

TECHNICAL DATA

X

ENGINE DESCRIPTION

| | 2001 | 2002 | 2003 | 2003T |
|--|-------------|-------------|-----------------------------|-------------|
| Number of cylinders | 1 | 2 | 3 | 3 |
| Output, see sales literature | | | | |
| Max. operating speed rpm | | | 3200 | |
| Bore, mm (inch) | | 79 (3.110") | | |
| Stroke, mm (inch) | | 87 (3.425") | | |
| Displacement, dm ³ (in ³) | 0.43 (26.2) | 0.85 (51.8) | 1.28 (78.1) | 1.28 (78.1) |
| Idling speed rpm | | | 850 | |
| Max. angle of incline when under way | | | 10° | |
| Max. angle of lateral incline under way | | | 30° | |
| Engine weight incl. reverse gear | | | | |
| (MS2) kg (lbs) | 112 (246) | 139 (305) | 159 (349) | 176 (387) |
| (V-drive) kg (lbs) | 118 (259) | 145 (319) | 165 (363) | 182 (400) |
| Engine weight incl. S drive kg (lbs) | 126 (277) | 153 (336) | 173 (380) | - |
| Fuel | | | Autodiesel (No 2 Diesel) | |

VALVES

| | | |
|---|----------------------|---------------|
| Valve clearance, inlet mm, warm engine | <i>jeu admission</i> | 0.30 (0.012") |
| Valve clearance, outlet mm, warm engine | <i>echappement</i> | 0.30 (0.012") |
| Decompressed depression, mm | | 0.50 (0,020") |

LUBRICATING SYSTEM

| | | | | |
|---|-----------|------------|--------------------------|-----------|
| Oil capacity, incl. filter lit (US qts) | 1.4 (1.5) | 2.75 (2.9) | 4.1 (4.3) | 4.3 (4.5) |
| Oil quality | | | CD | |
| Viscosity above +10°C | | | SAE 15/W40 ¹⁾ | |
| below +10°C | | | SAE 10W ²⁾ | |
| Ratio, MS2, MS2V | | | 2,4:1 alt. 3,0:1 | |
| Oil capacity MS2 lit (US qts) | | | 0,8 (0.85) | |
| Oil capacity MS2V lit (US qts) | | | 1,8 (1.9) | |
| Oil quality (as for engine) | | | CD | |
| Viscosity, above +10°C | | | SAE 20W/30 ¹⁾ | |
| below +10°C | | | SAE 10W ²⁾ | |
| Ratio 120S | | | 2,20:1 | |
| Oil capacity 120 S lit (US qts) | | | 2,6 (2.75) | |
| Oil quality (as for engine) | | | | |
| Viscosity (as for engine) | | | | |
| Thermostat begins opening | | | | |
| sea water cooled engine °C (°F) | 60 (140) | 60 (140) | 60 (140) | - |
| fresh water cooled engine °C (°F) | - | 74 (165) | 74 (165) | 74 (165) |
| Thermostat, fully open | | | | |
| Sea water cooled engine °C (°F) | 75 (167) | 75 (167) | 75 (167) | - |
| Fresh water cooled engine °C (°F) | - | 87 (188) | 87 (188) | 87 (188) |
| Fresh water cooling system, lit. (US qts) | - | 4 (4.2) | 5.5 (5.8) | 7 (7.4) |

ELECTRICAL SYSTEM

| | | | | |
|--|--|-----|-------------|-----|
| Battery voltage | | | 12 | |
| Starter motor battery, max Ah | | | - 70 | |
| Starter motor output, kW | | | | |
| → Alternator output, A (W) | | 1,4 | 1,4 | 1,4 |
| Specific gravity of electrolyte | | | | |
| Recharge at g/cm ³ | | | 1230 | |
| Fully charged, g/cm ³ | | | 1,275-1,285 | |

TORQUE FACTORS

| | | |
|---|--|---------------|
| Nuts for injectors, Nm (kpm) (ft.lbs) | | 20 (2.0) (15) |
|---|--|---------------|

1) Volvo Penta CD oil Double Grade.

2) Volvo Penta CD oil Single Grade.