

D2842.

Engine description.

Characteristics

- Cylinders and arrangement: 12 cylinders in 90° V design
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Exhaust turbocharger with intercooler, boost pressure control with waste gate
- Number of valves: 2 valves per cylinder
- Fuel system: Direct fuel 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 control: Electronic engine monitoring for LE419/LE412/LE405
- Exhaust gas status: IMO Tier 2, 97/68/EC for LE412/LE419
- Fuel: DMX fuel to ISO 8217, DIN EN 590

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Technical data.

Technical features D2842

Type of engine		LE 419	LE 412	LE 405
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 ¹⁾	kW (hp)	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	2,530	3,340	3,400
at speed	rpm	1,600	1,200–1,600	1,200–1,400
Specific fuel consumption ²⁾	g/kWh	216	222	230
Fuel consumption ²⁾	l/h	113	155	181
Classifiable		✓	✓	✓

1) The rating is according to DIN 3046/1.

2) Consumption at rated power.



Dimensions D2842

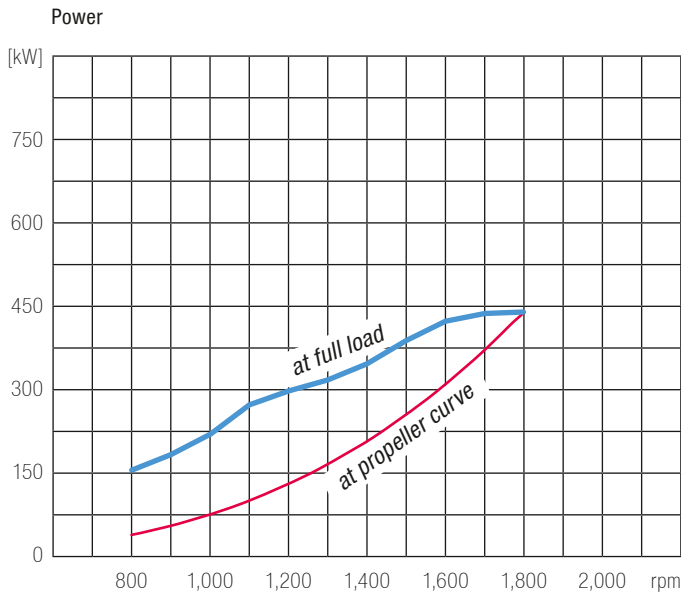
Type of engine		LE 419/412/405
A-Overall width of engine	mm	1,230
B-Overall length of engine	mm	1,750
C-Overall height of engine	mm	1,105
	– flat oil pan	
	– deep oil pan	1,215
D-Top of engine to crankshaft centre	mm	685
E-Length of engine from front end to edge of flywheel housing	mm	1,491
Average weight of engine ready for installation (dry)	kg	1,790

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

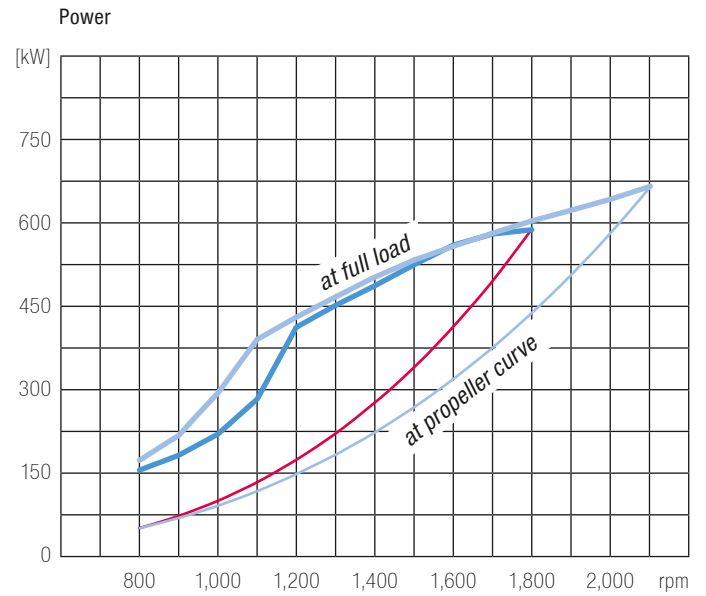
D2842.

Power charts.

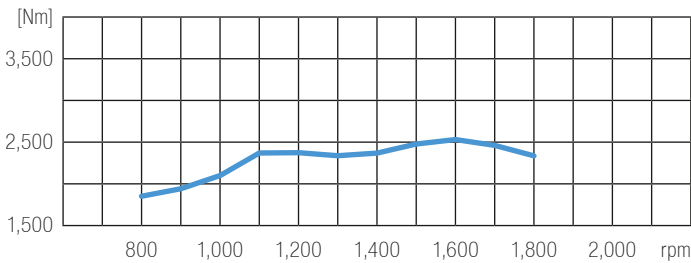
D2842 LE 419



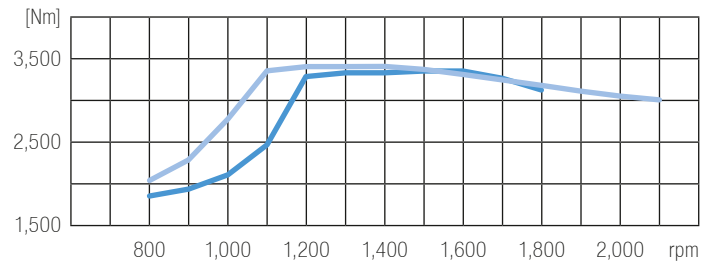
D2842 LE 412 and D2842 LE 405



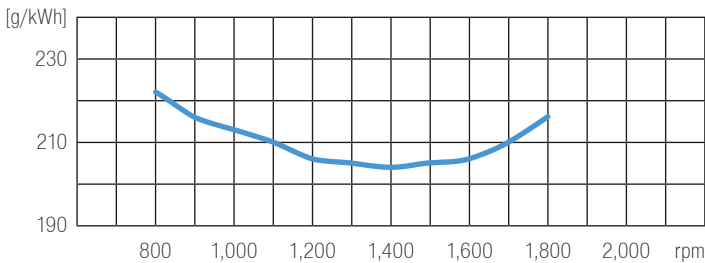
Torque



Torque

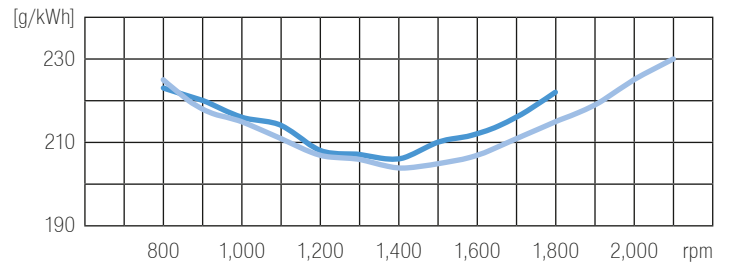


Specific fuel consumption (full load)



■ D2842 LE 419 with 440 kW (598 hp at 1,800 rpm)

Specific fuel consumption (full load)



■ D2842 LE 412 with 588 kW (800 hp at 1,800 rpm)

■ D2842 LE 405 with 662 kW (900 hp at 2,100 rpm)