

PowerTech

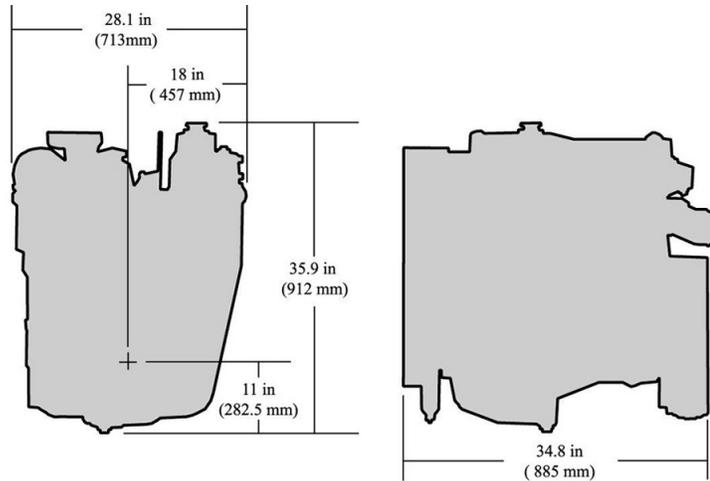
4045DFM Diesel Engine

Propulsion Engine Specifications



4045DFM shown

Dimensions



Certifications

- Det Norske Veritas
- IMO MARPOL Annex VI
- IWT (2004/26/EC)
- RCD (2003/44/EC)
- US EPA Marine Tier 2 Compliant

General data

Model	4045DFM70	Length - mm (in)	885 (34.8)
Number of cylinders	4	Width - mm (in)	713 (28.1)
Displacement - L (cu in)	4.5 (275)	Height-- mm (in)	912 (35.9)
Bore and Stroke-- mm (in)	107 x 127 (4.21 x 5.00)	Weight, dry-- kg (lb)	437 (963)
Compression Ratio	17.6:1	Maximum Installed Angle	Front Up – degrees 12 Front Down – degrees 0
Engine Type	In-line, 4- Cycle		
Aspiration	Naturally aspirated		

Features and benefits

Watercooled 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

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

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 options provide application flexibility

High Torque and Low Rated RPM

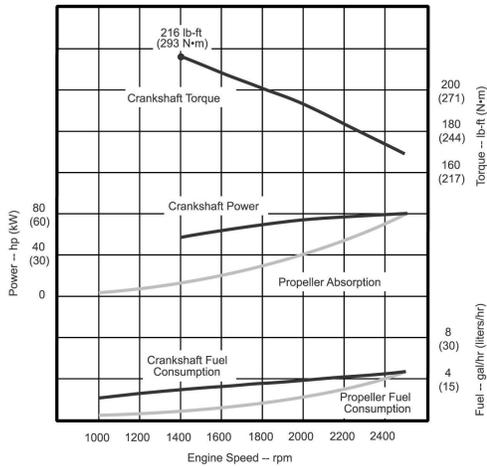
- Enables the engine to turn larger propellers at lower speed for best efficiency
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

Fuel System

- Proven and reliable Mechanical Governor

Performance curve

M2 PERFORMANCE CURVE



Performance data

M2

Rated Power - kW (hp)	60 (80)
Rated Speed - rpm	2500
Low Idle Speed - rpm	750
Peak Torque - Nm (ft-lb)	296 (218)
Peak Torque Speed - rpm	1400
Fuel Consumption - L/h (gal/hr)	17.5 (4.6)

M rating

M2

Typical load factor	65 %
Typical annual usage (hr)	3000
Typical full-power operation (hr)	16 of each 24

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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.