# TAMD41M, TAMD41P

\* Power rating - see General Data

Pleasure Duty (PD), Light Duty (LD), Medium Duty (MD) 6-cylinder, 4-stroke, direct injected, turbo-charged marine diesel engine with aftercooler - crankshaft power\* 147 kW (200 hp)

# Reliable marine engine

TAMD41 is a reliable and economic marine engine with considerable power resources and is specially developed for planing craft. With its compact dimensions, it is ideal for twin installation.

## Turbo-charging

The engine is turbo-charged for efficient operation with high power/fuel consumption ratio. The turbo-charging contributes to reduced exhaust emission levels. The turbo-charger also acts as an additional silencer on both induction and exhaust sides of the engine.

### Direct injection

Direct injection (DI) results in low thermal load and low fuel consumption compared to swirl chamber engines (IDI) of the same cylinder volume. Direct injected engines also have a longer service life.

#### Aftercooler

The aftercooler cools the compressed and heated air, thus raising its oxygen content. This enables the engine to use the fuel more efficiently.

## Low exhaust emission levels

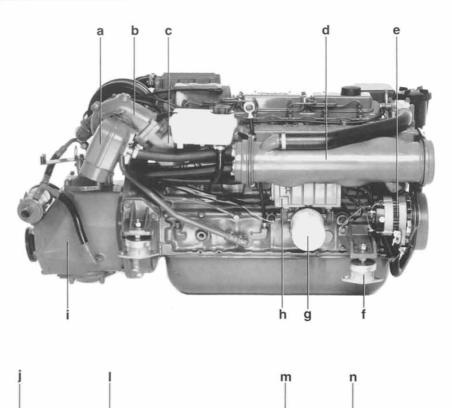
The advanced combustion system minimizes noxious exhaust emissions. TAMD41P is certified for use on lake Constance - where exhaust emission regulations are probably the toughest in the world.

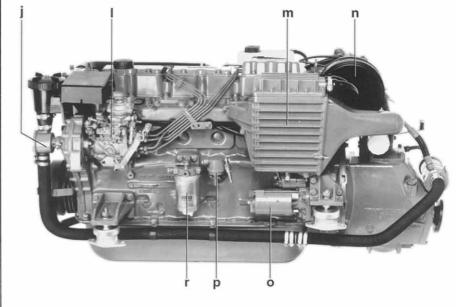
### HS1 marine gearbox

Volvo Penta's hydraulically shifted marine gearbox has been specially developed with a view to increasing the standard of onboard comfort in terms of quiet running, greater reliability and increased efficiency. PRM402 is available as a choice of marine gearbox.

### Comprehensive service network

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





The engine shown may vary from the standard unit.

- a. Exhaust elbow, wet type
- Turbo-charger
- Freshwater cooled exhaust manifold
- d. Freshwater cooling e. Alternator 14 V/50 A
- Flexible front engine mounting Lubrication oil filter

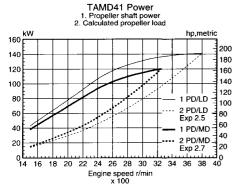
- Oil cooler Marine gearbox Seawater pump Injection pump
- m.Seawater cooled aftercooler
- n. Air filter
  o. Starter motor 3.0 kW
  p. Feed pump
  r. Fuel filter

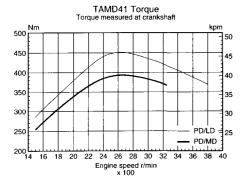


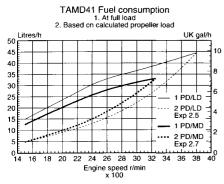
# General data

Type designation	TAN	MD41M	(PD/MD)	
	TAN	MD41P	(PD/LD)	
No of cylinders			` 6	
Configuration 4-stroke		ke direc	e direct-injected	
	turbo-charged aftercooled,			
			el engine	
Fuel grade EN590			1D or 2D	
Bore, mm (in)			92 (3.62)	
Stroke, mm (in)			90 (3.54)	
Displacement, litres (in <sup>3</sup> )		3	.59 (219)	
Compression ratio			17.5:1	
Crankshaft power 1)				
PD/MD (3250 r/min) kW (hp)		•	125 (170)	
PD/LD (3800 r/min) kW (hp)		•	147 (200)	
Propeller shaft powe	r <sup>1)</sup>			
PD/MD (3250 r/min) kW (hp)		•	119 (162)	
PD/LD (3800 r/min) kW (hp)			138 (188)	
Dry weight, kg (lb)		4	55 (1003)	
Dry weight with HS1, kg (lb)		3.	15 (1131)	

 Technical data in accordance with ISO 8665 and ISO 3046 Standard Fuel Stop Power. Fuel 40°C (104°F), lower calorific value of 42700 kJ/kg and density of 840 g/litre.







# **Engine equipped with**

Freshwater cooled turbo-charger Freshwater cooling, thermostatcontrolled with tubular heat exchanger Seawater pump with rubber impeller Seawater cooled aftercooler Seawater cooled tubular oil cooler Prewired el.system for connection to instrument panel Alternator 14 V/60 A Starter motor 12 V/3.0 kW Engine brackets in front Engine bracket at rear Flexible engine mounts Flywheel housing, SAE 4 size Flywheel, heavy type Exhaust elbow, wet type

# Technical description Engine and block

- Cylinder block and cylinder head are made of cast iron alloy for good corrosion resistance and long service life.
- Replaceable valve seatings and cylinder linings.
- Oil-cooled, forged aluminium pistons with two compression rings and one oil scraper ring.
- Nitrocarbonized crankshaft with five bearings.

### **Fuel system**

- Rotor-type injection pump with a mechanical governor and smoke limiter.
- Fuel feed pump with hand primer.
- Fine fuel filter with water separator.
- Electrically operated stopping device.

### **Cooling system**

- Thermostatically controlled freshwater cooling, prepared for hot water outlet.
- Tubular heat exchanger with separate transparent expansion tank.
- Gear-driven seawater pump with rubber impeller.

### **Lubrication system**

- Pressure lubrication system with easily replaced full-flow oil filter on the side of the engine.
- Tubular, cleanable oil cooler.

### Inlet system

- Inlet silencer with replaceable filter.
- Freshwater cooled turbo-charger and seawater-cooled charge air cooler.

# **Exhaust system**

- Seawater-cooled exhaust elbow, made of cast iron with stainless steel insert.
- Exhaust elbow, dry type (optional)

### **Electrical system**

- 12 V corrosion-protected electrical system, complete with instrumentation and 14 V/60 A marine alternator. The alternator is prepared for a bulkheadmounted double-diode set which automatically distributes the charge current to two separate battery circuits.
- Charging regulator with battery sensor for voltage drop compensation.
- Automatic 40 A fuse with reset button.
- Starter motor power 3.0 kW.

## Marine gearbox

- HS1 marine gearbox with spiral bevel gears and hydraulically operated clutch.
- PRM402 marine gearbox of twin countershaft design with separate hydraulically operated multi-disc clutches.

