

# Technical data sheet

18.05.2016 (Version 2)

# Marine diesel engine D2866LXE40 ()

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

Rated power	190	kW
Rated power	258	PS
Speed	1800	rpm
Bore	128	mm
Stroke	155	mm
Displacement	11,97	liter
Rated torque	1008	Nm
Maximum torque	1055	Nm
at speed	1400-1600	rpm
Compression ratio [ε]	15,5	:1
Mean effective pressure	10,58	bar
Mean piston speed	9,3	m/s



# Consumption data <sup>1</sup>

Specific fuel consumption <sup>2</sup>	213	g/kWh
Absolute fuel consumption <sup>2</sup>	48	l/h
Lowest fuel consumption <sup>3</sup>	211	g/kWh

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

# **Engine description**

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, 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 20.000 - 25.000 operating hours
Classification	ABS, BV, CRS, DNV, GL, LR, RINA, RMRS, RRR, TL

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

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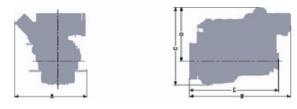
<sup>&</sup>lt;sup>1</sup> values at rated power

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

<sup>&</sup>lt;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	ka



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

Intake air temperature (max.)	45 °C	2
Intake air vacuum (min/max)	30/60 m	bar
Intake air volume flow	815 m	1³/h

Exhaust gas temperature	375	°C
Exhaust gas volume flow	1820	m³/h
Exhaust gas mass flow	965	kg/h
Exhaust back pressure (min/max)	20/60	mbar

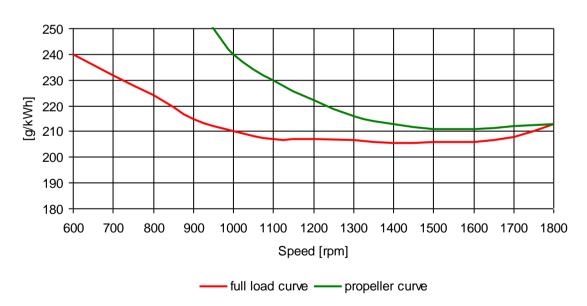
#### Heat balance 1

Exhaust gas heat	110	kW
Cooling water heat	140	kW
Intercooler heat	20	kW
Radiation heat	25	kW

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

Engine surface noise (Lwa)	114,1 dB(A)
Free exhaust noise (Lwa)	110,3 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>&</sup>lt;sup>1</sup> values at rated power

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

<sup>&</sup>lt;sup>3</sup> values on propeller curve

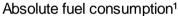


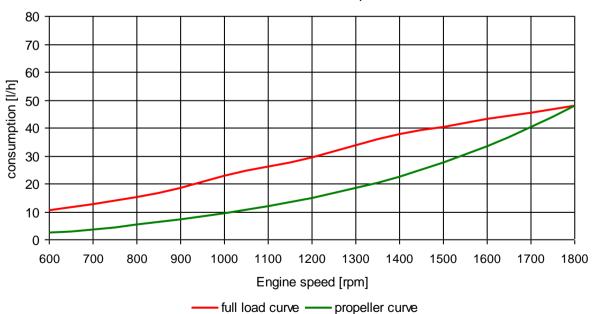
# Engine curves

18.05.2016 (Version 2)

D2866LXE40 (190kW@1800rpm) ()







- < The rated power is based on reference conditions according to DIN ISO 3046-1 (2002) >
- < Exponent for propeller curve 3 >
- < Engine specifications are subjected to change without notice >

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