

**PowerTech**<sup>™</sup>



# **Propulsion Specifications**



## General Data

Model	6090SFM75
Number of cylinders	6
Displacement L (cu in)	9.0 (549)
Bore and Stroke mm (in)	118 x 127 (4.65 x 5.00)
Compression Ratio	
Engine Type	In-line, 4- Cycle
Aspiration	Seawater Aftercooled

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- IMO MARPOL Annex VI
- US EPA Marine Tier 2 Compliant
- IWT (2004/26/EC)
- RCD (2003/44/EC)

Length mm (in)	1293 (50.9)
Width mm (in)	917 (36.1)
Height, Centerline to Top mm. (in)	658 (25.9)
Height, Centerline to Bottom mm. (in)	319 (12.6)
Weight, dry kg (lb)	1066 (2350)
Maximum Installed Angle	
Front Up - degrees	
Front Down - degrees	0

## Dimensions



## Features and Benefits

#### Watercooled Turbocharger and Exhaust Manifold

- Cooler and quieter environment for vessel and crew
- Reduced external connections eliminates hoses and fittings that can leak or break

### **Directed Top-liner Cooling**

- Reduces upper liner temperature by as much as 100 degrees Fahrenheit (54 degrees Celsius)
- Durable and reliable power cylinder components

## Replaceable Wet-type Cylinder Liners

## Hardened and precision machined for long life

## **Corrosion Resistant Components**

Provides engine protection from the effects of seawater

## Gear Auxiliary Drive

 Optional auxiliary drive for wash-down pumps, hydraulic oil pumps, and air compressors

## Front or Side Service

- Oil and fuel filter combinations
- Application and service flexibility to provide installation convenience plus fast and easy maintenance

### Heat Exchanger Cooled

- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Seawater aftercooler for increased power and efficiency

#### High Torque and Low Rated RPM

- Enables the engine to turn larger propellers at lower speed for best efficiency
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

#### **Fuel System**

- Electronically controlled high pressure common rail fuel system provides precise fuel delivery with variable timing resulting in excellent fuel economy and performance
- 3-5% Generator Droop Governing
- Self diagnostics and protection
- Electronic instrument panel with plain text messaging

# **Propulsion Specifications**

# Performance curve









Performance data	M4	М3	M2	M1
Rated Power - kW (hp)	373 (500)	317 (425)	280 (375)	242 (325)
Rated Speed - rpm	2400	2300	2200	2100
Low Idle Speed - rpm	600	600	600	600
Peak Torque - Nm (ft-lb)	1875 (1383)	1730 (1276)	1571 (1159)	1447 (1067)
Peak Torque Speed - rpm	1900	1700	1700	1600
Fuel Consumption - L/h (gal/hr)	94.0 (24.8)	80.4 (21.2)	70.9 (18.7)	62.7 (16.6)

M rating	M4	МЗ	M2	M1
Typical load factor	≤ 40 %	≤ 50 %	≤ 65 %	> 65 %
Typical annual usage (hr)	≤ 800	≤ 2000	≤ 3000	> 3000
Typical full-power operation (hr)	1 of each 12	4 of each 12	16 of each 24	24 Uninterrupted



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

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