



Marine Propulsion

3126

224 bkW @ 2800 rpm
300 bhp @ 2800 rpm



Shown with
Accessory Equipment

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	IMO compliant
Bore—mm (in)	110 (4.33)
Stroke—mm (in)	127 (5.0)
Displacement—L (cu in)	7.2 (442)
Rotation (from flywheel end)	Counterclockwise
Compression Ratio	15.5:1
Capacity for Liquids—L (U.S. gal)	
Cooling System	28 (7.4)
Lube Oil System (refill)	25 (6.6)
Oil Change Interval — hrs	250
Caterpillar DEO 10W30 or 15W40	
Engine Weight, Net Dry	
(approx) — kg (lb)	722 (1,592)

STANDARD ENGINE EQUIPMENT

Air Inlet System

12V air inlet heater, sea water aftercooler, air cleaner/fumes disposal, turbocharger

Charging System

12V, 51 amp charging alternator

Control System

mechanical governor, forward facing throttle control

Cooling System

thermostats and housing, belt-driven centrifugal jacket water pump, gear-driven auxiliary sea water pump, expansion tank, marine gear oil cooler, engine mounted heat exchanger with removable copper-nickel tube bundle, auxiliary sea water lines

Exhaust System

watercooled exhaust manifold and turbocharger, fumes disposal

Flywheel and Flywheel Housing

SAE No. 3 flywheel (126 teeth) and SAE No. 3 flywheel housing, SAE standard rotation

Fuel System

RH or LH service filter, fuel transfer pump

Instrumentation

magnetic pickup tachometer drive, wiring harness includes junction box, mounting and hardware, 12V oil pressure and water temperature sender group (single station)

Lube System

crankcase breather, gear-driven engine oil pump, RH or LH service oil filter, oil filler, oil level gauge, pan drain, lubricating oil

Protection System

12V energized-to-run solenoid shutoff, alarm contactor

Starting System

12V rear-facing electric starting motor, 12V junction box

General

vibration damper and guard, Caterpillar yellow paint, lifting eyes



From the library of Barrington Diesel Club

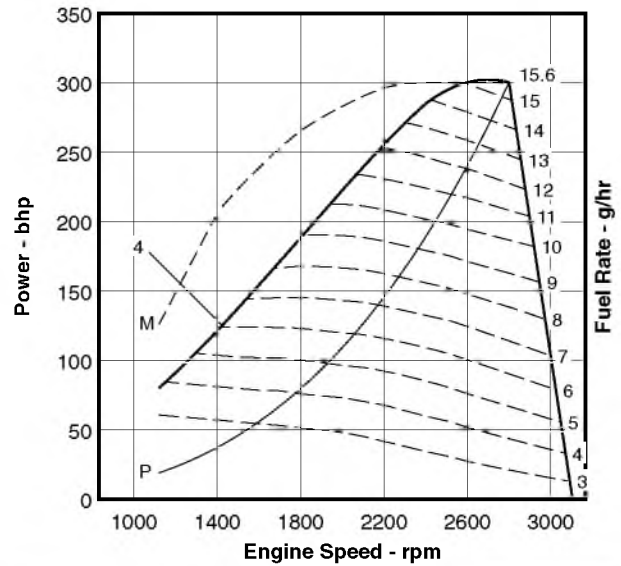
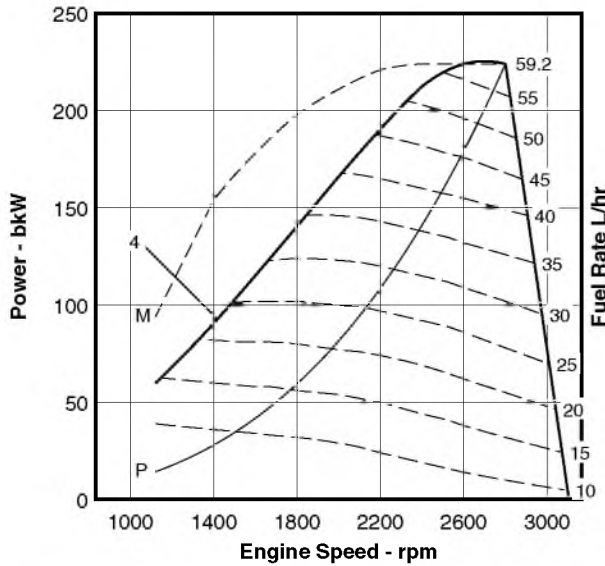
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.



PERFORMANCE CURVES

E Rating — DM4953-00

IMO Compliant



224 bkW

SI Metric

300 bhp

English

Performance Data

Performance Data

	Engine Speed rpm	Engine Power bkW	BSFC g/bkW-h	Fuel Rate L/h	Boost Press kPa Gauge	Intake Air Flow m ³ /min	Exh Manif Temp °C	Exh Gas Flow m ³ /min
Max	2800	224.0	222	59.2	218.3	24.4	483	49.0
Limit	2600	224.0	214	57.0	210.3	22.7	475	46.0
Curve: 4	2400	212.5	207	52.5	189.5	20.2	465	41.6
	2200	190.5	202	46.0	155.8	16.8	457	35.3
	2000	166.1	201	39.8	119.5	13.3	468	28.9
	1800	140.5	203	34.0	85.0	10.2	486	23.3
	1600	115.2	206	28.3	56.4	7.8	506	18.8
	1400	90.6	209	22.6	32.2	5.8	514	14.1
	1200	68.1	207	16.8	19.4	4.5	465	10.5
	1120	59.8	203	14.5	13.3	3.9	442	8.7

	Engine Speed rpm	Engine Power bhp	BSFC lb/bhp-h	Fuel Rate gph	Boost Press in.Hg. Gauge	Intake Air Flow cfm	Exh Manif Temp °F	Exh Gas Flow cfm
Max	2800	300	.364	15.6	64.6	861	901	1729
Limit	2600	300	.351	15.1	62.3	801	887	1623
Curve: 4	2400	285	.340	13.9	56.1	713	869	1468
	2200	255	.333	12.2	46.1	593	854	1246
	2000	223	.331	10.5	35.4	469	874	1020
	1800	188	.334	9.0	25.2	360	907	822
	1600	154	.339	7.5	16.7	275	942	663
	1400	121	.343	6.0	9.5	205	957	498
	1200	91	.340	4.4	5.7	159	870	371
	1120	80	.333	3.8	3.9	138	827	307

Max	2800	224.0	222	59.2	218.3	24.4	483	49.0
Power	2600	224.0	214	57.0	210.3	22.7	475	46.0
Curve: M	2400	224.0	207	55.2	201.1	20.9	480	43.4
	2200	221.0	201	52.9	189.2	18.6	489	39.7
	2000	211.0	198	49.9	168.4	16.0	507	35.0
	1800	198.0	218	51.4	143.3	13.5	544	31.6
	1600	178.0	297	63.1	150.9	15.6	596	40.0
	1400	154.0	382	70.1	210.7	24.0	651	62.7
	1200	111.0	391	51.7	121.8	14.8	620	38.9
	1120	94.0	337	37.7	78.3	9.8	606	25.8

Max	2800	300	.364	15.6	64.6	861	901	1729
Power	2600	300	.351	15.1	62.3	801	887	1623
Curve: M	2400	300	.340	14.6	59.6	738	895	1531
	2200	296	.330	14.0	56.0	656	913	1401
	2000	283	.326	13.2	49.9	565	944	1235
	1800	266	.358	13.6	42.4	476	1011	1115
	1600	239	.489	16.7	44.7	550	1105	1412
	1400	207	.628	18.5	62.4	847	1203	2213
	1200	149	.643	13.7	36.1	522	1147	1373
	1120	126	.554	10.0	23.2	346	1124	910

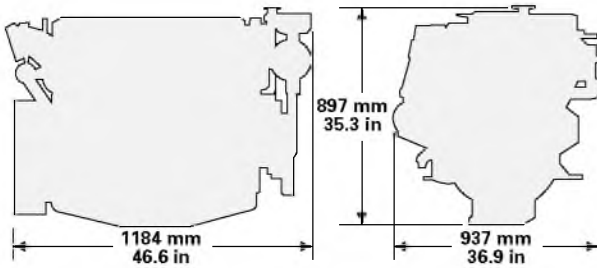
Prop	2800	224.0	222	59.2	218.3	24.4	483	49.0
Demand	2600	179.3	215	46.0	168.4	20.0	429	38.9
Curve: P	2400	141.1	212	35.7	118.7	15.6	401	30.3
	2200	108.7	212	27.5	78.0	12.0	382	23.2
	2100	94.5	213	24.0	61.4	10.4	372	20.2
	2000	81.6	215	20.9	46.6	9.0	361	17.4
	1800	59.5	221	15.7	24.3	6.8	331	12.8
	1600	41.8	233	11.6	12.0	5.4	292	9.7
	1400	28.0	250	8.3	5.0	4.6	248	7.6
	1200	17.6	270	5.7	0.4	3.5	212	5.5
	1120	14.3	279	4.8	1.9	3.0	199	4.6

Prop	2800	300	.364	15.6	64.6	861	901	1729
Demand	2600	240	.354	12.2	49.9	706	804	1373
Curve: P	2400	189	.349	9.4	35.2	550	754	1069
	2200	146	.349	7.3	23.1	423	720	819
	2100	127	.350	6.3	18.2	367	701	713
	2000	109	.353	5.5	13.8	318	681	614
	1800	80	.364	4.1	7.2	240	628	452
	1600	56	.384	3.1	3.6	191	557	342
	1400	38	.411	2.2	1.5	162	479	268
	1200	24	.444	1.5	0.1	124	413	194
	1120	19	.459	1.3	0.6	106	389	162

Brake Mean Effective Pressure1326 kPa

Brake Mean Effective Pressure192 psi

DIMENSIONS



RATING DEFINITIONS AND CONDITIONS

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

RATINGS are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50°C (122°F) and for sea water temperatures up to and including 42°C (108°F) at sea level.

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/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven. For a “without pumps” condition, deduct approximately 0.5% for each pump not engine driven.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.



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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.

TMI Reference No.: DM4953-00 (4-23-01)

Materials and specifications are subject to change without notice.

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

LEHM1456 (4-01)

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261 bkW @ 2800 rpm
350 bhp @ 2800 rpm



Shown with
Accessory Equipment

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	IMO compliant
Bore—mm (in)	110 (4.33)
Stroke—mm (in)	127 (5.0)
Displacement—L (cu in)	7.2 (442)
Rotation (from flywheel end)	Counterclockwise
Compression Ratio	15.5:1
Capacity for Liquids—L (U.S. gal)	
Cooling System	28 (7.4)
Lube Oil System (refill)	25 (6.6)
Oil Change Interval — hrs	250
Caterpillar DEO 10W30 or 15W40	
Engine Weight, Net Dry	
(approx) — kg (lb)	722 (1,592)

STANDARD ENGINE EQUIPMENT

Air Inlet System

12V air inlet heater, sea water aftercooler, air cleaner/fumes disposal, turbocharger

Charging System

12V, 51 amp charging alternator

Control System

mechanical governor, forward facing throttle control

Cooling System

thermostats and housing, belt-driven centrifugal jacket water pump, gear-driven auxiliary sea water pump, expansion tank, marine gear oil cooler, engine mounted heat exchanger with removable copper-nickel tube bundle, auxiliary sea water lines

Exhaust System

watercooled exhaust manifold and turbocharger, fumes disposal

Flywheel and Flywheel Housing

SAE No. 3 flywheel (126 teeth) and SAE No. 3 flywheel housing, SAE standard rotation

Fuel System

RH or LH service filter, fuel transfer pump

Instrumentation

magnetic pickup tachometer drive, wiring harness includes junction box, mounting and hardware, 12V oil pressure and water temperature sender group (single station)

Lube System

crankcase breather, gear-driven engine oil pump, RH or LH service oil filter, oil filler, oil level gauge, pan drain, lubricating oil

Protection System

12V energized-to-run solenoid shutoff, alarm contactor

Starting System

12V rear-facing electric starting motor, 12V junction box

General

vibration damper and guard, Caterpillar yellow paint, lifting eyes

BDC

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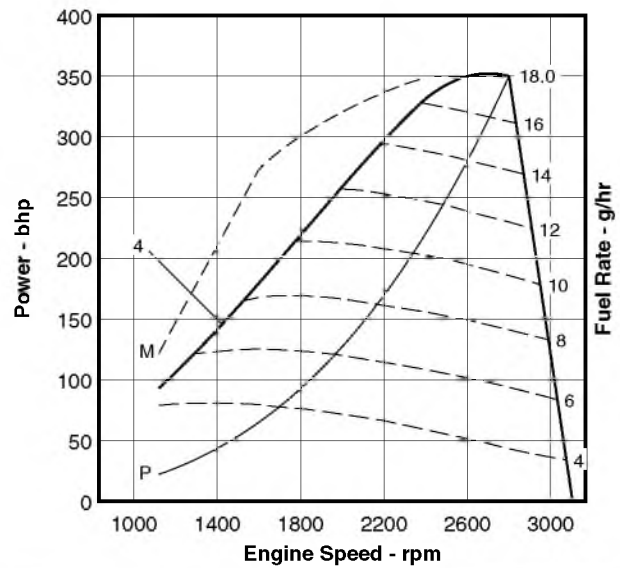
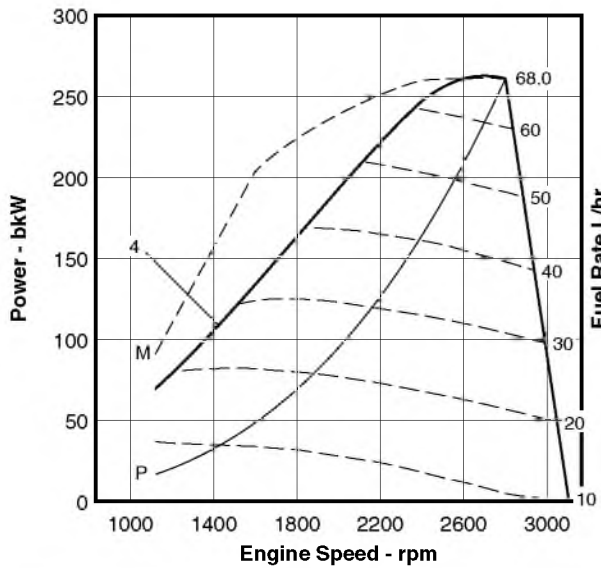
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.



PERFORMANCE CURVES

E Rating — DM4952-00

IMO Compliant



261 kW

SI Metric

350 bhp

English

Performance Data

	Engine Speed rpm	Engine Power kW	BSFC g/bkW-h	Fuel Rate L/h	Boost Press kPa Gauge	Intake Air Flow m ³ /min	Exh Manif Temp °C	Exh Gas Flow m ³ /min
Max	2800	261.0	218	67.9	187.8	22.1	573	52.6
Limit	2600	261.0	214	66.7	180.7	20.9	575	50.5
Curve: 4	2400	247.3	209	61.6	171.5	19.2	557	45.8
	2200	221.6	203	53.7	157.4	16.9	525	39.2
	2000	193.2	200	46.0	138.0	14.4	504	32.9
	1800	163.5	200	39.0	104.9	11.3	517	26.9
	1600	134.0	203	32.4	67.5	8.3	557	21.0
	1400	105.5	208	26.1	40.5	5.9	572	15.6
	1200	79.2	211	19.9	24.7	4.6	526	11.6
	1120	69.6	210	17.4	17.2	3.7	502	9.0

Max	2800	261.0	218	67.9	187.8	22.1	573	52.6
Power	2600	261.0	215	66.7	180.7	20.9	575	50.5
Curve: M	2400	260.0	210	65.1	177.2	19.5	581	48.0
	2200	251.0	206	61.5	170.9	17.7	583	43.8
	2000	239.0	204	58.1	162.8	15.8	587	39.8
	1800	224.0	206	55.0	153.3	14.0	605	36.4
	1600	204.0	217	52.8	126.6	11.2	713	30.7
	1400	157.0	253	47.4	18.0	5.4	832	19.5
	1200	110.0	290	38.1	80.1	10.2	657	27.9
	1120	91.0	289	31.3	55.1	7.7	612	20.6

Prop	2800	261.0	218	68.0	187.8	22.1	573	52.6
Demand	2600	209.0	212	52.8	159.5	19.4	488	41.9
Curve: P	2400	164.4	209	41.0	128.8	16.2	431	33.1
	2200	126.6	209	31.6	90.4	12.6	405	25.6
	2100	110.1	210	27.6	71.9	10.9	399	22.2
	2000	95.1	211	24.0	55.3	9.5	389	19.2
	1800	69.3	217	17.9	29.3	7.2	359	14.2
	1600	48.7	229	13.3	13.9	5.7	318	10.6
	1400	32.6	246	9.6	5.4	4.6	273	7.9
	1200	20.5	265	6.5	0.8	3.4	230	5.5
	1120	16.7	272	5.4	2.6	3.0	215	4.7

Performance Data

	Engine Speed rpm	Engine Power bhp	BSFC lb/bhp-h	Fuel Rate gph	Boost Press in.Hg. Gauge	Intake Air Flow cfm	Exh Manif Temp °F	Exh Gas Flow cfm
Max	2800	350	.359	17.9	55.6	780	1063	1856
Limit	2600	350	.352	17.6	53.5	738	1067	1782
Curve: 4	2400	332	.343	16.3	50.8	678	1035	1616
	2200	297	.334	14.2	46.6	596	977	1383
	2000	259	.329	12.2	40.9	508	939	1161
	1800	219	.329	10.3	31.1	399	962	949
	1600	180	.334	8.6	20.0	293	1034	741
	1400	141	.341	6.9	12.0	208	1061	550
	1200	106	.347	5.3	7.3	162	980	409
	1120	93	.344	4.6	5.1	131	935	318

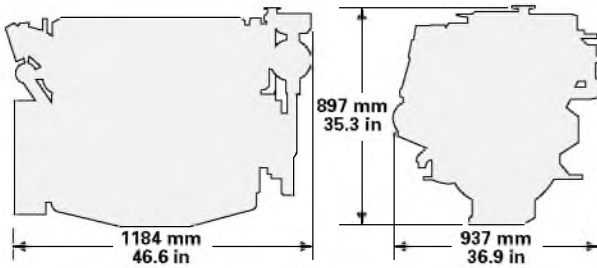
Max	2800	350	.359	17.9	55.6	780	1063	1856
Power	2600	350	.353	17.6	53.5	738	1067	1782
Curve: M	2400	349	.345	17.2	52.5	688	1077	1694
	2200	337	.338	16.2	50.6	625	1081	1546
	2000	321	.335	15.3	48.2	558	1088	1404
	1800	300	.338	14.5	45.4	494	1120	1284
	1600	274	.357	13.9	37.5	395	1315	1083
	1400	211	.417	12.5	5.3	191	1529	688
	1200	148	.477	10.1	23.7	360	1214	985
	1120	122	.475	8.3	16.3	272	1133	727

Prop	2800	350	.359	18.0	55.6	780	1063	1856
Demand	2600	280	.349	13.9	47.2	685	910	1479
Curve: P	2400	220	.344	10.8	38.1	572	807	1168
	2200	170	.344	8.3	26.8	445	760	903
	2100	148	.345	7.3	21.3	385	750	783
	2000	128	.347	6.3	16.4	335	732	678
	1800	93	.356	4.7	8.7	254	678	501
	1600	65	.376	3.5	4.1	201	605	374
	1400	44	.404	2.5	1.6	162	523	279
	1200	27	.435	1.7	0.2	120	446	194
	1120	22	.448	1.4	0.8	106	419	166

Brake Mean Effective Pressure1545 kPa

Brake Mean Effective Pressure224 psi

DIMENSIONS



RATING DEFINITIONS AND CONDITIONS

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

RATINGS are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50°C (122°F) and for sea water temperatures up to and including 42°C (108°F) at sea level.

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/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven. For a “without pumps” condition, deduct approximately 0.5% for each pump not engine driven.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.



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TMI Reference No.: DM4952-00 (4-23-01)

Materials and specifications are subject to change without notice.

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

LEHM1457 (4-01)

Printed in U.S.A.

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287 bkW @ 2800 rpm
385 bhp @ 2800 rpm



Shown with
Accessory Equipment

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	IMO compliant
Bore—mm (in)	110 (4.33)
Stroke—mm (in)	127 (5.0)
Displacement—L (cu in)	7.2 (442)
Rotation (from flywheel end)	Counterclockwise
Compression Ratio	15.5:1
Capacity for Liquids—L (U.S. gal)	
Cooling System	28 (7.4)
Lube Oil System (refill)	25 (6.6)
Oil Change Interval — hrs	250
Caterpillar DEO 10W30 or 15W40	
Engine Weight, Net Dry	
(approx) — kg (lb)	722 (1,592)

STANDARD ENGINE EQUIPMENT

Air Inlet System

12V air inlet heater, sea water aftercooler, air cleaner/fumes disposal, turbocharger

Charging System

12V, 51 amp charging alternator

Control System

mechanical governor, forward facing throttle control

Cooling System

thermostats and housing, belt-driven centrifugal jacket water pump, gear-driven auxiliary sea water pump, expansion tank, marine gear oil cooler, engine mounted heat exchanger with removable copper-nickel tube bundle, auxiliary sea water lines

Exhaust System

watercooled exhaust manifold and turbocharger, fumes disposal

Flywheel and Flywheel Housing

SAE No. 3 flywheel (126 teeth) and SAE No. 3 flywheel housing, SAE standard rotation

Fuel System

RH or LH service filter, fuel transfer pump

Instrumentation

magnetic pickup tachometer drive, wiring harness includes junction box, mounting and hardware, 12V oil pressure and water temperature sender group (single station)

Lube System

crankcase breather, gear-driven engine oil pump, RH or LH service oil filter, oil filler, oil level gauge, pan drain, lubricating oil

Protection System

12V energized-to-run solenoid shutoff, alarm contactor

Starting System

12V rear-facing electric starting motor, 12V junction box

General

vibration damper and guard, Caterpillar yellow paint, lifting eyes

BDC

From the library of Barrington Diesel Club

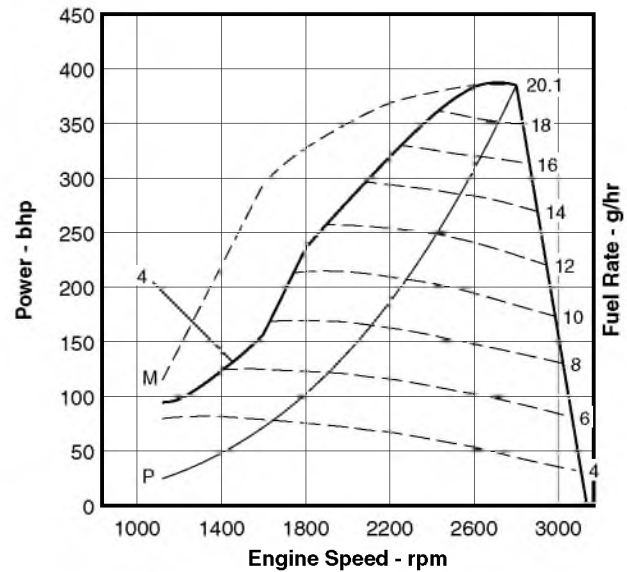
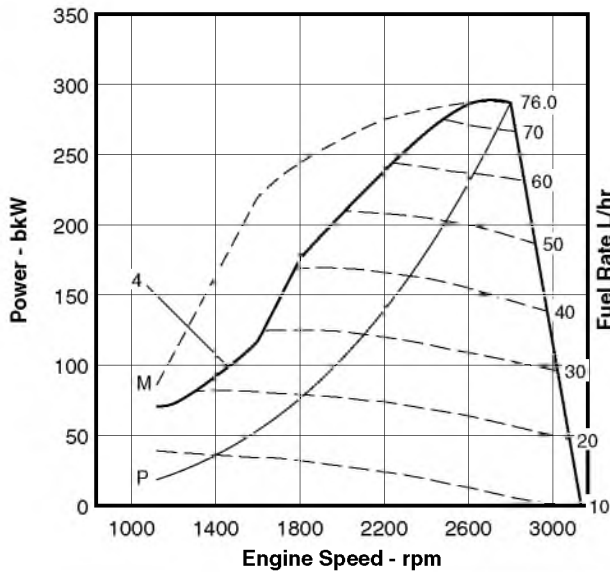
Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.



PERFORMANCE CURVES

E Rating — DM4951-00

IMO Compliant



287 bkW

SI Metric

Performance Data

	Engine Speed rpm	Engine Power bkW	BSFC g/bkW-h	Fuel Rate L/h	Boost Press kPa Gauge	Intake Air Flow m ³ /min	Exh Manif Temp °C	Exh Gas Flow m ³ /min
Max	2800	287.0	222.2	76.0	198.7	23.0	618	57.9
Limit	2600	286.0	220.2	75.1	198.3	21.9	628	56.7
Curve: 4	2400	265.9	214.2	67.9	185.5	19.8	599	50.2
	2200	238.3	207.1	58.8	168.0	17.4	562	42.2
	2000	207.8	200.9	49.7	145.5	14.6	528	34.2
	1800	175.8	199.5	41.8	115.1	11.7	531	28.0
	1600	117.0	201.3	28.1	56.4	7.7	512	18.8
	1400	92.2	204.0	22.4	34.6	5.7	510	14.0
	1200	72.4	207.7	17.9	20.8	4.2	487	10.2
	1120	70.5	210.2	17.7	19.7	3.8	501	9.4
Max Power	2800	287.0	222.2	76.0	198.7	23.0	618	57.9
Curve: M	2600	287.0	217.7	74.5	198.6	21.9	629	56.8
	2400	282.0	212.8	71.5	190.0	19.9	620	51.7
	2200	275.0	207.8	68.1	184.9	18.4	629	48.2
	2000	261.0	203.4	63.3	174.5	16.1	630	42.0
	1800	244.0	201.6	58.6	162.7	13.8	648	36.6
	1600	220.0	222.8	58.4	138.3	11.8	735	33.1
	1400	164.0	258.4	50.5	77.8	8.7	791	28.1
	1200	108.0	276.7	35.6	79.7	9.4	635	26.0
	1120	86.0	244.9	25.1	37.0	5.1	586	13.8
Prop Demand	2800	287.0	222.2	76.0	198.7	23.0	618	57.9
Curve: P	2600	229.8	212.4	58.2	171.4	20.1	524	45.8
	2400	180.7	206.4	44.5	141.9	16.8	447	35.1
	2200	139.2	204.7	34.0	105.0	13.4	411	27.1
	2100	121.1	205.4	29.6	83.7	11.6	403	23.6
	2000	104.6	207.1	25.8	64.3	10.0	398	20.3
	1800	76.2	212.5	19.3	35.3	7.4	373	14.8
	1600	53.6	220.9	14.1	18.4	5.8	332	11.0
	1400	35.9	232.8	10.0	8.8	4.6	283	8.2
	1200	22.6	247.6	6.7	2.5	3.7	238	6.0
	1120	18.4	254.2	5.6	0.2	3.3	224	5.2

Brake Mean Effective Pressure1699 kPa

385 bhp

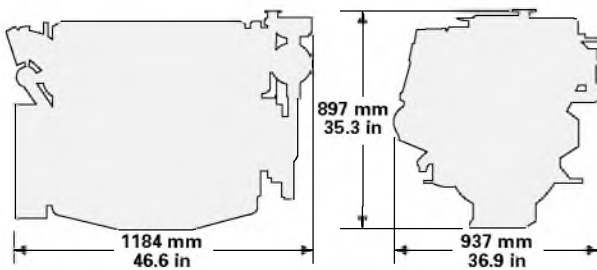
English

Performance Data

	Engine Speed rpm	Engine Power bhp	BSFC lb/bhp-h	Fuel Rate gph	Boost Press in.Hg. Gauge	Intake Air Flow cfm	Exh Manif Temp °F	Exh Gas Flow cfm
Max	2800	385	.365	20.1	58.8	812	1145	2045
Limit	2600	384	.362	19.8	58.7	773	1162	2002
Curve: 4	2400	357	.352	17.9	54.9	699	1110	1773
	2200	320	.340	15.5	49.8	614	1043	1490
	2000	279	.330	13.1	43.1	516	982	1208
	1800	236	.328	11.0	34.1	413	987	989
	1600	157	.331	7.4	16.7	272	953	664
	1400	124	.335	5.9	10.2	201	951	494
	1200	97	.341	4.7	6.2	148	909	360
	1120	95	.346	4.7	5.8	134	933	332
Max Power	2800	385	.365	20.1	58.8	812	1145	2045
Curve: M	2600	385	.358	19.7	58.8	773	1164	2006
	2400	378	.350	18.9	56.3	703	1148	1826
	2200	369	.342	18.0	54.8	650	1164	1702
	2000	350	.334	16.7	51.7	569	1166	1483
	1800	327	.331	15.5	48.2	487	1198	1293
	1600	295	.366	15.4	41.0	417	1356	1169
	1400	220	.425	13.3	23.0	307	1457	992
	1200	145	.455	9.4	23.6	332	1176	918
	1120	115	.403	6.6	11.0	180	1087	487
Prop Demand	2800	385	.365	20.1	58.8	812	1145	2045
Curve: P	2600	308	.349	15.4	50.8	710	975	1617
	2400	242	.339	11.8	42.0	593	836	1240
	2200	187	.337	9.0	31.1	473	772	957
	2100	162	.338	7.8	24.8	410	757	833
	2000	140	.340	6.8	19.0	353	748	717
	1800	102	.349	5.1	10.5	261	703	523
	1600	72	.363	3.7	5.4	205	629	388
	1400	48	.383	2.6	2.6	162	542	290
	1200	30	.407	1.8	0.7	131	460	212
	1120	25	.418	1.5	0.1	117	435	184

Brake Mean Effective Pressure246 psi

DIMENSIONS



RATING DEFINITIONS AND CONDITIONS

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

RATINGS are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50°C (122°F) and for sea water temperatures up to and including 42°C (108°F) at sea level.

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/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven. For a “without pumps” condition, deduct approximately 0.5% for each pump not engine driven.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

The logo consists of the letters 'BDC' in a stylized, red, serif font.

From the library of Barrington Diesel Club

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.

TMI Reference No.: DM4951-00 (8-00)

Materials and specifications are subject to change without notice.

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

LEHM0594 (3-01)

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BDC

Shown with
Accessory Equipment

From the library of Barrington Diesel Club

CATERPILLAR® ENGINE SPECIFICATIONS

In-Line 6, 4-Stroke-Cycle-Diesel

Emissions IMO compliant

Bore — mm (in) 110 (4.33)

Stroke — mm (in) 127 (5.0)

Displacement — L (cu in) 7.2 (442)

Rotation (from flywheel end)... Counterclockwise

Compression Ratio 15.0:1

Capacity for Liquids — L (U.S. gal)

 Cooling System 28.0 (7.4)

 Lube Oil System (refill) 25.0 (6.6)

Oil Change Interval 250 hrs

Engine Weight, Net Dry

 (approx) — kg (lb) 722 (1592)

STANDARD EQUIPMENT

Air intake

aftercooler, air cleaner/fumes disposal (closed system), air inlet heater

Alternator

belt driven, 12 volt, 51 ampere

Cooling

transmission oil cooler, heat exchanger, auxiliary sea water pump, expansion tank, thermostat, jacket water pump

Exhaust

watercooled manifold and turbocharger

Flywheel and housing

SAE No. 3, rear-facing starter

Fuel

filter, fuel transfer pump

Governor

mechanical

Instrumentation

magnetic pickup (for tachometer drive)

Lubricating

oil filter, filler, dipstick, crankcase breather, oil pump

Service RH and LH

service per top level PAs

Starting

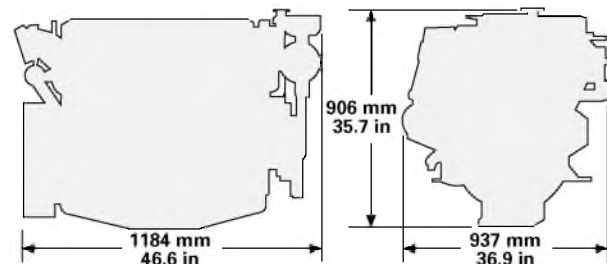
electric

Torsional vibration damper

Wiring harness

junction box, mounting and hardware

DIMENSIONS



This Caterpillar Marine Engine can be operated with air inlet temperatures up to 50°C (122°F) measured at the air inlet, and fuel temperatures 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.



RATING DEFINITIONS AND CONDITIONS

Ratings are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in Hg), 27°C (81°F), and 60% relative humidity.

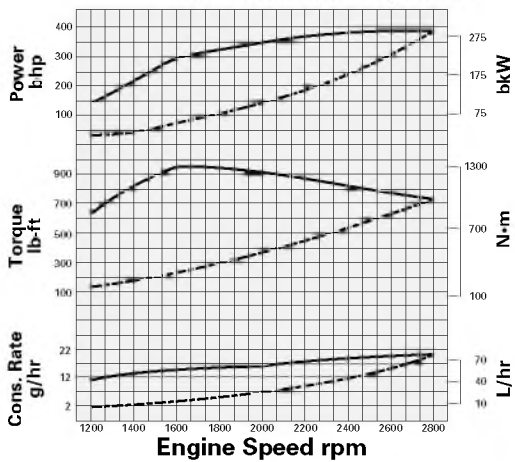
Fuel rates are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18 390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal).

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

3126 MUI MARINE ENGINE – 224-287 bkW

PERFORMANCE CURVES

E Rating – 2800 rpm
287 bkW (385 bhp) 390 mhp



Cubic Prop Demand Curve Data
(for displacement hulls only)

Speed rpm	Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
2800	287	979	222	76.0
2600	230	844	212	58.2
2400	181	719	206	44.5
2200	139	604	205	34.0
2000	105	499	207	25.8
1800	76	405	213	19.3
1600	54	320	221	14.1
1400	36	245	233	10.0
1200	23	180	248	6.7

Speed rpm	Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
2800	385	722	.365	20.1
2600	308	623	.349	15.4
2400	242	530	.339	11.8
2200	187	445	.337	9.0
2000	140	368	.340	6.8
1800	102	299	.349	5.1
1600	72	236	.363	3.7
1400	48	181	.383	2.6
1200	30	133	.407	1.8

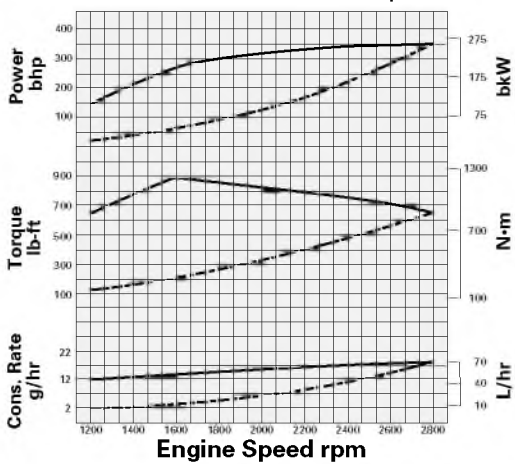
TMI — DM4951-00
Max Power Curve Data

Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
287	979	222	76.0
287	1054	218	74.5
282	1122	213	71.5
275	1194	208	68.1
261	1246	203	63.3
244	1294	202	58.7
220	1313	215	56.4
164	1119	256	50.1
108	859	327	42.1

Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
385	722	.365	20.1
385	777	.358	19.7
378	828	.350	18.9
369	881	.342	18.0
350	919	.334	16.7
327	954	.332	15.5
295	968	.353	14.9
220	825	.421	13.2
145	634	.537	11.1

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

E Rating – 2800 rpm
261 bkW (350 bhp) 355 mhp



Cubic Prop Demand Curve Data
(for displacement hulls only)

Speed rpm	Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
2800	261	890	218	68.0
2600	209	768	212	52.8
2400	164	654	209	41.0
2200	127	550	209	31.5
2000	95	454	211	23.9
1800	69	368	217	17.9
1600	49	291	229	13.3
1400	33	223	246	9.6
1200	21	163	265	6.5

Speed rpm	Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
2800	350	656	.359	18.0
2600	280	566	.349	13.9
2400	220	482	.344	10.8
2200	170	406	.344	8.3
2000	128	335	.347	6.3
1800	93	271	.356	4.7
1600	65	215	.376	3.5
1400	44	164	.404	2.5
1200	27	120	.435	1.7

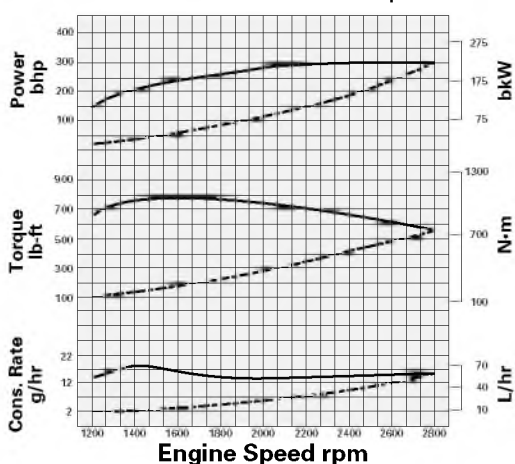
TMI — DM4952-00
Max Power Curve Data

Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
261	890	218	67.9
261	959	215	66.7
260	1035	210	65.1
251	1089	206	61.5
239	1141	204	58.1
224	1188	206	55.0
204	1218	215	52.3
157	1071	249	46.6
110	875	342	44.8

Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
350	656	.359	17.9
350	707	.353	17.6
349	763	.345	17.2
337	803	.338	16.2
321	842	.335	15.3
300	876	.339	14.5
274	898	.354	13.8
211	790	.409	12.3
148	645	.562	11.8

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

E Rating – 2800 rpm
224 bkW (300 bhp) 304 mhp



Cubic Prop Demand Curve Data
(for displacement hulls only)

Speed rpm	Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
2800	224	764	222	59.2
2600	179	659	215	46.0
2400	141	561	212	35.7
2200	109	472	212	27.5
2000	82	390	215	20.9
1800	60	316	221	15.7
1600	42	249	233	11.6
1400	28	191	250	8.3
1200	18	140	270	5.7

Speed rpm	Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
2800	300	563	.364	15.6
2600	240	486	.354	12.2
2400	189	414	.349	9.4
2200	146	348	.349	7.3
2000	109	288	.353	5.5
1800	80	233	.364	4.1
1600	56	184	.383	3.1
1400	38	141	.411	2.2
1200	24	103	.444	1.5

TMI — DM4953-00
Max Power Curve Data

Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
224	764	222	59.2
224	823	214	57.0
224	891	207	55.2
221	959	201	52.9
211	1007	198	49.9
198	1050	218	51.4
178	1062	297	63.0
154	1050	376	68.9
111	883	397	52.5

Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
300	563	.364	15.6
300	607	.351	15.1
300	657	.340	14.6
296	707	.331	14.0
283	743	.326	13.2
266	774	.358	13.6
239	783	.489	16.6
207	774	.617	18.2
149	651	.653	13.9

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

- Prop Demand ----- 3.0 Exponent (for displacement hulls only)
- Engine Performance Parameters: Power +/- 3%; Specific Fuel Consumption +/- 3%; Fuel Rate +/- 5%.