



The Cat® C0.5 Industrial Diesel Engine is offered in ratings ranging from 4.1-6.4 bkW (5.5-8.6 bhp) @ 2000-2800 rpm. These ratings meet U.S. EPA Tier 4 Final emission standards. Ratings: 8.2-10.2 bkW (11.0-13.7 bhp) @ 2800-3600 rpm are also available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas. Nonroad engines less than 19 kW (25 hp) are not currently subject to EU emission standards. Industries and applications powered by C0.5 engines include: Auxiliary Power Units, Compactors/Rollers, Mobile Earthmoving Equipment, Mobile Light Towers and Turf and Landscaping.

# **Specifications**

Power Rating		
Minimum Power	8.2 bkW	11 BHP
Maximum Power	10.2 bkW	13.7 BHP
Rated Speed		2000-3600 rpm

Emission Standards	
Emissions	For Use in Regions Where Less Than 19 kW Ratings Are
	Not Required to Meet an Emission Standard

General	
Engine Configuration	In-Line 2, 4-Stroke-Cycle
Bore	67 mm (2.64 in)
Stroke	72 mm (2.83 in)
Displacement	0.5 L (31 in³)
Aspiration	Naturally Aspirated (NA)
Compression Ratio	23.5:1
Combustion System	Indirect Injection
Rotation from Flywheel End	Counterclockwise
Cooling System - Capacity	1.1 L (1.16 qt)
Lube System - Refill	1.6-2.0 L (1.7-2.1 qt)

Engine Dimensions - Approximate	
Height	523 mm (20.6 in)
Length	407 mm (16 in)
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	57 kg (126 lb)
Width	371 mm (14.6 in)



### **Benefits and Features**

## 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**

Delivers impressive performance throughout 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 while maintaining low operating costs.

## **Broad Application Range**

Industry leading range of factory configurable ratings and options for agricultural, material 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. Standard 500 hour service intervals.

### 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 SOSSM 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

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## Standard Equipment

### Air Inlet System

· Inlet manifold with choice of inlets.

### **Control System**

- Alternator 12 volt 14 amp
- Starter motor 12 volt
- · Glow plug starting aid

### Cooling System

# Cat® C0.5 Diesel Engine

## Industrial



- · Belt-driven coolant pump
- · Coolant temperature switch
- · Choice of cooling fans

## Flywheel and Flywheel Housing

• U.S. EPA Tier 4 Final: Standard backplate flywheel housing and flatface flywheel

## **Fuel System**

- Fuel injection pump
- · Spin-on fuel filter
- Electronic Shut-off Solenoid (ESOS)

## **Lube System**

- · Closed circuit breather
- · Spin-on lube oil filter
- · Lube oil pressure switch
- · Lube oil sump

#### General

- · Cast iron, engine block
- · Cast iron exhaust manifold--side outlet
- Cold start capability to -20° C (-4° F)
- · Gradeability 35° continuous
- · Paint: Caterpillar yellow, with optional colors available at request

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.