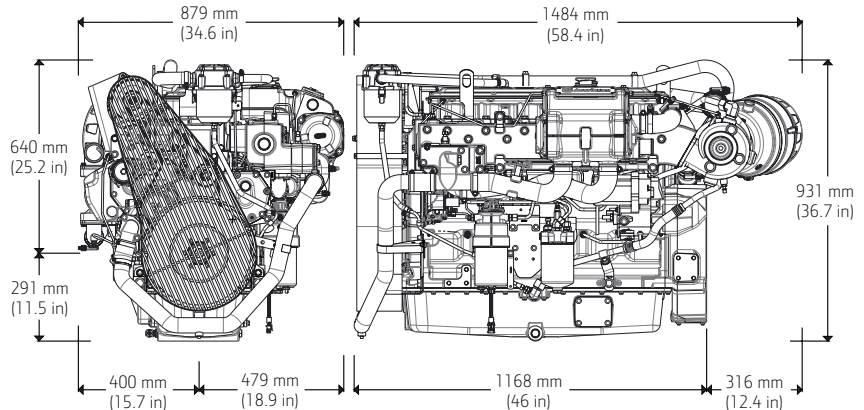


# PowerTech™ 6068SFM85 Diesel Engine

Marine Propulsion Engine Specifications



## Dimensions



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

## Emissions

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

## General Data (based on standards option configuration)

Model	6068SFM85	Length maximum – mm (in)	1484 (58.4)
Number of cylinders	6	Length to rear face of flywheel housing – mm (in)	1168 (46)
Displacement – L(cu in)	6.8 (415)	Flywheel housing SAE	SAE #3
Bore and Stroke – mm (in)	106 x 127 (4.17 x 5)	Width maximum – mm (in)	879 (34.6)
Engine Type	In-line, 4-cycle	Crankshaft centerline left – mm (in)	400 (15.7)
Aspiration	Turbocharged and air-to-seawater aftercooled	Crankshaft centerline right – mm (in)	479 (18.9)
		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)	TBD

## Classification Societies

SOLAS – Accessories available\*  
ABS, DNV, BV, LR

\* Other accessories available. Contact your distributor for details.

## Engine Specifications

Performance ratings	Power kW (bhp)	Rated Speed (rpm)	Rated fuel consumption L/hr (gal/hr)
M1	186 (249)	2400	51 (13.5) <sup>1</sup>
M2	209 (280)	2500	56.7 (15.0)
M3	239 (321)	2600	63.2 (16.7) <sup>2</sup>
M4	265 (355)	2700	69.3 (18.3)
M5*	298 (400)	2800	81.3 (21.5)

\* M5 rating is a recreational only rating

Metric hp = Brake hp x 1.01387

<sup>1</sup> Needs to have 186 kW (250 hp) for Power kW (hp)

<sup>2</sup> Needs to have 239 kW (320 hp) for Power kW (hp)

M rating	M1	M2	M3	M4	M5
Typical load factor	>65%	<=65%	<=50%	<=40%	<=35%
Typical Annual Usage (hr)	Unrestricted	3,000-5,000	2,000-4,000	1,000-3,000	300-1,000
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 J1228 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.

Photographs may show non-standard equipment.

## 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

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

- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures
- 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

### Turbocharged with air-to-seawater aftercooling

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

### Multiple service options

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

### 4-valve cylinder head

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

### Water-cooled exhaust manifold

- Integrated components eliminate external hoses and fittings
- Wet exhaust manifold creates a cooler and quieter environment for passengers and crew

### 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

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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.*