D16-MH



Technical Data

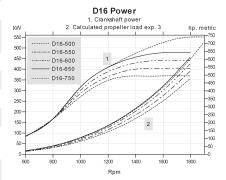
Engine designation	D16 MH				
No. of cylinders and configuration	in-line 6				
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with charge air cooler				
Bore/stroke, mm (in.)	144/165 (5.67/6.50)				
Displacement, I (in ³)	16.12 (983.9)				
Compression ratio	17.5:1				
Dry weight bobtail, kg (lb)	1750 (3858)				
Dry weight with reverse gear MG5145SC-E, kg (lb)	2110 (4652)				
Dry weight with reverse gear MG5170DC-E, kg (lb)	2610 (5754)				
	Rating 1 1800 rpm	Rating 1 1800 rpm	Rating 1 1800 rpm	Rating 1 1800 rpm	Rating 2 1900 rpm
Crankshaft power, kW (hp)	368 (501)	405 (551)	442 (601)	479 (651)	552 (751)
Max. torque, Nm (lbf.ft) @ 1200 rpm	2766 (2040)	2907 (2144)	3092 (2280)	3265 (2408)	3267 (2410)
Specific fuel consumption,					
g/kWh (lb/hph) @1400 rpm	197 (0.320)	197 (0.320)	195 (0.316)	194 (0.313)	199 (0.322)
g/kWh (lb/hph) @1800 rpm	209 (0.339)	209 (0.338)	209 (0.339)	210 (0.341)	209 (0.339)
Emission compliance	EU IWW,	EU IWW,	EU IWW,	EU IWW,	EU IWW,
	IMO NOx,	IMO NOx,	IMO NOx,	IMO NOx,	IMO NOx,
	CCNR Stage 2,	CCNR Stage 2,	CCNR Stage 2,	CCNR Stage 2,	CCNR Stage 2,
			US EPA Tier 3	US EPA Tier 3	US EPA Tier 3

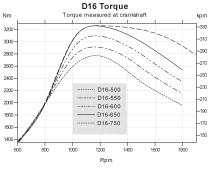
Recommended fuel to conform to ASTM-D975 1-D & 2-D, EN 590 or JIS KK 2204

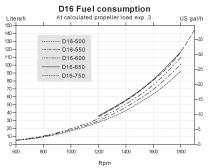
Flywheel housing/SAE size 14"/SAE1

Technical data according to ISO 3046 Fuel Stop Power and ISO 8665. Fuel with a lower calorific value of 42700 kJ/kg and density of 840 g/liter at $15\,^{\circ}$ C (60 °F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

Ratings R1 & R2, see explanation in Volvo Penta's Product Guide.









D16-MH

Technical description:

Engine and block

- Cylinder block and cylinder head made of cast-iron
- One-piece cast-iron cylinder head
- Ladder frame fitted to engine block
- Replaceable wet cylinder liners and valve seats/guides
- Drop forged crankshaft with induction hardened bearing surfaces and fillets with seven main bearings
- Four valve per cylinder layout with overhead camshaft
- Each cylinder features cross-flow inlet and exhaust ducts
- Gallery oil-cooled cast aluminum alloy pistons with three piston rings
- · Rear-end transmission

Engine mounting

Flexible engine mounting (option)

Lubrication system

- Integrated oil cooler in cylinder block
- Twin full flow oil filters and by-pass filters of spin-on type

Fuel system

- Electronic Unit Injectors, one per cylinder, vertically positioned at the center in between the four valves
- 5-hole high pressure injector nozzles
- Gear-driven fuel pump, driven by timing gear
- Electronically controlled central processing system (EMS – Engine Management System)
- · Electronically controlled injection timing
- Twin spin-on fine fuel filters with change over valve

Air inlet and exhaust system

- · Air filter with replaceable inserts
- Mid-positioned twin entry turbocharger and charge air cooler

Cooling system

- Freshwater-cooled charge air cooler
- · Seawater-cooled tubular heat exchanger
- · Coolant system prepared for hot water outlet
- Easily accessible seawater impeller pump in rear end

Electrical system

24V/80A alternator

Instruments/controls (option)

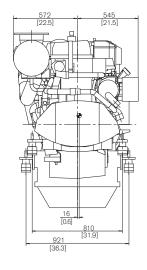
- Complete instrumentation including key switch and interlocked alarm
- EVC monitoring panels for single or twin installations
- Electronic remote control for throttle and shift
- · Plug-in connections
- SDU shutdown unit for classified installations
- MCC Marine Control System

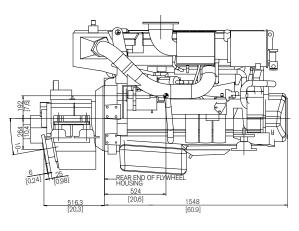
Reverse gear

• MG5145A-E, electrically shifted.

Dimensions D16 MH with MG5145A-E

Not for installation





More information

Contact your local Volvo Penta dealer for more information regarding Volvo Penta engines and optional equipment/ accessories or visit www.volvopenta.com





Download the Volvo Penta dealer locator App for your IPhone or Android



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