

Image shown may not reflect  
actual Engine

## SPECIFICATIONS

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

Emissions.....	IMO
Displacement.....	27.03 L (1,649.47 in <sup>3</sup> )
Rated Engine Speed.....	1800
Bore.....	137.2 mm (5.4 in)
Stroke.....	152.4 mm (6.0 in)
Aspiration.....	Turbocharged-Aftercooled
Governor.....	Mechanical
Cooling System.....	Keel
Weight, Net Dry (approx.).....	2,415 kg (5,324 lb)
Refill Capacity	
Cooling System.....	67.0 L (17.7 gal)
Lube Oil System.....	139.0 L (36.7 gal)
Oil Change Interval.....	500 hrs
Caterpillar Diesel Engine Oil 10W30 or 15W40	
Deep Sump Oil Pan	
Rotation (from flywheel end).....	Counterclockwise
Flywheel and Flywheel Housing.....	SAE NO. 0
Flywheel Teeth.....	136

## STANDARD ENGINE EQUIPMENT

### Air Inlet System

Corrosion resistant aftercooler core, regular duty panel type air cleaner, air cleaner inlet adapter, turbocharger inlet

### Cooling System

Gear-driven centrifugal jacket water pump, expansion tank, engine oil cooler, thermostats and housing, transmission oil cooler

### Exhaust System

Watercooled exhaust manifold and turbocharger, dry elbow and flange

### Fuel System

Fuel filter - RH service, fuel transfer pump, fuel priming pump, flexible lines, fuel ratio control

### Instrumentation

Heavy-duty SAE standard rotation tachometer drive; RH instrument panel with oil pressure, water temperature, and fuel pressure gauges; service meter

### Lube System

Crankcase breather; oil filter - RH service; oil level gauge - RH service, oil filler in valve cover, deep sump oil pan, manual oil sump pump

### Mounting System

Front support

### General

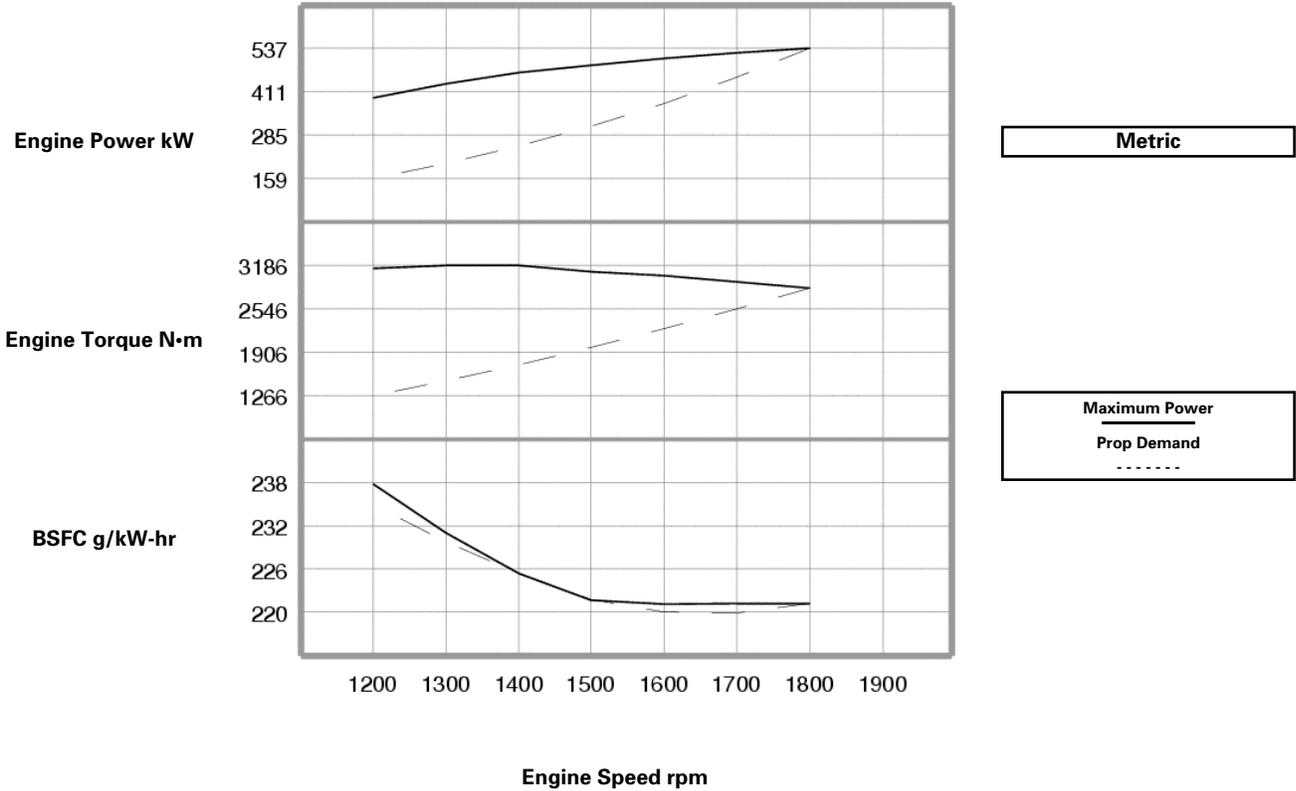
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

### ISO Certification

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

**PERFORMANCE CURVES**

**B-RATING - DM6079-02**

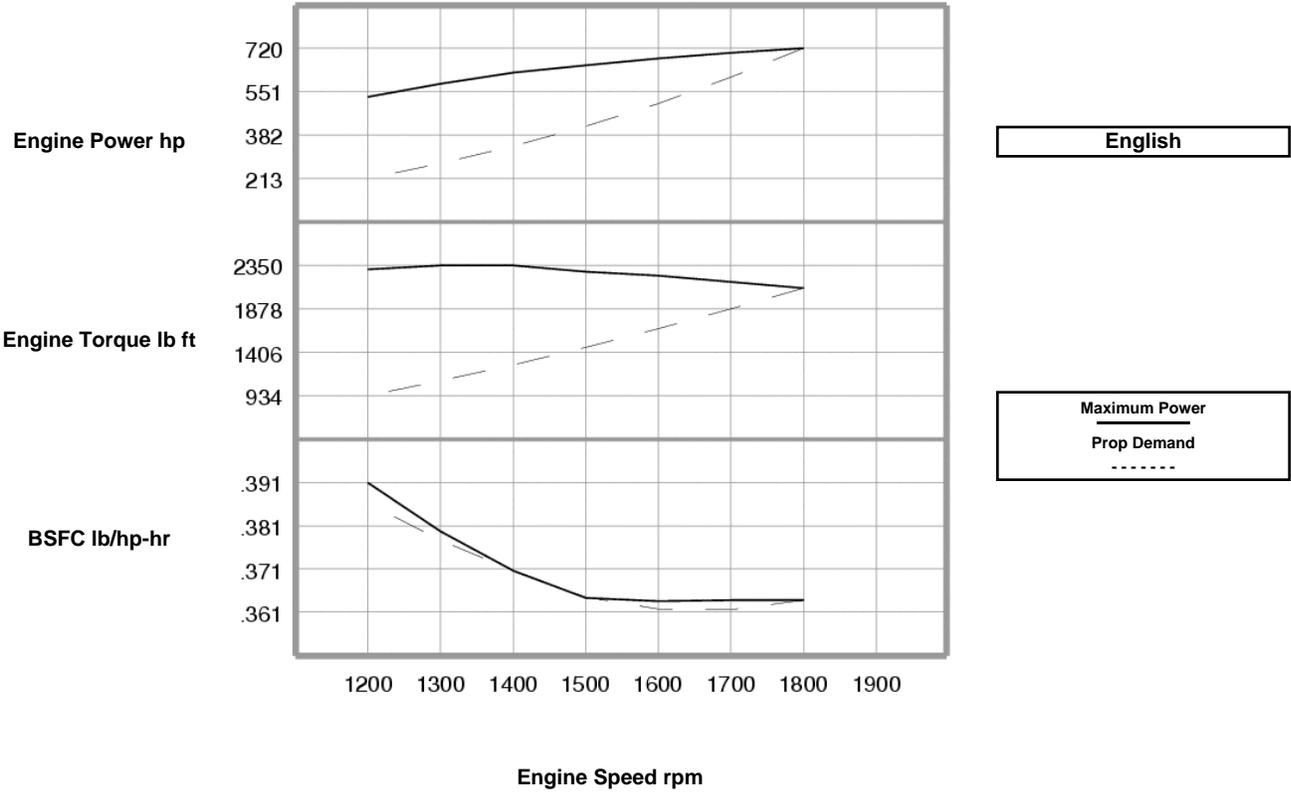


Maximum Power Data					Prop Demand Data				
Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr	Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
1800	537	2849	221.2	141.6	1800	537	2849	221.2	141.6
1700	523	2939	221.2	137.9	1700	452.4	2541	219.9	118.6
1600	508	3029	221.1	133.8	1600	377.2	2251	220	98.9
1500	486	3094	221.6	128.4	1500	310.8	1978	221.7	82.1
1400	466	3180	225.3	125.2	1400	252.7	1723	225.3	67.9
1300	434	3186	231	119.5	1300	202.3	1486	229.8	55.4
1200	394	3133	237.8	111.6	1200	159.1	1266	234.9	44.5

NOTE: Prop demand data is a cubic prop demand curve with 3.0 exponent for displacement hulls only.

**PERFORMANCE CURVES**

**B-RATING - DM6079-02**



Maximum Power Data					Prop Demand Data				
Engine Speed rpm	Engine Power hp	Engine Torque lb ft	BSFC lb/hp-hr	Fuel Rate gph	Engine Speed rpm	Engine Power hp	Engine Torque lb ft	BSFC lb/hp-hr	Fuel Rate gph
1800	720	2101	.364	37.4	1800	720	2101	.364	37.4
1700	702	2168	.364	36.4	1700	607	1874	.362	31.3
1600	681	2234	.363	35.3	1600	506	1660	.362	26.1
1500	652	2282	.364	33.9	1500	417	1459	.364	21.7
1400	625	2345	.370	33.1	1400	339	1271	.370	17.9
1300	582	2350	.380	31.6	1300	271	1096	.378	14.6
1200	528	2311	.391	29.5	1200	213	934	.386	11.8

NOTE: Prop demand data is a cubic prop demand curve with 3.0 exponent for displacement hulls only.

**RATING DEFINITIONS AND CONDITIONS**

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**B Rating (Heavy Duty) -**

% Load Factor: 40 to 80  
% Time at Rated RPM: up to 40  
Typical Time at Full Load: 10 hours out of 12  
Typical Hour/Year: 3000 to 5000  
Typical Applications: For vessels operating at rated load and rated speed up to 80% of the time with some load cycling (40% to 80% load factor). Typical applications could include but are not limited to vessels such as mid-water trawlers, purse seiner, crew and supply boats, ferries, or towboats. Typical operation ranges from 3000 to 5000 hours per year.

**Power**

at declared engine speed is in accordance with ISO3046-1:2002E. Caterpillar maintains ISO9001:1994/QS-9000 approved engine test facilities to assure calibration of test equipment. Electronically controlled engines are set at the factory at the advertised power corrected to standard ambient conditions. The published fuel consumption rates are in accordance with ISO3046-1:2002E.

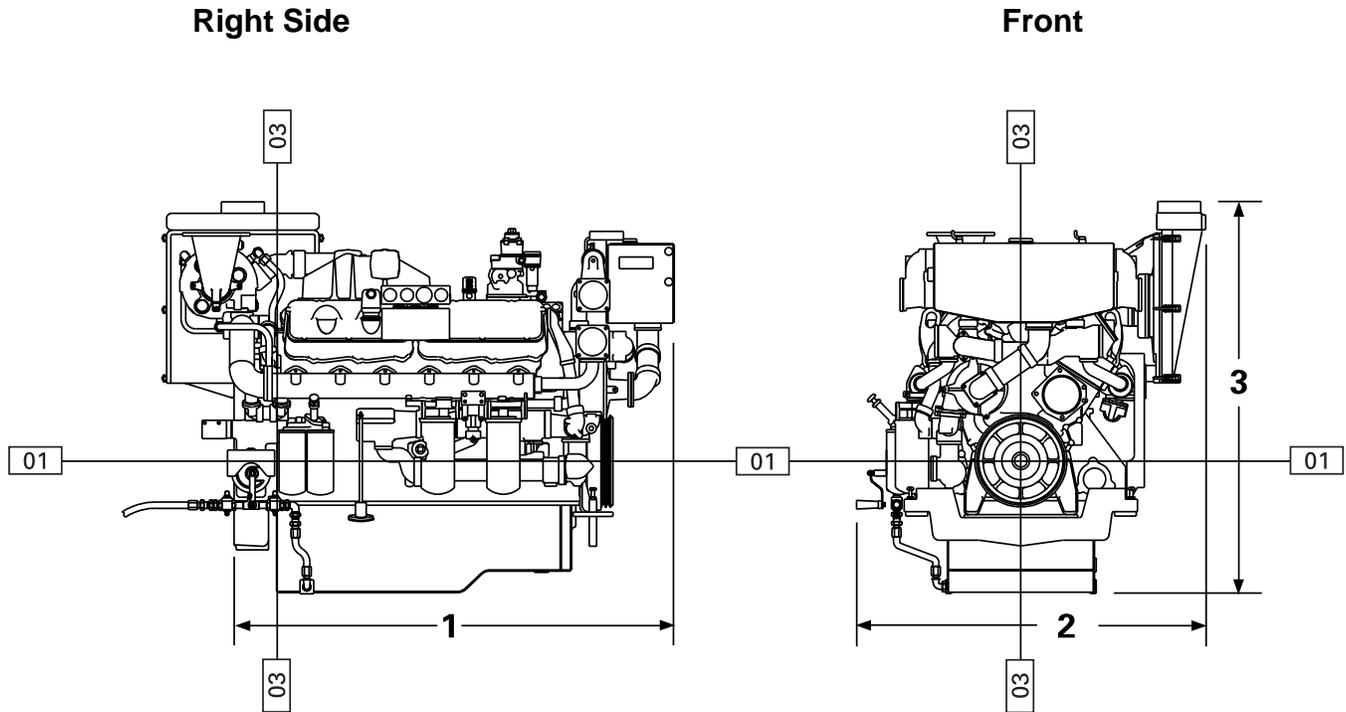
**Fuel rates**

are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/L (7.001 lb/U.S. gal). Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturer's engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

Power produced at the flywheel will be within standard tolerances up to 49° C (120° F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52° C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

**DIMENSIONS**



Engine Dimensions		
(1) Length to Flywheel Housing	1821.7 mm	71.72 in
(2) Width	1444.3 mm	56.86 in
(3) Height	1621.4 mm	63.83 in
Weight, Net Dry (approx)	2415 kg	5,324 lb

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 1965516).

Performance No.: DM6079-02

Feature Code: 412DM02

U.S. Sourced

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The International System of Units (SI) is used in this publication.

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