

Diesel Engines Series 4000

for Marine Applications

Maximum 1DS

2040 - kW

2773 - mhp

2735 - bhp



Compliant
with MARPOL 73/78 (IMO)
Annex VI NO_x Limits

Engine Specifications

Version	12v4000 M90
Displacement	48.8 liters (2978cu in)
Bore and Stroke	165 mm x 190 mm (6.50 in. x 7.50 in.)
Description	Sequential turbocharged and charge air cooled
Governor	MDEC
Port Model	T1227M01
Starboard Model	T1227M00

Standard Power Rating

Air Temp. 25 °C	kW	mhp	bhp	rpm
Sea Water Temp. 25 °C				
Rated Power	2040	2773	2735	2100
Rating Conditions	ISO 3046			

Standard Boat Profile

100% Power, 10% Time
70% Power, 70% Time
<10% Power, 20% Time

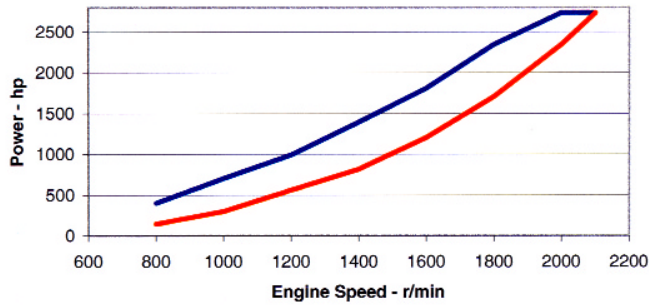
Typical applications

- Privately - owned yachts



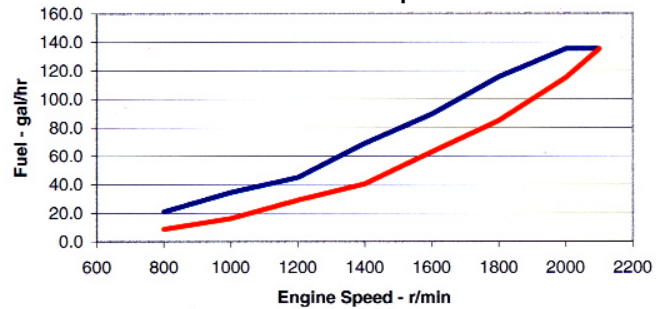
DaimlerChrysler Off-Highway

BHP



Power output guaranteed within +2/-0% at ISO 3046 conditions:
 77°F (25°C) air inlet temperature
 77°F (25°C) fuel temperature
 .847 specific fuel gravity at 77°F (25°C)
 77°F (25°C) raw water temperature
 9.31 in. Hg (99 kPa) dry barometer

Fuel Consumption

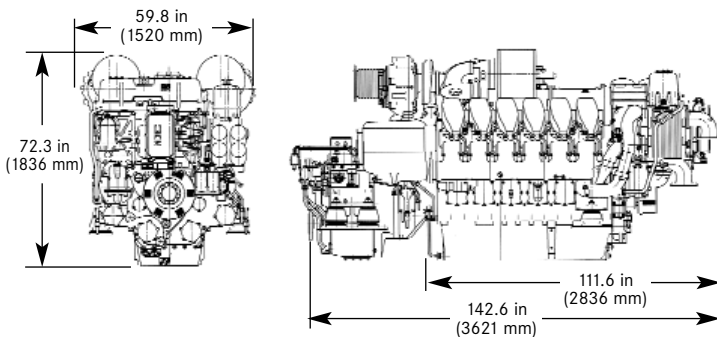


Performance shown includes:
 Usage of diesel fuel with a minimum LHV 42,800 kJ/kg (18,390 Btu/lb) per DIN EN 590.
 Air intake restriction: 10 in. H₂O (2.5kPa)
 Exhaust back pressure: 15 in. H₂O (3.7kPa)

Rating Definition - Maximum 1DS

The marine maximum rating applies to high performance application where speed is important and overall load factors are low. Maximum continuous cruising RPM is 1900 and full power is limited to 10% (average) of operating time. This rating is normally reserved for privately-owned yachts in non-revenue applications.

Dimensional Information



All dimensions are approximate. For complete dimensional information, refer to installation drawing provided by your authorized Detroit Diesel Corporation representative. Typical marine transmission shown.

Standard Equipment

Main Engine - Sequential and wastegate turbocharging; watercooled exhaust components; flywheel housing size SAE #00; two-part polyurethane Glacier white paint and chrome valve covers are standard on pleasurecraft engines

Fuel System - Electronic unit pump injection system; secondary fuel filter mounted on front of engine

Engine Oil System - Dual oil filters to be mounted on engine with diverter valve

Engine Cooling System - Titanium plate modular heat exchanger system with integral fuel cooler; gear-driven self-priming raw water pump with 3" hose inlet; engine block heater (120V/1500W); coolant recovery bottle

Air Inlet System - Direct mounted turbochargers; dual intake air filters and silencers with closed crankcase breather system.

Electrical - Starter: 24V, 2-pole isolated ground; Alternator: 24V/100 amp, 2-pole isolated ground, belt driven

Engine Mounting - Engine mounts with isolators

Exhaust Connection System - (2) Horizontal dry outlet flanges

Optional Equipment

Fuel System - Double wall fuel lines for society classification; SeaPro 600 primary fuel filter/water separator with electric priming pump

Marine Gear Transmissions - Available in numerous ratio's & configurations

Electronic Engine Monitoring & Controls - Available

Exhaust Connection System - (2) Exhaust bellows



For more information contact your MTU or DDC distributor. All Detroit Diesel distributors in NAFTA are authorized MTU distributors.
www.mtu-online.com / www.detroitdiesel.com / marine@detroitdiesel.com