

VOLVO PENTA INBOARD DIESEL

TAMD74A

6-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine with aftercooler – crankshaft power* 154–257 kW (209–350 hp)

* Power rating – see Technical Data

Reliable and powerful

The TAMD74A is a powerful, reliable and economical marine diesel built on the dependable in-line six design.

Developed for Medium and Heavy duty operation for displacement, semi-planing and planing craft.

Durability and low noise levels

Designed for easiest, fastest and most economical installation.

Well-balanced to produce smooth and vibration-free operation with low noise level.

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

To maintain a controlled working temperature in cylinders and combustion chambers, the engine is equipped with piston cooling and freshwater-cooled oil cooler. The engine is also fitted with replaceable cylinder liners and valve seats/guides to ensure maximum durability and service life of the engine.

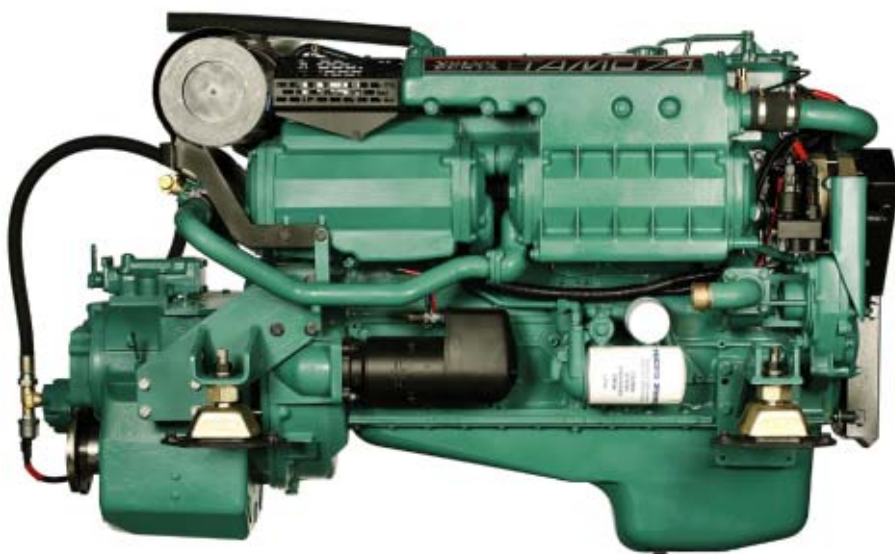
Low exhaust emission levels

The state of the art, high-tech injection and charging system with low internal losses contributes to excellent combustion and low fuel consumption. The TAMD74A is certified according to IMO and IMO US/EPA.

Marine electrics

The classifiable two-pole electrical system "CU 2500F" is specifically adapted to demanding marine environments with remote and flex-mounted senders as well as moisture-proof connectors.

TAMD74A
with MG5091DC



Ease of service and maintenance

Easily accessible service and maintenance points contribute to the ease of service of the engine.

Comprehensive service network

Volvo Penta has a well-established network of authorized service dealers in more than 100 countries throughout the world. These service centers offer genuine Volvo Penta parts as well as skilled personnel to ensure the best possible service.

Technical description:

Engine and block

- Cylinder block and cylinder heads made of cast iron alloy
- Two cylinder heads
- Replaceable wet cylinder liners and valve seats/guides
- Nitrocarburized crankshaft with seven main bearings

- Oil-cooled forged aluminum pistons
- Three piston rings, upper of keystone type

Lubrication system

- Freshwater-cooled oil cooler
- Side-mounted full-flow and by-pass filter of spin-on type

Fuel system

- Fuel injection pump with centrifugal governor, and fuel feed pump
- High pressure fuel lines
- Twin fine fuel filters of spin-on type
- Fuel shut-off valve, electrically operated
- 7-hole injectors

Turbocharger

- Freshwater-cooled turbocharger

Cooling system

- Tubular heat exchanger with integrated expansion tank or adapted for 1- and 2-circuit keel cooling
- Seawater-cooled tubular aftercooler
- Belt-driven seawater pump

Electrical system

- 12 V or 24 V electrical system incl. alternator (60A) with charging sensor
- Rubber suspended electrical terminal box with semi-automatic fuses

VOLVO
PENTA

TAMD74A

Technical Data

Engine designation **TAMD74A**
 No. of cylinders and configuration in-line 6
 Method of operation 4-stroke,
 direct-injected, turbocharged
 diesel engine with aftercooler

Bore, mm (in.) 107 (4.21)
 Stroke, mm (in.) 135 (5.31)
 Displacement, l (in³) 7.28 (444)
 Compression ratio 17.2:1
 Dry weight, kg (lb) 860 (1896)
 Weight with reverse gear MG5075A,
 excl. water and oil, kg (lb) 1045 (2304)
 Crankshaft power,
 Rating 2, kW (hp) 2200 rpm 257 (350)
 Rating 2, kW (hp) 2200 rpm 210 (287)
 Rating 1, kW (hp) 2100 rpm 184 (250)
 Rating 1, kW (hp) 2000 rpm 160 (218)
 Rating 1, kW (hp) 1800 rpm 154 (209)
 Torque,
 Rating 2, Nm (lbf.ft) 2200 rpm 1117 (824)
 Rating 2, Nm (lbf.ft) 2200 rpm 912 (673)
 Rating 1, Nm (lbf.ft) 2100 rpm 836 (617)
 Rating 1, Nm (lbf.ft) 2000 rpm 765 (564)
 Rating 1, Nm (lbf.ft) 1800 rpm 819 (604)
 Recommended fuel to
 conform to ASTM-D975 1-D & 2-D,
 EN 590 or JIS KK 2204

Specific fuel consumption,
 R 2, g/kWh (lb/hph) 2200 rpm 229 (0.371)
 R 2, g/kWh (lb/hph) 2200 rpm 222 (0.360)
 R 1, g/kWh (lb/hph) 2100 rpm 222 (0.360)
 R 1, g/kWh (lb/hph) 2000 rpm 222 (0.360)
 R 1, g/kWh (lb/hph) 1800 rpm 209 (0.339)
 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 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.
 N.B. The product can also be used in an application with a higher
 rating than stated, e.g. R2 can be used for R3, R4 or R5.
 The engine is certified according to IMO and IMO US/EPA.

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Lubrication system

- Electrically and manually operated oil drain pump
- Rear-mounted full-flow oil filters of spin-on type
- Shallow oil sump
- Classifiable oil system

Fuel system

- Single or twin fuel filters/water separators
- Classifiable fuel system

Exhaust system

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

Cooling system

- Seawater strainer
- Hot water outlet
- Separate expansion tank

Electrical system

- 12V 130A or 24V 100A extra alternators
- Various instrument panels
- Cable harness in different lengths
- Classifiable electric equipment acc. to IP44

Power transmission

- PTO crankshaft front end, type stub shaft incl. universal bracket
- Hydraulic pump for steering and other duties

Reverse gear

- MG5075SC and MG5091SC/DC

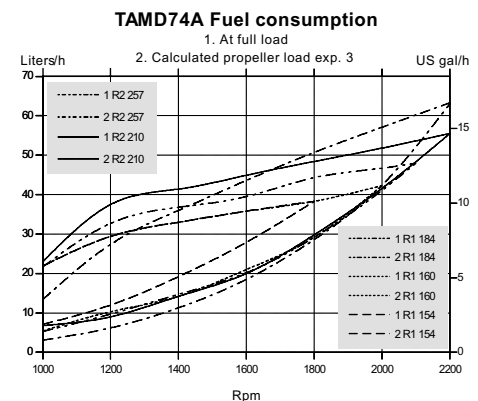
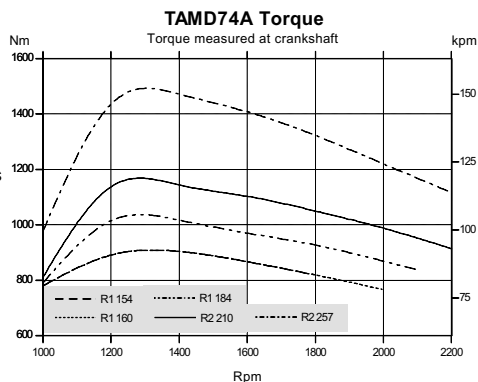
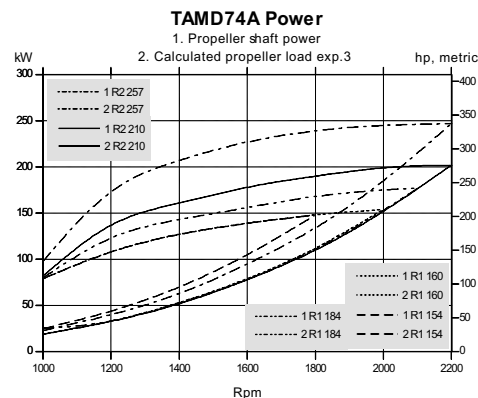
Other equipment

- Flush and bilge pump
- Belt guard
- White-painted engine and reverse gear
- Engine heater 2000 W, separately fitted

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.



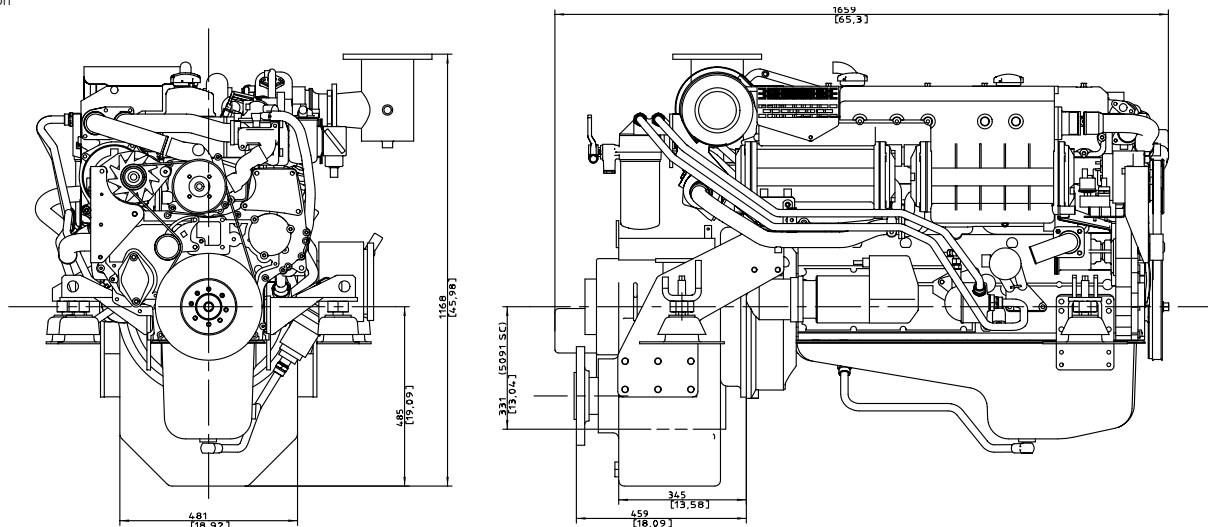
Optional equipment:

Engine

- Flexible suspension for engine and reverse gear

Dimensions TAMD74A with 5091SC/DC

Not for installation



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