

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.



STAGE
ready 

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 |
| Displacement | l cu in | 11,9 726 |
| Max. nominal speed | min ⁻¹ rpm | 1800-2100 |

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

1) Power data without deduction of fan power

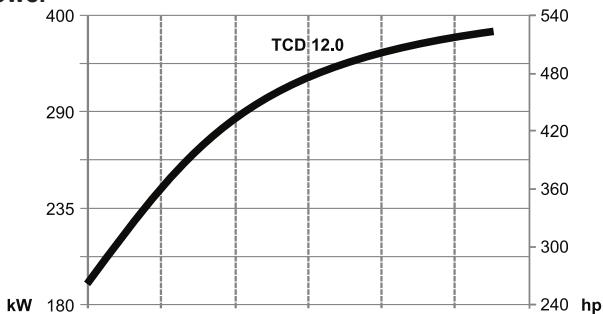
2) Best point consumption refers to diesel with a density of 0.835 kg/dm³ at 15°C.

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

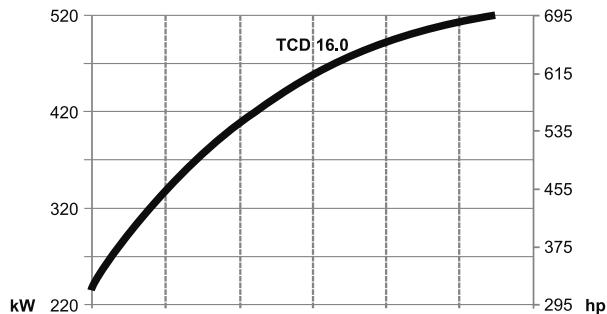
CHARACTERISTIC CURVES

TCD 12.0

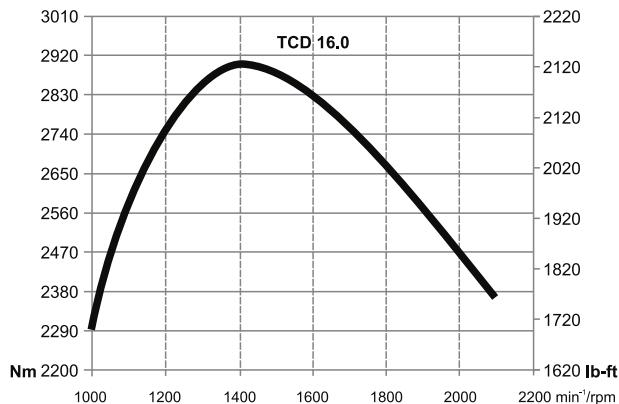
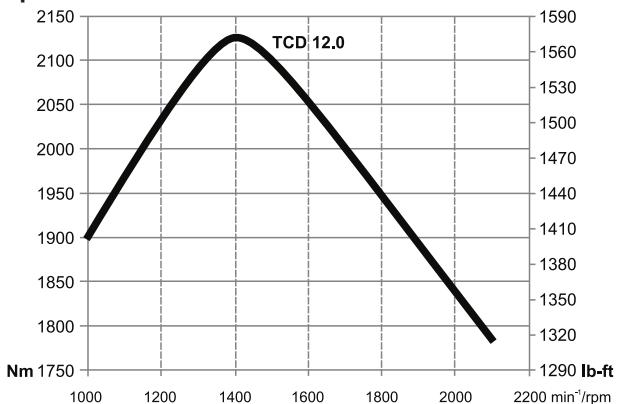
Power



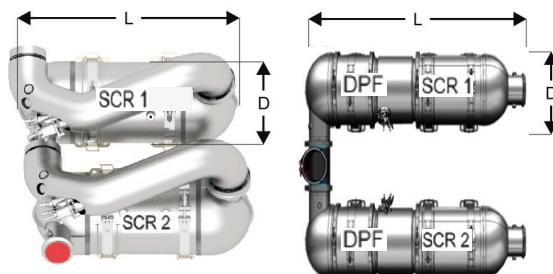
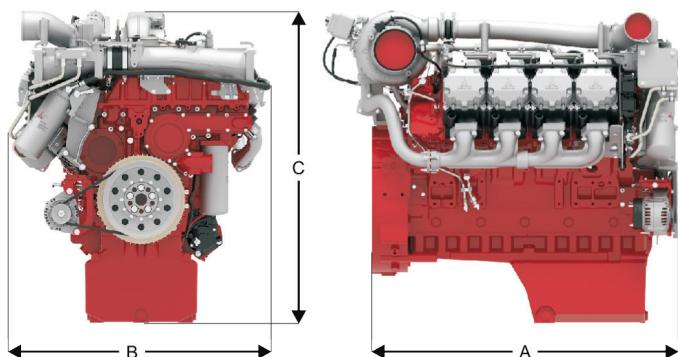
TCD 16.0



Torque



DIMENSIONS



| Engine type | A | B | C | Tier 4 | | Stage V | | DVRT® EAT | |
|-------------|---------|-------------|------------|---------------|------------------------|-------------|------------|-------------|------------|
| | | | | SCR 2 in line | DPF 2 + SCR 2 parallel | SCR 1/DPF | SCR 2 | 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 | 385 15,2 |
| 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 | 385 15,2 |
| 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 | 385 15,2 |
| 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 | 385 15,2 |

■ 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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The engine company. 