

DEUTZ TCD 12.0/16.0

For mobile machinery ■ 240-520 kW / 322-697 hp at 1800-2100 min⁻¹/rpm ■ EU Stage V / US EPA Tier 4 / CN 4

- Water-cooled, V version (90°) 6 or 8- cylinder engines with turbocharging and charge air cooling.
- Engine and exhaust aftertreatment (EAT) are optimised for highest total system efficiency and thus ensure lowest consumption and total operating cost.
- Thanks to SCR technology, the cooler sizes do not need to be enlarged in comparison with Tier 3 engines. Fuel consumption is reduced. (applicable for Stage V and Tier 4)
- Consistent installation and connection dimensions of the engine facilitate the changeover of existing installations to the next stage of the emission laws.
- The engines have a modular exhaust aftertreatment system (EAT) with components from the DVERT® kit and optional configuration variants. This means a high flexibility in machine integration for the OEM.
- Best cold starting performance even under extreme conditions.
- The extremely compact engine design and customer friendly accessories reduce the installation cost and increase the number of applications.
- Both engines are also available as a flat version for extremely compact installations.
- The powerful Common Rail injection system and the electronic engine control (EMR) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.
- 100% power take-off at flywheel and front end and additionally up to three PTO drives with a total torque of up to 520 Nm.
- The engines meet the requirements of the EU Stage V and US EPA Tier 4 with SCR. For EU Stage V a DPF is integrated into the EAT system. A variant with-out EAT is available as an option for less regulated markets.



TECHNICAL DATA

Engine type		TCD 12.0 V6	TCD 16.0 V8
No. of cylinders		6	8
Bore/stroke	mm in	132/145 5,2/5,7	132/145 5,2/5,7
Displacement	l cu in	11,9 726	15,9 969
Max. nominal speed	min ⁻¹ rpm	1800-2100	1800-2100

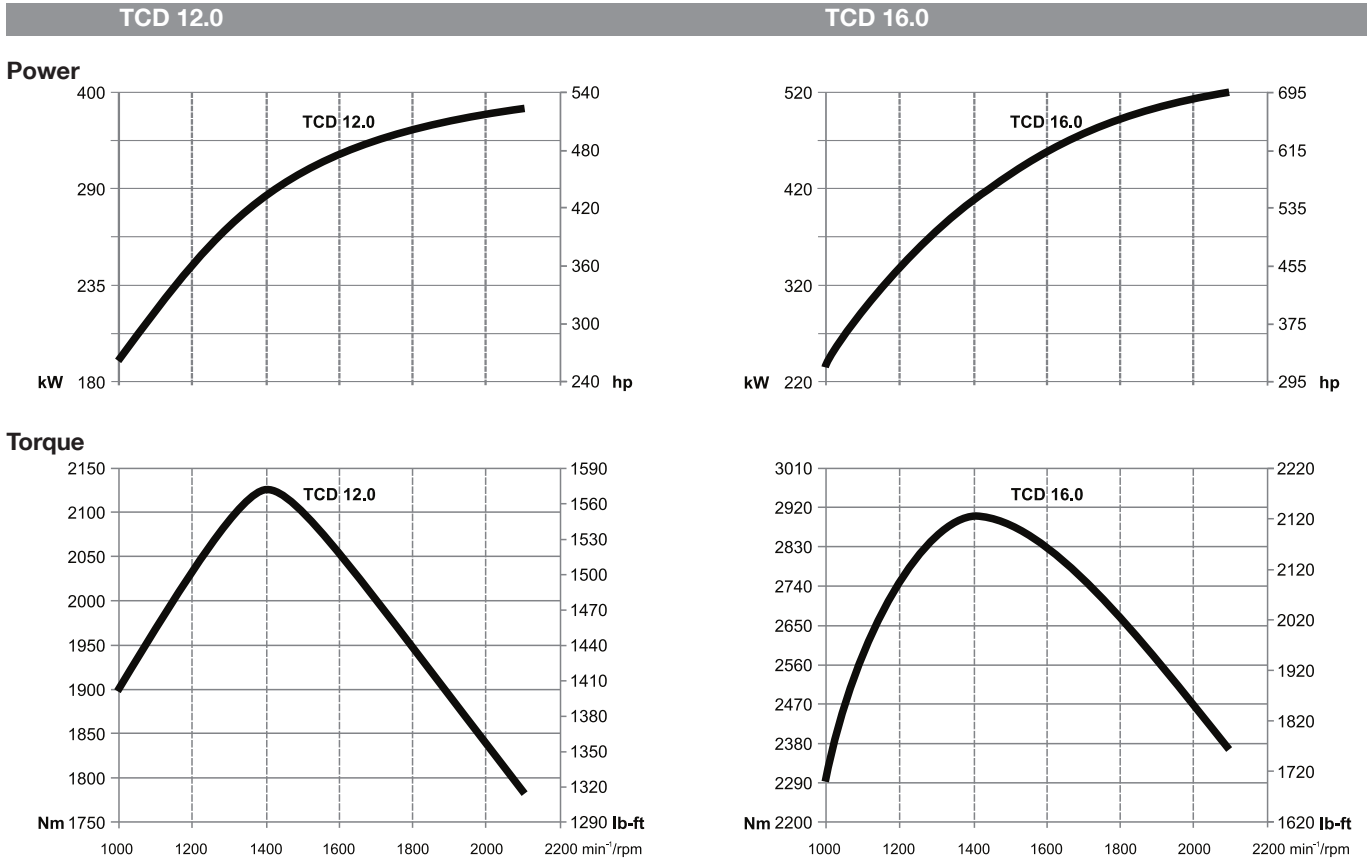
Engine type		TCD 12.0 V6	TCD 16.0 V8
Power output as per ISO 14396 ¹⁾	kW hp	390 524	520 697
at speed	min ⁻¹ rpm	2100	2100
Max. torque	Nm lb/ft	2130 1571	2890 2132
at speed	min ⁻¹ rpm	1400	1400
Minimum idling speed	min ⁻¹ rpm	600	600
Specific fuel consumption ²⁾	g/kWh lb/hph	194 0,32	199 0,33
Weight as per DIN 70020 Part 7A ³⁾	kg lb	995 2194	1260 2778

1) Power data without deduction of fan power

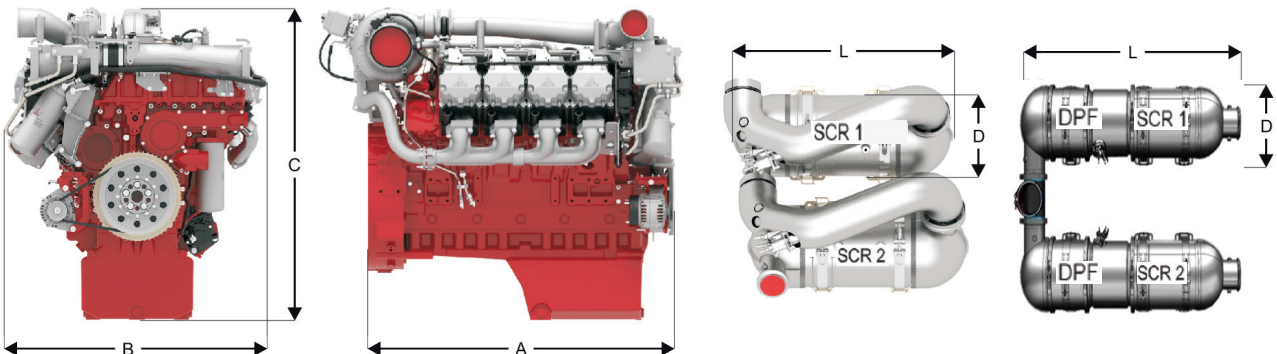
2) Best point consumption refers to diesel with a density of 0.835 kg/dm³ at 15°C.

3) Without starter/alternator, cooler and fluids but with flywheel and flywheel housing

CHARACTERISTIC CURVES



DIMENSIONS



Engine type	Tier 4			Stage V				DVERT® EAT	
	A	B	C	SCR 2 in line		DPF 2 + SCR 2 parallel		SCR 1/DPF	SCR 2
TCD 12.0	mm in 980 38,6	945 37,2	1170 46,1	385 15,2	1364 53,7	385 15,2	1364 53,7	■	■
TCD 16.0	mm in 1150 45,3	945 37,2	1170 46,1	385 15,2	1547 60,9	385 15,2	1547 60,9	■	■
TCD 12.0*	mm in 980 38,6	945 37,2	840 33,1	385 15,2	1364 53,7	385 15,2	1364 53,7	■	■
TCD 16.0*	mm in 1150 45,3	945 37,2	880 34,6	385 15,2	1547 60,9	385 15,2	1547 60,9	■	■

■ SCR 1 and 2 are standard in EU Stage IIIB and IV.
 SCR 1 / DPF is standard in EU Stage V. A DPF will be integrated into SCR 1.
 * Version without cover plate. Dimension C including cover plate is 891 mm | 35,1 in.

All EAT connection variants are available either in 0° or 90° positions for inlet and outlet flanges.
 Note: The engine dimensions and weights vary depending on the scope of delivery.
 For more information please contact the DEUTZ AG or the responsible sales partner.

DEUTZ AG
 Ottostraße 1
 51149 Cologne, Germany
 Phone: +49 (0) 221 822-0
 Telefax: +49 (0) 221 822-3525
 E-Mail: info@deutz.com
 www.facebook.com/deutzofficial
 www.deutz.com

The engine company. **DEUTZ**®