PENTA

VOLVO PENTA AQUAMATIC DUOPROP

D4-270/300/320 DPI

3.7 liter, in-line 4 cylinder

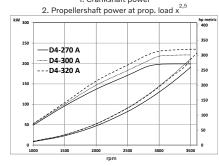


Technical Data

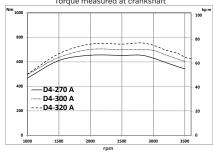
Product designation	D4-270 A	D4-300 A	D4-320 A
Crankshaft power, kW (hp)	199 (270)	221 (300)	235 (320)
Propeller shaft power, kW (hp)	191 (260)	212 (289)	226 (307)
Engine speed, rpm	3500	3500	3600
Engine displacement, I (in³)	3.67 (223.7)	3.67 (223.7)	3.67 (223.7)
Engine configuration	in-line 4	in-line 4	in-line 4
Aspiration	turbo, after cooler, compressor		
Rating	R4*	R5**	R5**
Dry weight with DPI, kg (lb)	670 (1477)	670 (1477)	670 (1477)
Propeller series	H2 - H10	H2 - H10	H2 - H10 / H8 - H10
Ratio	1.85:1	1.85:1	1.85:1 / 1.69:1
Voltage	12V or 24V	12V or 24V	12V or 24V
Emission compliance	IMO NOx, EU RCD Stage II, US EPA Tier 3		
Speed range, kn	25 - 45	25 - 45	25 - 45 / 45 - 50

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.

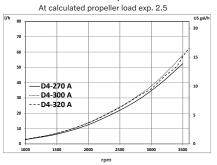




Torque Torque measured at crankshaft



Fuel consumption



^{*}R4. For light planing craft in commercial operation.

^{**}R5. For pleasure craft applications, and can be used for high speed planing crafts in commercial applications.

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Technical description

Engine block and head

- Cylinder block and cylinder head made of cast iron
- Ladder frame fitted to engine block
- 4-valve technology with hydraulic lash adjusters
- · Double overhead camshafts
- Oil-cooled pistons with two compression rings and one oil scraper ring
- Integrated cylinder liners
- Five bearing crankshaft
- · Rear end camshaft transmission

Engine mounting

· Flexible engine mounting

Lubrication system

- Replaceable separate full-flow and by-pass oil filter
- · Seawater cooled tubular oil cooler
- Oil level and oil temperature sensors
- Crankcase oil separator, maintenance free unit

Fuel system

- · Common rail injection system, 2000 bar
- Electronically controlled central processing system (EMS – Engine Management System)
- Fuel pressure sensor that indicates clogging in fuel filters
- Single fine fuel filter of spin-on type, with water separator and water in fuel alarm

Air inlet and exhaust system

- Belt driven compressor with silencer
- · Air filter with replaceable insert
- · Crankcase gases vented into the air inlet
- · Exhaust elbow or exhaust riser
- · Turbocharger, freshwater cooled
- · Loss of seawater alarm

Cooling system

- Thermostatically regulated freshwater cooling
- Seawater cooled tubular heat exchanger
- · Coolant system prepared for hot water outlet
- · Seawater impeller pump
- · Engine mounted seawater strainer

Electrical system

- Marine alternator (12V/150A or 24V/80A) prepared for Pulse Width Modulation (PWM)
- Automatic fuses for engine, transmission and EVC
- · Auxiliary stop switch in front of engine
- · Engine available as 12V or 24V
- Power connections and fuses co-located in one connection box on engine

Electronic Vessel Control (EVC)

- Fully integrates the engines, electronics and EVC features with Glass Cockpit
- Steer-by-wire
- Electronic shift and throttle as standard
- · Low speed control as standard
- Joystick option for multiple installation

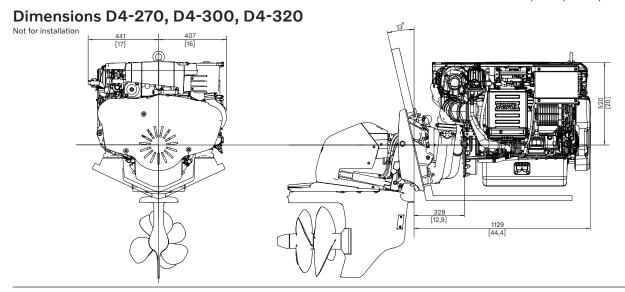
- Autopilot with Joystick Driving as option
- Dynamic Positioning System as option for multiple installation
- Support for Easy Connect app
- Maintenance Assistant with service alert

Drive

- Complete with transom shield, and installation components
- Max tilt angle 45° (adjustable)
- Protective aluminum anodes to prevent corrosion
- Built in kick-up function to reduce possible damage, in the event the drive strikes an underwater object
- Power Trim with one button operation in multiple installation
- Fully integrated water inlet and exhaust
 system
- Hydraulic gear shift system with low speed mode as standard
- · Water in oil sensor
- · Low oil level sensor
- Compatible with 12V or 24V
- H-series propellers, isolated to prevent corrosion and with line cutters as standard
- Water in bellow sensor
- Hydraulic trim and steering system oil filled at delivery
- · Oil filter for improved service life

Option

U.S.C.G./MED (SOLAS)



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.

Contact your local Volvo Penta dealer for more information regarding Volvo Penta engines and optional equipment/ accessories or visit www.volvopenta.com

