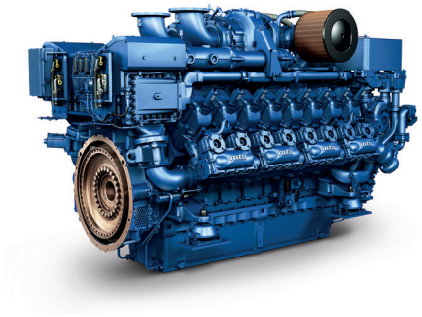
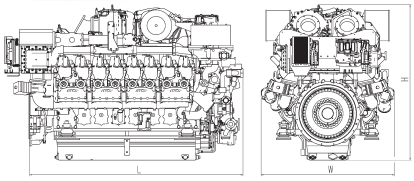
Marine

GAS ENGINE SERIES 4000 M55RN

for vessels with unrestricted continuous operation (1A)





Engine	Dimensions (L x W x H) mm (in)	Mass, dry kg (lbs)
8V 4000 M55RN	2050 x 1820 x 2100 (80.7 x 71.7 x 82.7)	6044 (13325)
16V 4000 M55RN	3233 x 1820 x 2100 (127.3 x 71.7 x 82.7)	9800 (21605)

Typical applications: e.g. tugs, barges, ferries, governmental vessels and other work boats

Optional equipment and finishing shown. Standard may vary.

Engine type		8V 4000 M55RN	16V 4000 M55RN
Rated power ICFN	kW	746	1492
	(bhp)	1000	2000
Speed	rpm	1600	1600
Peak torque Nm		5400	10800
Dry weight kg (lbs)		6044 (13325)	9800 (21605)
No. of cylinders		8	16
Displacement	l (cu in)	38.2 (2331.1)	76.3 (4656.1)
Emission legislation*		IMO III	IMO III

* These engines meets the IMO III emission standards with no additional exhaust gas aftertreatment.
IMO - International Maritime Organisation (MARPOL)

A Rolls-Royce solution

Fuel consumption *	8V 4000 M55RN	16V 4000 M55RN
Consumption	9690 kJ/kWh at nominal power = 204 g/kWh	

* Fuel consumption; tolerance at actual state of development +/- 10%

Standard equipment	
Starting system	Electric starter motor 24V, 2 pole, coolant preheating system
Oil system	Gear driven lube oil pump, switchable oil filter, lube oil heat exchanger, pump for lube oil extraction, closed crankcase ventilation, oil level monitoring
Cooling system	Separate high and low temperature cooling circuit, engine version for separate heat exchanger, gear driven coolant circulation pumps
Combustion air system	Engine coolant temperature-controlled intercooler, flame arrestors in charge-air manifold, single-stage turbocharging with 2 water-cooled turbochargers, on-engine seawater-resistant air filters, 30° discharge elbow
Fuel system	Flexible positionable Gas Regulating Unit aligned with engine safety concept, containing Gas-pressure regulating valve in accordance with engine requirements, monitored gas-filter, Doubleblock&Bleed valves with second enclosure applicable for air ventilation only. Gas engine with tight secondary enclosure around fuel-system complying with gas-safe machinery space, applicable for overpressure nitrogen or air ventilation, additional on-engine gas filter, multi-point injection valve on each cylinder, modular built common rail system on each cylinder bank, single fuel supply interface on engine connected via flexible hose
Engine management system	Engine control and monitoring system (ADEC); engine interface module - EIM, engine mounted
Mounting system	Resilient engine mounting
Engine safety system	The scope of delivery for the engine fulfils the requirements to be used in a gas safe engine room design and SOLAS requirements for admissible temperature
Power transmission	Torsional resilient and off-set compensating coupling

Optional equipment	
Oil system	Lube oil priming system, automatic oil replenishment system
Combustion air system	Intake air silencer
Exhaust system	90° discharge elbow
Auxiliary PTO	Secondary coolant pump, PTOs at free end of engine
Engine management system	Expansion in compliance with extended scope of monitoring (crankcase monitoring)
Gearbox option	Various revers reduction gearbox models, elec. actuated, gearbox mounts, PTO for hydraulic pump at driving shaft or at mediate shaft, trolling, trailing pump, propeller shaft flange classification ABS, BV, DNV/GL, LR including necessary extensions to scope of supply
High humidity	Up to 26 g/kg (standard is up to 22 g/kg)
High pressure	Inerting for engine
Classification	ABS, BV, DNV/GL, LR including necessary extensions to scope of supply

Reference conditions:
> Intake air temperature 25°C/Sea water temperature 25°C
> Barometric pressure 1000 mbar
Specifications are subject to change without notice.
All dimensions are approximate, for complete information refer to installation drawing. For further information consult your distributor/dealer.

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Subject to change. | 32310441 | Edition 01/20 | ESM 2020-10.