



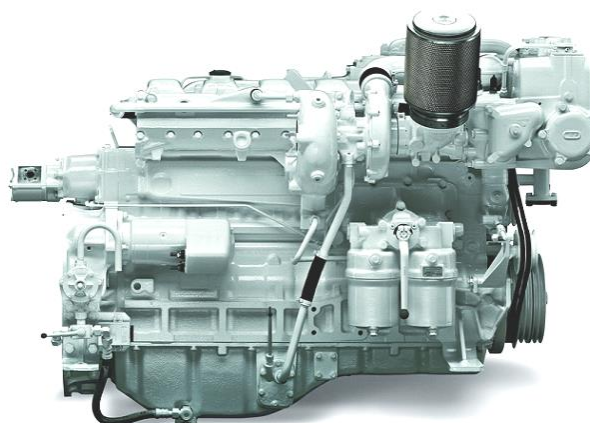
# Technical data sheet

18.05.2016  
(Version 2)

## Marine diesel engine D2866LXE40 ()

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

Rated power	294	kW
Rated power	400	PS
Speed	2100	rpm
Bore	128	mm
Stroke	155	mm
Displacement	11,97	liter
Rated torque	1337	Nm
Maximum torque	1415	Nm
at speed	1600-1800	rpm
Compression ratio [ε]	15,5	:1
Mean effective pressure	14,04	bar
Mean piston speed	10,85	m/s



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

### Consumption data <sup>1</sup>

Specific fuel consumption <sup>2</sup>	213	g/kWh
Absolute fuel consumption <sup>2</sup>	75	l/h
Lowest fuel consumption <sup>3</sup>	207	g/kWh

### Engine description

Operation profile	up to 3000 hours per year at a maximum of 50 % of time at full load   average load < 70 %
Construction	four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	6 cylinders in line, single cylinder heads with wet replaceable cylinder liners
Air system	single-stage turbocharger with charge air intercooler
Cooling system	seawater cooled by rubber impeller pump or two-circuit-cooling system for hull cooling
Oil system	force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit of the engine
Fuel system	Inline injection pump with mechanical governor, fuel to DIN EN 590, DIN ISO 8217 (DMA/DMX)
Auxiliary PTO	PTO for hydraulic pump (90Nm), front-PTO by crank shaft extension
Alternator	three-phase generator with rectifier and transistorized governor, 28V, 55A
Starting system	solenoid-operated electric starter, 24V, 5.4kW
Service	oil change interval 400 operating hours, average TBO 15.000 - 20.000 operating hours
Classification	ABS, BV, CRS, DNV, GL, LR, RINA, RMRS, RRR, KR, TL

**Exhaust status** IMO Tier II, 97/68/EC, RCD 94/25/EC

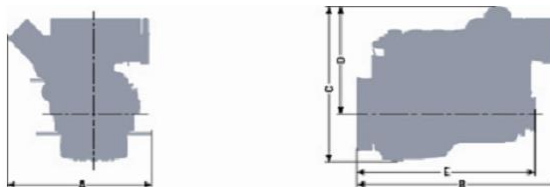
<sup>1</sup> values at rated power

<sup>2</sup> Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590

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

## D2866LXE40 ( )

A - overall width.....	855 mm
B - overall length.....	1474 mm
C - overall height.....	1244 mm
D - above crank shaft....	686 mm
E - length to flywheel....	1298 mm
Engine weight (dry).....	1020 kg



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

Intake air temperature (max.)	45 °C
Intake air vacuum (min/max)	30/60 mbar
Intake air volume flow	1290 m <sup>3</sup> /h

Exhaust gas temperature	410 °C
Exhaust gas volume flow	3060 m <sup>3</sup> /h
Exhaust gas mass flow	1550 kg/h
Exhaust back pressure (min/max)	20/80 mbar

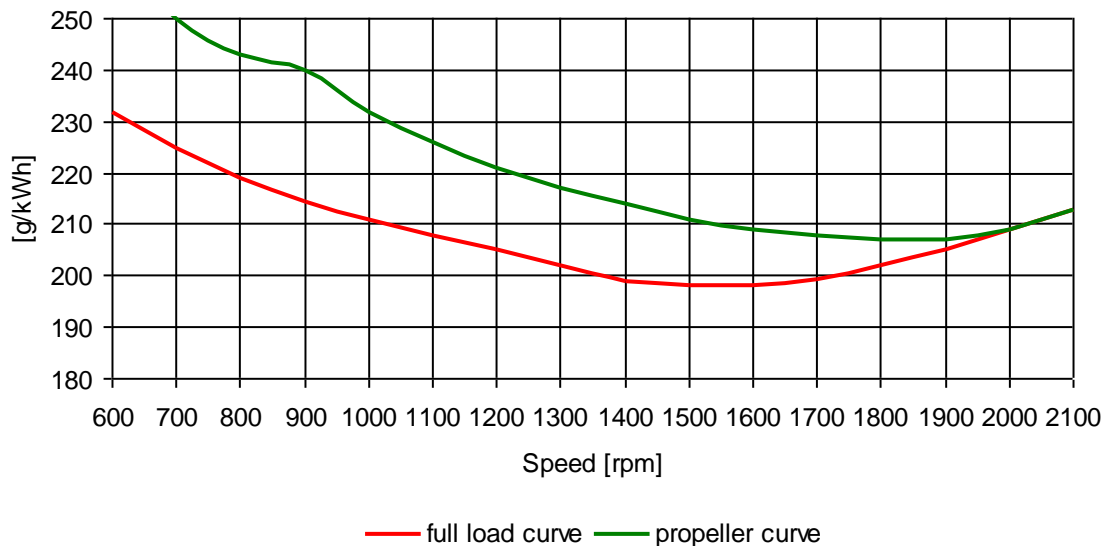
### Heat balance <sup>1</sup>

Exhaust gas heat	163 kW
Cooling water heat	220 kW
Intercooler heat	45 kW
Radiation heat	26 kW

### Noise emission <sup>1</sup>

Engine surface noise (Lwa)	109,0 dB(A)
Free exhaust noise (Lwa)	102,0 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 2,7 >

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

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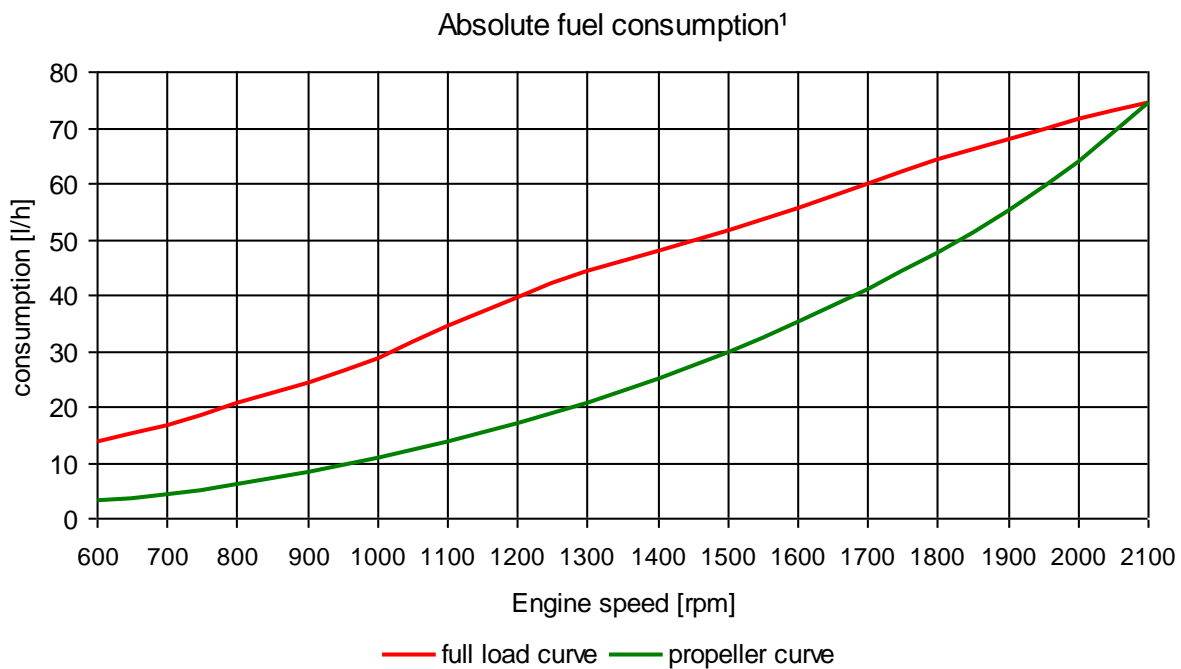
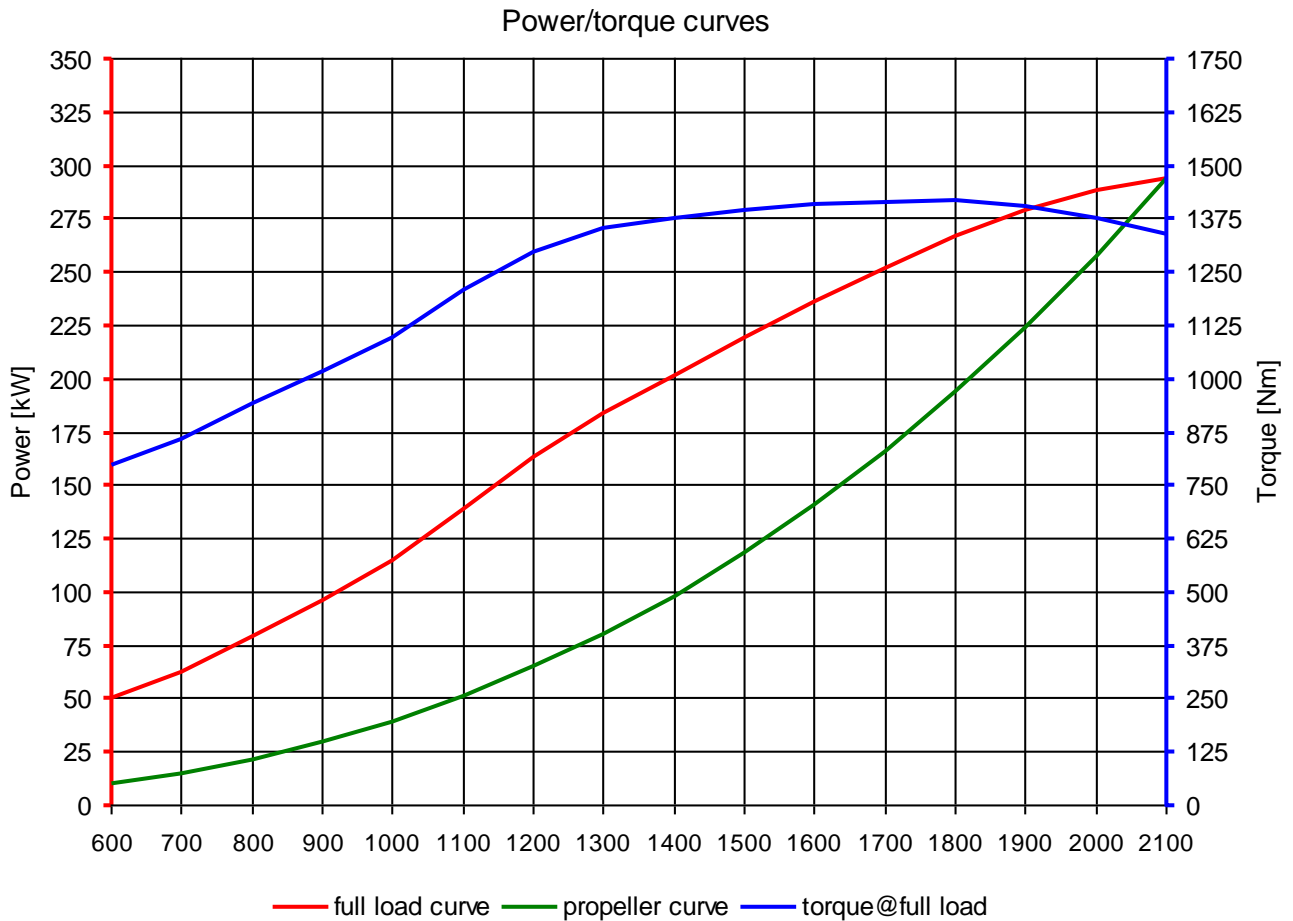
<sup>3</sup> values on propeller curve



# Engine curves

18.05.2016  
(Version 2)

D2866LXE40 (294kW@2100rpm) ()



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

< Exponent for propeller curve 2,7 >

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