

CUMMINS ENGINE COMPANY, INC
Columbus, Indiana 47201

Marine Performance Curve

Basic Engine Model:
370B (SW)

Curve Number:
M-90034

Marine
Pg. No.
B
49

Engine Configuration:
D403041MX02

CPL Code:
2208

Date:
07Dec00

Displacement: **5.9 litre [359 in.³]**
Bore: **102 mm [4.02 in.]**
Stroke: **120 mm [4.72 in.]**
Fuel System: **Inline Bosch P7100**
Cylinders: **6**

Advertised Power:

kW [HP, Metric] @ RPM
265* [370] @ 3000

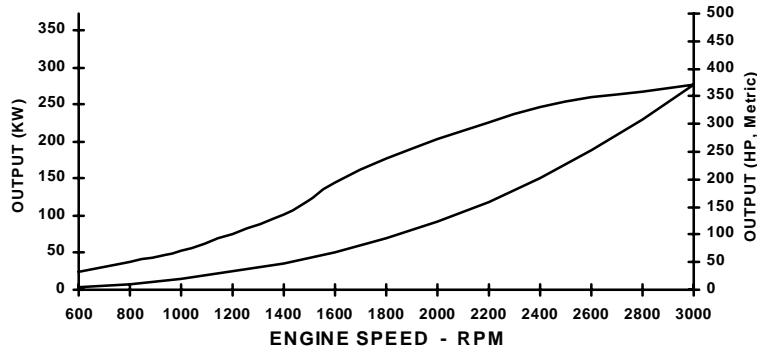
Aspiration:

**Turbocharged / Sea Water Aftercooled
High Output**

Rating Type:

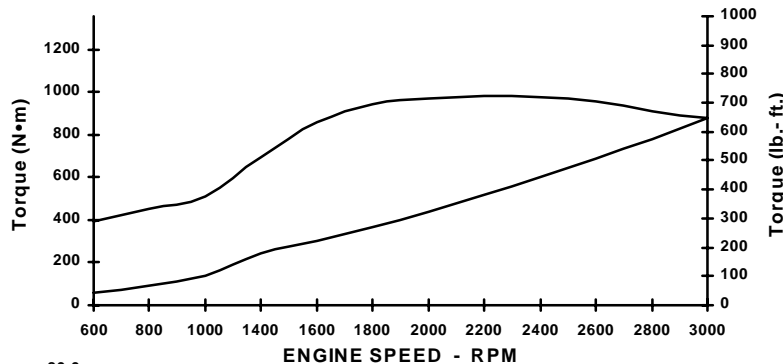
CERTIFIED: This marine diesel engine conforms with the NOx requirements of the International Maritime Organization (IMO), MARPOL 73/78 Annex VI, Regulation 13 as applicable.

RATED POWER OUTPUT CURVE



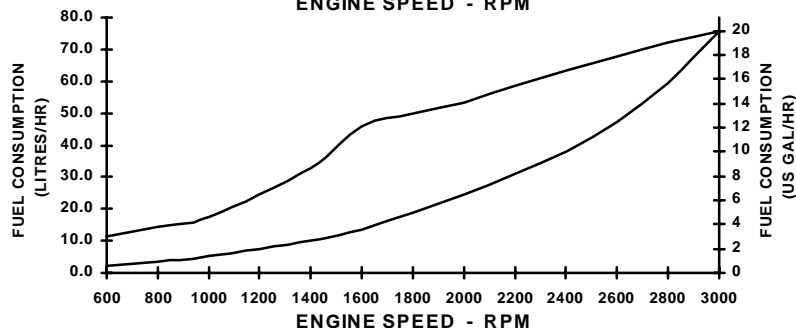
RPM	kW	HP
3000	265	(370)
2800	267	(358)
2400	246	(330)
2000	226	(272)
1800	178	(238)
1600	144	(193)
1400	102	(137)
1000	53	(72)
800	38	(51)
600	25	(33)

FULL LOAD TORQUE CURVE



RPM	N·m	lb.-ft.
3000	879	(648)
2800	910	(671)
2400	979	(722)
2000	967	(724)
1800	942	(695)
1600	860	(634)
1400	697	(514)
1000	510	(376)
800	450	(332)
600	391	(288)

FUEL CONSUMPTION - PROP CURVE



RPM	Litres/hr	Gal/hr
3000	75.8	(20.0)
2800	59.6	(15.8)
2400	37.9	(10.0)
2000	24.5	(6.5)
1800	18.7	(4.9)
1600	13.6	(3.6)
1400	10.2	(2.7)
1000	5.1	(1.4)
800	3.4	(0.9)
600	2.2	(0.6)

Rating Conditions: Ratings are based upon ISO 8665 and SAE J1228 reference conditions; air pressure of 100 kPa [29.612 in. Hg], air temperature 25°C [77°F], and 30% relative humidity. Power is rated in accordance with IMCI procedures. Member NMMA.

Rated Curves (upper) represent rated power at the crankshaft for mature gross engine performance capabilities obtained and corrected in accordance with ISO 3046. Propeller Curve (lower) is based on a typical fixed propeller demand curve using a 2.7 exponent. Propeller Shaft Power is approximately 3% less than rated crankshaft power after typical reverse/reduction gear losses and may vary depending on the type of gear or propulsion system used.

Fuel Consumption is based on fuel of 35° API gravity at 16°C [60°F] having LHV of 42,780 kJ/kg [18390 Btu/lb] and weighing 838.9 g/liter [7.001 lb/U.S. gal].

High Output Rating: This Rating is for use in variable load applications where full power is limited to one (1) hour out of every eight (8) hours of operation. Also, reduced power operations must be at or below 200 RPM of the maximum rated RPM. This rating is for pleasure/non-revenue generating applications that operate 300 hours per year or less.

CHIEF ENGINEER

Marine Engine Performance Data

Curve No. M-90034
DS-4960
CPL: 2208
DATE: 07Dec00

General Engine Data

Engine Model	370B (SW)
Rating Type	High Output
Rated Engine Power	265 [370]
Rated Engine Speed	3000
Rated HP Production Tolerance	±5
Rated Engine Torque	878 [648]
Peak Engine Torque @ 2200 RPM	982 [724]
Brake Mean Effective Pressure	1876 [272]
Minimum Idle Speed Setting	600
Normal Idle Speed Variation	±50
High Idle Speed Range - Minimum	3300
High Idle Speed Range - Maximum	3400
Maximum Torque Capacity from Front of Crank ²	N.A.
Compression Ratio	15.3:1
Piston Speed	12.0 [2360]
Firing Order	1-5-3-6-2-4
Weight (Dry) Engine Only - Average	N/A
Weight (Dry) Engine With Heat Exchanger System - Average	581 [1280]

Fuel System¹

Approximate Fuel Flow to Pump	277 [73]
Maximum Allowable Fuel Supply to Pump Temperature	60 [140]
Approximate Fuel Flow Return to Tank	N.A.
Approximate Fuel Return to Tank Temperature	N.A.
Maximum Heat Rejection to Drain Fuel⁵	N.A.
Fuel Transfer Pump Pressure Range	124-172 [18-25]

Air System¹

Intake Manifold Pressure	1448 [57]
Intake Air Flow	339 [718]
Heat Rejection to Ambient	35 [2012]

Exhaust System¹

Exhaust Gas Flow	906 [1919]
Exhaust Gas Temperature (Turbine Out)	481 [898]
Exhaust Gas Temperature (Manifold)	N.A.

Emissions (in accordance with ISO8178 Cycle E3)

NOx (Oxides of Nitrogen)	8.85 [6.60]
HC (Hydrocarbons)	0.42 [0.31]
CO (Carbon Monoxide)	1.45 [1.08]
PM (Particulate Matter)	0.23 [0.17]

Cooling System¹

Coolant Flow to Engine Heat Exchanger/Keel Cooler	236 [62]
Standard Thermostat Operating Range (Min.)	83 [181]
Standard Thermostat Operating Range (Max.)	95 [203]
Heat Rejection to Engine Coolant ³	184 [10,500]
Sea Water Flow (With Heat Exchanger Option)⁴	220 [58]
Pressure Cap Rating (With Heat Exchanger Option)	103 [15]

INSTALLATION DRAWING

Engine Only	3626425
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TBD = To Be Decided

N/A = Not Applicable

N.A. = Not Available

¹All Data at Rated Conditions

²Consult Installation Direction Booklet for Limitations

³Heat rejection values are based on 50% water/ 50% ethylene glycol mix and do NOT include fouling factors. If sourcing your own cooler, a service fouling factor should be applied according to the cooler manufacturer's recommendation.

⁴Consult option notes for flow specifications of optional Cummins seawater pumps, if applicable.

⁵May not be at rated load and speed. Maximum heat rejection may occur at other than rated conditions.

CUMMINS ENGINE COMPANY, INC.
COLUMBUS, INDIANA

All Data is Subject to Change Without Notice - consult the following Cummins intranet site for most recent data:
<http://marketingtechdata.cummins.com/curves/database/htmlfiles/curvemainpage.htm>