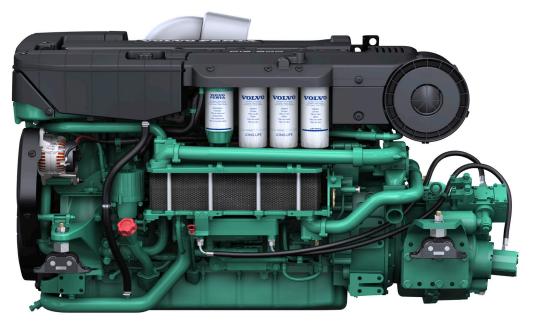
D13-700

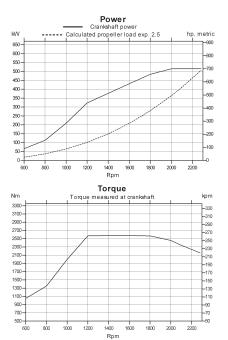


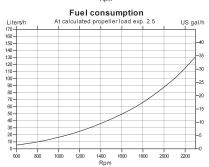
Technical Data

Engine designation	D13-700
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 (in ³)	12.78 (779.7)
Compression ratio	16.5:1
Dry weight bobtail, kg (lb)	1450 (3197)
Crankshaft power, kW (hp) @ 2300 rpm	515 (700)
Max. torque, Nm (lbf.ft) @ 1200 rpm	2930 (2162)
Emission compliance	IMO NOx, EU RCD Stage II, US EPA Tier 3
Rating	3*
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 3. For commercial vessels or craft with high demands on speed and acceleration, planing or semi-planing hulls in cyclical operation.







D13-700

Technical description:

Engine and block

- Cylinder block made of cast iron
- One-piece cast-iron cylinder head
 Ladder frame fitted to engine block
- 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 injectors
- 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 blockRear 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 timingElectronically controlled central processing
- system (EMS Engine Management System)
 Single fine fuel filter of spin-on type

Air inlet and exhaust system

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

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 alternator

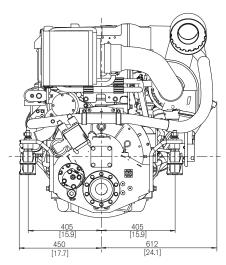
Instruments/controls (option)

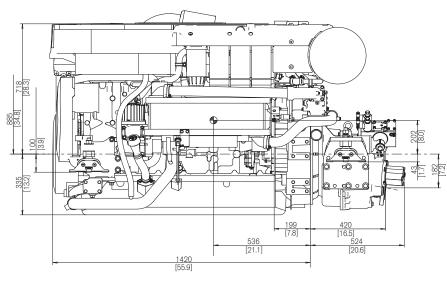
- Complete instrumentation including key switch and interlocked alarm
- EVC monitoring panels for single or twin installations
- · Electronic shift and throttle
- · Plug-in connectors
- EVC system color display

Reverse gear

- ZF325-1AE, with low speed as option, electronically shifted
- MGX-5096A, with QuickShift® and low speed as standard, electronically shifted

Dimensions D13-700 with ZF325-1AE





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



AB Volvo Penta SE-405 08 Göteborg, Sweden www.volvopenta.com

Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice. The engine illustrated may not be entirely identical to production standard engines.