



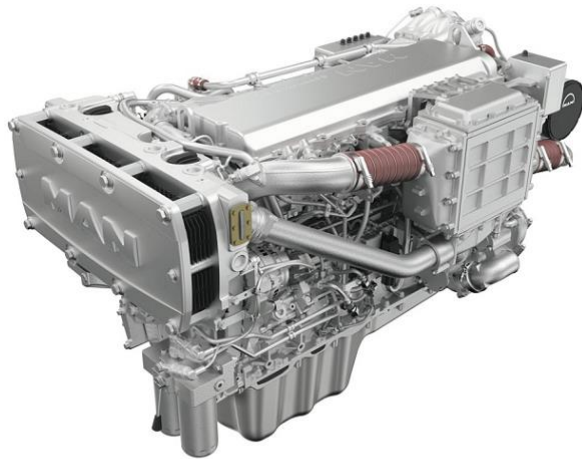
# Technical data sheet

Marine diesel engine  
D2676LE494

04.07.2022  
(Version 1)

## Performance data <sup>1</sup>

Rated power	331	kW
Rated power	450	PS
Speed	1800	rpm
Bore/Stroke	126/166	mm
Displacement	12,42	liter
Rated torque	1756	Nm
Maximum torque	1980	Nm
at speed	1200-1600	rpm
Compression ratio [ε]	18,0	:1
Mean effective pressure	17,77	bar
Mean piston speed	9,96	m/s



## Consumption data <sup>2</sup>

Specific fuel consumption <sup>1</sup>	209	g/kWh
Absolute fuel consumption <sup>1</sup>	82	l/h
Lowest fuel consumption <sup>3</sup>	208	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 or variable pitch propeller
Operation profile	Unlimited operating hours per year at a maximum of 100 % of time at full load
Construction	Four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	6 cylinders in line, 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, GTL/HVO
Auxiliary PTO	PTO for hydraulic pump 16 cm <sup>2</sup>
Alternator	Three-phase generator with rectifier and transistorized governor, 28V, 120A
Starting system	Solenoid-operated electric starter, 24V, 5.5kW
Service	Oil change interval 600 operating hours
Classification	Engine according to classification requirements available => see MAN Marine Configurator
<b>Exhaust status</b>	<b>IMO Tier II, RCD 2013/53/EC, EPA Tier 3 commercial</b>

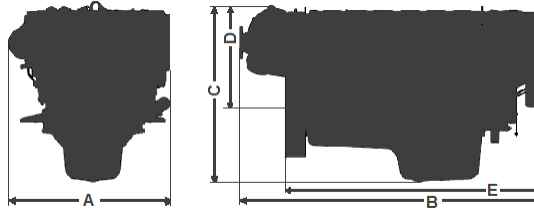
<sup>1</sup> Values at rated power

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

<sup>3</sup> Values on propeller curve

## D2676LE494

A - overall width.....	986 mm
B - overall length.....	1795 mm
C - overall height.....	1096 mm
D - above crank shaft....	674 mm
E - length to flywheel....	1527 mm
Engine weight (dry).....	1251 kg



### Combustion parameters <sup>1</sup>

Intake air temperature (max.)	45 °C
Intake air vacuum (min/max)	30/60 mbar
Intake air volume flow	1520 m <sup>3</sup> /h

Exhaust gas temperature	461 °C
Exhaust gas volume flow	3820 m <sup>3</sup> /h
Exhaust gas mass flow	1790 kg/h
Exhaust back pressure (min/max)	20/80 mbar

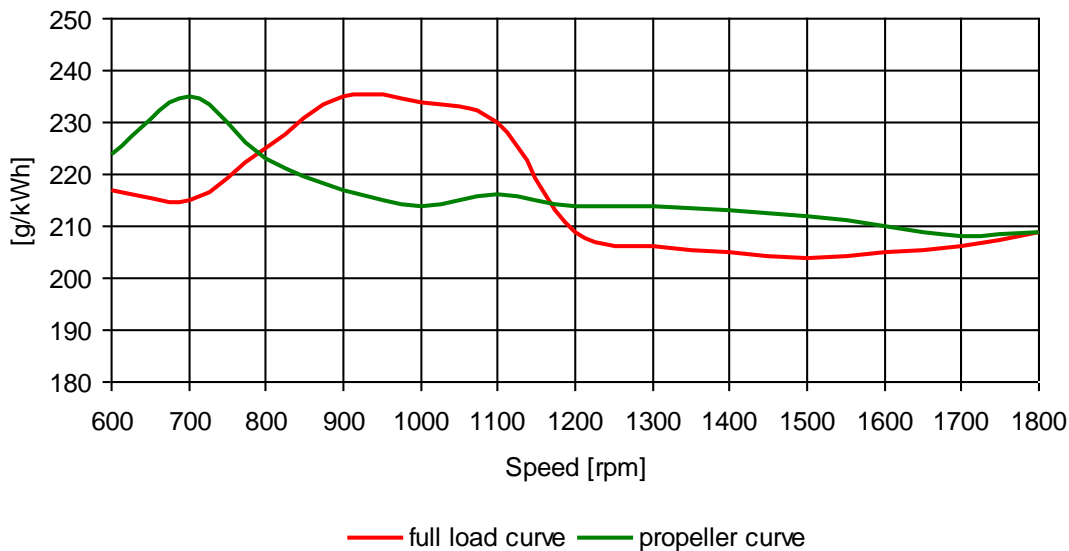
### Heat balance <sup>1</sup>

Exhaust gas heat	250 kW
Cooling water heat	145 kW
Intercooler heat	80 kW
Radiation heat	26 kW

### Noise emission (sound power) <sup>1</sup>

Engine surface noise (Lwa)	112,0 dB(A)
Free exhaust noise (Lwa)	105,0 dB(A)

### Specific fuel consumption<sup>2</sup>



< 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 3 >

**< Engine specifications are subjected to change without prior notice >**

<sup>1</sup> Values at rated power

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

<sup>3</sup> Values on propeller curve