D11-510





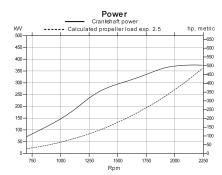
Technical Data

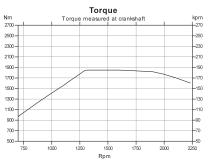
Engine designation	D11-510
No. of cylinders and configuration	in-line 6
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with aftercooler
Bore/stroke, mm (in.)	123/152 (4.84/5.98)
Displacement, I (in ³)	10.84 (661.3)
Compression ratio	16.5:1
Dry weight bobtail, kg (lb)	1145 (2524)
Crankshaft power, kW (hp) @ 2250 rpm	375 (510)
Max. torque, Nm (lbf.ft) @ 1300 rpm	1851 (1365)
Emission compliance	IMO NOx, EU RCD, 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) @ 2250rpm	213 (0.345)
Flywheel housing/SAE size	11.5"/SAE 2

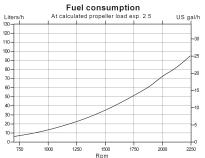
Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at 15 $^{\circ}$ C (60 $^{\circ}$ F).

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.









D11-510

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 (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 alter-

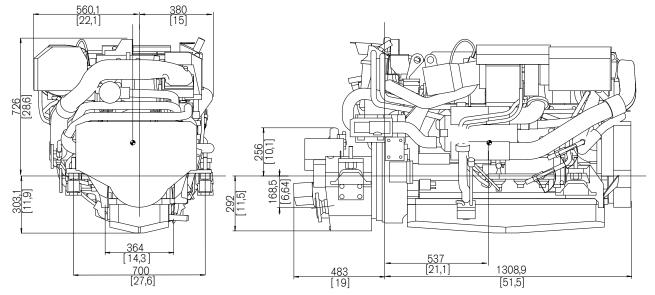
Instruments/controls

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

Reverse gear

- ZF305-2A-E, ZF325IV-E, electronically shifted
- Low speed available as option

Dimensions D11-510 with ZF305-3A-E



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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