Technical data sheet

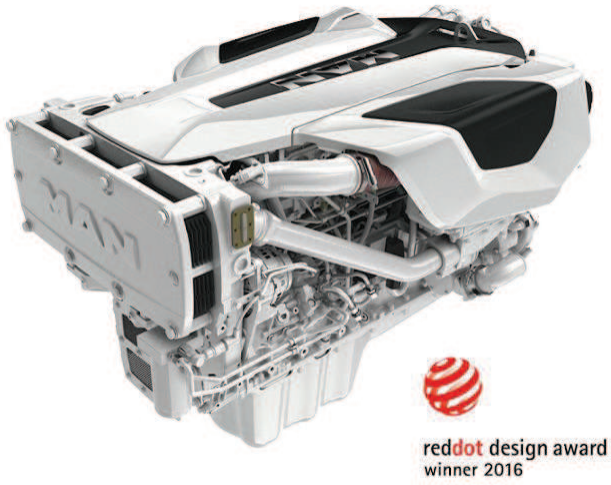
Marine diesel engine

D2676LE423 (i6-800)

17.01.2017
(Version 1)

Performance data [1]

Rated power	588	kW
Rated power	800	PS
Speed	2300	rpm
Bore	126	mm
Stroke	166	mm
Displacement	12,42	liter
Rated torque	2441	Nm
Maximum torque	2674	Nm
at speed	1400-2000	rpm
Compression ratio [ε]	16,5	:1
Mean effective pressure	24,70	bar
Mean piston speed	12,73	m/s



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

Consumption data [1]

Specific fuel consumption [2]	225	g/kWh
Absolute fuel consumption [2]	158	l/h
Lowest fuel consumption [3]	213	g/kWh

Engine description

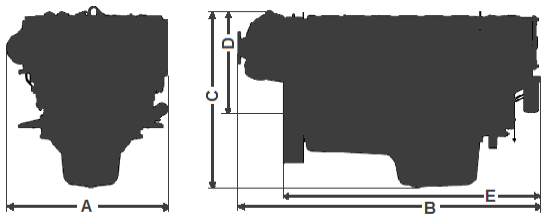
Operation profile	up to 1000 hours per year at a maximum of 20 % of time at full load | average load < 50 %
Construction	four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	6 cylinders in line, single cylinder heads with wet replaceable cylinder liners
Air system	single-stage 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 high pressure pump and EDC control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm²
Alternator	three-phase generator with rectifier and transistorized governor, 28 V, 110 A
Starting system	solenoid operated electric starter, 24 V, 5.5 kW
Service	oil change interval 400 operating hours, average TBO 5.000 operating hours
Classification	----------

Exhaust status	**IMO Tier II, RCD 2013/53/EC, EPA Tier 3 recreational, 97/68/EC**

[1] values at rated power
[2] Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
[3] values on propeller curve

D2676LE423 (i6-800)

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).....	1215	kg



Combustion parameters [1]

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	2330	m³/h
Exhaust gas temperature	645	°C
Exhaust gas volume flow	7290	m³/h
Exhaust gas mass flow	2730	kg/h
Exhaust back pressure (min/max)	20/80	mbar

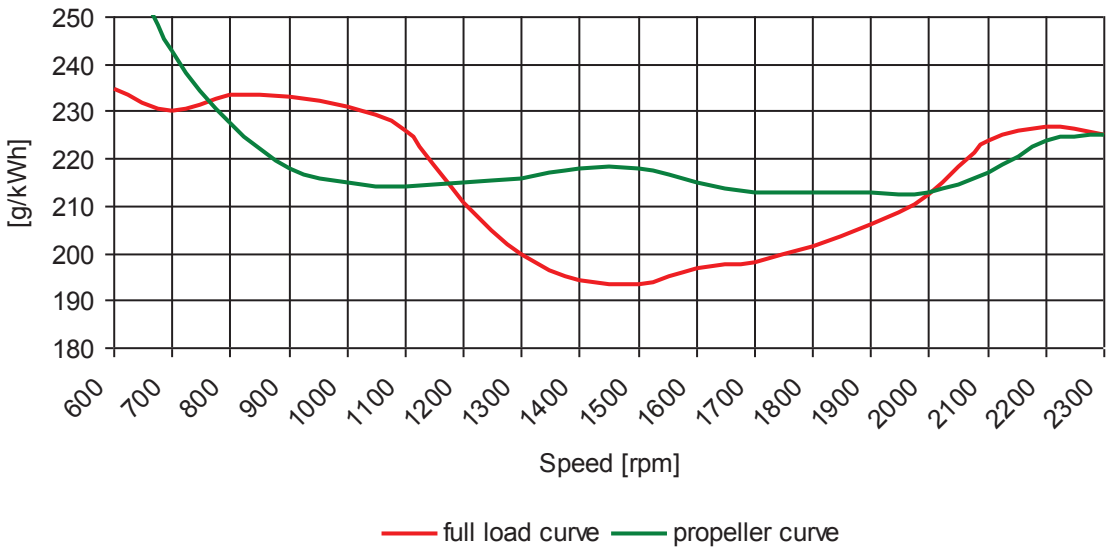
Heat balance [1]

Exhaust gas heat	545	kW
Cooling water heat	300	kW
Intercooler heat	120	kW
Radiation heat	28	kW

Noise emission [1]

Engine surface noise (Lwa)	115,0	dB(A)
Free exhaust noise (Lwa)	129,2	dB(A)

Specific fuel consumption[2]



< 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] Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
[3] values on propeller curve

Engine curves

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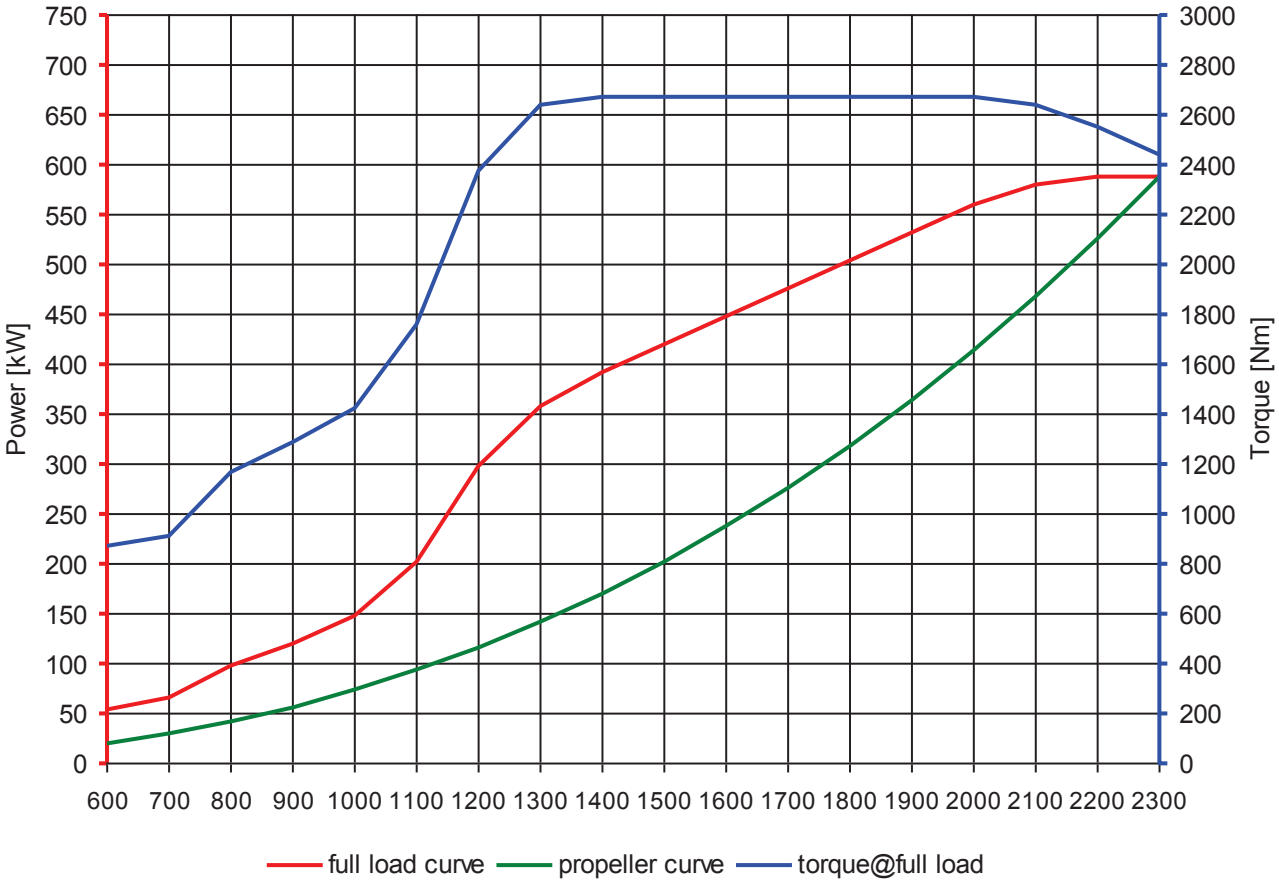
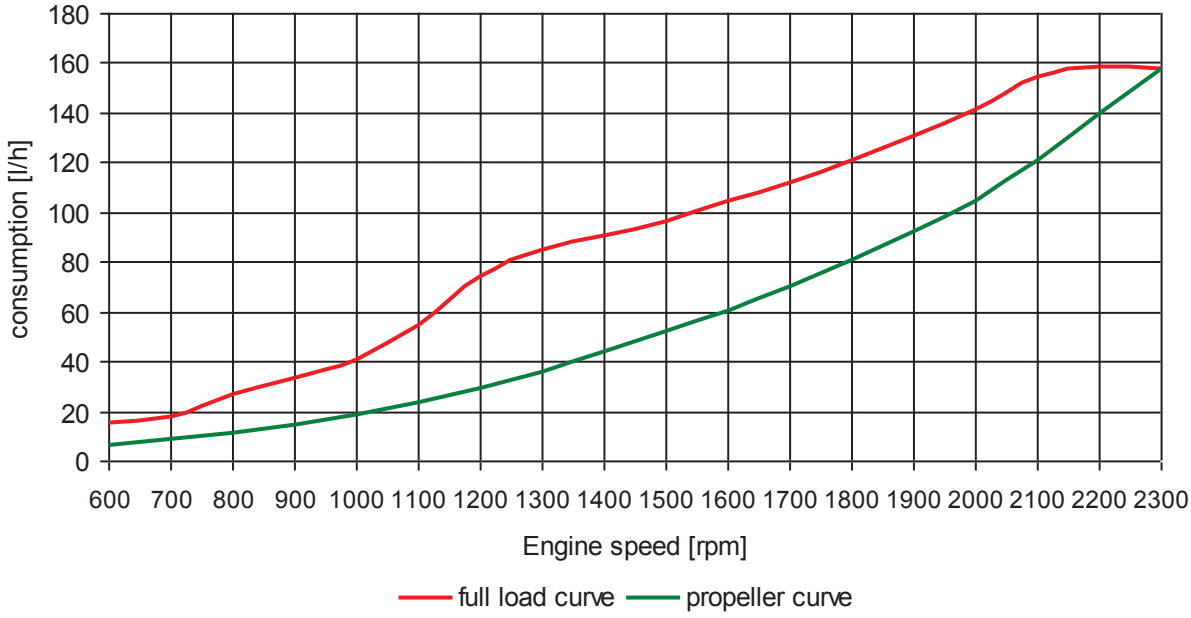
D2676LE423 (588kW@2300rpm) (i6-800)

Power/torque curves



Absolute fuel consumption[1]



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