# D13-900



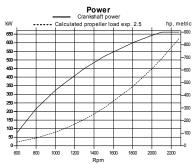
# **Technical Data**

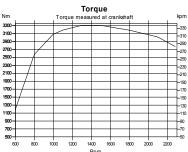
Engine designation	D13-900
No. of cylinders and configuration	in-line 6
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with charge air cooler
Bore/stroke, mm (in.)	131/158 (5.16/6.22)
Displacement, I (in <sup>3</sup> )	12.78 (779.7)
Compression ratio	16.5:1
Dry weight bobtail, kg (lb)	1560 (3439)
Crankshaft power, kW (hp) @2300 rpm	662 (900)
Max. torque, Nm (lbf.ft) @ 1300 rpm	3300 (2434)
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) @ 2300rpm	209 (0.339)
Flywheel housing/SAE size	14"/SAE1

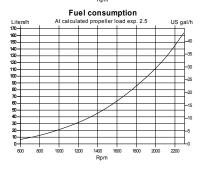
Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at 15 °C (60 °F).

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

 ${}^{\star}\text{RATING 5.}$  For pleasure craft applications, and can be used for high speed planing crafts in commercial applications









# D13-900

# **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 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 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 turbo technology with freshwatercooled charge air cooler
- · Air filter with replaceable inserts
- Wet exhaust elbow (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 alternator

#### Instruments/controls

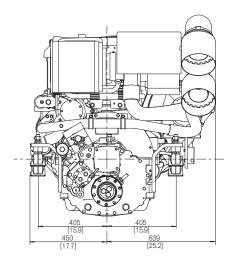
- Complete instrumentation/display packages, including e-key, the electronic key from Volvo Penta.
- · Electronic shift and throttle
- · Plug-in connectors
- EVC system color display (option)

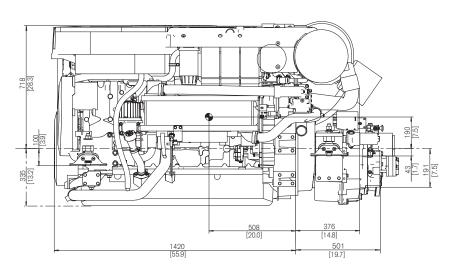
#### Reverse gear

- MGX-5096A and MGX-5114IV, with Quick-Shift® and low speed as standard, electronically shifted
- ZF335AE, with low speed as option, electronically shifted

### Dimensions D13-900 with MGX-5096A

Not for installation





#### 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





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