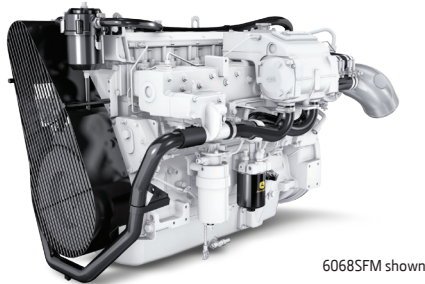
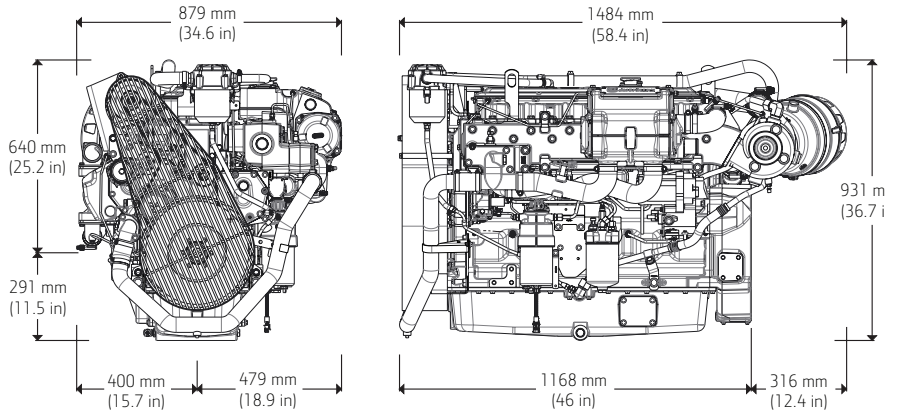


PowerTech™ 6068SFM85 Diesel Engine

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 standard 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 right – mm (in)	479 (18.9)
Aspiration	Turbocharged and air-to-seawater aftercooled	Crankshaft centerline left – mm (in)	400 (15.7)
		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

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 (250)	2400	51 (13.5)
M2	209 (280)	2500	56.7 (15.0)
M3	239 (320)	2600	63.2 (16.7)
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

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.

For easier installation, JDPS offers a range of options to fit your needs.

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
- Transfer pump with priming option
- 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 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.