

3508 fire pump displayed above

## CAT® ENGINE SPECIFICATIONS

### V-12, 4-Stroke-Cycle Diesel

Emissions .....	Non-certified
Bore .....	170 mm (6.7 in)
Stroke .....	190 mm (7.5 in)
Displacement .....	51.8 L (3158 in <sup>3</sup> )
Aspiration .....	Turbocharged-Aftercooled
Rotation (from flywheel end) .....	Counterclockwise
Refill Capacity	
Cooling System .....	160 L (42 U.S. gal)
Lube Oil System .....	318 L (84 U.S. gal)
Oil Change Interval .....	1 year
Flywheel and Flywheel Housing .....	SAE No. 0
Flywheel Teeth .....	151

## FEATURES

- Proven reliability and durability
- Robust diesel strength design prolongs life and lowers owning and operating costs
- Market-leading power density
- Core engine components designed for reconditioning and reuse at overhaul

### Testing

Every Cat® engine is full-load tested to ensure proper engine performance

### World-class Product Support Offered Through Global Cat Dealer Network

- More than 2,200 dealer outlets
- Cat factory-trained dealer technicians service every aspect of your engine
- Cat parts and labor warranty
- Preventive maintenance agreements available for repair-before-failure options

- S•O•S<sup>SM</sup> program matches your oil and coolant samples against Caterpillar set standards to determine:
  - Internal engine component condition
  - Presence of unwanted fluids
  - Presence of combustion by-products
  - Site-specific oil change interval

### Over 80 Years of Engine Manufacturing Experience

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

- Manufacturing of cast engine blocks, heads, cylinder liners, and flywheel housings
- Machining of critical components
- Complete engine assembly

### Web Site

To learn more about Cat fire pump engines, visit [www.catoilandgasinfo.com](http://www.catoilandgasinfo.com) or [www.cat-industrial.com](http://www.cat-industrial.com).

## STANDARD ENGINE EQUIPMENT

### Air Inlet System

Air cleaner, regular-duty with service indicators turbocharger, watercooled, rear-mounted

### Charging System

Charging alternator 24V, 35A

### Control System

Governor, RH, 3161 with self contained synthetic oil sump, air-fuel ratio control, mechanical speed control, without torque control

### Cooling System

Thermostats and housing  
 Jacket water pump, gear-driven, centrifugal, RH  
 Heat exchanger (installed) — max 61°F coolant temperature capacity (consult factory for higher supply water coolant temperature)  
 Expansion tank

### Exhaust System

Exhaust manifold — air-shielded, watercooled  
 Exhaust elbow, dry 305 mm (12 in) ID

### Flywheels and Flywheel Housing

Flywheel — SAE No. 0, 151 teeth  
 Flywheel housing — SAE No. 0  
 SAE standard rotation

### Fuel System

Fuel filter, with service indicators, cartridge-type with RH service  
 Fuel transfer pump  
 Primary fuel filter (shipped loose)

### Instrumentation

Instrument panel, RH

Engine oil pressure and fuel pressure gauges  
 Ammeter gauge, jacket water temperature gauge  
 Service meter, electric  
 Tachometer

### Lube System

Crankcase breather, top-mounted  
 Oil cooler  
 Oil filler and dipstick, RH  
 Oil pump  
 Oil filter, cartridge-type with RH service  
 Shallow oil pan

### Mounting System

Rails, mounting, engine length, 330 mm (13 in), C-channel

### Power Take-Off

Flywheel stub shaft

### Protection System

Junction box  
 Manual shutoff, RH  
 Stop-start system, automatic (compatible with NFPA 20 requirements, energizable from either of two battery sources and capable of manual starter actuation)

### Starting System

Jacket water heater, dual (12 kW total, 240-480V)  
 Single 24V electric starting motor, LH  
 Starting switch

### General

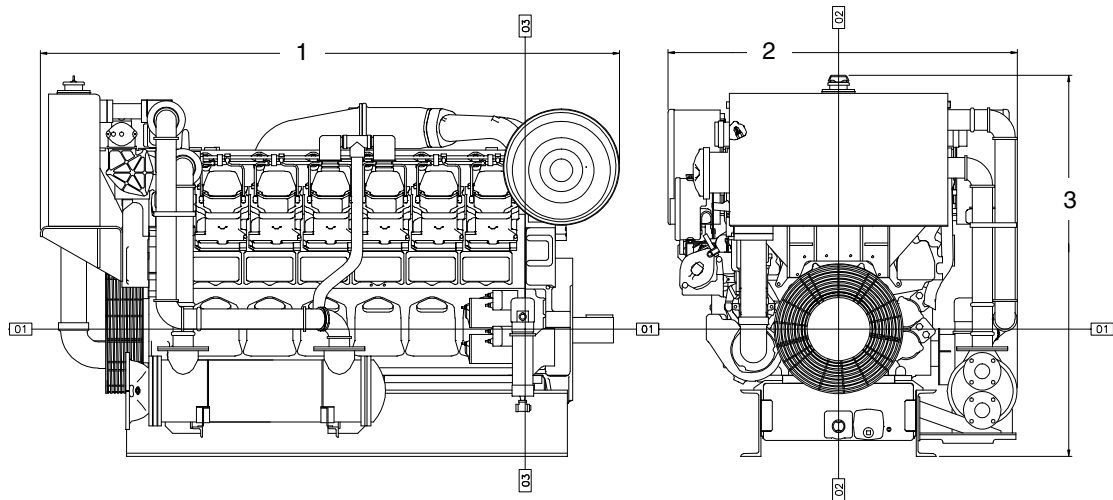
Paint, red engine with black rails  
 Vibration damper and guard  
 Lifting eyes



# 3512 Fire Pump Engine

1066-1195 kW/1430-1600 bhp  
@ 1460-1750 rpm

## DIMENSIONS



Engine Dimensions		
(1) Length	2890 mm	113.8 in
(2) Width	1744 mm	68.7 in
(3) Height	1902 mm	74.9 in
Weight — dry (approx.)	6360 kg	13,999 lb

Note: For general dimensions only, not actual configuration. Do not use for installation design. See general dimension drawings for detail.

## RATING DEFINITIONS AND CONDITIONS

**Standby Fire Pump** — Ratings represent the output which may be utilized to drive stationary fire pumps where the pumping equipment has been sized according to NFPA 20 standards.

**Rating Conditions** 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.

Information contained in this publication may be considered confidential. Discretion is recommended when distributing. Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, 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.