

D2842



MAN high speed marine engines for heavy duty applications.

Engineering the Future – since 1758.

MAN Nutzfahrzeuge



Full speed ahead.

Typical applications for marine heavy duty operation cover passenger and goods transportation as well as escort and patrol duties at sea. MAN marine diesel engines from 258 mhp to 900 mhp perform these tasks reliably and efficiently. They meet the international current emission standards and are environmentally friendly. The worldwide service network ensures minimal maintenance effort and a customer-oriented service.

Engine description D2842.

Characteristics

Cylinders and arrangement	12 cylinders in 90° V design
Operation mode	watercooled 4-stroke diesel engine with exhaust turbocharger and intercooler, boost pressure control with waste gate
Number of valves	2 valves per cylinder, replaceable
Fuel system	Direct injection with Bosch injection pump
Engine block	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
Engine lubrication	Closed system with forced feeding, oil cooling and filtering
Type of cooling	Heat exchanger with seawater pump fitted alternatively equipment for keel cooling
Engine electric	Electronic engine monitoring for LE419/LE412/LE405
Exhaust gas status	IMO Tier 2, 97/68/EC for LE412/LE419 On request: ZKR, SAV and BSO for commercial application
Fuel	DMX fuel to ISO 8217, EN 590

Dimensions D2842

		LE419/412/405
A-Overall width of engine	mm	1,230
B-Overall length of engine	mm	1,751
C-Overall height of engine - flat oil pan	mm	1,105
- deep oil pan	mm	1,216
D-Top of engine to crankshaft centre	mm	685
E-Length front end to edge of flywheel housing	mm	1,491
Average weight of engine ready for installation (dry)	kg	1,790

For detailed examinations of installation dimensions, please order drawings from our factory.

MAN engines have outstanding qualities

- High tractive power even at low speeds
- Powerful acceleration and rapid reaction to commands
- High performance combined with low weight
- Compact, space-saving design
- Low emission values
- High efficiency owing to low fuel consumption, low running costs and long service life
- World-wide service network with rapid supply of spare parts

Technical data D2842

Type of engine		LE419	LE412	LE405
Bore	mm	128	128	128
Stroke	mm	142	142	142
Displacement	l	21.93	21.93	21.93
Compression ratio		15.5:1	15.5:1	15.5:1
Rotation looking on flywheel		left	left	left
Flywheel housing		SAE 1	SAE 1	SAE 1
Nominal rating	kW (mhp)	440 (598)	588 (800)	662 (900)
Rated speed	rpm	1,800	1,800	2,100
Torque at rated speed	Nm	2,334	3,120	3,010
Maximum torque	Nm	2,340	3,459	3,440
at speed	rpm	1,700	1,200	1,500
Specific fuel consumption ²	g/kWh	216	222	218
Fuel consumption ²	l/h	114	156	172
Classifiable		√	√	√

¹ The rating is according to DIN ISO 3046/1. ² Consumption at rated power.

Definition of heavy duty operation

Annual operating hours	> 3,000
Percentage of time at full load	≤ 100%
Average load application	≤ 100%

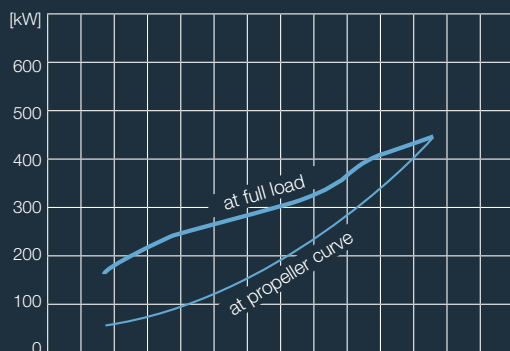
Typical applications

Trawlers
Tugs and pushboats
Freight barges and freighters
Ferries
Dredgers

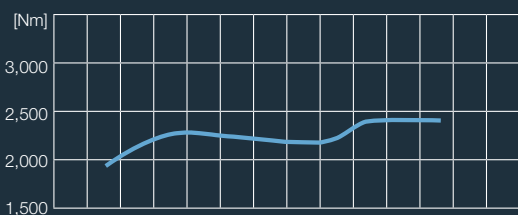


Power charts D2842.

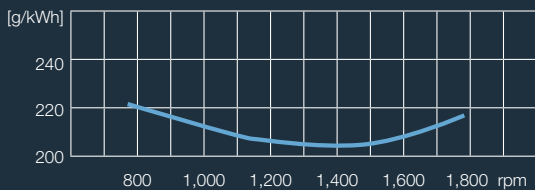
Power



Torque

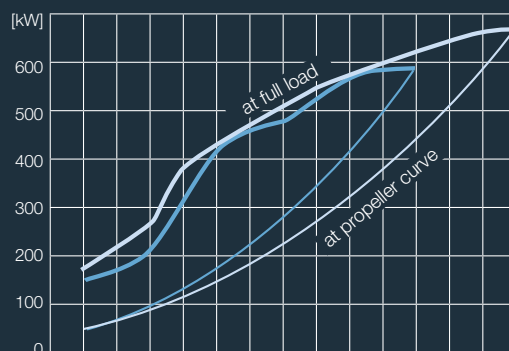


Specific fuel consumption (full load)

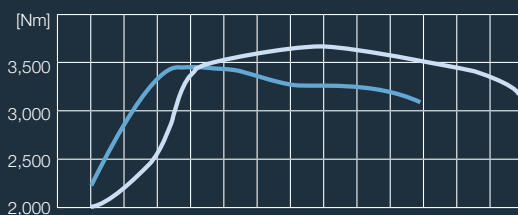


■ D 2842 LE 419 (440 kW, 1,800 rpm)

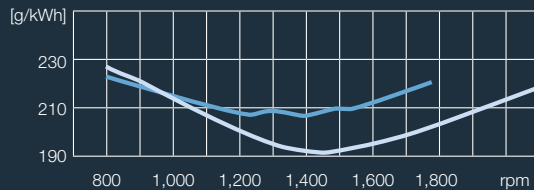
Power



Torque



Specific fuel consumption (full load)



■ D 2842 LE 412 (588 kW, 1,800 rpm)

■ D 2842 LE 405 (662 kW, 2,100 rpm)

D 114.498/E · mu 09104 · Printed in Germany

Text and illustrations are not binding.

We reserve the right to make modifications in the course of technical progress.

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