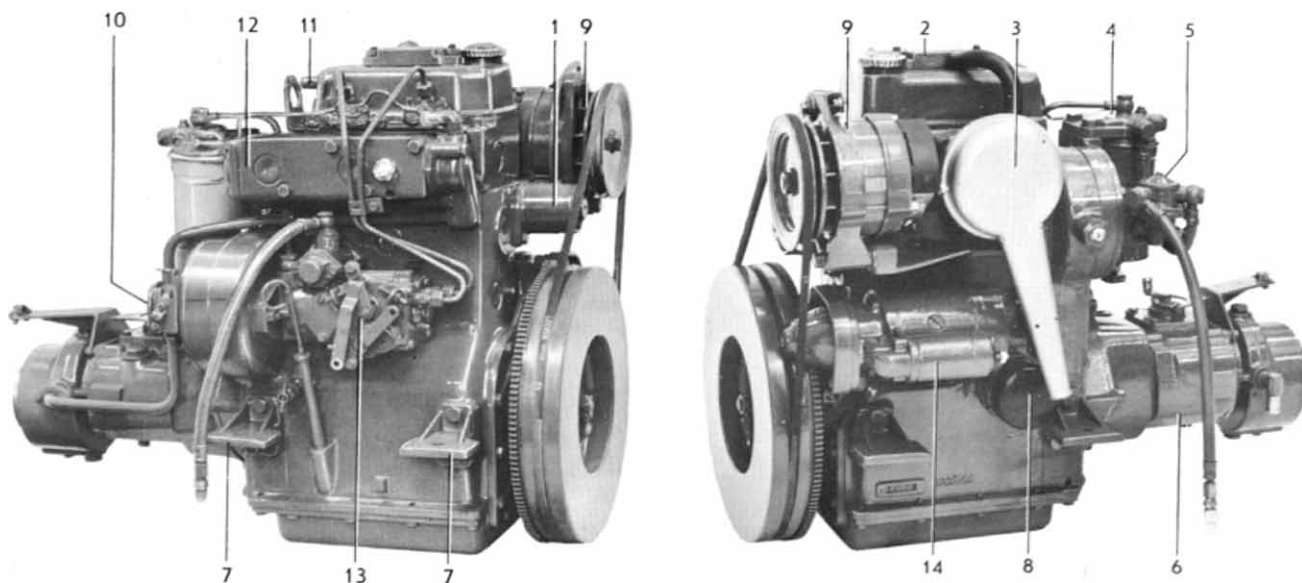


VOLVO PENTA

MD 7A



2-cylinder, 4-stroke marine diesel engine with direct injection
Propeller shaft output 13 hp (9.6 kW)



STANDARD EQUIPMENT

ENGINE BODY — Cylinder block and head made of cast iron. Pistons made of light-alloy with 2 compression rings and one oil scraper ring. Crankshaft journalled in 3 bearings.

Decompression handle (11)

Recess for starting crank handle (1)

Tool kit with starting crank handle is supplied with engine.

FUEL SYSTEM — Distributor-type injection pump with centrifugal governor for accurate speed regulation (13)

Feed pump with hand primer (5) and flexible hose with fuel pipe connection for suction and return lines

Effective fuel filter (4)

Manual cold-starting device

COOLING SYSTEM — Thermostat-controlled sea-water cooling. Sea-water pump with neoprene rubber impeller (10). The reverse gear reduction gear is water-cooled.

LUBRICATING SYSTEM — Pressure-lubrication system with lubricating oil filter of the spin-on type (8). Sealed crankcase ventilation (2).

INTAKE SYSTEM — Intake silencers (3) with filter.

EXHAUST SYSTEM — Sea-water cooled exhaust manifold of cast iron with R 1 1/4" connection (12).

ELECTRICAL SYSTEM — Corrosionproof 12 V electrical system, with complete instrument panel.

Alternator 35A, 420 W (9), Starter motor output 0.8 kW (1.1 h.p.) (14).

The instrument panel is provided with a key switch, warning lamps for battery charging, cooling water temperature and oil pressure, and 2 extra switches.

Automatic alarm with buzzer for low oil pressure and high cooling water temperature. Also wired for indicating the respective warning lamps.

Recess for extra instrument (diam. 52 mm) covered with dummy plug.

Cable harness, 4 m (13 ft.) in length, with connector.

Main fusing, with built in spare fuse, delivered with engine.

ENGINE MOUNTING — The engine is supplied with engine brackets for fixed suspension (7).

POWER TRANSMISSION — Reverse gear type MS-B (mono-Shift) red. ratio 1.91:1, L-H prop. (6). Delivered without propeller shaft flange. Single control lever for both speed and operating the reverse gear should be used. Bracket for control cables included.



PRODUCT BULLETIN

EXTRA EQUIPMENT

FUEL SYSTEM

Electrically operated fuel pump
Water-separating filter with or without flexible hoses
Water separator
Fuel tank
Cap with connection for fuel tank
Fuel line with copper piping and installation parts.

COOLING SYSTEM

Sea-water filter complete with attachment
Cooling water intake complete with cock and hose
Vacuum valve

EXHAUST SYSTEM

Water-cooled exhaust elbow
Hull through fitting
Exhaust rubber hose
Water-cooled silencer
Exhaust boot

Silencer
Compensator

ELECTRICAL SYSTEM AND INSTRUMENTS

Charging distributor for charging 2-battery system
Extra instruments: Hourmeter, fuel- and water gauge, voltmeter, rudder indicator.
Master switch
Calbe harness extension
Instrument panel for extra instrument

ENGINE MOUNTING

Flexible engine mounting

BOAT ACCESSORIES

Electrically operated bilge pump
Original paint
Oils

CONTROLS AND CONTROL SYSTEM

VP single-control level for both speed and forward-reverse operation, top-mounted or side-mounted.
Neutral-position switch — automatic safety interlock for VP controls
Push-pull controls
Control cables
Steering gears
Steering lock
Steering wheels
Steering cables
Ball joint and fork kit for steering cables

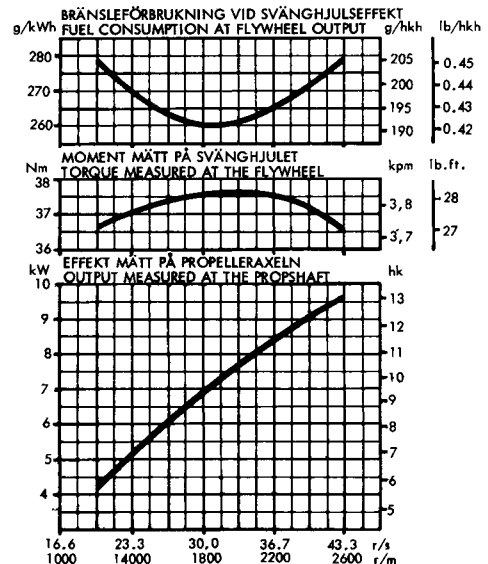
PROPELLER EQUIPMENT

Propeller shaft coupling
Flexible coupling
Clamp coupling
Propeller shafts
Propeller shaft sleeves
Propellers

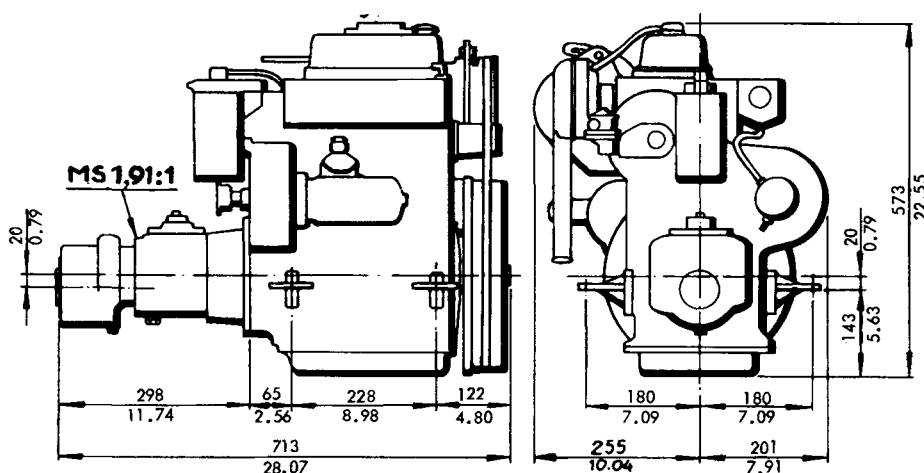
DATA

Type of operation 4-stroke diesel engine with direct injection
Designation MD7A
Propeller shaft output¹⁾ 13 hp at 2600 rpm (9.6 kW at 43.3 r/s)
Number of cylinders 2
Capacity 0,744 dm³ (45.4 in³)
Bore 76.0 mm (2.99 in)
Stroke 82.0 mm (3.23 in)
Valves overhead
Weight, engine with MS-B rev. gear 1.91:1, approx. 175 kg (385 lb)

1) The diagram indicates the propeller shaft output for a run-in engine with mechanical reverse gear according to DIN 6270 Leistung B für Dauerbetrieb. The engine flywheel output is approx. 4% higher.
1 hk = 1 hp (metric system) = 0.986 HP (Imp./US meas. system)



DIMENSION DRAWING



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