



C2.2 Industrial Engine

Tier 4 Final

31.4-36.4 kW/42.1-48.8 bhp @ 2400-3000 rpm



CAT® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle Diesel

Bore.....	84 mm (3.3 in)
Stroke.....	100 mm (3.9 in)
Displacement.....	2.216 L (135 in ³)
Aspiration.....	Naturally Aspirated
Compression Ratio.....	23.3:1
Combustion System.....	Indirect Injection
Rotation (from flywheel end) ...	Counterclockwise
Capacity for Liquids	
Cooling System (engine only) ..	3.6 L (3.8 U.S. qts)
Lube Oil System (refill)	10.6 L (11.2 U.S. qts)
Engine Weight, Net Dry (approx)	
with standard equipment.....	218 kg (480.6 lb)

FEATURES

Emissions

Meets 2013 U.S. EPA Tier 4 Final 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

Substantial torque rise delivers impressive performance through a wide speed range while maintaining low operating costs

Fuel Efficiency

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

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

Ultra-compact package size ensures ease of installation as well as exceptional power density.

Low-Cost Maintenance

Single-side servicing improves ease of maintenance and simplifies the servicing routine. Service intervals at 500 hours are standard.

Testing

Every Cat® engine is quality tested to ensure proper engine performance.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance
- 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 EQUIPMENT

Air Inlet

Inlet manifold with choice of inlets

Control System

Alternator 12V 85A, starter motor 12V, glow plug starting aid

Cooling System

Belt-driven coolant pump, coolant temperature switch, choice of cooling fans

Flywheel & Flywheel Housing

SAE No. 7-1/2, SAE No. 8, or SAE No. 10 flywheel, choice of SAE No. 4 or standard backplate flywheel housing

Fuel System

Simple, robust indirect injection fuel pump, spin-on fuel filter

Lube System

Alternative oil fillers, spin-on lube oil filter, lube oil pressure switch, lube oil sump

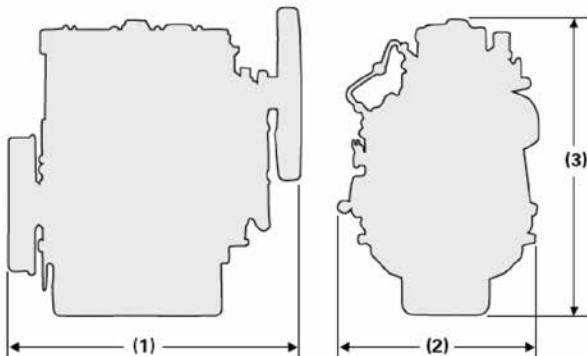
Power Take-Off

SAE A PTO drive

General

Cast iron engine block, cast iron exhaust manifold – side outlet, cold start capability to -20°C (-4°F), gradeability 35° continuous

DIMENSIONS



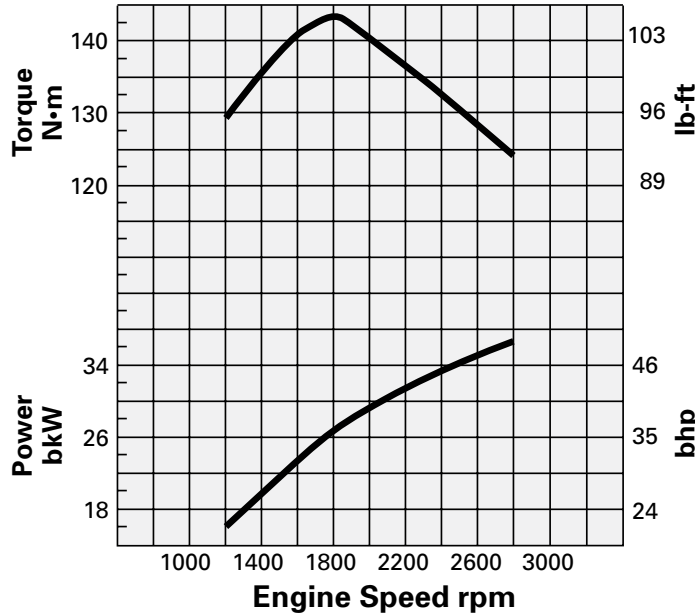
(1) Length	727 mm (28.6 in)
(2) Width	596 mm (23.5 in)
(3) Height	758 mm (29.9 in)

Note: Dimensions depend on final specifications.



PERFORMANCE DATA — PRELIMINARY

Naturally Aspirated — 2400-3000 rpm



Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N·m	Peak Torque lb-ft
C	2800	36.4	48.8	1800	143.0	105.5

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 for Diesel Engines — up to 7.1 liter 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 specification U.S. EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

AFTERTREATMENT CONFIGURATION

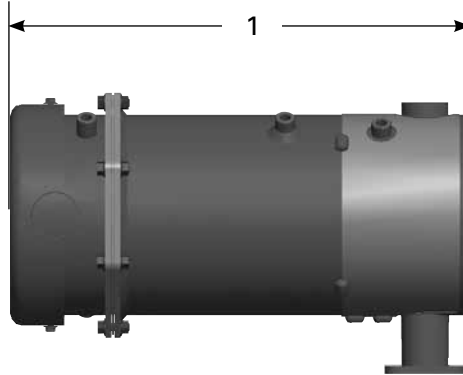


Image shown may not reflect actual aftertreatment.

198 mm (7.8 in) Diameter Base Configuration

Approximate Size and Weight

(1) Length — 449 mm (17.6 in)

Weight — 16 kg (35.3 lbs)

Note: Final weight and dimensions will depend on completed specification.

AFTERTREATMENT FEATURES

Regeneration:

Highly effective passive regeneration under most operating environments and cycles. Automatic, transparent active regeneration back up system during light load or adverse operating cycles. Wall flow DPF and through-flow DOC to effectively remove and manage emissions.

Mounting: Multiple off- and on-engine installation options provide customers with simple and flexible solutions for many applications.

Service: Minimum 3,000 hour DPF ash service intervals.

STANDARD EMISSIONS CONTROL EQUIPMENT

DPF: Diesel Particulate Filter with range of outlet options

DOC: Diesel Oxidation Catalyst

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