PowerTech ™ 4045TFM50 Diesel Engine

Marine Propulsion Engine Specifications



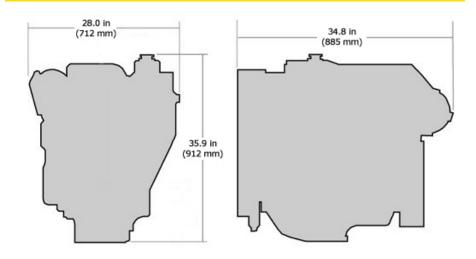


4045TFM50 shown

Emissions

Non-Emissions Certified

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	4045TFM50
Number of cylinders	4
Displacement - L (cu in)	4.5 (275)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Engine Type	In-line, 4- Cycle
Aspiration	Turbocharged

Length maximum - mm (in)	885 (34.8)
Height mm (in)	912 (35.9)
Weight, dry - kg (lb)	462 (1019)

Classification Societies

CRS, DNV-GL, RINA

^{*}SOLAS and 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	78 (105)	2300	null		
M2	90 (121)	2400	null		
M3	101 (135)	2500	26.3 (6.9)		
M4	112 (150)	2600	29.7 (7.8)		

Metric hp = Brake hp x 1.01387

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

Watercooled Exhaust Manifold

- Cooler and quieter environment for vessel and crew

Replaceable wet-type cylinder liners

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

Internal Balancers

- Low noise and vibration for crew comfort

Corrosion Resistant Components

- Provides engine protection from the effects of seawater

Either-side Service

- Oil fill and dipstick combinations
- Remote oil filter for easier service access
- Application and service flexibility to provide installation convenience plus fast and easy maintenance

Fuel System

- Proven and reliable Mechanical Governor

Heat exchanger or Keel Cooled

- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Integrated expansion tank, heat exchanger and exhaust manifold reduce chances of leaks
- Keel cooler or heat exchanger options provide application flexibility

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