

VOLVO PENTA INBOARD DIESEL TAMD22P

4-cylinder, direct-injected freshwater-cooled turbocharged marine diesel engine with aftercooler. Crankshaft power* 77 kW (105 hp)

* Power rating – see Technical Data

The TAMD22P is a marine engine of advanced design manufactured from quality components and designed to fulfil customer requirements.

Service Life

The TAMD22P is fitted with freshwater cooling as standard. This reduces internal corrosion and enables the engine to maintain a consistent and optimal working temperature under all conditions.

Comfort

Smooth running with very low vibration levels results from a dynamically balanced design and high efficiency rubber insulation

The engine's high torque provides excellent operating characteristics to aid maneuvering, particularly in confined spaces.

Additional on board comfort features are available from an extensive range of matched accessories.

Environment

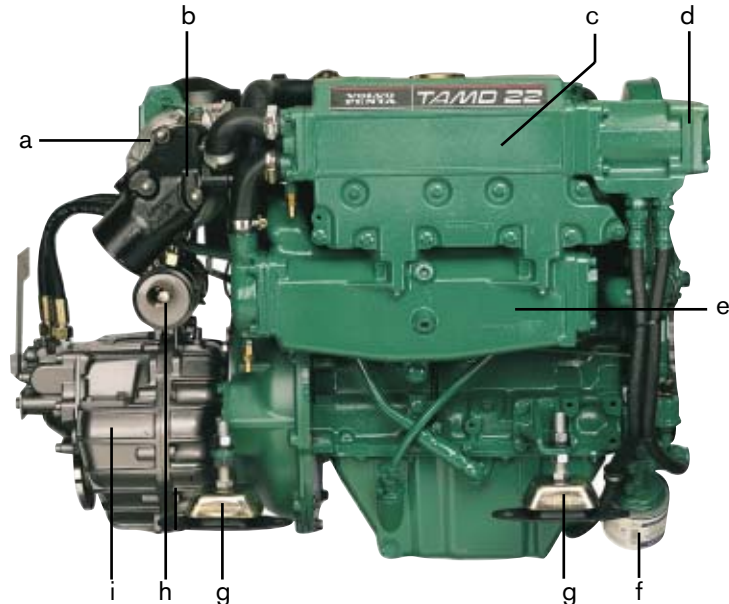
The engine's direct injection and advanced combustion system ensure high efficiency and low fuel consumption, which minimize noxious exhaust emissions and enhance overall enjoyment of boating. The TAMD22P is certified according to BSO II and SAV.

Transmissions

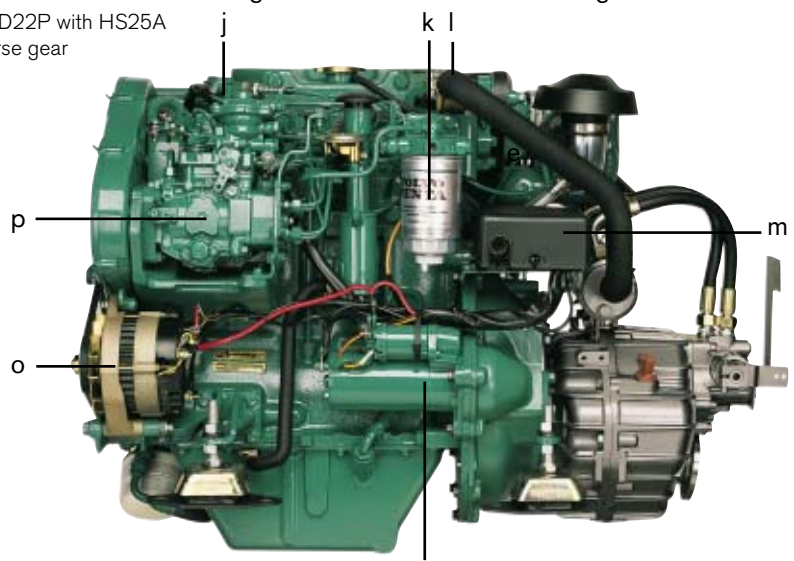
For increased flexibility, in both design and installation, completely matched down angle hydraulic, and straight or down angle mechanical reverse gears are available. All built for durability and smooth operation.

Application

Due to the turbo wastegate technology, the engine's characteristics allow full throttle operating range from 3500 to 4500 rpm. This gives high flexibility for different applications.



TAMD22P with HS25A reverse gear



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

- | | |
|--|----------------------------|
| a. Turbo with integrated wastegate | i. Reverse gear |
| b. Exhaust elbow, wet type | j. Fuel feed pump |
| c. Heat exchanger with integral expansion tank | k. Fuel filter |
| d. Oil cooler | l. Seawater pump |
| e. Aftercooler | m. Electrical terminal box |
| f. Oil filter | n. Starter motor |
| g. Flexible engine mounting | o. Alternator (GEN) |
| h. Seawater intake | p. Injection pump |

**VOLVO
PENTA**

TAMD22P

Technical Data

Engine designation **TAMD22P**
 Crankshaft power, kW (hp) 77 (105)
 Propeller shaft power¹⁾, kW (hp) 75 (102)
 Full throttle operating speed, rpm 3500–4500
 Displacement, l (in³) 2.0 (122)
 Number of cylinders 4
 Bore, mm (in.) 84 (3.3)
 Stroke, mm (in.) 89 (3.5)
 Compression ratio 17.5:1
 Dry weight with reverse gear
 HS25A, kg (lb) 270 (595)
 MS25A, kg (lb) 260 (573)
 MS25L, kg (lb) 258 (569)

Duty rating: R5

1) With MS25L

Technical data according to ISO 8665. Fuel with a lower calorific value of 42,700 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. The engine is certified according to BSO II and SAV.

Technical description:

Engine and block

- Cylinder block manufactured from high grade cast iron and cylinder head and pistons of aluminum alloy

- Pistons fitted with two compression rings and a single oil scraper ring
- Oil cooled pistons
- Overhead camshaft
- Replaceable, hardened valve seats in cylinder head

Lubrication system

- Spin-on full flow oil filter
- Separate oil scavenger pipe
- Closed circuit crankcase ventilation
- Oil cooler

Fuel system

- Flange mounted injection pump of rotor type with mechanical regulator for accurate speed control and smoke limiter
- Feed pump with hand primer
- Spin-on type fine fuel filter

Exhaust system

- Freshwater-cooled exhaust manifold and seawater-cooled exhaust elbow
- Turbo with wastegate system

Cooling system

- Freshwater cooling system governed by thermostat and circulation pump
- Tubular heat exchanger with integral expansion tank
- Coolant system prepared for hot water outlet fittings
- Impeller pump for seawater system

Electrical system

- 12V, two-pole, corrosion-protected electrical system
- 14V/60A marine alternator
- Charging regulator with electronic sensor for voltage drop compensation
- Electrically operated stop
- Glow plugs for excellent cold starting
- Electric starter motor (1.8 kW output)
- Choice of instrument panels or separate instruments

Transmissions:

HS25A Hydraulic – drop center with 8° down angled output shaft. Trolling valve kit available.
 – Ratio 2.29:1 and 2.71:1 (RH and LH rotation).

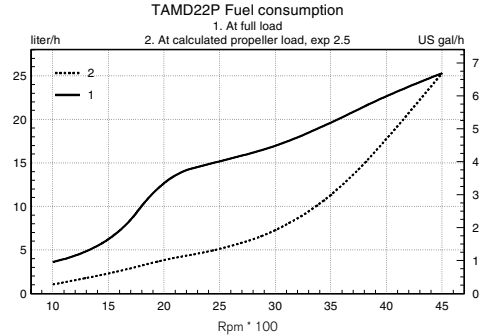
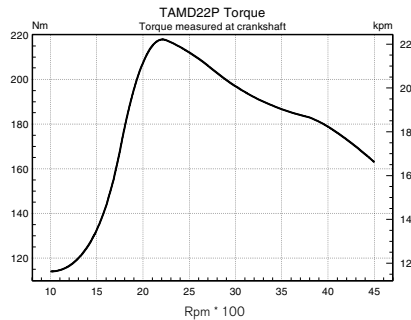
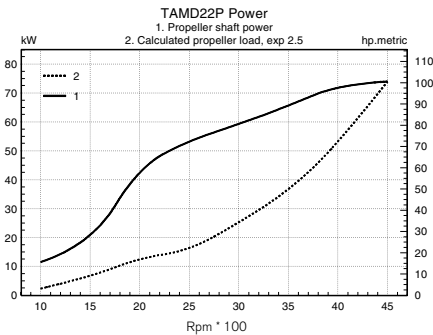
MS25A Mechanical – drop center with 8° down angled output shaft.
 – Ratio 2.23:1/2.74:1 (RH/LH) and 2.74:1/2.74:1 (RH/LH).

MS25L Mechanical – drop center with straight output shaft.
 – Ratio 2.3:1/2.1:1 (RH/LH) and 2.74:1/2.72:1 (RH/LH).

Accessories

An extensive range of accessories are available. For detailed information, please see Accessory catalogs.

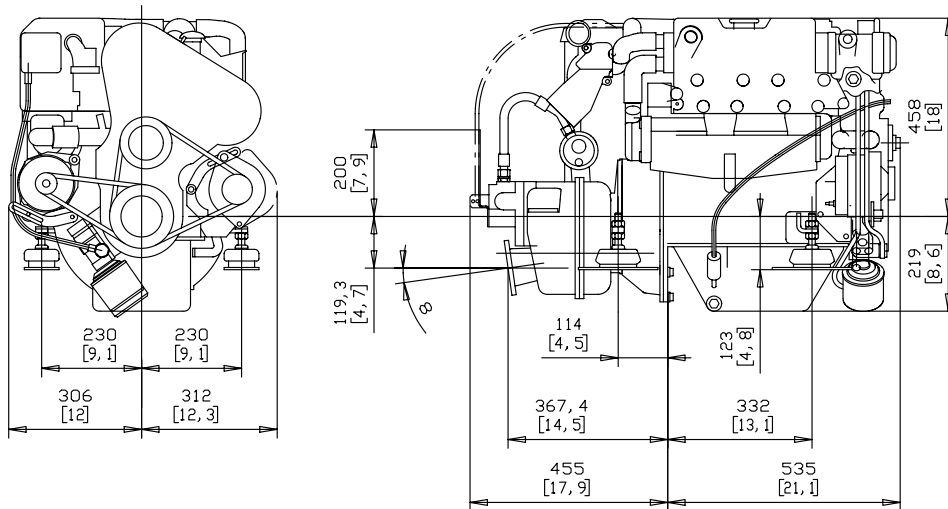
Contact your local Volvo Penta dealer for further information. Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.



Dimensions

TAMD22P/HS25A

Not for installation



VOLVO PENTA

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