

# D11-670



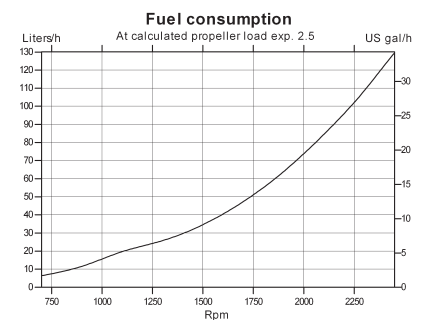
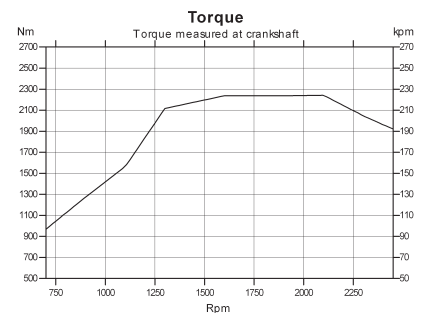
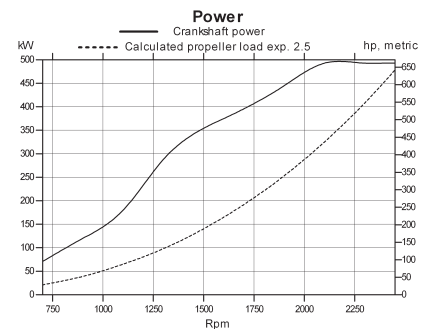
## Technical Data

Engine designation	D11-670
No. of cylinders and configuration	in-line 6
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with aftercooler
Bore/stroke, mm (in.)	123/152 (4.84/5.98)
Displacement, l (in <sup>3</sup> )	10.84 (661.3)
Compression ratio	16.5:1
Dry weight bobtail, kg (lb)	1145 (2524)
Crankshaft power, kW (hp) @ 2450 rpm	493 (670)
Max. torque, Nm (lbf.ft) @ 2100 rpm	2242 (1653)
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) @ 2450rpm	221 (0.358)
Flywheel housing/SAE size	11.5"/SAE 2

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



**VOLVO  
PENTA**

# D11-670

## 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 (option)

### Lubrication system

- Integrated oil cooler in cylinder block
- Symmetrically 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

- Mid-positioned twin entry turbocharger with aftercooler
- Air filter with replaceable inserts
- Wet exhaust elbow (option)
- Loss of sea water alarm

### Cooling system

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

### Electrical system

- 24V with extra 12V/115A or 24V/80A alternator

### Instruments/controls

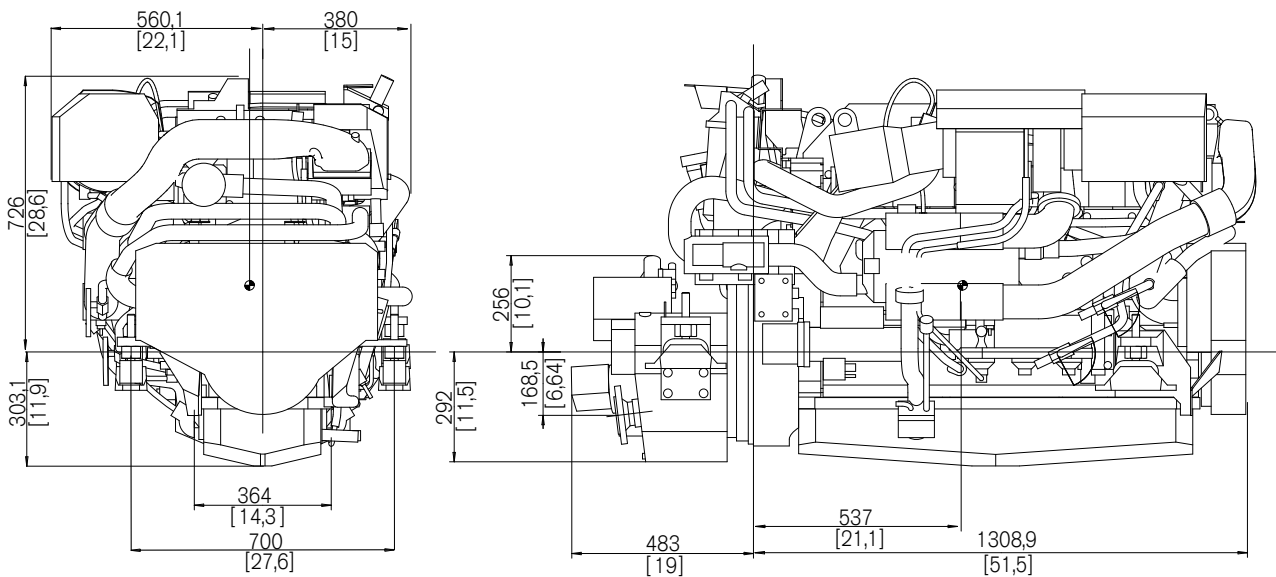
- Complete instrumentation/display packages, including e-key, the electronic key from Volvo Penta.
- Electronic remote control for throttle and shift
- Plug-in connectors

### Reverse gear

- ZF305-3A-E, ZF325IV-E, electronically shifted
- Low speed available as option

## Dimensions D11-670 with ZF305-3A-E

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](http://www.volvopenta.com)



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

# VOLVO PENTA

AB Volvo Penta

SE-405 08 Göteborg, Sweden  
[www.volvopenta.com](http://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.