

Marine

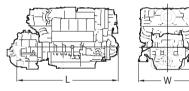
DIESEL ENGINES 8V/10V 2000 M72

for fast vessels with high load factors (1B)



| Engine with gearbox | Dimensions (L ₁ xWxH ₁) mm (in) Mass, dry kg (lt | |
|------------------------|-------------------------------------------------------------------------|-------------|
| 8V/ZF 2000 | 1910x1130x1225 (75.2x44.5x48.1) | 2410 (5320) |
| 10V/ZF 3000 | 2181x1130x1305 (85.9x44.5x51.4) | 2820 (6225) |

Typical applications: Ferries (e.g. monohulls, hydrofoils, catamarans, surface effect ships) and



Engine type

Optional equipment and finishing shown. Standard may vary.

 8V 2000 M72
 10V 2000 M72

 kW
 720
 900

 (bhp)
 (965)
 (1205)

| Rated power ICFN kW | 720 | 900 | |
|-------------------------------------------------|-------------------------|------------------------------------|--|
| (bhp) | (965) | (1205) | |
| Speed rpm | 2250 | 2250 | |
| No. of cylinders | 8 | 10 | |
| Bore/stroke mm (in) | 135/156 (5.3/6.1) | 135/156 (5.3/6.1) | |
| Displacement, total l (cu in) | 17.9 (1093) | 22.3 (1361) | |
| Flywheel housing | SAE 1 | SAE 1 | |
| Gearbox type ²⁾ | ZF 2000 | ZF 3000 | |
| | i = 1.1 – 2.5 | i = 1.1 - 3.0 | |
| Optimization of exhaust emissions ¹⁾ | IMO II/EPA 2/EU IIIA 2) | IMO II/EPA 2/EU IIIA ²⁾ | |

displacement yachts

 IMO - International Maritime Organisation EPA - US Marine Directive 40 CFR 94 EU - Recreational crafts 94/25 EC

2) EU IIIA/RheinSchUO (CCNR) on request



| Performance & fuel consumption ¹⁾ | | 8V 2000 M72 | | | 10V 2000 | 10V 2000 M72 | | |
|----------------------------------------------|--------|-------------|-------|------|----------|--------------|------|--|
| Speed | rpm | 2250 | 1950 | 1200 | 2250 | 1950 | 1200 | |
| Maximum power | kW | 720 | 710 | 370 | 900 | 880 | 460 | |
| | bhp | 965 | 950 | 495 | 1205 | 1180 | 615 | |
| Power on propeller curve (n ³) | kW | 720 | 475 | 115 | 900 | 585 | 140 | |
| | bhp | 965 | 635 | 155 | 1205 | 785 | 190 | |
| Fuel consumption | g/kWh | 214 | 215 | 219 | 213 | 211 | 208 | |
| on propeller curve ¹⁾ | l/hr | 185.6 | 123.0 | 30.3 | 231.0 | 148.7 | 35.1 | |
| | gal/hr | 49.0 | 32.5 | 8.0 | 61.0 | 39.3 | 9.3 | |

1) Tolerance +5% per ISO 3046, Diesel fuel to DIN EN 590 with a min L.H.V. of 42800 kJ/kg (18390 BTU/lb)

| Standard equipment | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Starting system | Electric starter 24 V |
| Auxiliary PTO | Alternator, 80A, 28V, 2 pole |
| Oil system | Gear driven lube oil pump, lube-oil duplex filter with diverter valve, lube-oil heat exchanger, handpump for oil extraction |
| Fuel system | Fuel feed pump, fuel hand pump, fuel pre-filter, fuel main filter with diverter valve, on-engine fuel oil cooler, HP fuel pump, jacketed HP fuel lines, injection nozzles (CR system), flame proof hose lines, leak-off fuel tank level monitored |
| Cooling system | Coolant-to-raw water plate core heat exchanger, self priming centrifugal raw water pump gear driven coolant circulation pump |
| Combustion air system | Sequential turbocharging with 2 water-cooled exhaust-gas turbochargers, on-engine set of combustion-air filters |
| Exhaust system | Triple-walled, liquid-cooled, on-engine exhaust manifolds, single centrally located exhaust outlet, 1 exhaust bellow horizontal discharge |
| Mounting system | Resilient mounts at free end |
| Engine management system | Engine control and monitoring system (ADEC) |
| Optional equipment | |
| Auxiliary PTO | Alternator, 140A, 28V, 2 pole, bilgepump, on-engine PTOs |
| Oil system | Centrifugal oil filter, oil replenishment system |
| Fuel system | Duplex fuel pre-filter |
| Cooling system | Coolant preheating system, integr. seawater gearbox piping |
| Exhaust system | 1 exhaust bellow vertical discharge |
| Mounting System | Resilient mounts at driving end |
| Engine Management System | In compliance with Classification Society Regulations |
| Monitoring/Control System | smartline, blueline, bluevision, BlueVision NewGeneration, Callosum |
| Power Transmission | Torsionally resilient coupling |
| | Reverse reduction gearbox, el. actuated, gearbox mounts, trolling mode for dead-slow |
| Gearbox Options | propulsion, free auxiliary PTO, hydraulic pump drives |

- > Power definition according ISO 3046
- > Intake air temperature 25°C/Sea water temperature 25°C

- > Barometric pressure 1000 mbar
- > Power reduction at 45°C/32°C: none

Specifications are subject to change without notice. All dimensions are approximate. For complete information refer to installations drawing. For further information consult your MTU distributor/dealer. may feature options not fitted as standard to standard engine.

Rolls-Royce Group

www.mtu-solutions.com/powergen

> Intake air depression 15 mbar / Exhaust back pressure 30 mbar