

PowerTech™

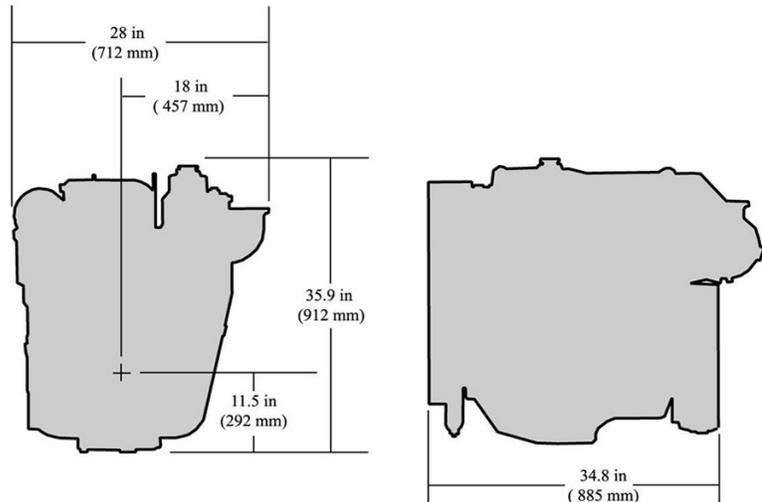
4045DFM70 Diesel Engine

Marine Generator Drive Engine Specifications



4045DFM70 shown

Dimensions



Dimensions shown in mm (in) may vary according to options selected. Contact your distributor for more information.

Emissions

IMO Exempt

General Data (Based on Standard Option Configuration)

Model	4045DFM70	Length maximum - mm (in)	885 (34.8)
Number of cylinders	4	Height - mm (in)	902 (35.5)
Displacement - L (cu in)	4.5 (275)	Height, crankshaft centerline to top - mm (in)	620 (24.4)
Bore and Stroke-- mm (in)	106.5 x 127 (4.19 x 5.00)	Height, crankshaft centerline to bottom - mm (in)	282.5 (11.1)
Engine Type	In-line, 4- Cycle	Weight, dry - kg (lb)	462 (1019)
Aspiration	Naturally aspirated		

Classification Societies

CCS,DNV-GL,PRS

*SOLAS and other accessories available. Contact your distributor for details.

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

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

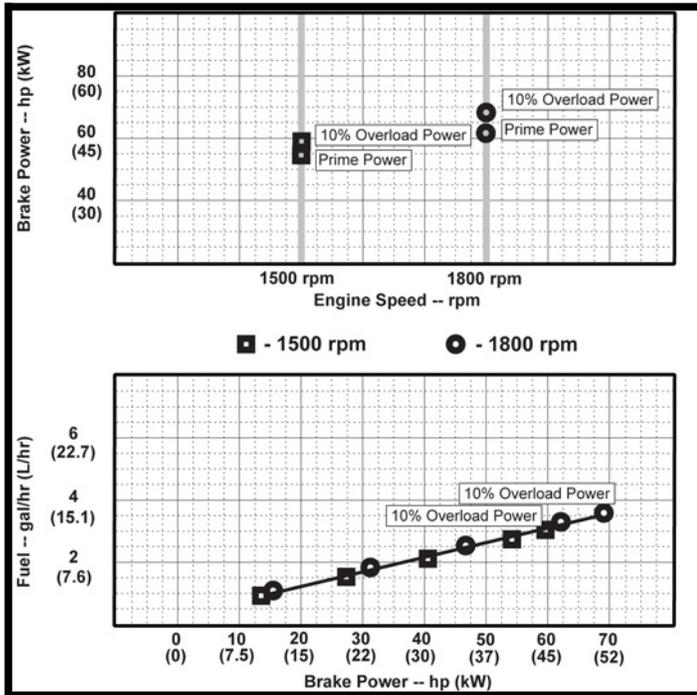
- Proven and reliable Mechanical Governor

Either-side Service

- Oil fill and dipstick combinations

Performance Curves

50 and 60 Hz (1500 and 1800 rpm)



Performance data points shown at 25%, 50%, 75%, 100% (prime), and 110% (overload) power.

Calculated Generator-Set Rating

Rated speed Hz (rpm)	Generator efficiency %	Engine power		Power factor	Calculated generator set rating	
		Prime*			Prime*	
		kW	hp		kWe	kVA
50 (1500)	88-92	40	54	0.8	35-37	44-46
60 (1800)	88-92	45	60	0.8	40-42	50-53

*Prime power is the normal power an engine is capable of delivering with a variable load for an unlimited number of hours per year. This rating conforms to ISO 3046 and SAE J1995. This rating incorporates a 10 percent overload capability, and conforms to ISO 8528 prime power.

See your John Deere Power Systems engine distributor or marine dealer for more detailed performance information.