

VOLVO PENTA INBOARD DIESEL TAMD122A

6-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine with aftercooler – crankshaft power* 280–294 kW (380–400 hp)

* Power rating – see Technical Data

Powerful, reliable and economical

A high-performance, long-life engine built on the dependable in-line six design.

Designed for operation in demanding environments:

- Semiplaning workboats in Medium Duty operation (Rating 2)
- Displacement workboats in Heavy Duty operation (Rating 1)

Built for effective turbocharging with high output/fuel consumption ratio, thus achieving excellent fuel economy.

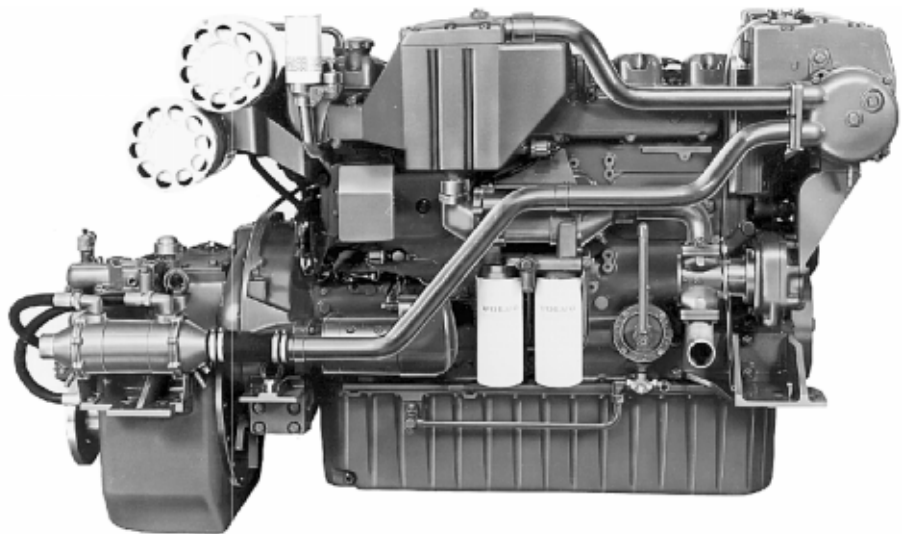
Extremely well-balanced construction with powerfully dimensioned crankshaft bearings result in a steady and vibrationfree running for highest possible degree of boat comfort.

Comprehensive range of factory-fitted equipment for perfect matching to specific customer requirements, e.g. reverse gears, PTO's, cooling systems, electrical systems.

Easily adaptable to comply with the demands of the classification societies and marine authorities concerning operation in unmanned engine rooms.

Simplified, thus time- and cost-saving, servicing. Well-established service network in more than 100 countries using Genuine Volvo Penta Parts and skilled personnel minimizes non-operational time and costs.

TAMD122A with
MG514C reverse gear



Technical description:

Engine and block

- Cylinder block and cylinder heads made of special cast iron alloy
- Flywheel housing (cast iron) with connection acc. to SAE 1
- Separate cylinder heads ensure effective sealing
- Replaceable cylinder liners and valve seats/guides
- Seven-bearing crankshaft with very moderate load on both main and big-end bearings
- Rigid camshaft with well designed cams. Large overlap between inlet and exhaust valves ensures excellent air flow, efficient fuel supply, good cooling and low exhaust gas temperature.
- Piston cooling for low piston temperature and reduced ring temperature

Lubrication system

- Seawater-cooled oil cooler
- Twin full-flow oil filters of spin-on type
- Oil filler in valve cover

- Deep oil sump with inspection covers
- Manual oil drain pump, engine-mounted

Fuel system

- Twin fine fuel filter of spin-on type
- Fuel injection pump with centrifugal governor, smoke limiter and fuel feed pump
- Fuel shut-off valve 24V, electrically operated

Turbocharger

- Freshwater-cooled turbocharger and exhaust manifold

Cooling system

- Seawater-cooled aftercooler
- Tubular heat exchanger or 1-circuit keel cooling
- Belt-driven freshwater pump and gear-driven seawater pump with neoprene impeller

Electrical system

- 24V electrical system incl. 60A alternator with integrated charging sensor
- Rubber-suspended electrical terminal box

**VOLVO
PENTA**

TAMD122A

Technical Data

Engine designation **TAMD122A**
 No. of cylinders and configuration in-line 6
 Method of operation 4-stroke, direct-injected, turbocharged diesel engine with aftercooler
 Bore, mm (in.) 130.2 (5.1)
 Stroke, mm (in.) 150 (5.9)
 Displacement, l (in³) 11.98 (731)
 Compression ratio 14.5:1
 Dry weight, kg (lb) 1360 (2998)
 Crankshaft power,
 Rating 2, kW (hp) 1900 rpm 294 (400)
 Rating 1, kW (hp) 1800 rpm 280 (380)
 Torque,
 Rating 2, Nm (ft.lb) 1900 rpm 1478 (1090)
 Rating 1, Nm (ft.lb) 1800 rpm 1483 (1094)
 Recommended fuel to conform to ASTM-D975 1-D & 2-D, EN 590 or JIS KK 2204

Specific fuel consumption,
 Rating 2, g/kWh (lb/hph) 1900 rpm . 217 (0.352)
 Rating 1, g/kWh (lb/hph) 1800 rpm . 212 (0.344)

Fuel temperature 40°C (104°F)
 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/litre at 15 °C (60 °F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

N.B. The product can also be used in an application with a higher rating than stated, e.g. R1 can be used for R2, R3, R4 or R5.

Optional equipment:

Engine

- Adapter kit for flywheel and housing acc. to SAE 0
- Flexible suspension for engine and reverse gear

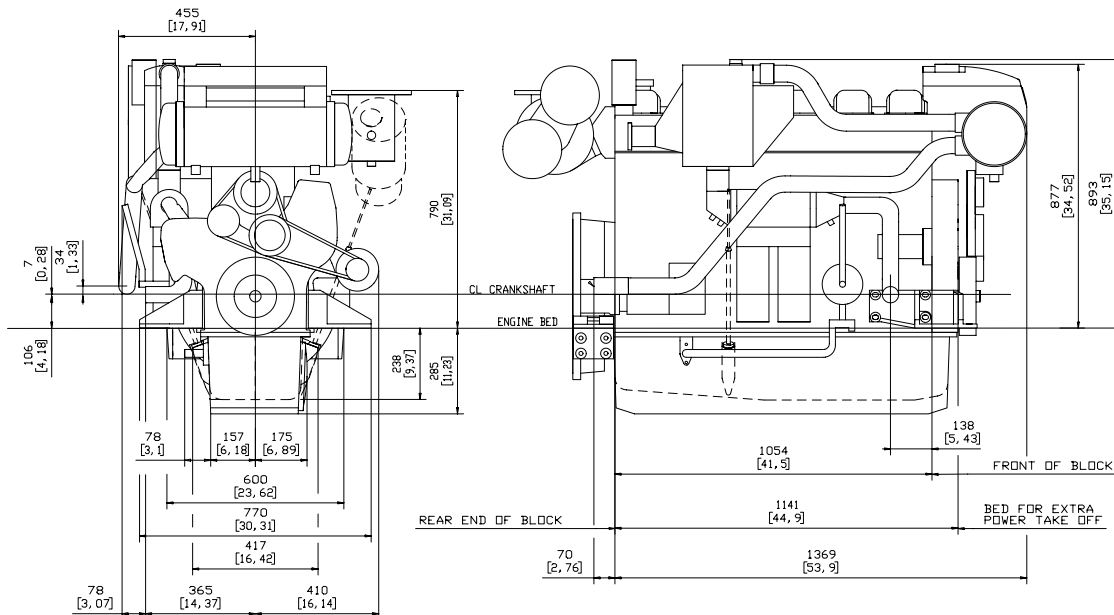
Lubrication system

- Oil filling on starboard side
- Shallow oil sump
- Shift valve for oil filters

Dimensions

TAMD122A

Not for installation.



Fuel system

- Shift valve for fuel filter
- Single or twin fuel filter/water separator
- Jacketed fuel pipes

Exhaust system

- Exhaust elbow, dry or wet
- Silencer, dry
- Flexible compensator

Cooling system

- Seawater strainer
- Freshwater filter
- Adapter for connection of extra expansion tank

Electrical system

- 24V/100A extra alternator
- Various instrument panels
- Cable harness in different lengths
- Classifiable electrical equipment acc. to IP44

Power transmission

- Disengageable PTOs, 10"/11.5" crankshaft front end, 14" crankshaft rear end, and right hand side mounted
- Auxiliary drive
- Extra pulley for crankshaft
- Hydraulic pump for steering and other duties

Reverse gear

- MG514C and MG5111SC/DC
- Trolling valve available

Other equipment

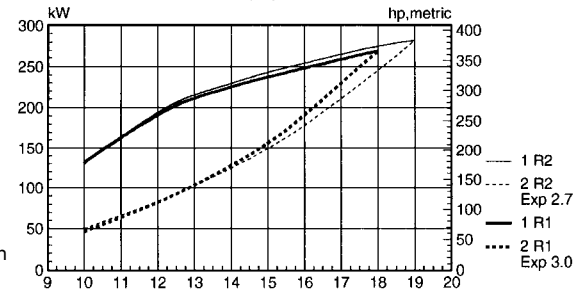
- 2" bilge/flush pump
- Belt guard
- White-painted engine and reverse gear

Contact your local Volvo Penta dealer for further information.

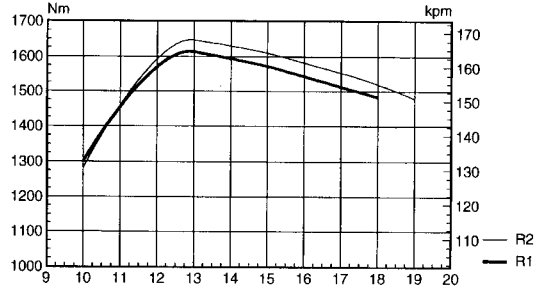
Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

The engine illustrated may not be entirely identical to production standard engines.

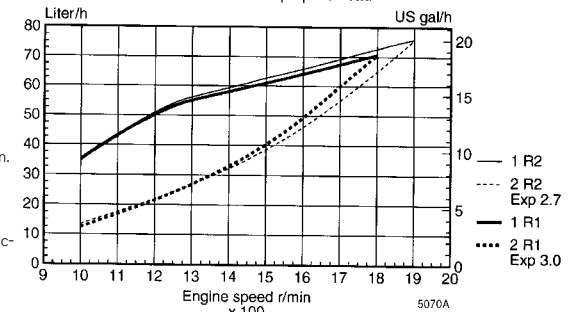
TAMD122A Power
 1. Propeller shaft power
 2. Calculated propeller load



TAMD122A Torque
 Torque measured at crankshaft



TAMD122A Fuel consumption
 1. At full load
 2. Based on calculated propeller load



VOLVO PENTA

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