

TCD 12.0/16.0

For mobile machinery

240 - 520 kW|322 - 697 hp at 1800 - 2100 min⁻¹|rpm

EU Stage IV / US EPA Tier 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 minimised fuel and total operating costs.
- Thanks to SCR technology, the cooler sizes do not need to be enlarged in comparison with Tier 3 engines. Fuel consumption is reduced. The exhaust gas aftertreatment system is maintenance free.
- Consistent installation and connection dimensions of the engine facilitate the changeover of existing installations to the next stage of the emission legislation.



- 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 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.

- The extremely compact engine design and customer friendly accessories reduce the installation costs 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 4) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.
- Best cold starting performance even under extreme conditions.
- The engines meet the requirements of the EU Stage IIIB & IV and US EPA Tier 4 interim & Tier 4 with SCR. 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
Nominal speeds	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.

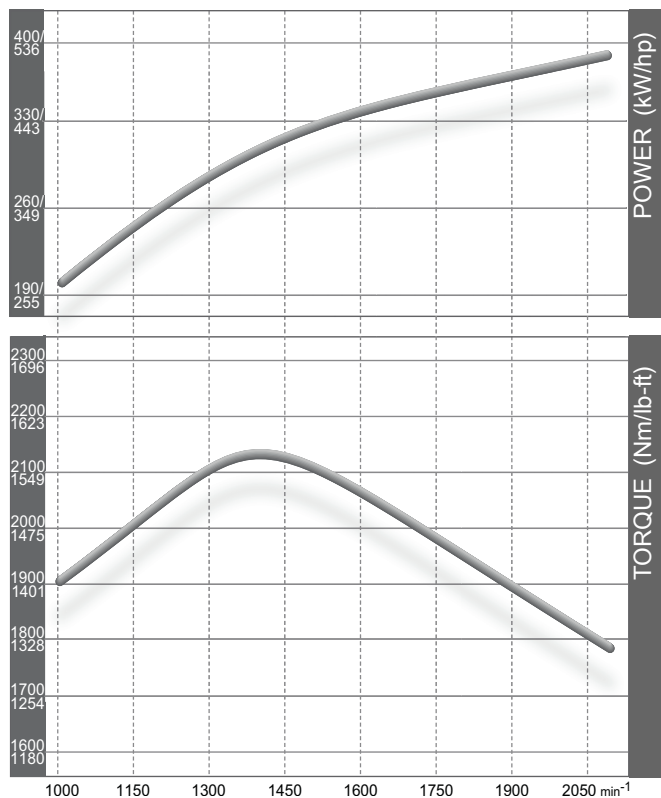
2) Best full load consumption refers to diesel with a density of 0.835 kg/dm³ at 15°C | 6.96 lb/US gallon at 60°F.

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

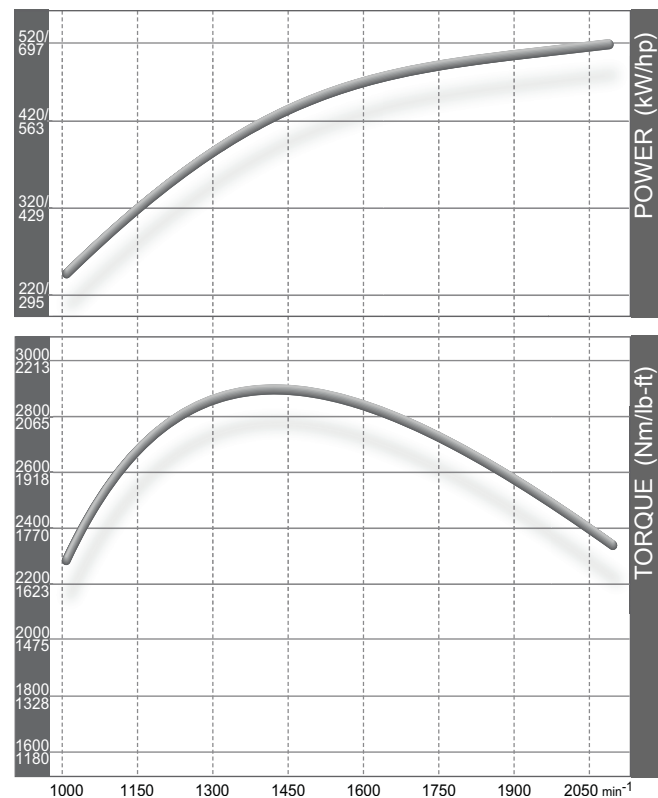
The data on this data sheet are for information purposes only and are not binding values. The data in the quotation is definitive.

Torque curve

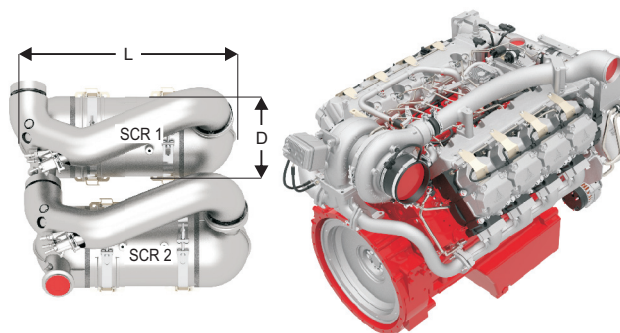
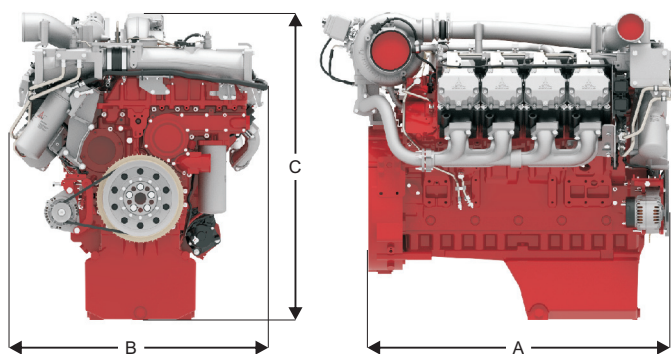
TCD 12.0 V6 - 390 kW|524 hp



TCD 16.0 V8 - 520 kW|697 hp



Dimensions



		A	B	C
TCD 12.0 V6 T4	mm in	980 38.6	945 37.2	1170 46.1
TCD 16.0 V8 T4	mm in	1150 45.3	945 37.2	1170 46.1
TCD 12.0 V6 T4*	mm in	980 38.6	945 37.2	840(891)** 33.1(35.1)**
TCD 16.0 V8 T4*	mm in	1150 45.3	945 37.2	960 37.8

SCR 1		SCR 2		DVERT® EAT	
D	L	D	L	SCR 1	SCR 2
365 14.4	911 35.9	365 14.4	911 35.9	■	■
365 14.4	1064 41.9	365 14.4	1064 41.9	■	■
365 14.4	911 35.9	365 14.4	911 35.9	■	■
365 14.4	1064 41.9	365 14.4	1064 41.9	■	■

** Available also without cover plate; Dimensions in brackets including cover plate.
 ■ Standard

Note: The engine dimensions and weights vary depending on the scope of delivery.

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For more information please contact the DEUTZ AG Köln or the responsible sales partner.

