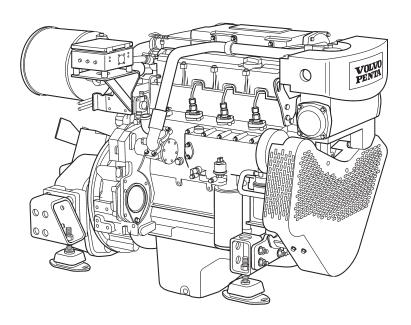
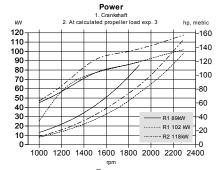
## D5A TA

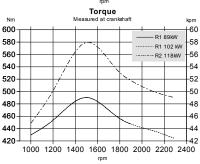


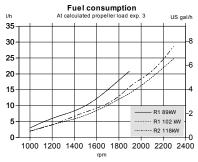
#### **Technical Data**

TOOMINGAL BATA			
Engine designation	D5A TA		
No. of cylinders and configuration	in-line 4		
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with aftercooler		
Bore/stroke, mm (in.)	108 (4.25)/130 (5.12)		
Displacement, I (in <sup>3</sup> )	4.76 (290)		
Compression ratio	17.6:1		
Dry weight bobtail, kg (lb)	525 (1157)		
Dry weight with reverse gear ZF220, kg (lb)	570 (1257)		
	Rating 2 2300 rpm	Rating 1 2300 rpm	Rating 1 1900 rpm
Crankshaft power, kW (hp)	118 (160)	102 (139)	89 (121)
Max. torque, Nm (lbf.ft) @ 1500 rpm	579 (427)	490 (362)	490 (362)
Specific fuel consumption,			
g/kWh (lb/hph) @ 2300 rpm	210 (0.340)	214 (0.347)	
g/kWh (lb/hph) @1900rpm			203 (0.329)
Recommended fuel to conform to	ASTM-D975 1-D & 2-D, EN 590 or JIS KK 2204		
Emission compliance	EU IWW, CCNR2		
Flywheel housing/SAE size	10"/11,.5"/SAE2, 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.









### D5A 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 3 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

**Dimensions D5A TA/ZF45** 

#### 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 2 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

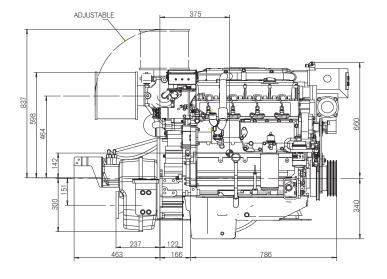
#### Power transmission

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

#### Reverse gear

ZF45

# Z3 VOLUMENTA PIENTA



#### 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



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