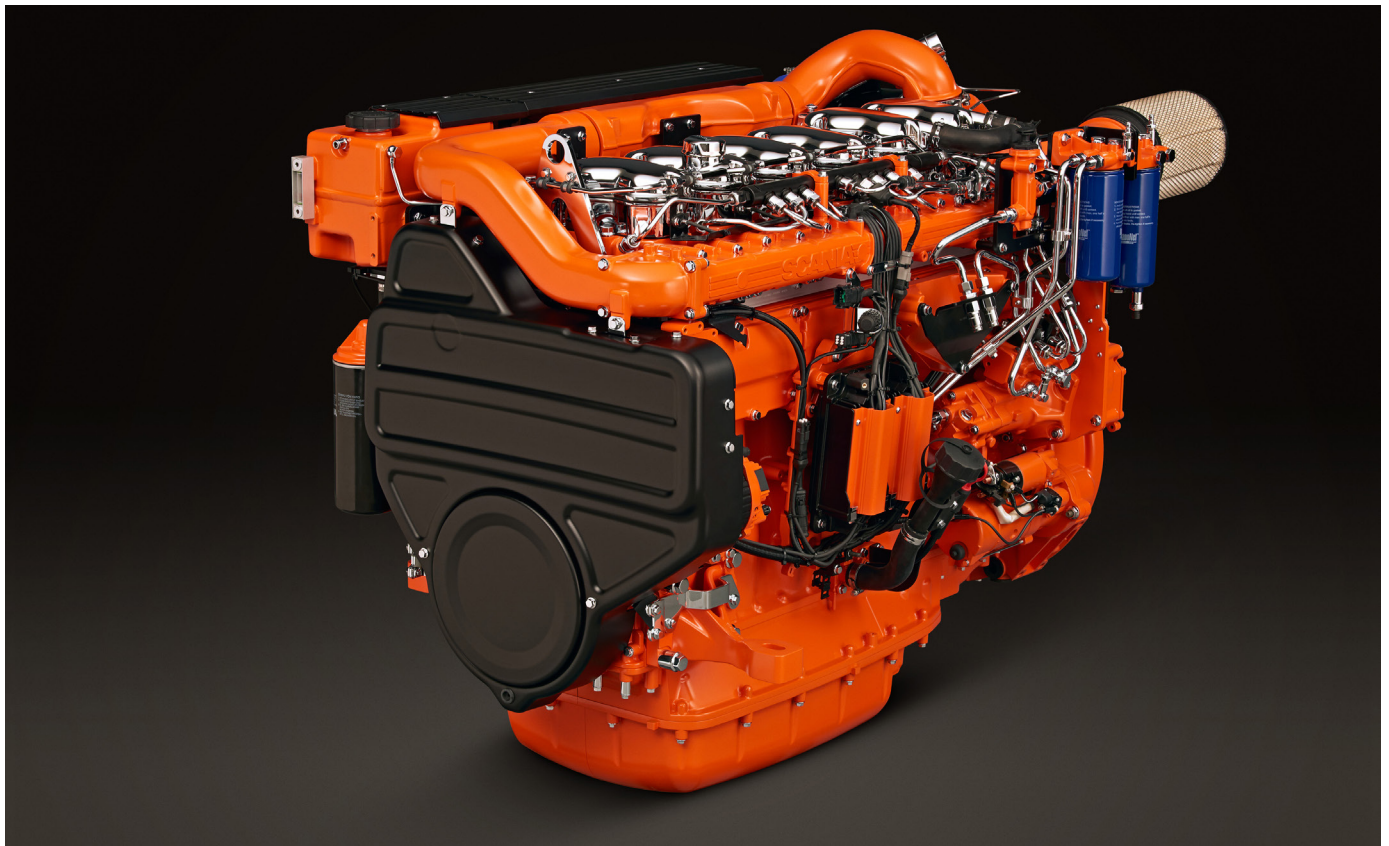


SCANIA MARINE ENGINE: EU RCD STAGE II, US TIER 3 FOR PLEASURE CRAFT

# 13-LITRE ENGINE



## Engine description

DI13 094M. 515 kW (700 hp)

<b>Engine speed</b>	2,300 rpm
<b>Emission compliance</b>	EU RCD Stage II, US Tier 3 for pleasure craft
<b>Rating</b>	Pleasure craft
<b>No of cylinders</b>	6 in-line
<b>Working principle</b>	4-stroke
<b>Displacement</b>	12.7 litres
<b>Weight</b>	1,285 kg (excluding oil and coolant)
<b>Oil capacity</b>	39-45 litres (standard oil sump)
<b>Electrical system</b>	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.

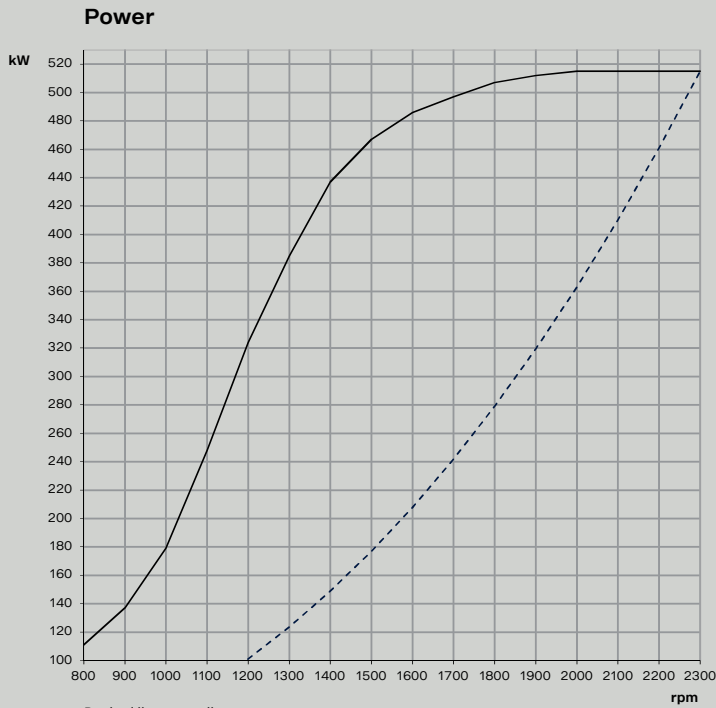
The engine can be equipped with many accessories such as air cleaners, PTOs, transmissions and instrumentation, to suit a variety of installations.

### Standard equipment

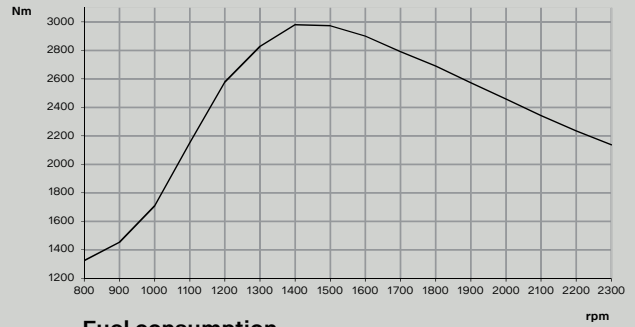
- Scania Engine Management System, EMS
- Extra high pressure fuel injection system, XPI
- Turbocharger
- Saver ring in cylinder liner
- Fuel filter and extra pre-filter with water separator
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in cylinder block
- Oil filler, in cylinder block
- Deep front oil sump with ladder frame
- Oil dipstick, in cylinder block
- Starter motor, 2-pole 7.0 kW
- Alternator, 2-pole 100 A
- Flywheel SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine suspension
- Protection covers
- Closed crankcase ventilation
- Sea water pump
- Heat exchanger 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.

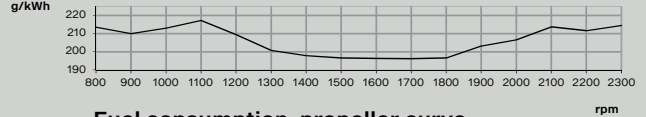
# Power charts



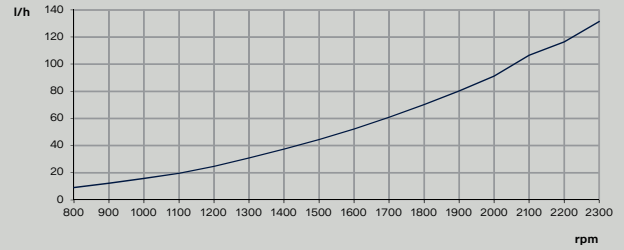
## Torque



## Fuel consumption



## Fuel consumption, propeller curve

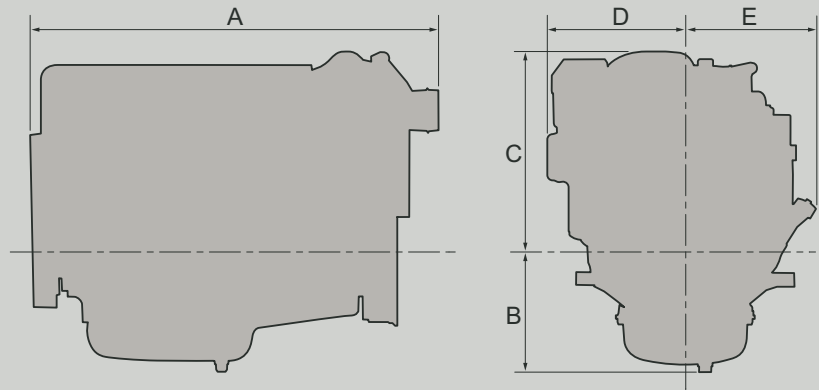


**Test conditions.** Air temperature +25 °C. Barometric pressure 100 kPa (750 mmHg). Humidity 30%. Diesel fuel acc.to ECE R 24 Annex 6. Density of fuel 0,840 kg/dm<sup>3</sup>. Viscosity of fuel 3.0 cSt at 40 °C. Energy value 42,700 kJ/kg. **Power test code** ISO 3046. Power and fuel values +/-3%.

# Dimensions

<b>A</b> Overall length	1,536
<b>B</b> Centre of crankshaft to bottom	448
<b>C</b> Centre of crankshaft to top	770
<b>D</b> Centre of crankshaft to right-hand side	502
<b>E</b> Centre of crankshaft to left-hand side	471

All dimensions indicated in mm.



# Technical data

	Engine speed (rpm)				
	1,200	1,500	1,800	2,100	2,300
Gross power (kW)	324	467	507	515	515
Gross power (hp, metric)	441	635	690	700	700
Gross power, propeller curve (kW)	101	177	279	410	515
Gross power, propeller curve (hp, metric)	138	241	379	558	700
Gross torque (Nm)	2,578	2,973	2,690	2,342	2,138
Spec. fuel consumption at full load (g/kWh)	209	197	197	214	214
Spec. fuel consumption, propeller curve (l/h)	25	44	70	107	132
Optimum fuel consumption (g/kWh)	196				
Heat rejection to coolant (kW)	251	309	339	373	393