# PowerTech ™ 6068SFM85 Diesel Engine

Marine Propulsion Engine Specifications



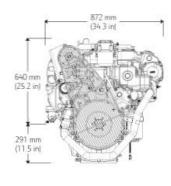


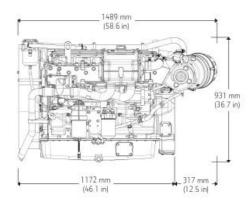
6068SFM85 shown

#### **Emissions**

EPA Commercial Marine Tier 3
IMO MARPOL Annex VI Tier II Compliant

#### **Dimensions**





Dimensions shown in mm (in) may vary according to options selected. Contact your distributor for more information.

# General Data (Based on Standard Option Configuration)

Model	6068SFM85
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Engine Type	In-line, 4- Cycle
Aspiration	Air-to-sea water

Length maximum - mm (in)	1489 (58.6)
Height - mm (in)	931 (36.7)
Height, crankshaft centerline to top - mm (in)	640 (25.2)
Height, crankshaft centerline to bottom - mm (in)	291 (11.5)
Weight, dry - kg (lb)	763 (1682)

#### **Classification Societies**

ABS,BV,CCS,CRS,DNV-GL,LR

## **Engine Specifications**

Performance ratings	Power kW (bhp)	Rated Speed (rpm)	Rated fuel consumption L/hr (gal/hr)
M1	186 (249)	2400	51.1 (13.5)
M2	209 (280)	2500	56.7 (15.0)
M3	239 (321)	2600	63.3 (16.7)
M4	265 (355)	2700	69.3 (18.3)
M5	298 (400)	2800	81.3 (21.5)

Metric hp = Brake hp x 1.01387

<sup>\*</sup>SOLAS and other accessories available. Contact your distributor for details.

M rating	M1	M2	M3	M4	M5
Typical load factor	> 65%	< =65%	< =50%	< =40%	< =35%
Typical annual usage (hr)	Unrestricted	3,000-5,000 hr	2,000-4,000 hr	1,000-3,000 hr	300-1,000 hr
Typical full-power operation (hr)	Uninterrupted	16 of each 24 hr	4 of each 12 hr	1 of each 12 hr	0.5 of each 8 hr

Ratings are based on ISO 8655 standard power rating and the SAE J1 228 crankshaft power rating. Flexibility of installation due to range of options.

See your John Deere Power Systems engine distributor or marine dealer for more detailed performance information.

#### **Features and Benefits**

### High Torque and Low Rated RPM

 High torque provides excellent vessel control and maneuverability. Lower rated propulsion RPM reduces vibration and noise for improved crew comfort.

### 4-Valve Cylinder Head

 Excellent airflow through 4-valve cylinder head delivers greater low-speed torque and better transient response time.

#### High-pressure Common-rail (HPCR)

 The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures. It also controls fuel injection timing and provides precise control for the start, duration, and end of injection. Electronic transfer pump is self-priming for ease of maintenance. Provides high performance, excellent fuel economy, and low emissions.

#### Water-cooled Exhaust Manifold

 Integrated components eliminate external hoses and fittings that can leak or break. Wet exhaust manifold creates a cooler and quieter environment for passengers and crew.

## Turbocharged With Air-to-Seawater Aftercooling

 Cooler turbocharger operation enables higher ratings and efficiencies for applications that require high power or speed.

## Replaceable Cylinder Liners

 Replaceable wet-type cylinder liners are precision-machined and hardened for long life. Allows engine to be rebuilt to original specifications.

### Electronic Engine Control Unit (ECU)

 Advanced fault code diagnostics and customizable engine protections ensure reliability and uptime. Provides highly customizable features and trim to integrate your vessel.

### Heat Exchanger

 High-capacity heat exchanger provides reliable operation in adverse conditions.

#### Multiple Service Options

 Either-side oil fill/dipstick combinations and remote oil and fuel filter options are available for easier service access.