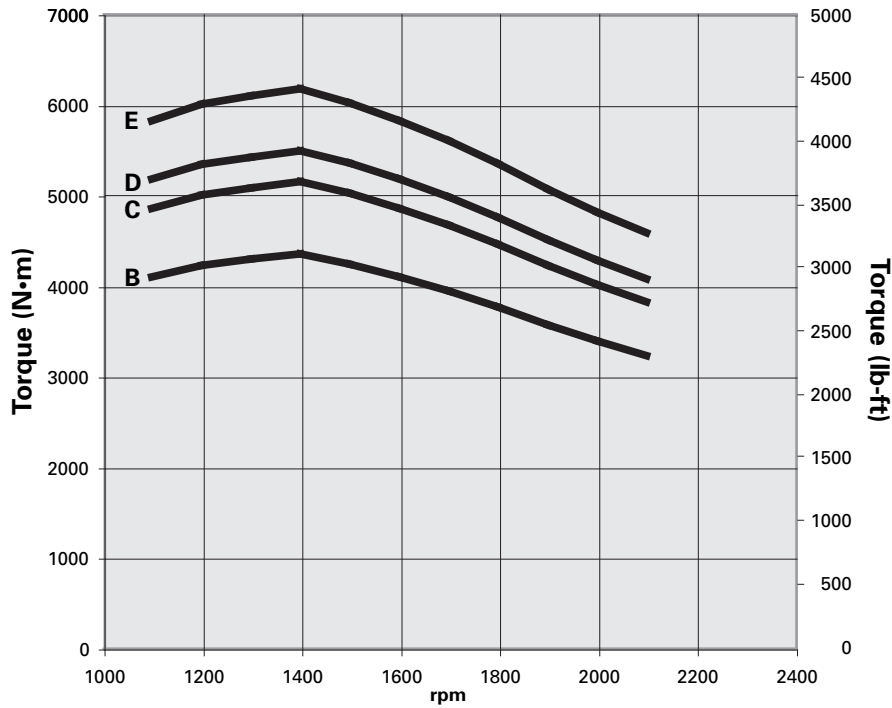
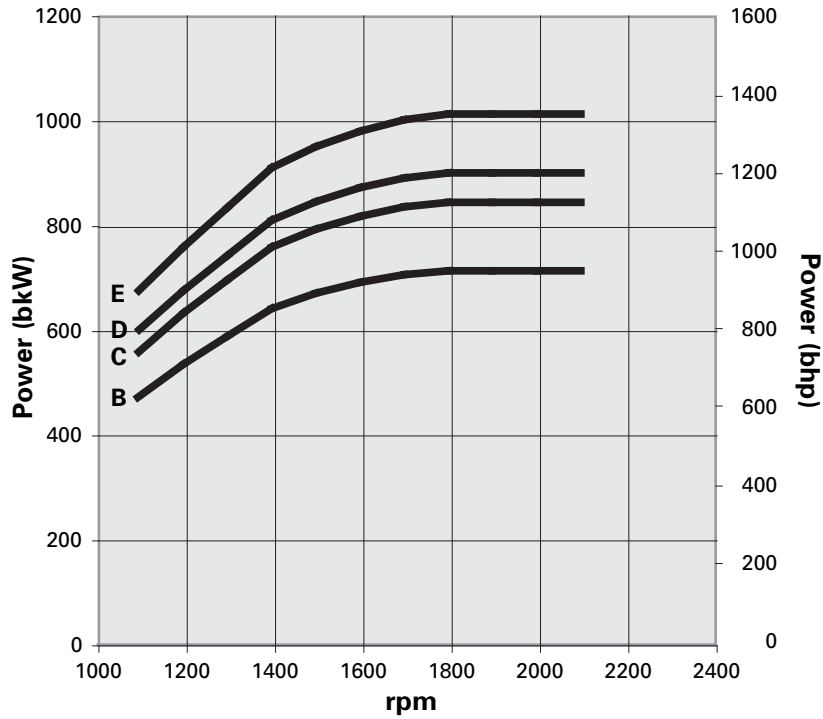
Lube System

Crankcase breather
Oil cooler
Oil filler
Oil filter
Oil pan front sump
Oil dipstick
Oil pump (gear driven)

General

Paint, Caterpillar yellow
Vibration damper
Lifting eyes

PERFORMANCE CURVES



Length	2083 mm (82 in.)
Width	1473 mm (58 in.)
Height	1499 mm (59 in.)



INDUSTRIAL RATINGS AND CONDITIONS

IND-B

For service where power and/or speed are cyclic (time at full load not to exceed 80%).

IND-C (Intermittent)

Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

IND-D

For service where maximum power is required for periodic overloads.

IND-E

For service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable.

Ratings are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in. Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29° C (84.2° F) with a density of 838.9 g/L.

The corrected performance values shown for Caterpillar engines will approximate the values obtained when the observed performance data is corrected to SAE J1995, ISO 3046-2, 8665, 2288, 9249, and 1585, EEC 80/1269 and DIN 70020 standard reference conditions.