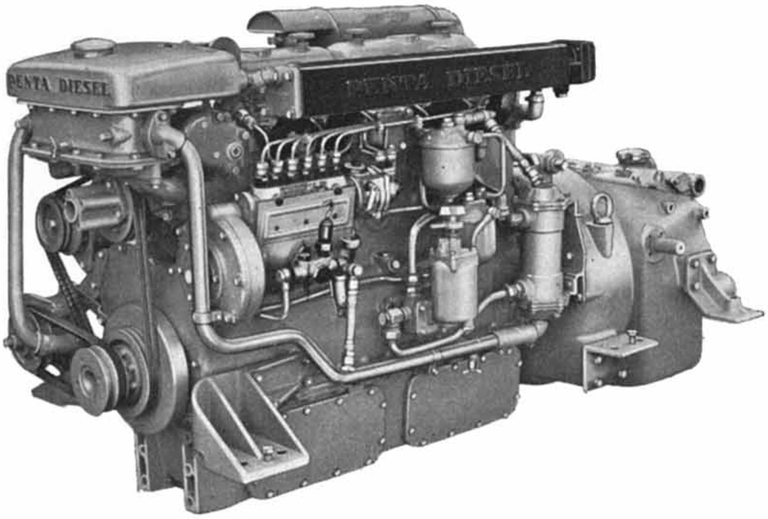
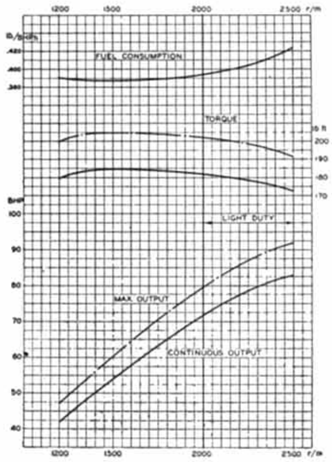
Ref. 5175



MD 47 with reverse and reduction gear 2: 1



VOLVO-PENTA • MD 47

Marine Diesel

Main data

*) Maximum output .... 92 h.p. at 2500 r.p.m.
Marine output,
light-duty oper., up to 83 h.p. at 2500 r.p.m.
heavy-duty oper., up to 71 h.p. at 2000 r.p.m.
Marine torque .... 25 kgm (181 lb.ft.) at 1400 r.p.m.

Number of cylinders 6
Displacement, total .... 4.7 litres (287 cu.in.)
Bore .... 95 mm (3.75″)
Stroke .... 110 mm (4.33″)
Compression ratio 17
Valves .... Overhead
Net weight (ratio 1: 1), approx. .... 700 kg (1540 lb.)

*) *The maximum output may be utilized after consultation with AB Penta.*

Specifications

Volvo-Penta Marine Diesel Engine type MD 47 is a four-stroke, direct-injection Diesel engine with the combustion chambers located for the greater part in the crowns of the pistons.

The cylinder block is made of cast-iron and the cylinder liners are of the replaceable type, the block being integrally cast with the crankcase.

The cylinder heads are made of special-alloy cast-iron with a high degree of heat resistance. The heads each cover three cylinders and they are inter-changeable. The special steel valve seats are replaceable.

The oil sump is of cast-iron. There are large covers through which the big-end bearing cap bolts can be loosened to enable the pistons and cylinder liners to be replaced without lifting the engine out of the boat.

The cylinder liners are of the dry type and are easily replaceable.

The pistons are forged of light-alloy.

The connecting rods are drop-forged and case-hardened.

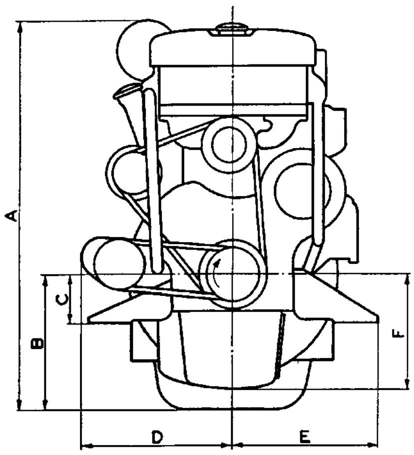
The crankshaft is drop-forged, robustly dimensioned, dynamically balanced. It is carried in seven bearings with all the journals surface-hardened. Total effective main bearing area 172 cm² = 27 sq.in.

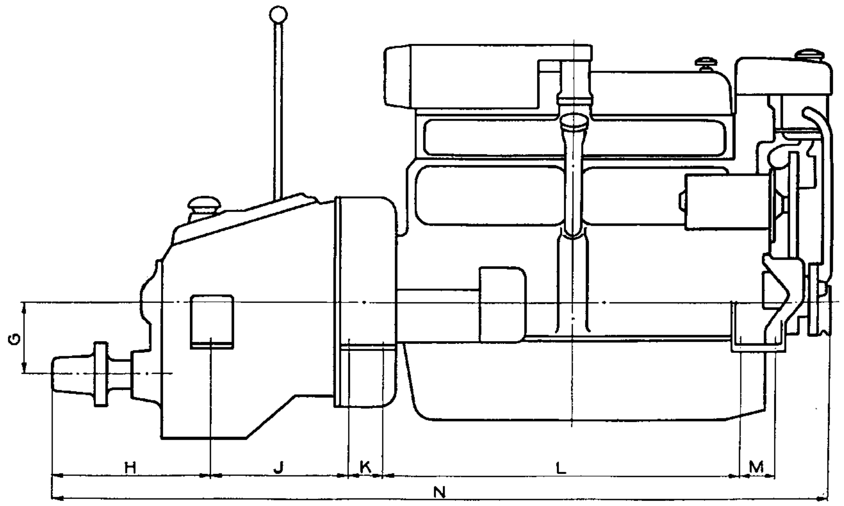
The bearing shells are easily replaceable and consist of lead-bronze lined steel shells.

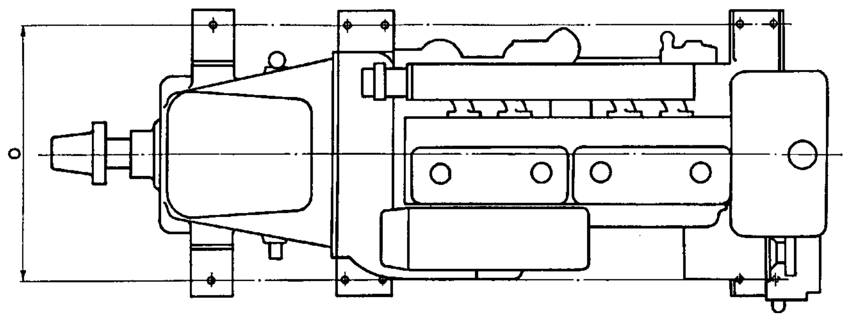
The camshaft is drop-forged with case-hardened and ground cams and bearing surfaces. Helically cut timing gears.

Valves. Nickel-steel inlet valves. Chrome-nickel steel exhaust valves with stellited seats.

VOLVO PENTA







A = 923	H = 377
B = 320	J = 328
C = 116	K = 80
D = 360	L = 845
E = 340	M = 80
F = 273	N = 1835
G = 170	O = 600

Dimensions in millimeters

The fuel system. Fuel injection pump with vacuum governor and direct-drive fuel feed pump. Twin fuel filters and one pre-filter. Injectors of the 4-hole type.

The lubricating system. Pressure lubrication. All the oil under pressure passes through an oil cooler and an oil filter of screen-type.

The cooling system. The engine and the exhaust manifold are fresh-water cooled. The fresh water is cooled by sea-water in a heat exchanger. Thermostat control automatically ensures the correct engine temperature.

The electrical system. 12 volt. 4 h.p. starter motor. Maximum dynamo output 450 watts, continuous output 300 watts. Automatic charging regulator.

Instruments. Instrument panel with mechanical revolution counter, oil pressure gauge, temperature gauge for coolant, starter motor switch, stop button, key switch, charging control lamp and switch for indirect instrument lighting. Cables (3 metres = 10 ft.) and other components for connection to engine included as well as master switch for complete engine electrical system and wiring diagram.

Reverse gear. Mechanically operated with 1:1, 2:1 or 3:1 reduction gear or hydraulically operated with 1,5:1, 2:1 or 3:1 reduction gear.

Friction clutch with different reduction gear intended for use with variable pitch propeller equipment.

Power take-off on forward end of engine. Friction clutch or flexible coupling.

The factory reserves the right to carry out modifications of design and equipment.

AKTIEBOLAGET

PENTA

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