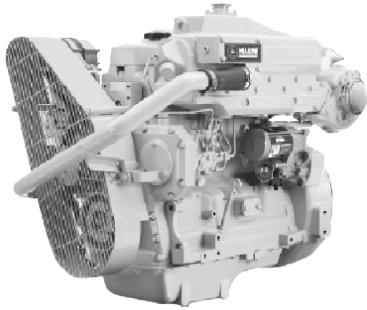


# PowerTech

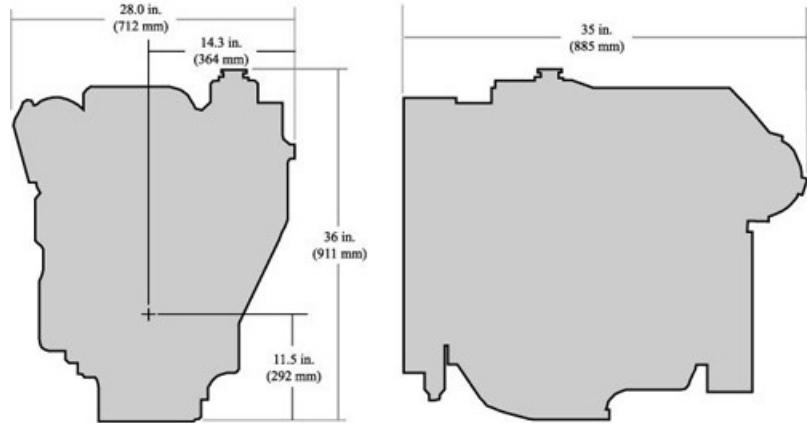
## 4045TFM Diesel Engine

Propulsion Engine Specifications



4045TFM shown

### Dimensions



### Certifications

- China Classification Society
- Det Norske Veritas
- Registro Italiano Navale

### General engine data

Model	4045TFM50	Length - mm (in)	885 (34.8)
Number of cylinders	4	Width - mm (in)	712 (28.0)
Displacement - L (cu in)	4.5 (275)	Weight, dry-- kg (lb)	462 (1019)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Maximum installed angle	Front Up – degrees 12 Front Down – degrees 0
Compression Ratio	17.2:1		
Engine Type	In-line, 4- Cycle		
Aspiration	Turbocharged		

### 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

#### Fuel System

- Proven and reliable Mechanical Governor

#### Heat exchanger or Keel Cooled

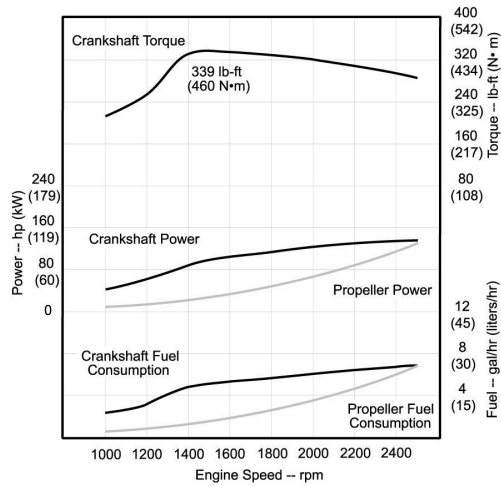
- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Integrated expansion tank, heat exchanger and exhaust manifold reduce chances of leaks
- Keel cooler or heat exchanger options provide application flexibility

#### High torque and low rated rpm

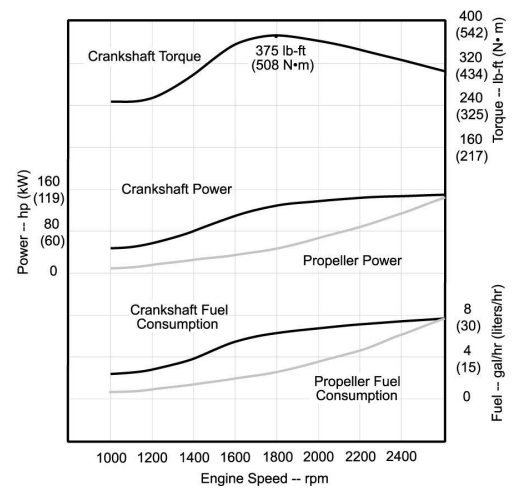
- Enables the engine to turn larger propellers at lower speed for best efficiency
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

# Performance curve

## M3 PERFORMANCE CURVE



## M4 PERFORMANCE CURVE



Performance data	M4	M3
Rated Power - kW (hp)	112 (150)	101 (135)
Rated Speed - rpm	2600	2500
Low Idle Speed - rpm	700	700
Peak Torque - Nm (ft-lb)	507 (374)	460 (339)
Peak Torque Speed - rpm	1800	1500
Fuel Consumption - L/h (gal/hr)	29.7 (7.8)	26.3 (6.9)

M rating	M4	M3
Typical load factor	40 %	50 %
Typical annual usage (hr)	800	2000
Typical full-power operation (hr)	1 of each 12	4 of each 12

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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.*