



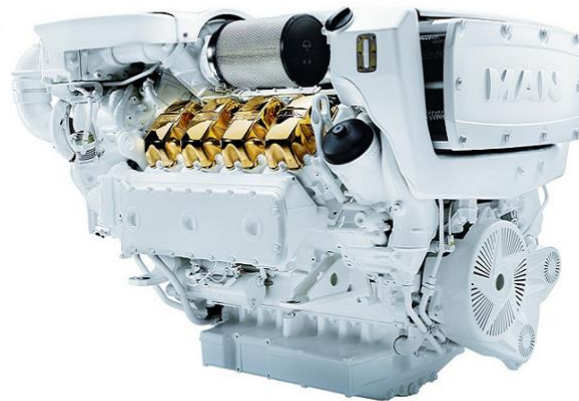
Technical data sheet

25.07.2019
(Version 1)

Marine diesel engine
D2868LE466 (V8-1300)

Performance data ¹

Rated power	956	kW
Rated power	1300	PS
Speed	2300	rpm
Bore/Stroke	128/157	mm
Displacement	16,16	liter
Rated torque	3970	Nm
Maximum torque	4350	Nm
at speed	1300-2100	rpm
Compression ratio [ε]	17,0	:1
Mean effective pressure	30,87	bar
Mean piston speed	12,04	m/s



Consumption data ²

Specific fuel consumption ¹	226	g/kWh
Absolute fuel consumption ¹	257	l/h
Lowest fuel consumption ³	199	g/kWh

The engine illustrated may not entirely be identical to production standard engine

Engine description

Application	Main propulsion diesel for ships with fixed pitch propeller
Operation profile	Up to 500 hours per year at a maximum of 5 % of time at full load
Construction	Four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	8 cylinders in V-arrangement, single cylinder heads with wet replaceable cylinder liners
Air system	Two-stage turbocharger with charge air intercooler and wastegate
Cooling system	Seawater cooled charge air cooler and plate heat exchanger by rubber impeller pump
Oil system	Force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit of the engine
Fuel system	Common Rail injection system with high pressure pump and EDC control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm ³ (180Nm)
Alternator	Three-phase generator with rectifier and transistorized governor, 28 V, 110 A
Starting system	Solenoid-operated electric starter, 24 V, 7.0 kW
Service	Oil change interval 400 operating hours
Classification	-----
Exhaust status	IMO Tier II, RCD 2013/53/EC, EPA Tier 3 recreational, EU Stage IIIA

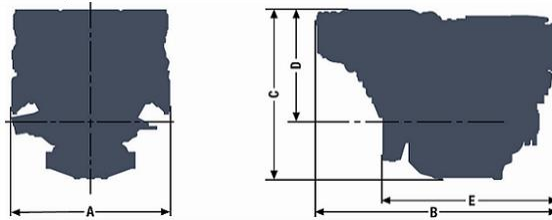
¹ Values at rated power

² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

³ Values on propeller curve

D2868LE466 (V8-1300)

A - overall width.....	1153 mm
B - overall length.....	1736 mm
C - overall height.....	1222 mm
D - above crank shaft....	811 mm
E - length to flywheel....	1262 mm
Engine weight (dry).....	1941 kg



Combustion parameters ¹

Intake air temperature (max.)	45 °C
Intake air vacuum (min/max)	30/60 mbar
Intake air volume flow	3980 m ³ /h

Exhaust gas temperature	475 °C
Exhaust gas volume flow	9600 m ³ /h
Exhaust gas mass flow	4730 kg/h
Exhaust back pressure (min/max)	20/80 mbar

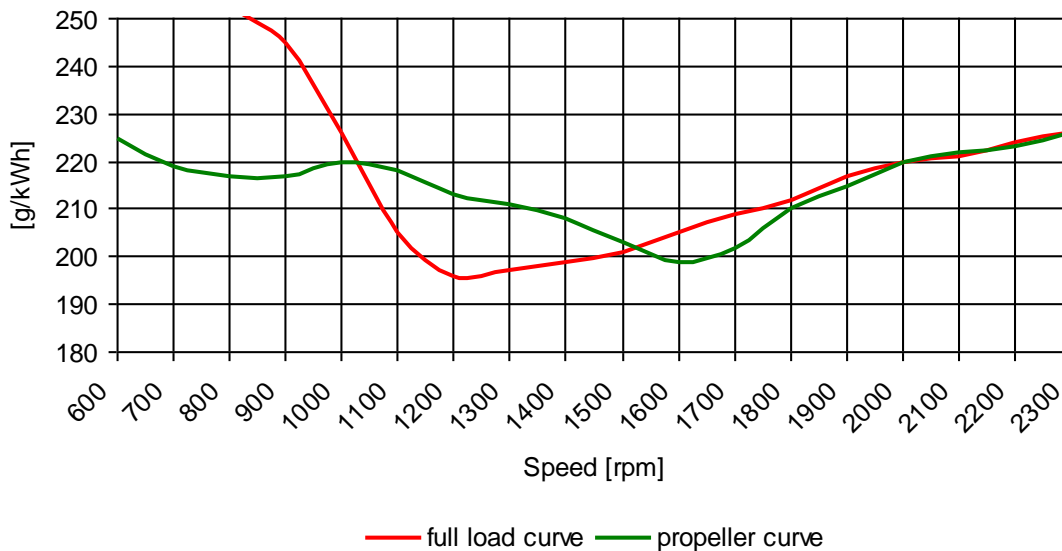
Heat balance ¹

Exhaust gas heat	660 kW
Cooling water heat	685 kW
Intercooler heat	245 kW
Radiation heat	33 kW

Noise emission (sound power) ¹

Engine surface noise (Lwa)	105,2 dB(A)
Free exhaust noise (Lwa)	113,6 dB(A)

Specific fuel consumption²



< The rated power is based on reference conditions according to ISO 3046-1 (2002) >

< Intake air temperature, max. 45°C | sea water temperature, max. 32°C >

< Barometric pressure 1000 mbar | air humidity 60% >

< Exponent for propeller curve 2,5 >

< Engine specifications are subjected to change without prior notice >

¹ Values at rated power

² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

³ Values on propeller curve