D13-800



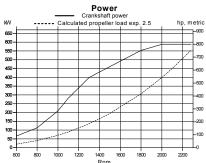
Technical Data

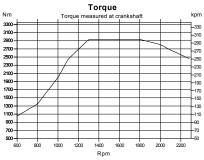
Engine designation	D13-800
No. of cylinders and configuration	in-line 6
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with charge air cooler
Bore/stroke, mm (in.)	131/158 (5.16/6.22)
Displacement, I (in³)	12.78 (779.7)
Compression ratio	16.5:1
Dry weight bobtail, kg (lb)	1450 (3197)
Crankshaft power, kW (hp) @ 2300 rpm	588 (800)
Max. torque, Nm (lbf.ft) @ 1200 rpm	2930 (2162)
Emission compliance	IMO NOx, EU RCD, US EPA Tier 3
Rating	R5*
Recommended fuel to conform to	ASTM-D975 1-D & 2-D, EN 590 or JIS KK 2204
Specific fuel consumption, g/kWh (lb/hph) @ 2300 rpm	212 (0.343)
Flywheel housing/SAE size	14"/SAE1

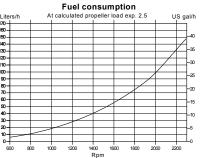
Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at 15 °C (60 °F).

Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

*RATING 5. For pleasure craft applications, and can be used for high speed planing crafts in commercial applications









D13-800

Technical description:

Engine and block

- Cylinder block 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 and center position of unit injec-
- 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

Lubrication system

- Integrated oil cooler in cylinder block
- Rear positioned twin full flow oil filter of spin-on type and by-pass filter

Fuel system

- Electronic high pressure unit injectors
- Gear-driven fuel pump and injection timing
- Electronically controlled central processing system (EMS - Engine Management System)
- Single fine fuel filter of spin-on type, with water separator and water alarm

Air inlet and exhaust system

- Twin entry turbo technology with freshwatercooled charge air cooler
- Air filter with replaceable inserts
- Wet exhaust elbow/riser (option)
- Loss of sea water alarm

Cooling system

Seawater-cooled plate heat exchanger

- · Coolant system prepared for hot water outlet
- Easily accessible seawater pump in rear end of flywheel housing

Electrical system

• 24V/110A plus an optional extra 24V/110A

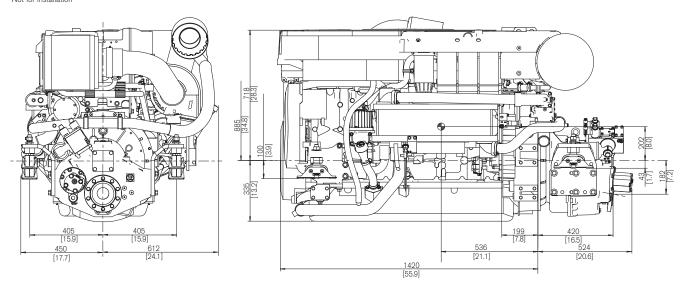
Instruments/controls

- Complete instrumentation/display packages, including e-key, the electronic key from Volvo
- Electronic shift and throttle
- · Plug-in connectors

Reverse gear

- ZF325-1AE and ZF325IV, with low speed as option, electronically shifted
- MGX-5096A and MGX-5114IV, with Quick-Shift® and low speed as standard, electronically shifted

Dimensions D13-800 with ZF325-1AE



More information

Contact your nearest Volvo Penta dealer for more information about Volvo Penta engines and optional equipment/accessories or go to www.volvopenta.com





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



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