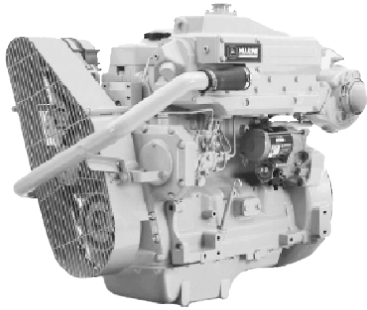


# PowerTech™

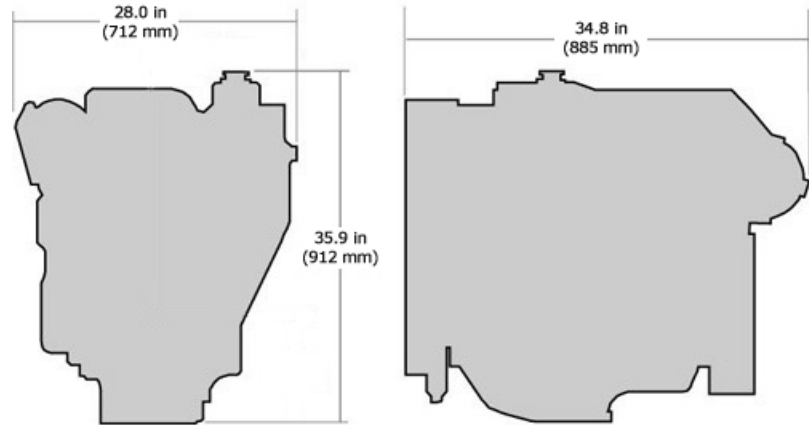
## 4045TFM50 Diesel Engine

Propulsion Engine Specifications



4045TFM50 shown

### Dimensions



### Certifications

Non-Emissions Certified

### General 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)	Height-- mm (in)	912 (35.9)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Weight, dry-- kg (lb)	462 (1019)
Compression Ratio	17.2:1	Maximum Installed Angle	Front Up – degrees 12 Front Down – degrees 0
Engine Type	In-line, 4- Cycle		
Aspiration	Turbocharged		

### 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

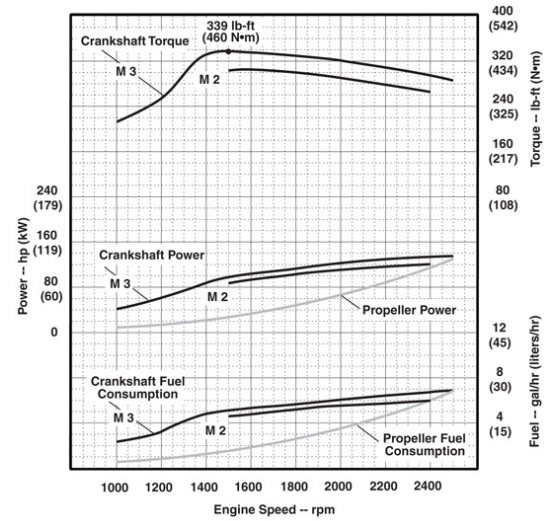
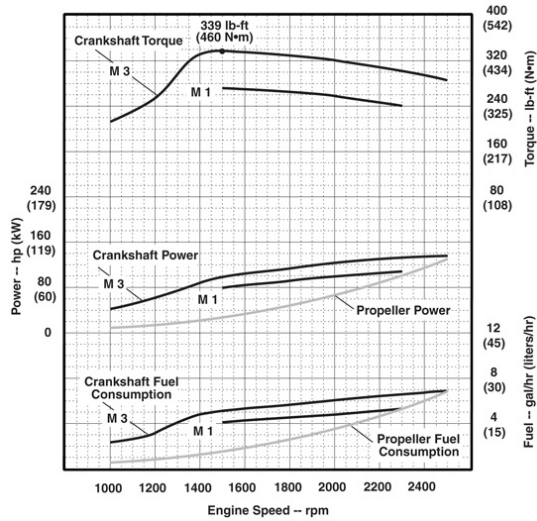
#### Heat exchanger or Keel Cooled

- 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

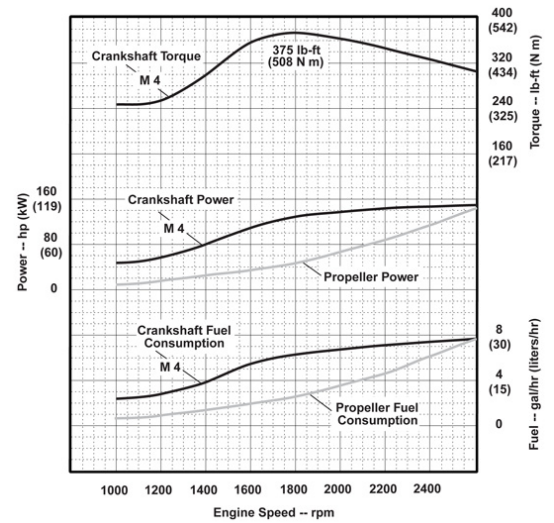
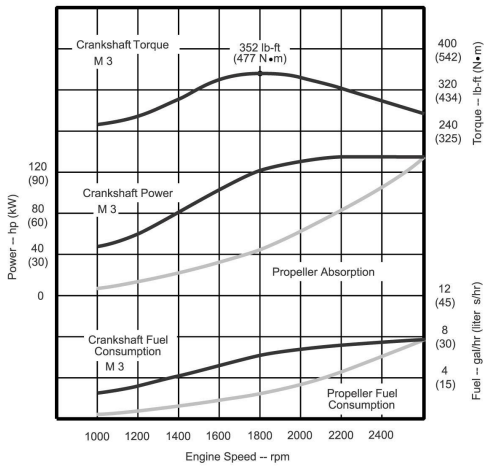
#### High torque and low rated rpm

- 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

# Performance curve



## M3 PERFORMANCE CURVE



Performance data	M4	M3	M2	M1
Rated Power - kW (hp)	112 (150)	101 (135)	90 (121)	78 (105)
Rated Speed - rpm	2600	2500	2400	2300
Low Idle Speed - rpm	700	700	null	null
Peak Torque - Nm (ft-lb)	507 (374)	460 (339)	null	null
Peak Torque Speed - rpm	1800	1500	null	null
Fuel Consumption - L/h (gal/hr)	29.7 (7.8)	26.3 (6.9)	null	null

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

**John Deere Power Systems**  
 3801 W. Ridgeway Ave.  
 PO Box 5100  
 Waterloo, IA 50704-5100  
 Phone: 1-800-533-6446  
 Fax: 319.292.5075

**John Deere Power Systems**  
**Usine de Saran**  
 La Foulonnerie - B.P. 11.13  
 45401 Fleury les Aubrais Cedex  
 France  
 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.*