



SCANIA MARINE ENGINE: EU RCD STAGE II, US TIER 3 FOR PLEASURE CRAFT

16-LITRE ENGINE



Engine description

DI16 304M. 809 kW (1,100 hp)

| Engine speed | 2,300 rpm | | | |
|---------------------|---|--|--|--|
| Emission compliance | EU RCD Stage II, US Tier 3 for pleasure craft | | | |
| Rating | Pleasure craft | | | |
| No of cylinders | V8 | | | |
| Working principle | 4-stroke | | | |
| Displacement | 16.4 litres | | | |
| Weight | 1,660 kg (excluding oil and coolant) | | | |
| Oil capacity | 40-48 litres (standard oil sump) | | | |
| Electrical system | 2-pole, 24 V DC | | | |

The marine engines from Scania are based on a robust design with a strength optimized 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 engine is equipped with a Scania developed Engine Management System, EMS, 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 equipped with many accessories such as air cleaners, PTOs, transmissions and instrumentation, to suit a variety of installations.

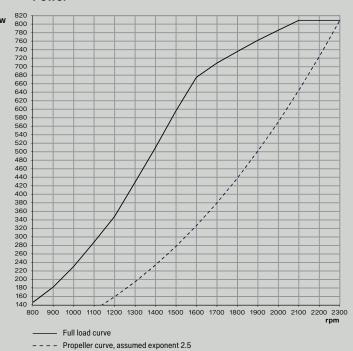
Standard equipment

- Scania Engine Management System, EMS
- Extra high pressure fuel injection system, XPI
- Dual water-cooled turbochargers
- Saver ring in cylinder liner
- Fuel filter and extra pre-filter with water separator
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in cylinder block
- Oil filler, in valve cover
- Deep front oil sump
- · Oil dipstick, front
- Starter motor, 2-pole 7.0 kW
- Alternator, 2-pole 100 A
 Flourist and CAF 44
- Flywheel SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine suspension
- Closed crankcase ventilation
- Sea water pump
- Sea water-cooled charge air cooler
- Dual heat exchangers with expansion tank

Pleasure craft: Intended for intermittent use where rated power is available 1 hour/20-hour period. Accumulated load factor must not exceed 50% of rated power. Accumulated total service time max. 500 h/year.

Power charts

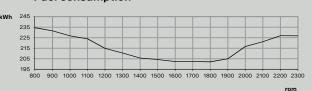




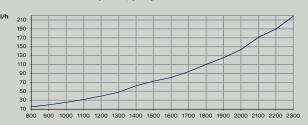
Torque 1 4200 4000 38000 3400 3200 3200 2800 2800 2200

900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300

Fuel consumption



Fuel consumption, propeller curve

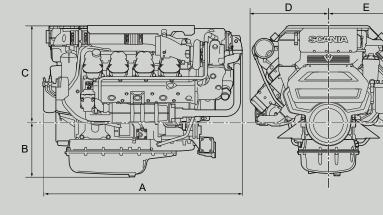


Test conditions. Air temperature +25 °C. Barometric pressure 100 kPa (750 mmHg). Humidity 30%. Diesel fuel acc.to ECE R 24 Annex 6. Density of fuel 0,840 kg/dm³. Viscosity of fuel 3.0 cSt at 40 °C. Energy value 42,700 kJ/kg. **Power test code** ISO 3046. Power and fuel values +/-3%.

Dimensions

| A Overall length | 1,574 |
|--|-------|
| B Centre of crankshaft to bottom | 428 |
| C Centre of crankshaft to top | 786 |
| D Centre of crankshaft to right-hand side | 635 |
| E Centre of crankshaft to left-hand side | 635 |

All dimensions indicated in mm.



Technical data

| | Engine speed (rpm) | | | | | |
|---|--------------------|-------|-------|-------|-------|--|
| | 1,200 | 1,500 | 1,800 | 2,100 | 2,300 | |
| Gross power (kW) | 348 | 597 | 736 | 809 | 809 | |
| Gross power (hp, metric) | 473 | 811 | 1,000 | 1,100 | 1,100 | |
| Gross power, propeller curve (kW) | 159 | 278 | 438 | 644 | 809 | |
| Gross power, propeller curve (hp, metric) | 216 | 378 | 596 | 876 | 1,100 | |
| Gross torque (Nm) | 2,769 | 3,799 | 3,905 | 3,679 | 3,359 | |
| Spec. fuel consumption at full load (g/kWh) | 215 | 204 | 202 | 221 | 227 | |
| Spec. fuel consumption, propeller curve (I/h) | 39 | 73 | 110 | 171 | 218 | |
| Heat rejection to coolant (kW) | 336 | 522 | 622 | 782 | 810 | |