# **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 factoryfitted 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 – the R2 (257 kW) according to IMO US/EPA.

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



# TAMD 74A

# **Technical Data**

Engine designation  No. of cylinders and configuration  Method of operation	in-line 6
direct-injected, tur diesel engine with Bore, mm (in.)	aftercooler
Stroke, mm (in.)	
Displacement, I (in³)	
Compression ratio	
Dry weight, kg (lb)	
Weight with reverse gear MG5075A,	
excl. water and oil, kg (lb)10	045 (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	
Rating 1, kW (hp) 2000 rpm	
Rating 1, kW (hp) 1800 rpm	154 (209)
Torque,	
Rating 2, Nm (lbf.ft) 2200 rpm	
Rating 2, Nm (lbf.ft) 2200 rpm	
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	
EN 590 or JI	S KK 2204
Specific fuel consumption,	00 (0 071)
R 2, g/kWh (lb/hph) 2200 rpm	
R 2, g/kWh (lb/hph) 2200 rpm	
R 1, g/kWh (lb/hph) 2100 rpm 2 R 1, g/kWh (lb/hph) 2000 rpm	
κ τ, g/κνντι (ιο/τιριί) 2000 τριτι	22 (0.360)

R 1, g/kWh (lb/hph) 1800 rpm..... 209 (0.339)

Tuel temperature 40°C (104°F)
Technical data according to ISO 3046 Fuel Stop Power and ISO 8665. With fuel having an LHV of 42,700 kJ/kg and density of 840 g/liter at 15°C (60°F). Merchant fuel may differ from this specific ation 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.

# Optional equipment: **Engine**

- Flexible suspension for engine and reverse gear

### Lubrication system

- Electrically and manually operated oil drain pump
- Rear-mounted full-flow oil filters of spinon 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

# 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

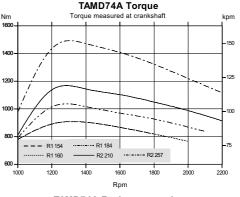
- Flush and bilge pump
- Belt guard
- White-painted engine and reverse gear
- Engine heater 2000 W, separately fitted

Contact your local Volvo Penta dealer for further infor mation.

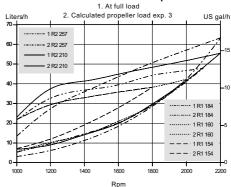
Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

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

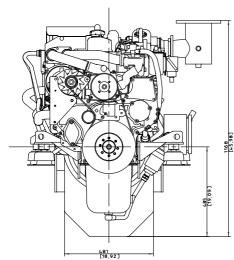
# TAMD74A Power 2. Calculated propeller load exp.3 hp, metric 1 R2 257 - 2 R2 257 1 R2 210 2 R2 210 2 R1 160 1 R1 154 -- 2R1 184 - - · 2R1 154

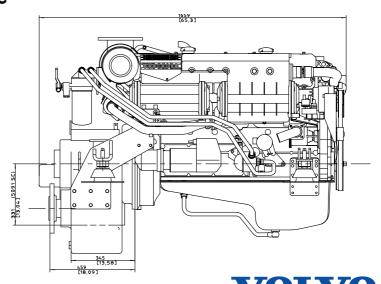


# **TAMD74A Fuel consumption**



# Dimensions TAMD74A with 5091SC/DC





**AB Volvo Penta** SE-405 08 Göteborg, Sweden

The engine is certified according to IMO.
\* R2 (257 kW) is certified according to IMO US/EPA