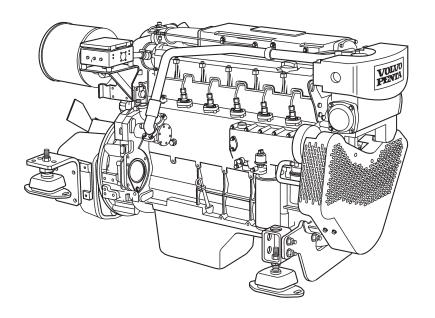
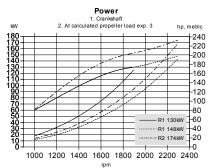
D7A TA

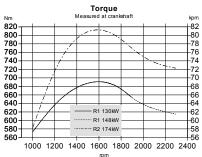


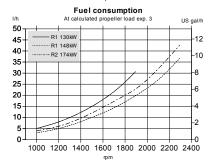
Technical Data

| recillical Bata | | | |
|---|--|----------------------|----------------------|
| Engine designation | D7A TA | | |
| No. of cylinders and configuration | in-line 6 | | |
| Method of operation | 4-stroke, direct-injected, turbocharged diesel engine with aftercooler | | |
| Bore/stroke, mm (in.) | 108 (4.25)/130 (5.12) | | |
| Displacement, I (in³) | 7.15 (436) | | |
| Compression ratio | 17.6:1 | | |
| Dry weight bobtail, kg (lb) | 690 (1521) | | |
| Dry weight with reverse gear ZF280, kg (lb) | 760 (1676) | | |
| | Rating 2 2300 rpm | Rating 1 2300 rpm | Rating 1 1900 rpm |
| Crankshaft power, kW (hp) | 174 (237) | 148 (201) | 130 (177) |
| Max. torque, Nm (lbf.ft) @ 1500 rpm | 809 (596) | 688 (507) | 688 (507) |
| Specific fuel consumption, | | | |
| g/kWh (lb/hph) @ 2300 rpm | 226 (0.366) | 229 (0.371) | |
| g/kWh (lb/hph) @1900rpm | | | 213 (0.345) |
| Recommended fuel to conform to | ASTM-D975 1-D & 2-D, EN 590 or JIS KK 2204 | | |
| Emission compliance | IMO NOx, EU IWW, CCNR2 | | |
| Flywheel housing/SAE size | 10"/11,.5"/SAE2, 10"/11,.5"/SAE3, 14"/SAE1 | | |
| | | | |

Technical data according to ISO 3046 Fuel Stop Power and ISO 8665. Fuel with a lower calorific value 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. Ratings R1 & R2, see explanation in Volvo Penta's Product Guide.









D7A TA

Technical description:

Engine and block

- Cylinder block, head and flywheel housing made of cast iron
- Belt guard
- Combined 10" and 11.5" flywheel with SAE 2 housing
- Nitrocarburized transmission gears
- Press-hardened crankshaft
- Forged aluminum pistons
- Cylinder liners of wet type

Lubrication system

- Oil filler in valve cover
- Oil sump made of cast iron
- Manual oil drain pump
- Rotary lubrication oil pump
- Freshwater-cooled oil cooler
- Full flow oil filters of spin-on type
- · Closed crankcase ventilation system

Fuel system

- Fuel feed pump
- Fine fuel filter of spin-on type
- Unit pumps
- Six-hole injectors
- Mechanical governor with smoke limiter
- Fuel stopping solenoid 24V

Cooling system

2-circuit keel cooling system with expansion

Dimensions D7A TA/ZF280

· Gear-driven seawater pump

- Belt-driven freshwater pump
- Freshwater-cooled turbocharger and exhaust manifold

Electrical system

- 2-pole 24V electrical system, 24V/55A alternator, 24V 4kW starter
- Senders and switches:

Tachometer

Lubrication oil pressure

Cooling-water temperature

Cooling-water level

Rubber-suspended electrical terminal box with semi-automatic fuses and plug-in connection

Optional equipment

Engine

- Flexible suspension for engine and reverse
- Combined 10"/11,5" flywheel with SAE 3 housing

Lubrication system

- · Shallow oil sump
- Twin oil filters, for remote mounting

Fuel system

- Hand pump
- Jacketed fuel pipes
- Single or twin fuel/water separating pre

· Twin fuel filters, for remote mounting

Exhaust system

- Exhaust elbow, wet
- Exhaust elbow, dry, with integrated flexible compensator
- Silencer, dry

Cooling system

- Engine-mounted tubular heat exchanger with integrated expansion tank
- Seawater filter

Electrical system

- 1-pole 12V electrical system, 12V/95A alternator, 12V/3.1kW starter
- 24V/140A alternator
- Engine heater 230V/820W
- Senders:

Charge air pressure

Gearbox oil pressure

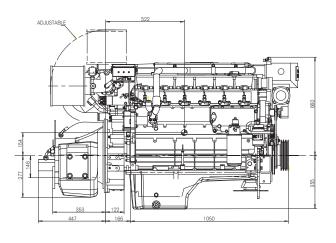
- Cable harness in different lengths
- Various instrument panels

Power transmission

- · PTO crankshaft front end, type stub shaft
- · Hydraulic pump fro steering and other duties

Reverse gear

ZF280



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