

DEUTZ TCD 12.0/16.0

For mobile machinery ■ 240-520 kW / 322-697 hp at 1800-2100 min⁻¹/rpm ■ EU Stage IIIB, IV, V / US EPA Tier 4i + 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 IIIB and IV)
- 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.
- 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 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.
- The engines meet the requirements of the EU Stage IIIB & IV and US EPA Tier 4 interim & Tier 4 with SCR. For EU Stage V a DPF is integrated into the EAT system. A variant without 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

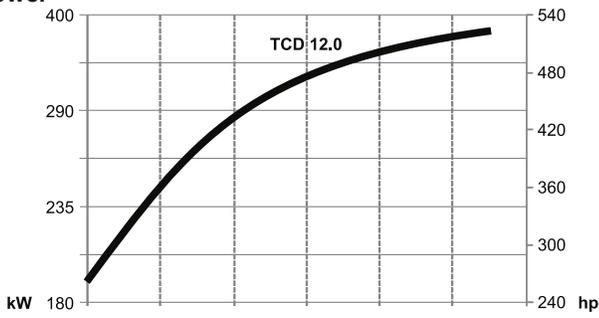
2) Best point consumption refers to diesel with a density of 0.835 kg/dm³ at 15°C.

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

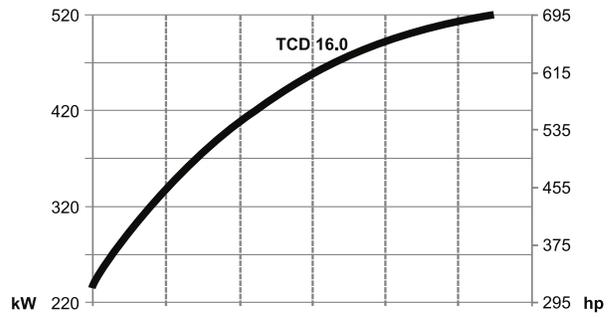
CHARACTERISTIC CURVES

TCD 12.0

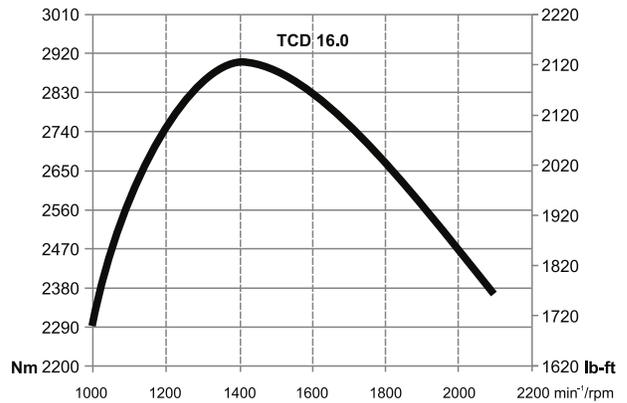
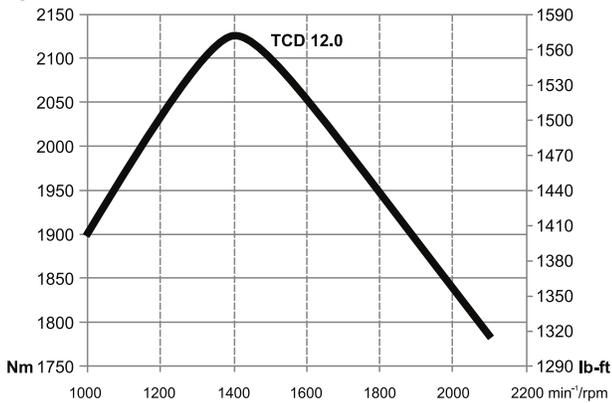
Power



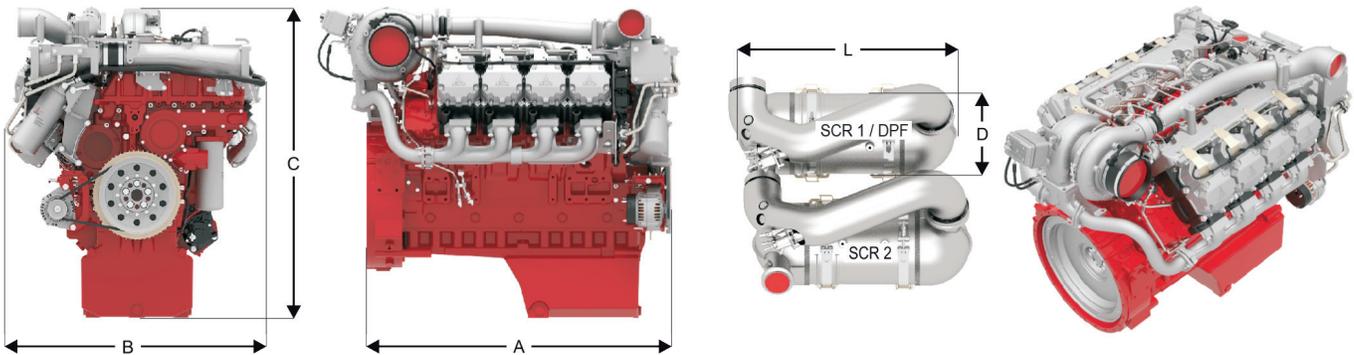
TCD 16.0



Torque



DIMENSIONS



Engine type	A		B		C		SCR 1 / DPF		SCR 2		DVERT® EAT					
	mm	in	mm	in	mm	in	D	L	D	L	SCR 1/DPF	SCR 2				
TCD 12.0	980	38.6	945	37.2	1170	46.1	365	14.4	965	38.0	365	14.4	911	35.9	■	■
TCD 16.0	1150	45.3	945	37.2	1170	46.1	365	14.4	1115	43.9	365	14.4	1064	41.9	■	■
TCD 12.0*	980	38.6	945	37.2	840	33.1	365	14.4	965	38.0	365	14.4	911	35.9	■	■
TCD 16.0*	1150	45.3	945	37.2	880	34.6	365	14.4	1115	43.9	365	14.4	1064	41.9	■	■

■ 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.
 The data on this data sheet are for information purposes only and are not binding values.
 For more information please contact your responsible sales partner.

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