

D34A MT

VOLVO PENTA INBOARD DIESEL

12-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine with aftercooler – crankshaft power* 776 kW (1055 hp)

Powerful and reliable engine for demanding operation in commercial applications

The Volvo Penta D34A MT engine is constructed to meet the most demanding requirements, such as marine main propulsion or marine generator drive. Its compactness and durability applies the most advanced technologies and engineering know-how; all this to benefit the operator.

The Volvo Penta D34A MT diesel engine is built to the highest quality standards recognized by all the major marine classification societies, such as Germanischer Lloyds, Norske Veritas etc. as well as the national Shipping Inspections.

Volvo Penta is continuously making intensive research work on the marine application of the engine to produce an engine with a compact design, which gives many advantages, such as low running costs in relation to high output.

An optimal combination of combustion chambers, fuel injection system, and effective turbocharger and charge air cooling system, provide an excellent fuel consumption over the whole range of engine speeds, through which the engine is economical in operation.

Maintenance is very easy, as supplementary equipment such as fuel injection pump, governor; water pump and turbocharger do not need any separate lubrication. The cylinder heads are individually divided by cylinder, and the engine has large inspection covers in crankcase and oil pan.

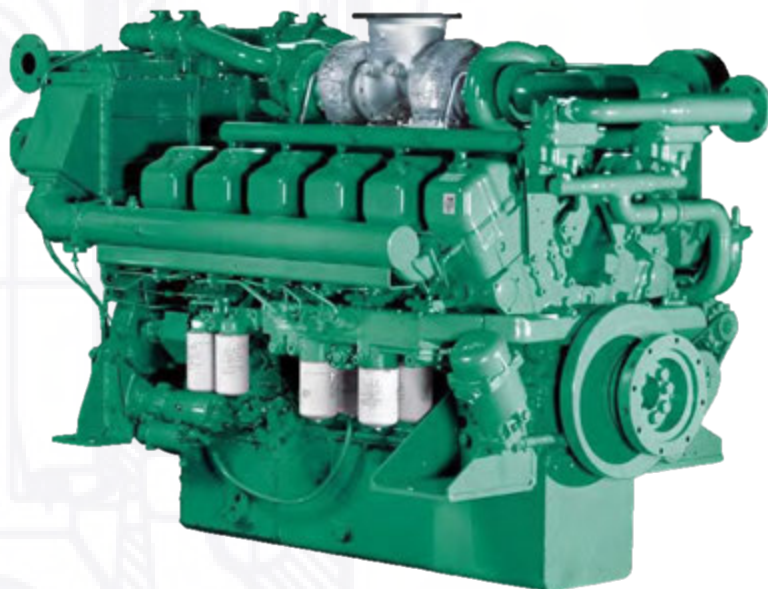
As the dimensions of the D34A MT engine are kept as small as possible, it takes up surprisingly little space. This asset will be subscribed whole-heartedly by the person who is in charge of the engine room. An engine room equipped with this engine is a well-ordered engine room.

Warranty and Service

All Volvo Penta marine engines come with the additional benefit and security of the Cost Control Program, a unique system of operator support and financial control – from installation to after-sales service.

The optional international limited Volvo Penta three-year warranty provides the owner peace of mind.

Qualified Volvo Penta dealers stand by for service and support in more than 100 countries all over the world.



D34A MT

Technical Data

Engine designation	D34A MT
No. of cylinders and configuration	V 12
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with aftercooler
Bore, mm	150
Stroke, mm	160
Displacement, l	33.93
Compression ratio	14.5:1
Dry weight, kg	2920
Crankshaft power at calculated propeller load, Rating 1, kW (hp) 1940 rpm	701 (953)
Rating 2, kW (hp) 2000 rpm	776 (1055)
Torque at calculated propeller load, Rating 1, Nm 1940 rpm	3589
Rating 2, Nm 2000 rpm	n.a.
Recommended fuel to conform to	ASTM No. 2-D
Specific fuel cons. at calculated propeller load, Rating 1, g/kWh 1940 rpm	214
Rating 2, g/kWh 2000 rpm	n.a.

All data represent net performance with standard accessories such as fuel injection pump, water pump, L.O. pump and charging alternator under the conditions of 100kPa (750 mm Hg), barometric pressure 300K (27°C) ambient temperature and 60% relative humidity.

Standard Equipment:

Engine

- Flywheel housing with connection acc. to SAE 0
- Flywheel (18")
- Engine brackets

Lubrication system

- Fresh water cooled oil cooler
- Spin-on type oil filter with shift valve
- Spin-on type oil by-pass filter

Fuel system

- Hydraulic governor
- Jacketed fuel pipes
- Spin-on type fuel filter (change over type)
- 24V fuel shut-off valve, electrically operated

Exhaust system

- Dry exhaust manifold with insulator cover
- Non-cooled turbocharger
- Air inlet filter/silencer

Cooling system

- Raw water cooled aftercooler
- Fresh water pump (V-belt driven)
- Raw water pump (V-belt driven)

Electrical system

- Starter motor (DC 24V-7.5kW)
- Alternator (24V-35A)

Other equipment

- Front P.T.O. pulley (2x B groove)
- Front safety cover
- Standard tools

Optional Equipment:

- Electrical system including wiring, senders, switches and terminal box mounted on engine
- Instrument panel for engine-room and wheel-house
- Air starting system on request
- Oil drain pump
- Flexible exhaust hose for dry exhaust line
- Dry exhaust silencer
- Fuel filter/water separator with shift valve
- Classification under regulations of: LR, ABS, DNV or GL
- Gearbox on request
- Spare parts
- Spare parts according to classification recommendations

Contact Volvo Penta 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.

Performance Data

Heavy Duty Rating 1

Crankshaft power at full load, R1, kW (hp) 1940 rpm	701 (953)
R1, kW (hp) 1900 rpm	695 (945)
R1, kW (hp) 1800 rpm	677 (921)
R1, kW (hp) 1700 rpm	651 (885)
R1, kW (hp) 1600 rpm	619 (842)
Crankshaft power at calculated propeller load, R1, kW (hp) 1940 rpm	701 (953)
R1, kW (hp) 1763 rpm	526 (715)
R1, kW (hp) 1540 rpm	351 (477)
R1, kW (hp) 1222 rpm	175 (238)
Torque at full load, R1, Nm 1940 rpm	3589
R1, Nm 1900 rpm	3634
R1, Nm 1800 rpm	3737
R1, Nm 1700 rpm	3804
R1, Nm 1600 rpm	3843
Torque at calculated propeller load, R1, Nm 1940 rpm	3589
R1, Nm 1763 rpm	2962
R1, Nm 1540 rpm	2261
R1, Nm 1222 rpm	1425
Specific fuel consumption at full load, R1, g/kWh 1940 rpm	214
R1, g/kWh 1900 rpm	214
R1, g/kWh 1800 rpm	212
R1, g/kWh 1700 rpm	210
R1, g/kWh 1600 rpm	212
Specific fuel cons. at calculated propeller load, R1, g/kWh 1940 rpm	214
R1, g/kWh 1763 rpm	213
R1, g/kWh 1540 rpm	214
R1, g/kWh 1222 rpm	225

Medium Duty Rating 2

Crankshaft power at full load, R1, kW (hp) 2000 rpm	776 (1055)
R1, kW (hp) 1900 rpm	757 (1029)
R1, kW (hp) 1800 rpm	731 (994)
R1, kW (hp) 1700 rpm	705 (958)
R1, kW (hp) 1600 rpm	671 (913)
Crankshaft power at calculated propeller load, R1, kW (hp) 2000 rpm	776 (1055)
R1, kW (hp) 1817 rpm	582 (791)
R1, kW (hp) 1587 rpm	388 (527)
R1, kW (hp) 1260 rpm	194 (264)
Torque at full load, R1, Nm 2000 rpm	3852
R1, Nm 1900 rpm	3957
R1, Nm 1800 rpm	4033
R1, Nm 1700 rpm	4118
R1, Nm 1600 rpm	4167
Torque at calculated propeller load, R1, Nm 2000 rpm	3852
R1, Nm 1817 rpm	3180
R1, Nm 1587 rpm	2427
R1, Nm 1260 rpm	1529
Specific fuel consumption at full load, R1, g/kWh 2000 rpm	220
R1, g/kWh 1900 rpm	217
R1, g/kWh 1800 rpm	214
R1, g/kWh 1700 rpm	212
R1, g/kWh 1600 rpm	212
Specific fuel cons. at calculated propeller load, R1, g/kWh 2000 rpm	220
R1, g/kWh 1817 rpm	216
R1, g/kWh 1587 rpm	213
R1, g/kWh 1260 rpm	227

Dimensions D34A MT

Dimensions in mm.
Not for installation.

