

# DEUTZ TCD 12.0/16.0

For mobile machinery ■ 240-520 kW / 322-697 hp at 1800-2100 min<sup>-1</sup>/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.
- 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 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 <sup>-1</sup>   rpm	1800-2100	1800-2100

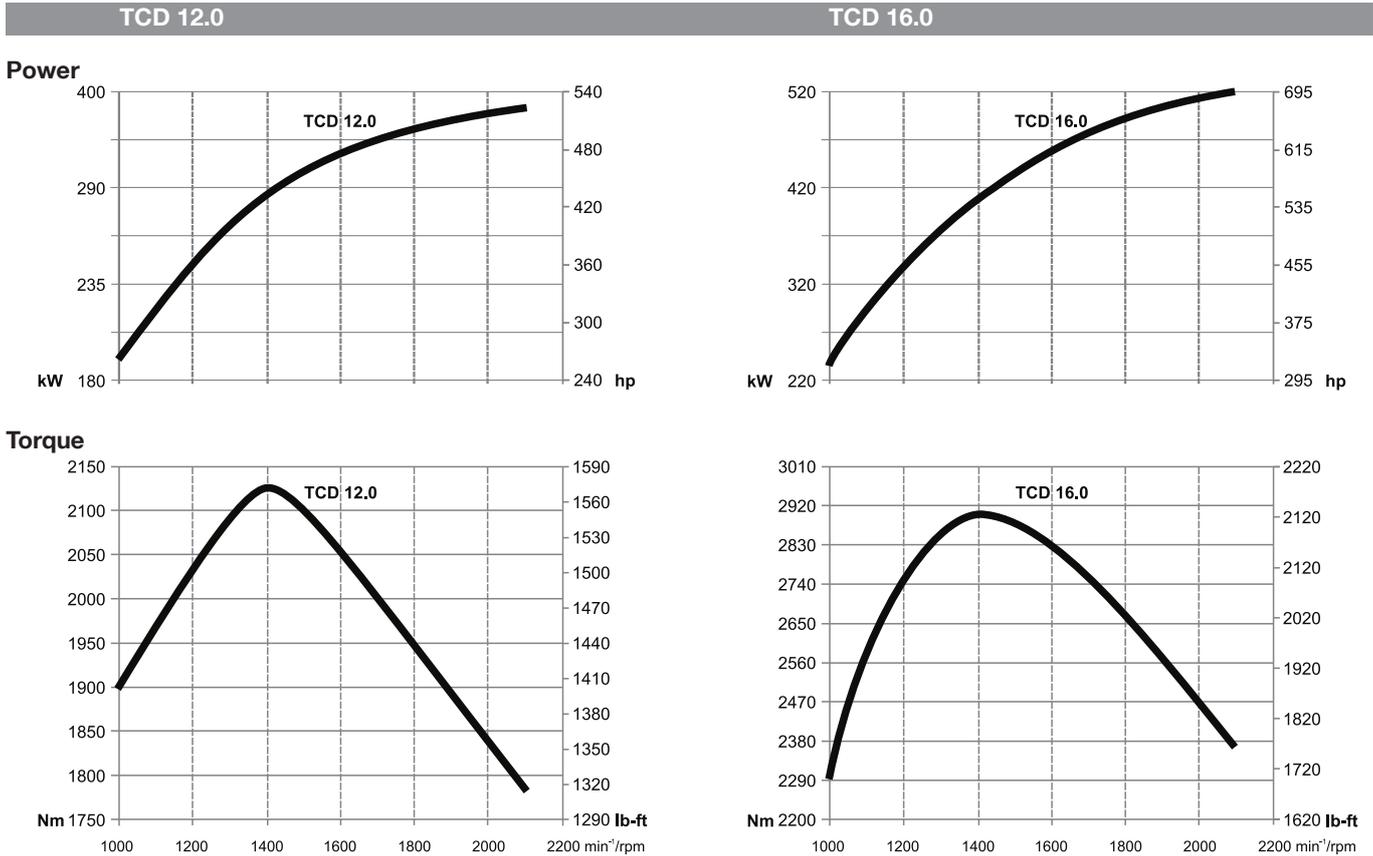
Engine type		TCD 12.0 V6	TCD 16.0 V8
Power output as per ISO 14396 <sup>1)</sup>	kW   hp	390   524	520   697
at speed	min <sup>-1</sup>   rpm	2100	2100
Max. torque	Nm   lb/ft	2130   1571	2890   2132
at speed	min <sup>-1</sup>   rpm	1400	1400
Minimum idling speed	min <sup>-1</sup>   rpm	600	600
Specific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

1) Power data without deduction of fan power

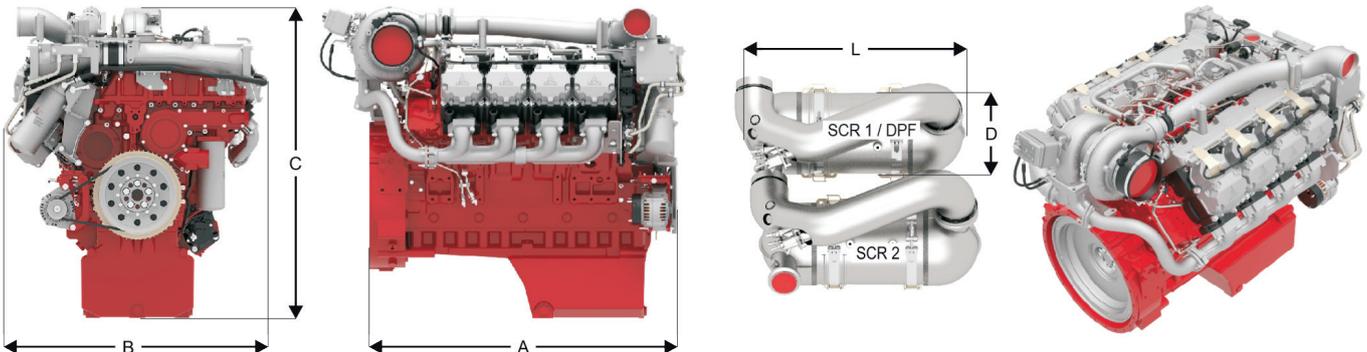
2) Best point consumption refers to diesel with a density of 0.835 kg/dm<sup>3</sup> at 15°C.

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

# CHARACTERISTIC CURVES



## 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	■	■
TCD 16.0	1150		45,3	945		37,2	1170		46,1	365		14,4	1115		43,9	■	■
TCD 12.0*	980		38,6	945		37,2	840		33,1	365		14,4	965		38,0	■	■
TCD 16.0*	1150		45,3	945		37,2	880		34,6	365		14,4	1115		43,9	■	■

■ 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.

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