CATERPILLAR®

C12
MARINE PROPULSION

390 mhp
(385 bhp)
287 bkW

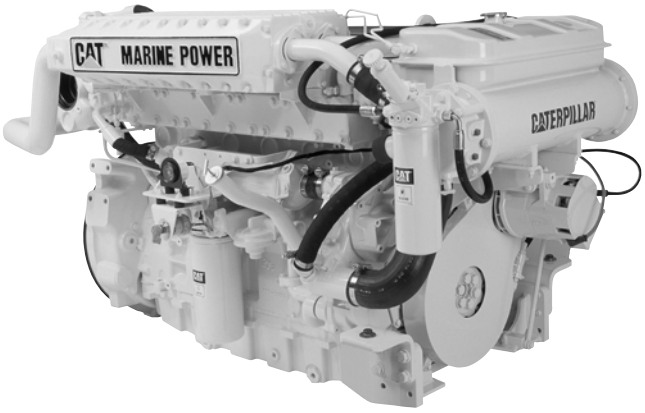


Image is a representation only, and may not show optional attachments.

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	EPA Tier II and IMO Compliant
Displacement	12 L (732 cu. in.)
Rated Engine Speed	1800
Bore	130.0 mm (5.1 in.)
Stroke	150.0 mm (5.9 in.)
Aspiration	Turbocharged-Aftercooled
Governor	Electronic
Cooling System	Heat Exchanger
Weight, Net Dry (approx)	1,174 kg (2,588 lb)
Refill Capacity	
Cooling System	45 L (12.0 U.S. gal)
Lube Oil System	28 L (7.5 U.S. gal)
Oil Change Interval	250 hrs
Caterpillar Diesel Engine Oil 10W30 or 15W40	
Center Sump Oil Pan	
Rotation (from flywheel end)	Counterclockwise
Flywheel and Flywheel Housing	SAE No. 1
Flywheel Teeth	113

STANDARD ENGINE EQUIPMENT

Air Inlet System
Corrosion resistant sea water aftercooler, air cleaner/fumes disposal system (closed)

Cooling System
Self-priming gear-driven sea water pump with rubber impeller, gear-driven jacket water pump, integral heat exchanger/expansion tank with removable tube bundle and replaceable copper-nickel tubes, thermostat and housing

Exhaust System
Watercooled exhaust manifold and turbocharger, round flanged outlet

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter — RH or LH service, flexible fuel lines

Instrumentation
Electric service meter

Lube System
Crankcase breather, engine oil cooler; oil filter — RH or LH service, oil level gauge — RH or LH service, oil filler, center sump oil pan, gear driven oil pump

Mounting System
Front support

Power Takeoffs
11 tooth spline SAE A hydraulic pump drive, single groove crankshaft pulley

Protection System
12 or 24 volt electronic shutdown (energized-to-run)

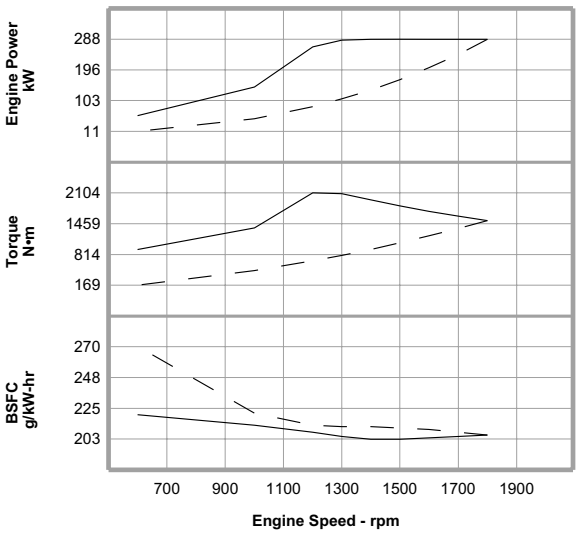
General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes, variable engine wiring, customer wiring connector and service tool connector

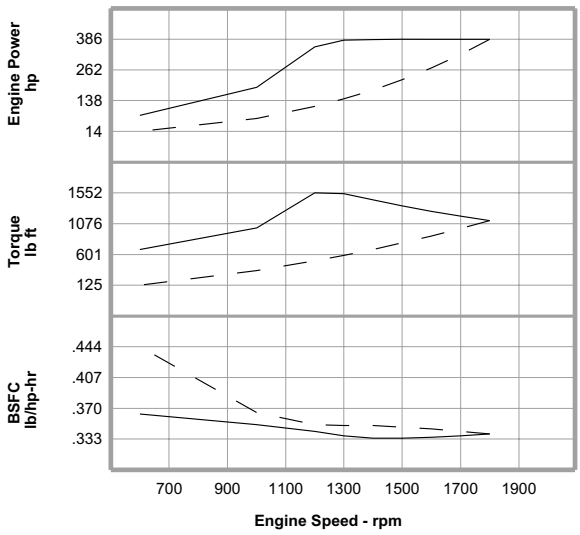
CATERPILLAR FACILITIES ISO 9001 CERTIFIED

MARINE ENGINE PERFORMANCE

C12 DITA
287 kW (385 hp) @ 1800 rpm
B Rating (Heavy Duty) — DM7528-00

EPA Tier II and IMO Compliant





Metric | Maximum Power — | Prop Demand — — | **287 kW**

English | Maximum Power — | Prop Demand — — | **385 hp**

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	1800	287	1522	206.0	70.4
	1700	287	1613	205.0	70.1
	1600	287	1715	204.0	69.8
	1500	288	1832	203.0	69.5
	1400	287	1955	203.0	69.3
	1300	284	2086	205.0	69.5
	1200	264	2104	208.0	65.5
	1000	144	1370	213.0	36.3
	600	58	920	221.0	15.2
Prop Demand Data	1800	287	1523	206.0	70.4
	1700	242	1358	208.0	60.0
	1600	202	1203	210.0	50.5
	1500	166	1057	211.0	41.8
	1400	135	921	212.0	34.1
	1300	108	794	212.0	27.3
	1200	85	677	213.0	21.6
	1000	49	470	222.0	13.0
	600	11	169	270.0	3.4

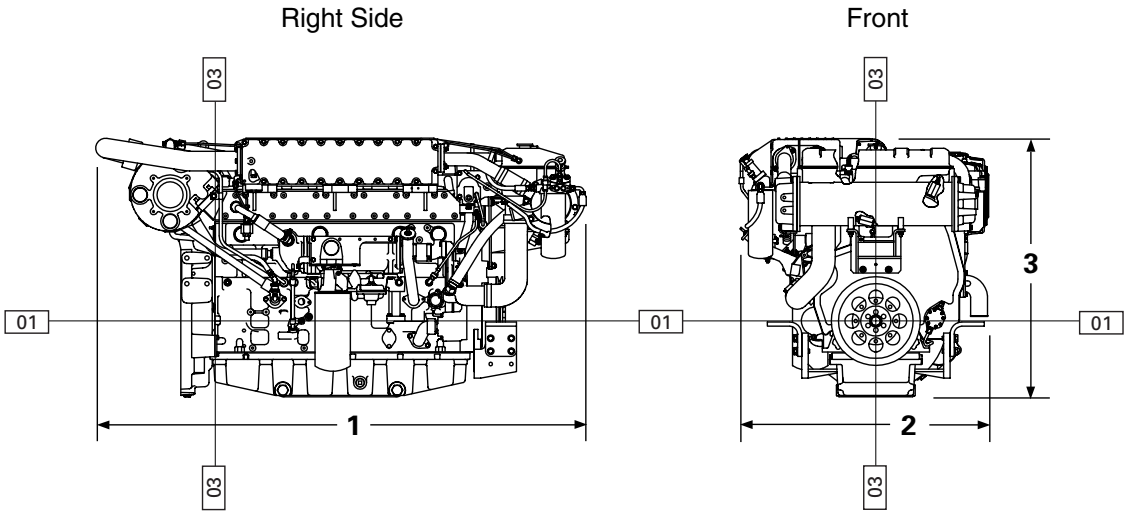
Cubic prop demand curve with 3.0 exponent for displacement hulls only.

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	1800	385	1123	.339	18.6
	1700	385	1190	.337	18.5
	1600	385	1265	.335	18.4
	1500	386	1351	.334	18.4
	1400	384	1442	.334	18.3
	1300	381	1538	.337	18.4
	1200	355	1552	.342	17.3
	1000	192	1010	.350	9.6
	600	78	679	.363	4.0
Prop Demand Data	1800	385	1123	.339	18.6
	1700	324	1002	.342	15.9
	1600	270	887	.345	13.3
	1500	223	780	.347	11.0
	1400	181	679	.349	9.0
	1300	145	586	.349	7.2
	1200	114	499	.350	5.7
	1000	66	347	.365	3.4
	600	14	125	.444	0.9

Power produced at the flywheel will be within standard tolerances up to 50°C (122°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	1573.9 mm	61.96 in
(2) Width	968.6 mm	38.13 in
(3) Height	1004.5 mm	39.55 in
Weight, Net Dry (approx)	1174 kg	2,588 lb

Note: Do not use for installation design. See general dimension drawing for detail (Drawing # 2169705).

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RATING DEFINITIONS AND CONDITIONS

B Rating (Heavy Duty)

% Load Factor: 40 to 80

% Time at Rated RPM: up to 80

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 tow boats. 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 accurate 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 manufacturers' 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 50°C (122°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.

TMI Reference No.: DM7528-00
U.S. Sourced
LEHM3410-00 (11-03)