

D34A MS

VOLVO PENTA INBOARD DIESEL

12-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine with aftercooler – crankshaft power* 701 kW (953 hp)

Powerful and reliable engine for demanding operation in commercial applications

The Volvo Penta D34A MS 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 MS 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.

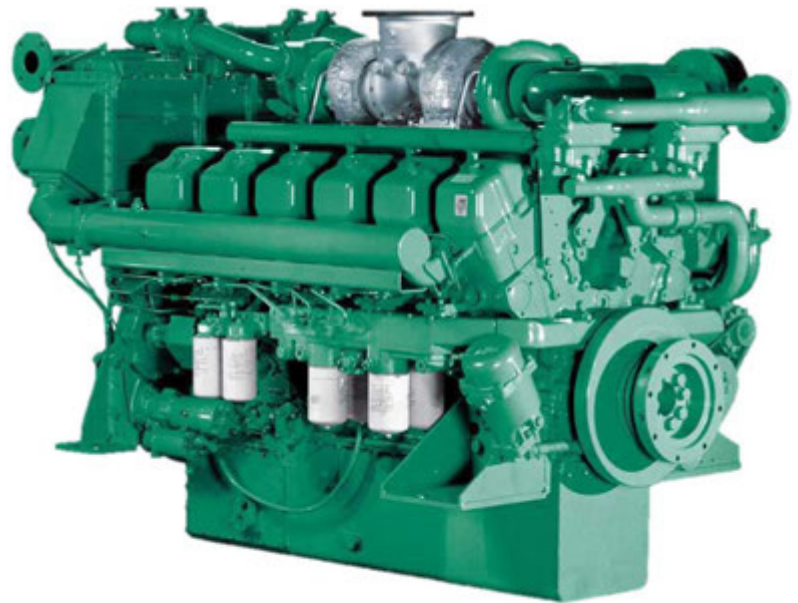
As the dimensions of the D34A MS engine are kept as small as possible, it takes up surprisingly little space. This asset will be subscribed whole-heartedly by the person who is in charge of the engine room. An engine room equipped with this engine is a well-ordered engine room.

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 MS

Technical Data

Engine designation	D34A MS
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	634 (862)
Rating 2, kW (hp) 2000 rpm	701 (953)
Torque at calculated propeller load, Rating 1, Nm 1940 rpm	n.a.
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	n.a.
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

- Fresh water cooled aftercooler with insulator cover
- Fresh 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	634 (862)
R1, kW (hp) 1900 rpm	634 (862)
R1, kW (hp) 1800 rpm	615 (837)
R1, kW (hp) 1700 rpm	595 (809)
R1, kW (hp) 1600 rpm	571 (776)
Crankshaft power at calculated propeller load,	
R1, kW (hp) 1940 rpm	634 (862)
R1, kW (hp) 1763 rpm	476 (647)
R1, kW (hp) 1540 rpm	317 (431)
R1, kW (hp) 1222 rpm	159 (216)
Torque at full load,	
R1, Nm 1940 rpm	3246
R1, Nm 1900 rpm	3314
R1, Nm 1800 rpm	3395
R1, Nm 1700 rpm	3477
R1, Nm 1600 rpm	3542
Torque at calculated propeller load,	
R1, Nm 1940 rpm	3246
R1, Nm 1763 rpm	2681
R1, Nm 1540 rpm	2044
R1, Nm 1222 rpm	1291
Specific fuel consumption at full load,	
R1, g/kWh 1940 rpm	214
R1, g/kWh 1900 rpm	213
R1, g/kWh 1800 rpm	212
R1, g/kWh 1700 rpm	209
R1, g/kWh 1600 rpm	208
Specific fuel cons. at calculated propeller load,	
R1, g/kWh 1940 rpm	214
R1, g/kWh 1763 rpm	213
R1, g/kWh 1540 rpm	218
R1, g/kWh 1222 rpm	232

Medium Duty Rating 2

Crankshaft power at full load,	
R2, kW (hp) 2000 rpm	701 (953)
R2, kW (hp) 1900 rpm	668 (909)
R2, kW (hp) 1800 rpm	639 (868)
R2, kW (hp) 1700 rpm	597 (811)
R2, kW (hp) 1600 rpm	555 (755)
Crankshaft power at calculated propeller load,	
R2, kW (hp) 2000 rpm	701 (953)
R2, kW (hp) 1817 rpm	526 (715)
R2, kW (hp) 1587 rpm	351 (477)
R2, kW (hp) 1260 rpm	175 (238)
Torque at full load,	
R2, Nm 2000 rpm	3482
R2, Nm 1900 rpm	3493
R2, Nm 1800 rpm	3523
R2, Nm 1700 rpm	3486
R2, Nm 1600 rpm	3444
Torque at calculated propeller load,,	
R2, Nm 2000 rpm	3482
R2, Nm 1817 rpm	2874
R2, Nm 1587 rpm	2194
R2, Nm 1260 rpm	1382
Specific fuel consumption at full load,	
R2, g/kWh 2000 rpm	218
R2, g/kWh 1900 rpm	217
R2, g/kWh 1800 rpm	214
R2, g/kWh 1700 rpm	213
R2, g/kWh 1600 rpm	214
Specific fuel cons. at calculated propeller load,	
R2, g/kWh 2000 rpm	218
R2, g/kWh 1817 rpm	216
R2, g/kWh 1587 rpm	217
R2, g/kWh 1260 rpm	225

Dimensions D34A MS

Dimensions in mm.
Not for installation.

