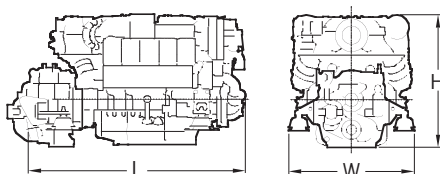


Diesel Engines 12V/16V 2000 M94

for Fast Vessels with Low Load Factors (1DS)



Dimensions and Masses

2000 M94	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V	1900x1295x1370 (74.8x51.0x53.9)	2810 (6195)
16V	2315x1295x1410 (91.1x51.0x55.5)	3380 (7452)
2000 M94 - with Gearbox type	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V - ZF 2075	2440x1295x1320 (96.1x51.0x52.0)	3270 (7209)
16V - ZF 3070	2950x1295x1400 (116.1x51.0x55.1)	4010 (8840)

Specifications are subject to change without notice. All dimensions are approximate, for complete information refer to installation drawing. For further information consult your MTU distributor/dealer.

Typical applications: Fast yachts, fast patrol boats, police craft and fire-fighting vessels

Engine Model	12V 2000 M94	16V 2000 M94
Rated power ICFN kW (bhp)	1432 (1920)	1939 (2600)
Speed rpm	2450	2450
No. of cylinders	12	16
Bore/stroke mm (in)	135/156 (5.3/6.1)	135/156 (5.3/6.1)
Displacement, total l (cu in)	26.8 (1635)	35.7 (2179)
Flywheel housing	SAE 0	SAE 0
Gearbox model, standard ^①	ZF 2075	ZF 3070
Optimization of exhaust emissions ^②	IMO II/EPA 2/EU III A ^③	IMO II/EPA 2/EU III A ^③
Solas compliance	Yes	Yes

^① gear ratio on request

^② IMO – International Maritime Organisation; EPA – US Marine Directive 40 CFR 94

^③ on request



Power. Passion. Partnership.

Performance & Fuel Consumption ^①		12V 2000 M94				16V 2000 M94				
Speed	rpm	2450	2100	1700	1200	2450	2100	1700	1200	
Maximum power	kW	1432	1330	1075	680	1939	1810	1425	885	
	bhp	1920	1784	1442	912	2600	2427	1911	1187	
Power on propeller curve (n ³)	kW	1432	900	475	175	1939	1225	650	240	
	bhp	1920	1207	637	235	2600	1643	872	322	
Fuel consumption	g/kWh	217 ^②	207	212	222	216 ^②	205	206	220	
	on propeller curve (n ³)	l/h	374.4	224.5	121.3	46.8	504.6	302.6	161.3	63.6
	gal/h	98.9	59.3	32.1	12.4	133.3	79.9	42.6	18.6	

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

② Fuel Consumption for Cruising speed with 70% power at 1900rpm: 12V=205 g/kWh; 16V=206g/kWh

Standard Equipment	
Starting system	Electric starter 24 V
Auxiliary PTO	Charging generator, 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 (Common rail system) flame proof hose lines, leak-off 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 3 water-cooled exhaust-gas turbochargers, on-engine intake air filters
Exhaust system	Triple-walled, liquid-cooled, on-engine exhaust manifolds, single centrally located exhaust outlet, 1 exhaust bellows vertical discharge
Mounting system	Resilient mounts at free end
Engine management system	Engine and gearbox control and monitoring system (ADEC)

Optional Equipment	
Auxiliary PTO	Charging generator, 140A or 200A, 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 engine mounted, integrated seawater gearbox piping
Exhaust System	Exhaust bellows horizontal discharge
Mounting System	Resilient mounts at driving end
Engine Management System	In compliance with Classification Society Regulations (EMU + MEU)
Monitoring / Control System	smartline, blue line, blue vision , Sturdy Bridge Controls
Power Transmission	Torsionally resilient coupling
Gearbox Options	Reverse reduction gearbox, electronically actuated, gearbox mounts, trolling mode for dead-slow propulsion, free auxiliary PTO, hydraulic pump drives

> The rated power of the stated diesel engines corresponds to ISO 3046-1:2002 (E) and ISO 15550:2002 (E)

> Intake air temperature 25°C/Sea water temperature 25°C

> Intake air depression 15 mbar/Exhaust back pressure 30 mbar > Barometric pressure 1000 mbar

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For further information consult your MTU distributor/dealer.

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