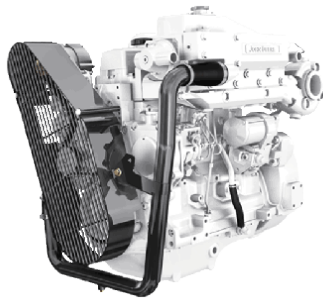


# PowerTech

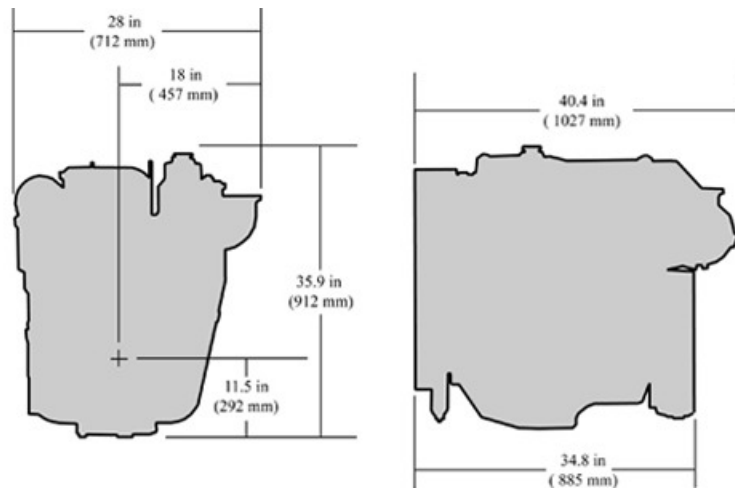
## 4045TFM Diesel Engine

Propulsion Engine Specifications



4045TFM shown

### Dimensions



### Certifications

- China Classification Society
- Det Norske Veritas
- IMO Exempt
- IWT (2004/26/EC)
- RCD (2003/44/EC)
- US EPA Marine Tier 2 Compliant

### General data

Model	4045TFM75	Length - mm (in)	885 (34.8)
Number of cylinders	4	Width - mm (in)	712 (28.0)
Displacement - L (cu in)	4.5 (275)	Height, Centerline to Top-- mm. (in)	620 (24.4)
Bore and Stroke-- mm (in)	107 x 127 (4.21 x 5.00)	Height, Centerline to Bottom-- mm. (in)	292 (11.5)
Compression Ratio	17.6:1	Weight, dry-- kg (lb)	462 (1019)
Engine Type	In-line, 4- Cycle	Maximum Installed Angle	Front Up – degrees 12
Aspiration	Turbocharged		Front Down – degrees 0

### 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

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

#### Either-side Service

- Oil fill and dipstick combinations
- Remote oil filter for easier service access

#### Heat Exchanger or Keel Cooled

- Integrated expansion tank, heat exchanger and exhaust manifold reduce chances of leaks
- Keel cooler options provide application flexibility

#### High Torque and Low Rated RPM

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

#### Corrosion Resistant Components

- Provides engine protection from the effects of seawater

#### Internal Balancers

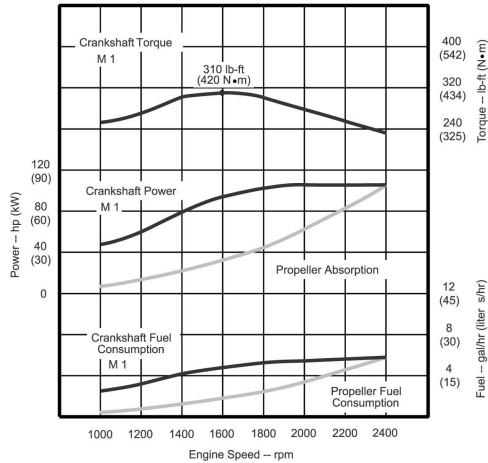
- Low noise and vibration for crew comfort

#### Fuel System

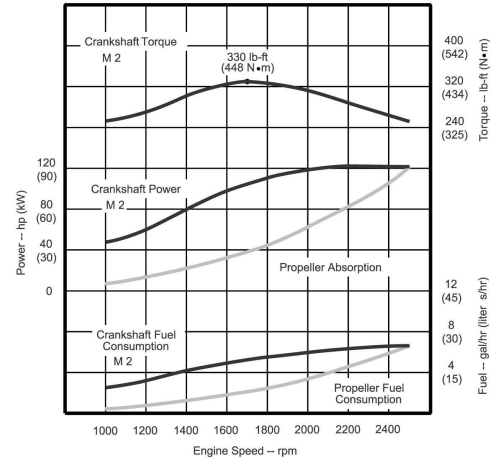
- Electronically controlled rotary fuel injection pump with variable timing resulting in excellent fuel economy and excellent performance
- Self diagnostics and protection

# Performance curve

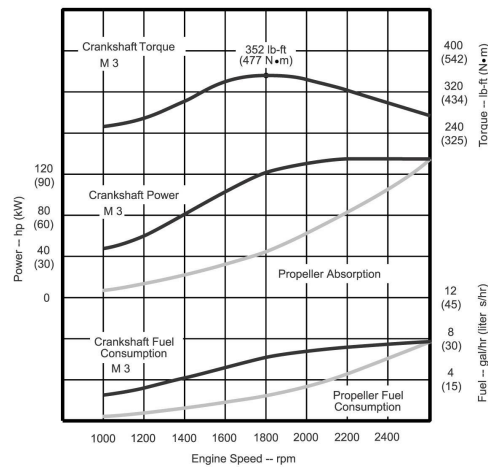
## M1 PERFORMANCE CURVE



## M2 PERFORMANCE CURVE



## M3 PERFORMANCE CURVE



### Performance data

	M3	M2	M1
Rated Power - kW (hp)	101 (135)	90 (121)	80 (107)
Rated Speed - rpm	2600	2500	2400
Low Idle Speed - rpm	650	650	650
Peak Torque - Nm (ft-lb)	477 (352)	448 (330)	420 (310)
Peak Torque Speed - rpm	1800	1700	1600
Fuel Consumption - L/h (gal/hr)	29.4 (7.8)	25.4 (6.7)	22.1 (5.8)

### M rating

	M3	M2	M1
Typical load factor	50 %	65 %	> 65 %
Typical annual usage (hr)	2000	3000	> 3000
Typical full-power operation (hr)	4 of each 12	16 of each 24	24 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.*