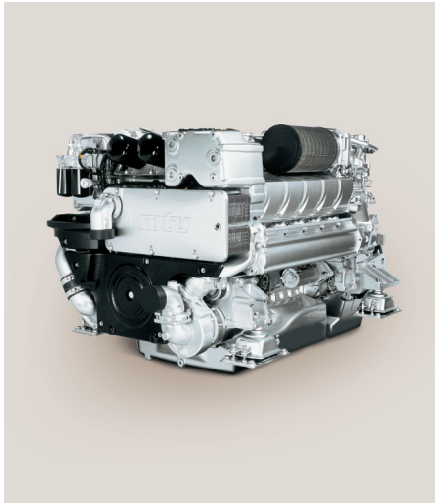


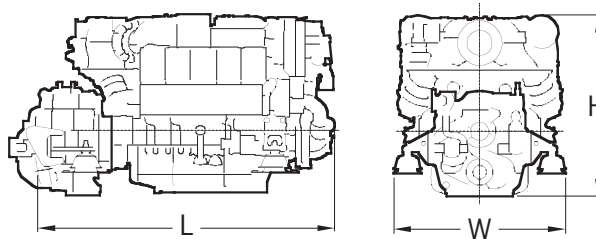
# Diesel Engines 8V/10V 2000 M93

## for Fast Vessels with Low Load Factors (1DS)



### Dimensions and Masses

2000 M93 - with gearbox	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
8V/ZF 550	2055x1130x1200 (80.9x44.5x47.2)	2550 (5622)
10V/ZF 2000	2255x1130x1230 (88.8x44.5x48.4)	2900 (6393)



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

Engine Model	8V 2000 M93	10V 2000 M93
Rated power ICFN      kW (bhp)	895 (1200)	1120 (1500)
Speed                      rpm	2450	2450
No. of cylinders	8	10
Bore/stroke              mm (in)	135/156 (5.4/6.1)	135/156 (5.4/6.1)
Displacement, total    l (cu in)	17.9 (1093)	22.3 (1361)
Flywheel housing	SAE 1	SAE 1
Gearbox type	ZF 550 i = 1.2 – 2.5	ZF 2000 i = 1.5 – 2.5
Optimization of exhaust emissions <sup>1)</sup>	IMO II/EPA 2/EU IIIA <sup>2)</sup>	IMO II/EPA 2/EU IIIA <sup>2)</sup>

<sup>1)</sup> IMO – International Maritime Organization (MARPOL)  
EPA – US Marine Directive 40 CFR 94  
EU – Nonroad Directive 97/68/EC

<sup>2)</sup> Recognition through the RheinSchUO (CCNR II)



Performance & Fuel Consumption <sup>1)</sup>		8V 2000 M93				10V 2000 M93			
Speed	rpm	2450	2200	2000	1200	2450	2200	2000	1200
Maximum power	kW	895	860	800	375	1120	1080	1000	475
	bhp	1200	1155	1075	505	1500	1450	1340	635
Power on propeller curve(n3)	kW	895	650	485	105	1120	820	615	135
	bhp	1200	870	650	140	1500	1100	825	180
Fuel consumption on propeller curve <sup>1)</sup>	g/kWh	215	212	215	222	214	217	213	220
	l/h	231.8	166.0	125.6	28.1	288.8	214.4	157.8	35.8
	gal/h	61.2	43.7	33.2	7.4	76.3	56.6	41.7	9.5

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

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 (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 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, 28V, 2 pole, bilgepump, on-engine PTOs
Fuel System	Duplex fuel pre-filter
Cooling System	Coolant preheating system, integr. seawater gearbox piping
Exhaust System	1 exhaust bellows horizontal discharge
Mounting System	Resilient mounts at driving end
Monitoring/Control System	<b>smartline, blueLine</b>
Power Transmission	Torsionally resilient coupling
Gearbox Options	Reverse reduction gearbox, el. actuated, gearbox mounts, trolling mode for dead-slow propulsion, free auxiliary PTO, hydraulic pump drives

> Power definition according ISO 3046

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

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

> 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.