The marine engines from Scania are based on a robust design with a strength optimised cylinder block containing wet cylinder liners that can easily be exchanged. Individual cylinder heads with 4 valves per cylinder promotes reparability and fuel economy. The engines are also available as type-approved with jacketed fuel pipes.

The engine is equipped with a Scania developed Engine Management System, EMS, in order to ensure the control of all aspects related to engine performance. The injection system is Scania’s XPI (extra high pressure fuel injection), a common rail system that gives low exhaust emissions with good fuel economy and a high torque. The engine can be fitted with many accessories such as air cleaners, PTOs, transmissions and type-approved instrumentation in order to suit a variety of installations.

**DI16 076M. 846 kW (1150 hp)**

**IMO Tier II, EU Stage IIIA**

<table>
<thead>
<tr>
<th>Engine speed (rpm)</th>
<th>1200</th>
<th>1500</th>
<th>1800</th>
<th>2000</th>
<th>2300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross power, full load (kW)</td>
<td>348</td>
<td>597</td>
<td>769</td>
<td>822</td>
<td>846</td>
</tr>
<tr>
<td>Gross power, full load (hp, metric)</td>
<td>473</td>
<td>812</td>
<td>1046</td>
<td>1118</td>
<td>1150</td>
</tr>
<tr>
<td>Gross power, propeller curve (kW)</td>
<td>166</td>
<td>291</td>
<td>458</td>
<td>597</td>
<td>846</td>
</tr>
<tr>
<td>Gross power, propeller curve (hp, metric)</td>
<td>226</td>
<td>395</td>
<td>623</td>
<td>811</td>
<td>1151</td>
</tr>
<tr>
<td>Gross torque (Nm)</td>
<td>2769</td>
<td>3799</td>
<td>4079</td>
<td>3924</td>
<td>3512</td>
</tr>
<tr>
<td>Fuel consumption at full load (g/kWh)</td>
<td>217</td>
<td>205</td>
<td>201</td>
<td>206</td>
<td>217</td>
</tr>
<tr>
<td>Fuel consumption at 3/4 load (g/kWh)</td>
<td>206</td>
<td>203</td>
<td>199</td>
<td>204</td>
<td>211</td>
</tr>
<tr>
<td>Fuel consumption at 1/2 load (g/kWh)</td>
<td>201</td>
<td>204</td>
<td>203</td>
<td>207</td>
<td>214</td>
</tr>
<tr>
<td>Fuel consumption, propeller curve (l/h)</td>
<td>40</td>
<td>71</td>
<td>110</td>
<td>145</td>
<td>219</td>
</tr>
<tr>
<td>Optimum fuel consumption (g/kWh)</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat rejection to coolant (kW)</td>
<td>333</td>
<td>506</td>
<td>612</td>
<td>685</td>
<td>767</td>
</tr>
</tbody>
</table>

**Rating:** Patrol craft short: Intended for intermittent use where rated power is available 1 hour/12-hour period. Between full load operations engine rpm must be reduced at least 10% from max. obtained rpm. Accumulated total service time max. 1200 h/year.

This specification may be revised without notice.
DI16 076M. 846 kW (1150 hp)
IMO Tier II, EU Stage IIIA

Engine description

No of cylinders: V 8
Working principle: 4-stroke
Firing order: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Displacement: 16.4 litres
Bore x stroke: 130 x 154 mm
Compression ratio: 16.7:1
Weight: 1660 kg (excl oil and coolant)
Piston speed at 1500 rpm: 7.7 m/s
Piston speed at 1800 rpm: 9.24 m/s
Camshaft: High position alloy steel
Pistons: Steel pistons
Connection rods: I-section press forgings of alloy steel
Crankshaft: Alloy steel with hardened and polished bearing surfaces
Oil capacity: 40-48 dm³ (standard oil sump)
Electrical system: 2-pole 24 V DC

Test conditions: Air temperature +25°C. Barometric pressure 100 kPa (750 mmHg). Humidity 30%. Diesel fuel acc. to EN 590. Density of fuel 0.840 kg/dm³. Viscosity of fuel 3.0 cSt at 40°C. Energy value 42700 kJ/kg. Power test code: ISO 3046. Power and fuel values +/-3%.

*With jacketed fuel pipes: 1609
*With jacketed fuel pipes: 1234

All dimensions in mm

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