Diesel Engine 8V/10V 2000 M94 for Fast Vessels with Low Load Factors (1DS)







Dimensions and Masses

2000 M94	Dimensions (LxWxH)	Mass, dry
8V	1373x1130x1200 mm (54.0x44.5x47.2 in)	2065 kg (4552.5 lbs)
10V	1600x1135x1250 mm (63.0x44.7x49.2 in)	2230 kg (4916 lbs)
2000 M94 - with	Dimensions (LxWxH)	Mass, dry
standard gearbox		
standard gearbox 8V - ZF 550	1907x1130x1200 mm (75.0x44.5x47.2 in)	2360 kg (5203 lbs)

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

Engine Model	8V 2000 M94	10V 2000 M94		
Rated power ICFN kW (hp) 932 (1250)	1193 (1600)		
Speed	pm 2450	2450		
No. of cylinders	8	10		
Bore/stroke mr	(in) 135/156 (5.3/6.1)	135/156 (5.3/6.1)		
Displacement, total I (d	ı in) 17.9 (1093)	22.3 (1361)		
Flywheel housing	SAE 1	SAE 1		
Gearbox model, standard ^①	ZF 550	ZF 2050		
Optimization of exhaust emiss	ons [®] IMO 2/EPA 2/EU III A [®]	IMO 2/EPA 2/EU III A [®]		
Solas compliance	Yes	Yes		

① gear ratio on request



[©] IMO - International Maritime Organisation; EPA - US Marine Directive 40 CFR 94

³ on request

Performance & Fuel Con	sumption ^①	8V 2000	M94			10V 2000	M94		
Speed	rpm	2450	2100	1700	1200	2450	2100	1700	1200
Maximum power	kW	932	885	680	395	1193	1120	860	540
	bhp	1250	1185	910	530	1600	1502	1153	724
Power on propeller curve (n³) kW	932	570	320	110	1193	750	390	150	
	bhp	1250	765	430	150	1600	1006	523	201
Fuel consumption	g/kWh	220 ^②	215	230	218	218 ^②	207	212	211
on propeller curve (n³)	l/h	247	198	88	28	313.3	187.0	99.6	38.1
	gal/h	65.3	52.3	23.4	7.6	82.8	49.4	26.3	10.1

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

[©] Fuel Consumption for Cruising speed with 70% power at 1900rpm: 8V = 205 g/kWh; 10V = 206 g/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, hand pump 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 2 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 PTPs		
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, blueline, bluevision		
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		

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

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

> Barometric pressure 1000 mbar