

Image shown may not reflect  
actual Engine

## SPECIFICATIONS

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

Emissions.....	EPA and IMO compliant
Displacement.....	32.1 L (1,958.86 in <sup>3</sup> )
Rated Engine Speed.....	1800
Bore.....	145.0 mm (5.71 in)
Stroke.....	162.0 mm (6.38 in)
Aspiration.....	TA
Governor.....	Mechanical
Cooling System.....	Keel Cooled
Engine Weight, Net Dry (approx).....	2,622 kg (5,781 lb)
Refill Capacity	
Cooling System.....	67.0 L (17.7 gal)
Lube Oil System.....	138.0 L (36.5 gal)
Oil Change Interval.....	500 hr
Caterpillar Deisel Engine Oil 10W30 or 15W40 Deep Sump Oil Pan	
Rotation (from flywheel end).....	CCW
Flywheel and Flywheel Housing.....	SAE NO. 0
Flywheel Teeth.....	136

## STANDARD ENGINE EQUIPMENT

### Air Inlet System

Corrosion-resistant aftercooler core, standard duty air cleaner—open element with service indicator, turbocharger inlets

### Cooling System

Gear driven centrifugal self-priming auxiliary sea water pump, gear driven centrifugal jacket water pump, expansion tank, engine oil cooler, thermostats and housing, transmission oil cooler

### Exhaust System

Watercooled exhaust manifold and turbochargers, dry elbows and flanges

### Fuel System

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

### Instrumentation

Heavy-duty (1/2 engine speed) 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 filler in valve cover, deep sump oil pan, manual oil sump pump

### Mounting System

Front support

### General

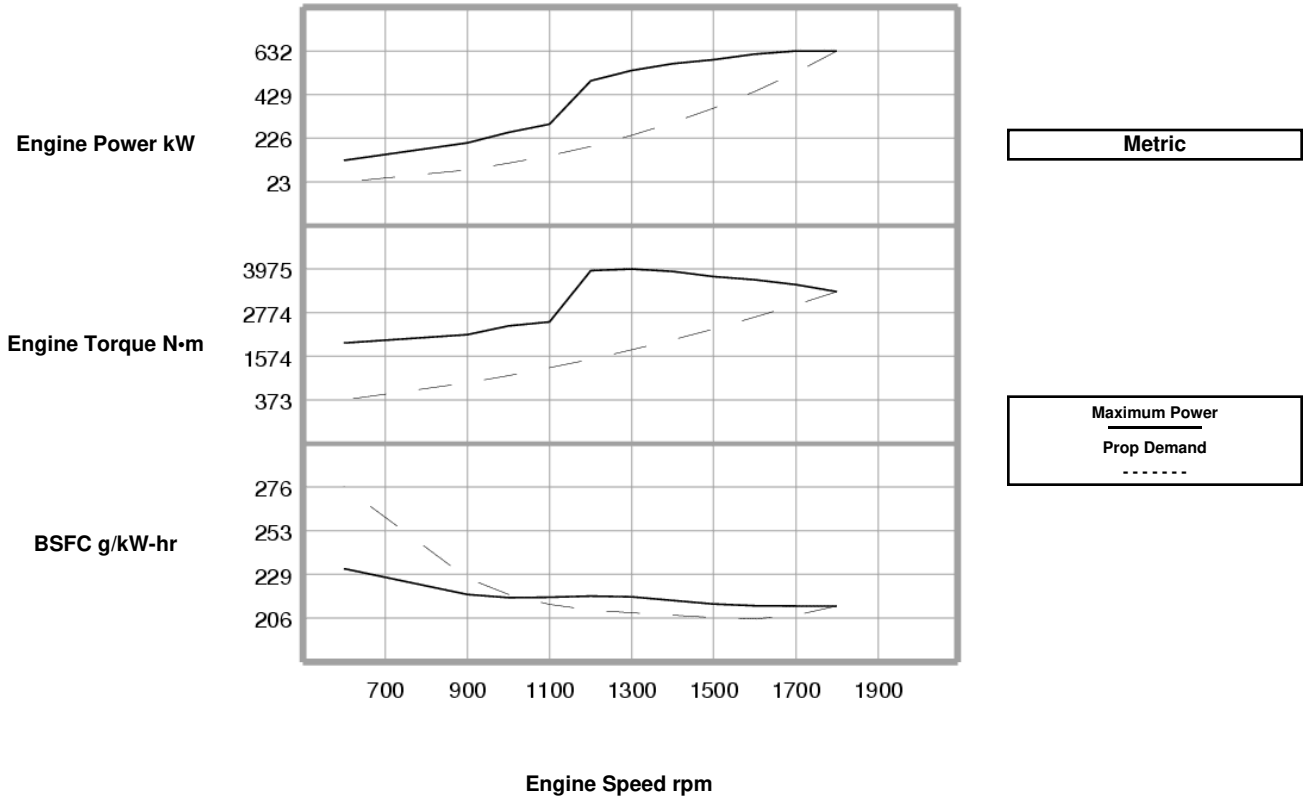
Vibration damper, Caterpillar yellow paint, lifting eyes

### ISO Certification

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

**PERFORMANCE CURVES**

**B-RATING - DM7298-01**

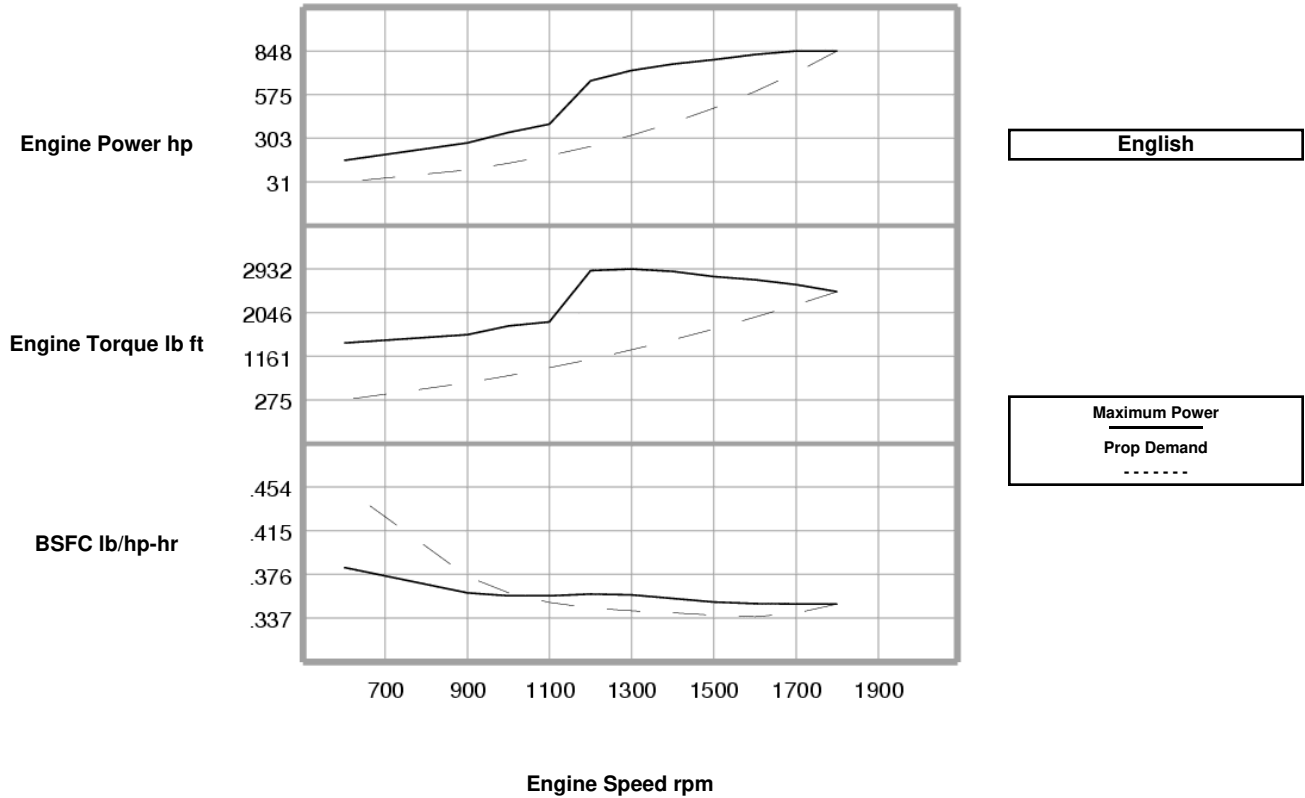


Maximum Power Data					Prop Demand Data				
Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr	Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
1800	632	3353	212.5	160.1	1800	632	3353	212.5	160.1
1700	632	3549	212.4	160.0	1700	532.4	2991	207.6	131.7
1600	616	3679	212.7	156.3	1600	443.9	2649	205.7	108.8
1500	591	3764	213.6	150.5	1500	365.7	2328	206.4	90.0
1400	572	3904	215.5	147.0	1400	297.4	2028	207.7	73.6
1300	541	3975	217.4	140.3	1300	238.1	1749	208.9	59.3
1200	494	3933	217.8	128.3	1200	187.3	1490	210.4	47.0
1100	291	2528	217.1	75.4	1100	144.2	1252	213.3	36.7
1000	253	2414	217	65.4	1000	108.4	1035	218.6	28.2
900	204	2166	218.6	53.2	900	79	838	227.3	21.4
600	122	1941	232.5	33.8	600	23.4	373	276	7.7

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

**PERFORMANCE CURVES**

**B-RATING - DM7298-01**



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	848	2473	.349	42.3	1800	848	2473	.349	42.3
1700	847	2618	.349	42.3	1700	714	2206	.341	34.8
1600	827	2713	.350	41.3	1600	595	1954	.338	28.7
1500	793	2776	.351	39.8	1500	490	1717	.339	23.8
1400	767	2879	.354	38.8	1400	399	1496	.341	19.4
1300	726	2932	.357	37.1	1300	319	1290	.343	15.7
1200	663	2901	.358	33.9	1200	251	1099	.346	12.4
1100	391	1865	.357	19.9	1100	193	923	.351	9.7
1000	339	1780	.357	17.3	1000	145	763	.359	7.4
900	274	1598	.359	14.1	900	106	618	.374	5.7
600	164	1432	.382	8.9	600	31	275	.454	2.0

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.

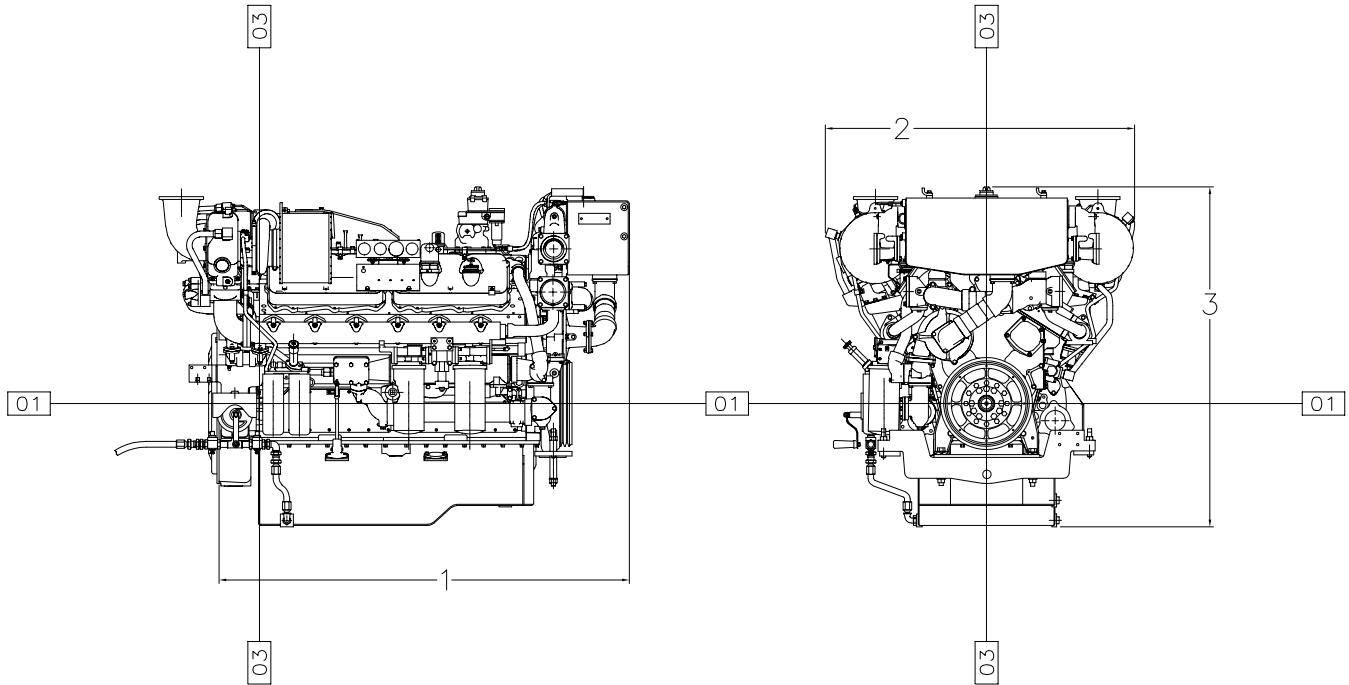
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturer's engines. Actual engine performance may vary according to the particular application of the engine and operating conditions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

**Right Side**

**Front**



Engine Dimensions		
(1) Length to Flywheel Housing	1821.7 mm	71.72 in
(2) Width	1374.0 mm	54.09 in
(3) Height	1510.4 mm	59.46 in
Weight, Net Dry (approx)	2622 kg	5,781 lb

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2455945 ).

Performance No.: DM7298-01

Feature Code: 412DM72

U.S. Sourced

7994529

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Materials and specifications are subject to change without notice.

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

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