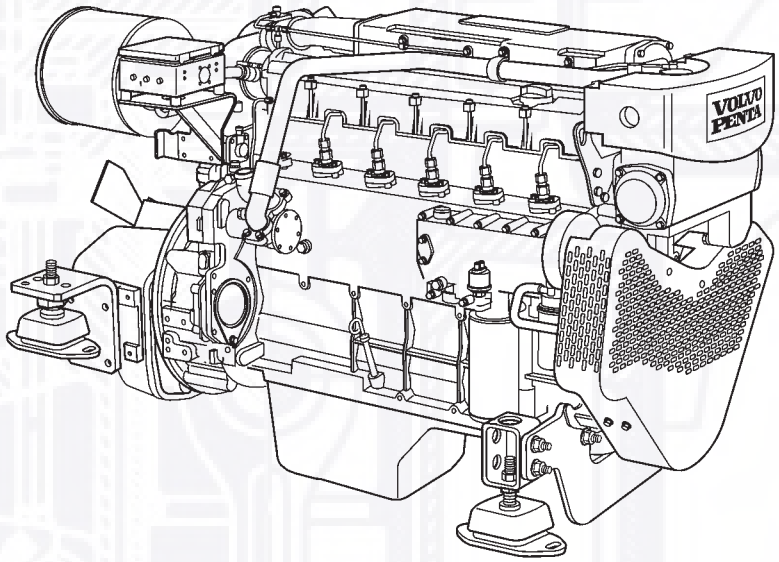
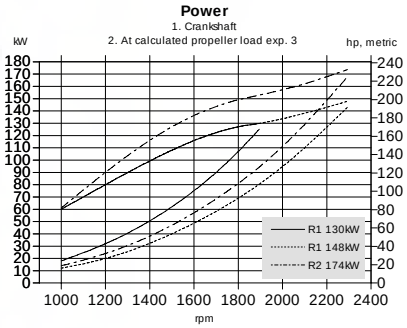
D7A TA

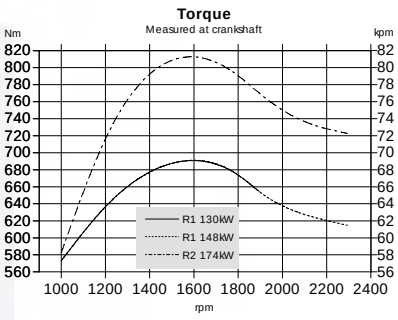


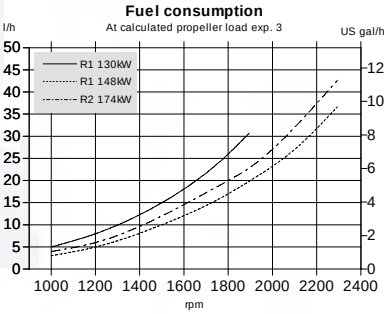
Technical Data

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, l (in^3)	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) @ 1900 rpm			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 °C (60 °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.







Diesel&Gas Service
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Проезд Фрезер, д.2, стр.107
Телефон: +7 (495) 775 01 27
E-mail: info@dieselgass.ru

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 tank
- 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 gear
- 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 filter
- 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

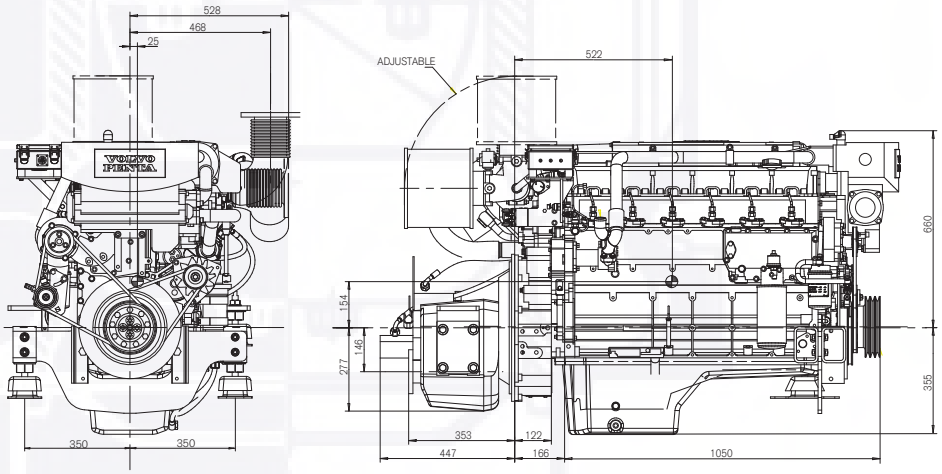
Power transmission

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

Reverse gear

- ZF280

Dimensions D7A TA/ZF280
Not for installation



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