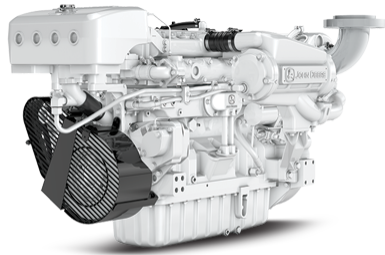


PowerTech™

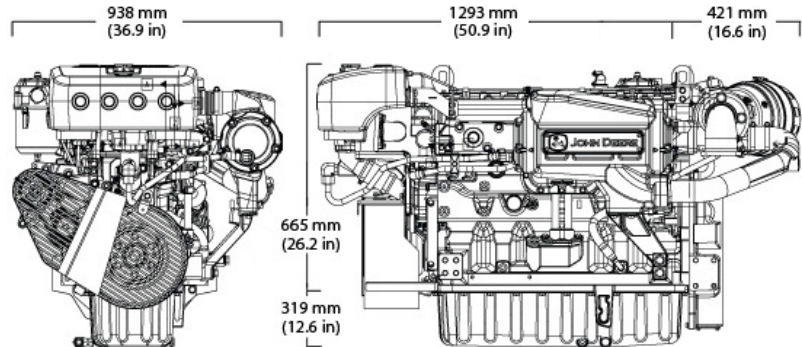
6090AFM85 Diesel Engine

Propulsion Engine Specifications



6090AFM85 shown

Dimensions



Certifications

EPA Commercial Marine Tier 3
IMO MARPOL Annex VI Compliant
NRMM (97/68/EC) as amended

General data

Model	6090AFM85	Length - mm (in)	1714 (67.5)
Number of cylinders	6	Width - mm (in)	938 (36.9)
Displacement - L (cu in)	9.0 (549)	Height, Centerline to Top-- mm. (in)	665 (26.2)
Bore and Stroke-- mm (in)	118 x 136 (4.65 x 5.35)	Height, Centerline to Bottom-- mm. (in)	319 (12.6)
Compression Ratio	16.3 : 1	Weight, dry-- kg (lb)	1055 (2326)
Engine Type	In-line, 4- Cycle	Maximum Installed Angle	Front Up – degrees 12 Front Down – degrees 0
Aspiration	Turbocharged and air-to-coolant aftercooled		

Features and benefits

Turbocharged with Air-to-Sea Aftercooling

Cooler operation enables higher power ratings and higher efficiencies.
Seawater aftercooled engines excel in higher power/speed applications.

Four Valves Per Cylinder

The 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time.

High-Pressure Common-Rail

The HPCR fuel system provides variable common-rail pressure, multiple injections, and controls fuel injection timing and provides precise control for the start, duration, and end of injection.

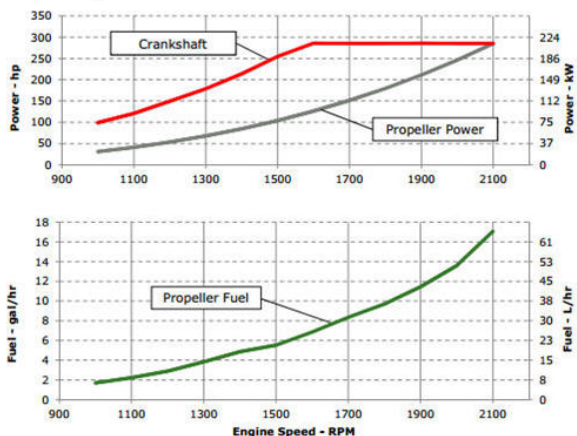
Keel-Cooled or Integrated Heat Exchanger

Keel-cooled engine option results in a closed cooling system and eliminates the need for a sea-strainer, seawater pump, or anodes.

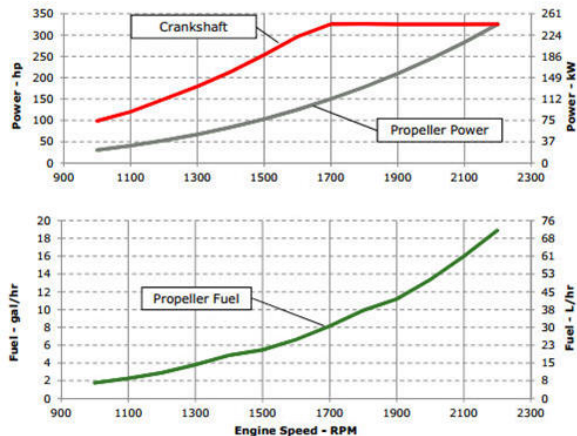
Heat exchanger option results in the engine being cooled via seawater to engine coolant heat exchanger.

Performance curve

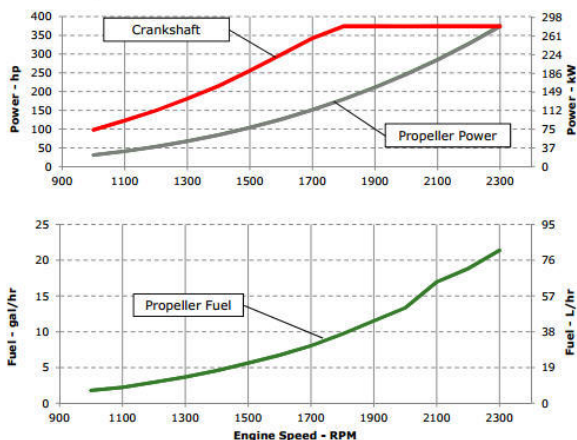
M1 Rating



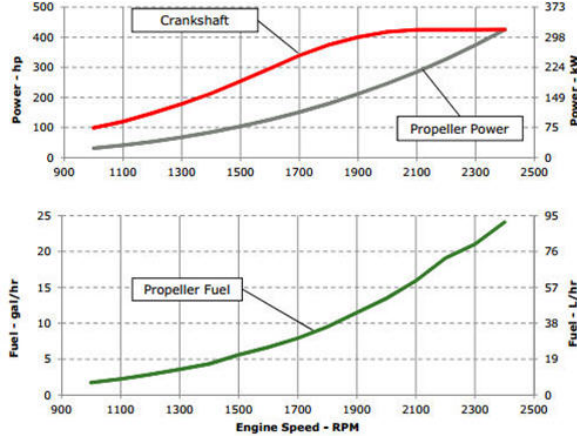
M2 Rating



M3 Rating



M4 Rating



Performance data	M4	M3	M2	M1
Rated Power - kW (hp)	317 (425)	280 (375)	243 (326)	213 (286)
Rated Speed - rpm	2400	2300	2200	2100
Low Idle Speed - rpm	650	650	650	650
Peak Torque - Nm (ft-lb)	1500 (1106)	1485 (1095)	1364 (1006)	1272 (938)
Peak Torque Speed - rpm	1900	1800	1700	1600
Fuel Consumption - L/h (gal/hr)	91.2 (24.1)	80.9 (21.4)	71.4 (18.9)	64.6 (17.1)

M rating	M4	M3	M2	M1
Typical load factor	< =40%	< =50%	< =65%	> 65%
Typical annual usage (hr)	1,000-3,000 hr	2,000-4,000 hr	3,000-5,000 hr	Unrestricted
Typical full-power operation (hr)	1 of each 12 hr	4 of each 16 hr	16 of each 24 hr	Uninterrupted

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All values at rated speed and power with standard options unless otherwise noted.
Specifications and design subject to change without notice.