

Technical data sheet

08.07.2022 (Version 3)

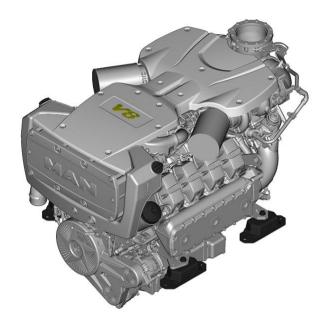
Marine diesel engine D2868LE426 (V8-1000)

Performance data ¹

Rated power	735	kW
Rated power	1000	PS
Speed	2300	rpm
Bore/Stroke	128/157	mm
Displacement	16,16	liter
Rated torque	3052	Nm
Maximum torque	3345	Nm
at speed	1400-2100	rpm
Compression ratio [ε]	17,0	:1
Mean effective pressure	23,73	bar
Mean piston speed	12,04	m/s

Consumption data ²

Specific fuel consumption ¹	234	g/kWh
Absolute fuel consumption ¹	205	l/h
Lowest fuel consumption ³	213	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 1000 hours per year at a maximum of 20 % of time at full load average load < 50 %
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	Single-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 EDC17 control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm³ (180Nm)
Alternator	Three-phase generator with rectifier and transistorized governor, 28V, 120A
Starting system	Solenoid-operated electric starter, 24V, 7.0kW
Service	Oil change interval 400 operating hours
Classification	

Exhaust status IMO Tier II, RCD 2013/53/EC, China 2 recreational, (EPA Tier 3 Replacement)

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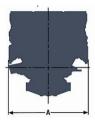
¹ Values at rated power

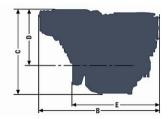
² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

³ Values on propeller curve

D2868LE426 (V8-1000)

A - overall width	1153	mm
B - overall length	1745	mm
C - overall height	1177	mm
D - above crank shaft	765	mm
E - length to flywheel	1243	mm
Engine weight (dry)	1780	kg





Combustion parameters ¹

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	2890	m³/h

Exhaust gas temperature	547	°C
Exhaust gas volume flow	7960	m³/h
Exhaust gas mass flow	3350	kg/h
Exhaust back pressure (min/max)	20/80	mbar

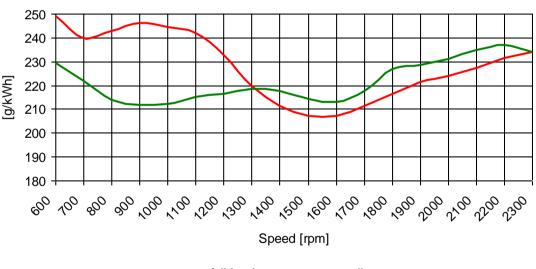
Heat balance 1

Exhaust gas heat	620	kW
Cooling water heat	510	kW
Intercooler heat	155	kW
Radiation heat	31	kW

Noise emission (sound power) 1

Engine surface noise (Lwa)	120,3 dB(A)
Free exhaust noise (Lwa)	123,0 dB(A)

Specific fuel consumption²



—— full load curve —— propeller curve

- < 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