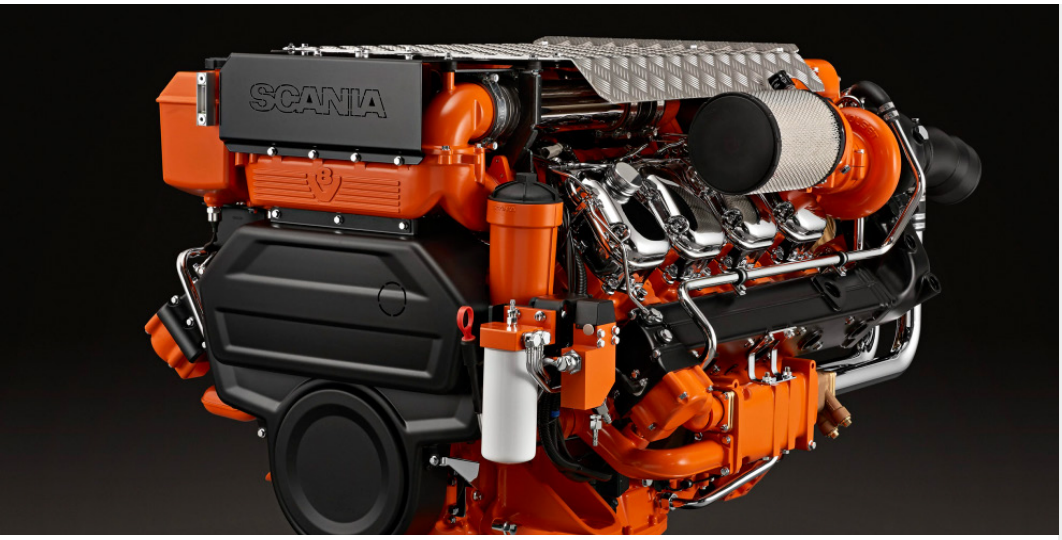
DI16 076M. 809 kW (1100 hp)

IMO Tier II, EU Stage IIIA



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 repairability and fuel economy. The engines are type approved in all major classification societies.

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 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.

	Rating	Engine speed (rpm)				
		1200	1500	1800	2000	2300
Gross power, full load (kW)	Patrol craft long	348	597	736	786	809
Gross power, full load (hp, metric)		473	812	1001	1069	1100
Gross power, propeller curve (kW)		159	278	438	570	809
Gross power, propeller curve (hp, metric)		216	378	596	776	1100
Gross torque (Nm)		2769	3799	3905	3753	3359
Spec fuel consumption. Full load (g/kWh)		217	205	201	205	215
Spec fuel consumption. 3/4 load (g/kWh)		206	203	200	204	211
Spec fuel consumption. 1/2 load (g/kWh)		201	204	203	207	215
Spec fuel consumption. Propeller curve (l/h)		38	68	105	139	207
Optimum fuel consumption (g/kWh)		199				
Heat rejection to coolant (kW)		333	506	583	653	726

Patrol craft long: Intended for intermittent use where rated power is available 1 hour/6 hours period. Between full load operations engine rpm must be reduced at least 10% from max. obtained rpm. Accumulated total service time max. 2000 h/year.

Standard equipment

- Scania Engine Management System, EMS
- Extra high pressure fuel injection system, XPI
- Twin turbochargers, water cooled
- Fuel pre-filter with water separator
- Fuel filter
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in valve cover
- Oil draining with plug
- Deep front oil sump
- Oil dipstick, front
- Starter, 2-pole 7.0 kW (EMS controlled)
- Alternator, 2-pole 100A
- Flywheel SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine brackets
- Catwalk and cover for belt transmission
- Closed crankcase ventilation
- Sea water charge air cooler
- Sea water pump
- Dual heat exchangers with expansion tank
- Operator's manual

Optional equipment

- Electrical base system 2.0
- Scania EMS display
- Hydraulic pump
- Side-mounted PTO
- Front-mounted PTO
- Exhaust connections
- Engine heater
- Stiff rubber suspension
- Air cleaner
- Studs in flywheel housing
- Low coolant level reaction
- Variable idle speed setting
- Low oil sump
- Oil draining with pump
- Oil level sensor
- Bilge pump

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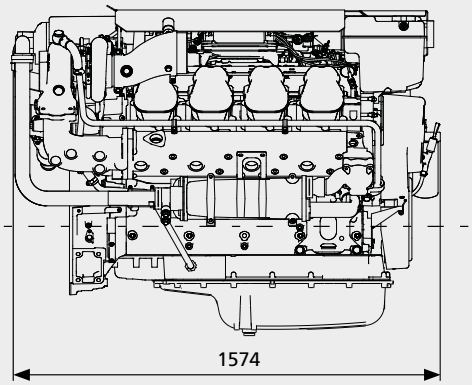
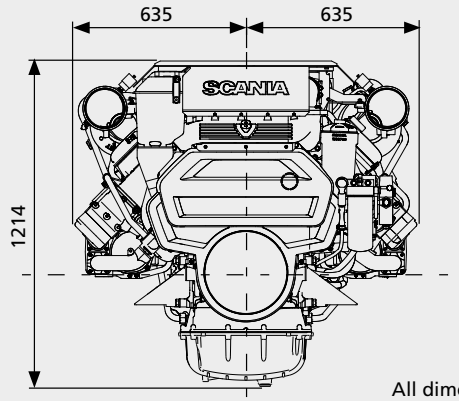
IMO Tier II, EU Stage IIIA

Engine description

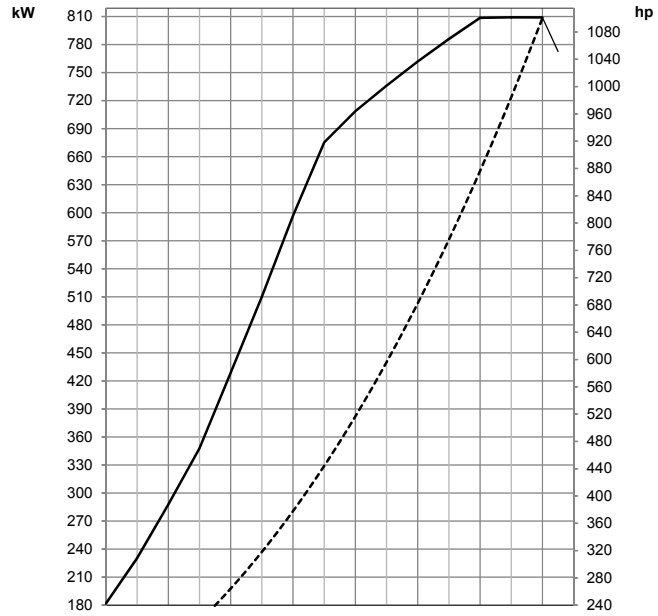
No of cylinders	V 8
Working principle	4-stroke
Firing order	1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Displacement	16.4 litres
Bore x stroke	130 x 154 mm
Compression ratio	15.7:1
Weight	1660 kg (excl oil and coolant)
Piston speed at 1500 rpm	7.7 m/s
Piston speed at 1800 rpm	9.24 m/s
Camshaft	High position alloy 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 24V



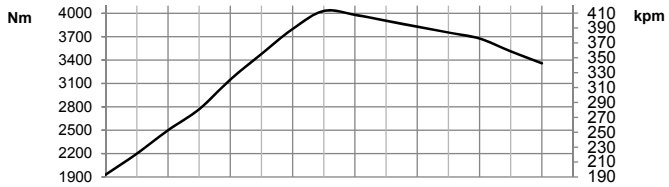


All dimensions in mm

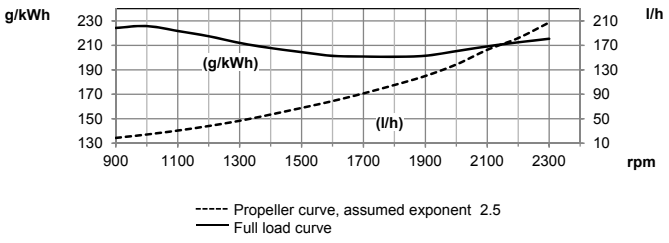
Output



Torque



Spec fuel consumption



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 42700 kJ/kg.
Power test code ISO 3046. Power and fuel values +/-3%.

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