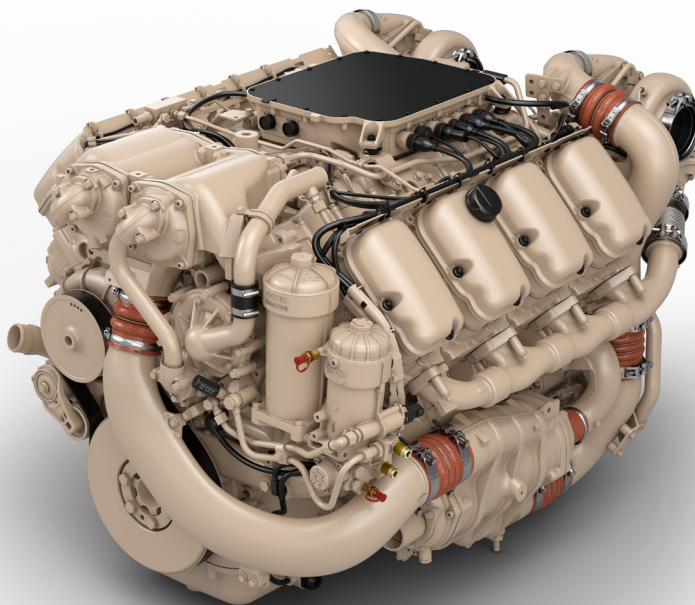


SCANIA HEAVY INDUSTRY SOLUTIONS

# 16-LITRE ENGINE



## Engine description

DI16. 588/800 kW (800/1,088 hp)

For Power Solutions, outstanding performance and high uptime are at the core of our business, and still we never compromise with fuel consumption. Scania's engines are compact and easy to install and maintain. Thanks to integrated production with industry-leading quality standards, we can supply both engines and parts with short lead times. Each engine provides leading fuel economy and exceptional torque rating already at low revs. This makes it suitable for support and operational land vehicles, while delivering lean customer operational and sustainment life cycle costs. By utilizing cutting-edge technology as well as proven technologies as a basis for development, our engineers continue to break new ground.

These are some key features of our engines:

- Modular design and support solutions, resulting in maximized uptime
- Global network and support
- High power-to-weight ratio
- Outstanding fuel efficiency
- Compact dimensions
- Full service support of spare parts, documentation, training, repair and maintenance services
- 100% designed and built in-house – uncompromising reliability

Scania can support with engine adaptations, as well as fitted or loose accessories, to suit a variety of installations. With more than 1,800 service workshops all over the world, the availability of professional services, assistance and advice leaves nothing to be desired. A great share of our authorized workshops are ready and accessible 365 days a year, ensuring high uptime. Scania supports the engine during its full life cycle in all heavy industry perspectives.

### Standard equipment

- Scania Engine Management System, EMS
- Fuel injection system unit injectors, PDE
- Twin turbocharger installation
- Engine-mounted fuel filter
- Oil filter, full flow
- Oil cooler, integrated in cylinder block
- CAN bus communication
- 2-pole starter motor, 7 kW (EMS-controlled)
- Cast iron flywheel housing, SAE 1 flange
- Open crankcase ventilation
- Dry or wet oil sumps
- EMC protection
- 2-stage charge air cooling

### Optional equipment

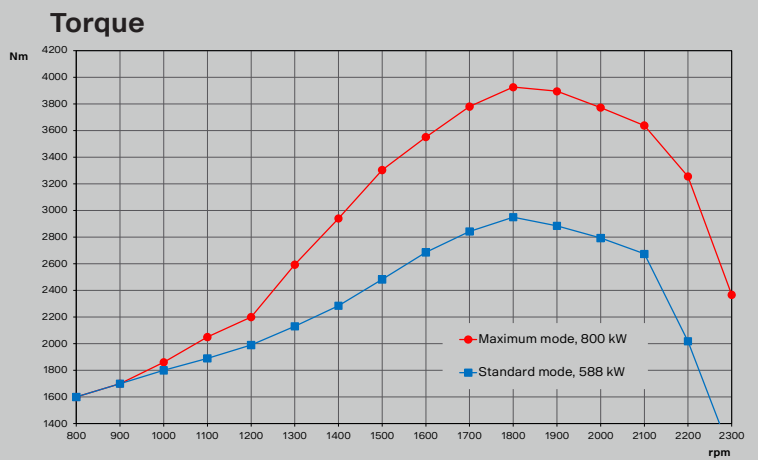
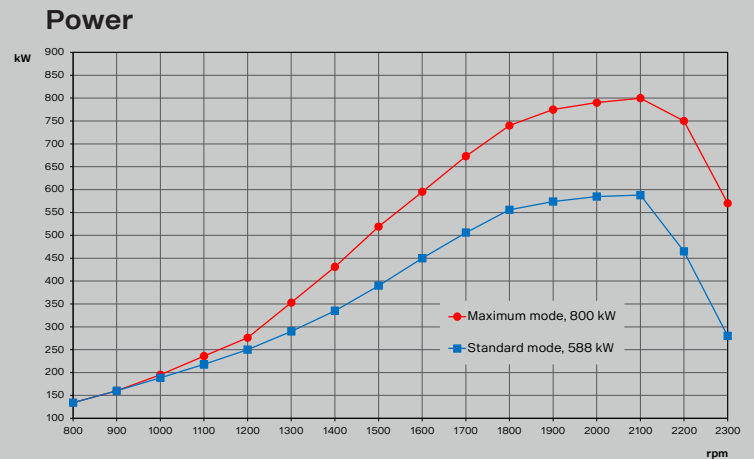
- Front-mounted PTO
- Exhaust connections
- Flywheels for different types of applications
- External thermostat
- Coolant level sensor
- Fuel cooler
- Fuel heater

## Engine description

No of cylinders	90°, V8
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 (dry)	1,340 kg
Charging method	Turbocharged
Starting method	Electric
Electrical system	1-pole, 24 V DC
Control method	CAN bus, Scania EMS
Intake system	Charge air cooling, dual circuit
Injection system	Unit injectors, PDE
Max torque	2,950/3,926 Nm
Rated power	588/800 kW
Rated speed	2,100 rpm
Contin. operational angles	Pitch ±60%; roll ±30%
Direction of rotation	Counter clockwise
Cold start	-19°C without preheating system
Lubrication oil system	Dry or wet oil sump
Oil cooler	Integrated in engine cooling system
Oil capacity	40-48 dm <sup>3</sup>
Standard fuels	EN590
Alternative fuels	F-34 (JP-8), F-44 (JP-5), F-54, F-63, F-75, F-35 with corresponding additives*
Lubrication oil standards	Scania LDF3, ACEA E4/E5/E7*

\*Other types of fuel or oil should be checked for compliance. Additional information is available on request.

## Power charts



**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 0.84 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

A Overall length	1,405
B Height	955
C Width	1,106

All dimensions indicated in mm.

