# PowerTech 6068SFM Diesel Engine

**Propulsion Engine Specifications** 





6068SFM shown

#### Certifications

IMO MARPOL Annex VI

US EPA Marine Tier 2 Compliant

IWT (2004/26/EC)

RCD (2003/44/EC)

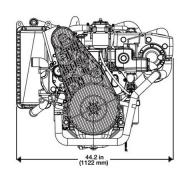
American Bureau of Shipping

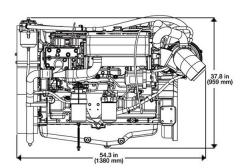
Bureau Veritas

Det Norske Veritas

Lloyd's Register

## **Dimensions**





## General engine data

Model	6068SFM75
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Compression Ratio	16.7:1
Engine Type	In-line, 4- Cycle
Aspiration	Air-to-sea water

Length - mm (in)	1380 (54.3)	
Width - mm (in)	1122 (44.2)	
Height, Centerline to Top mm. (in)	661 (26.0)	
Height, Centerline to Bottom mm. (in)	298 (11.7)	
Weight, dry kg (lb)	890 (1962)	
Maximum installed angle	Front Up – degrees	9
	Front Down – degrees	0

## Features and benefits

## High-Pressure Common Rail Fuel System

- Higher (33%) injection pressures, up to 1600 bar (23,000 psi)
- Variable injection pressure and timing control

#### John Deere Electronic Control Systems

- Built in controls eliminates the need for costly add on engine warning systems and associated components
- Service diagnostics and error codes automatically stored for later retrieval & ease of diagnostics
- Built in engine synchronization feature

# 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

# Replaceable Wet-type Cylinder Liners

- Excellent heat dissipation
- Hardened and precision machined for long life
- Rebuild to original specifications

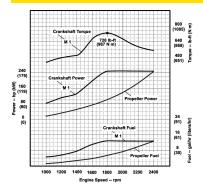
## High Torque and Low Rated RPM

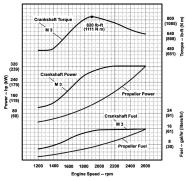
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

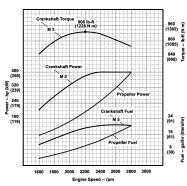
#### Heat Exchanger

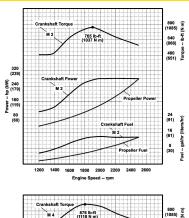
 High-capacity heat exchanger designed for reliable operation in adverse conditions

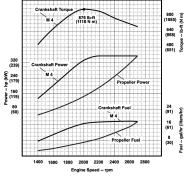
# Performance curve











Performance data	M5	M4	M3	M2	M1
Rated Power - kW (hp)	298 (400)	265 (355)	239 (321)	209 (280)	186 (249)
Rated Speed - rpm	2800	2700	2600	2500	2400
Low Idle Speed - rpm	600	600	600	600	600
Peak Torque - Nm (ft-lb)	1232 (909)	1188 (876)	1111 (819)	1037 (765)	987 (728)
Peak Torque Speed - rpm	2200	2000	1900	1900	1800
Fuel Consumption - L/h (gal/hr)	77.4 (20.4)	66.9 (17.7)	60.1 (15.9)	52.4 (13.8)	47.1 (12.4)

M rating	M5	M4	M3	M2	M1
Typical load factor	35 %	40 %	50 %	65 %	> 65 %
Typical annual usage (hr)	300	800	2000	3000	> 3000
Typical full-power operation (hr)	0.5 of each 8	1 of each 12	4 of each 12	16 of each 24	24 Uninterrupted

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Phone: 33.2.38.82.61.19 Fax: 33.2.38.82.60.00 All values at rated speed and power with standard options unless otherwise noted. Specifications and design subject to change without notice.