TCD 2015

The Engine for Construction Equipment.
240 – 500 kW | 322 – 670 hp at 1900/2100 rpm

The engine company.

DEUTZ®

Engine description

Cooling system:	Liquid cooling.
Crankcase:	Crankcase of grey cast iron with wet liners.
Crankcase breather:	Closed-circuit system, vacuum-controlled.
Cylinder head:	Individual cylinder heads of grey cast iron of crossflow design.
Valve arrangement/ timing:	Overhead valves in cylinder head, four-valve technology, actuated via tappets, pushrods and rocker arms, driven by gears and central camshaft.
Turbocharging:	One turbocharger and charge-air cooler.
Piston:	Three-ring pistons.
Piston cooling:	Oil-cooled with spray nozzles.
Connecting rod:	Drop-forged steel rod with trapezoidal piston pin support.
Crankshaft:	Drop-forged steel crankshaft with bolted counterweights.
Main and big end bearings:	Tri-metal plain bearings.
Camshaft:	Steel camshaft.
Lubrication system:	Forced-feed circulation lubrication with gear pump.
Engine oil cooler:	integrated.
Lubricating oil filter:	Paper-type microfilter as replaceable cartridge, full-flow filter.
Injection pump/ governor:	DEUTZ MV-system. Single injection pumps (pump-line-nozzle) with electronic governing.
Fuel lift pump:	Mechanical gear pump.
Injector:	5-hole nozzle, central arrangement.
Fuel filter:	Replaceable cartridge.
Alternator:	Three-phase alternator, 28 V / 55 A.
Starter motor:	24 V / 5.4 kW.
Heating system:	Optional connection for cab heating to engine cooling circuit.

Characteristics

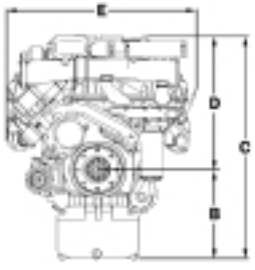
Engine in 90° V-version, turbocharging and charge-air cooling, four-valve technology | Extremely compact, powerful and with high power/volume ratio | Fuel injection system controlled by electronic solenoid valve | Tried and tested technology with acoustically optimized components

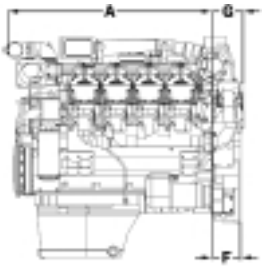
Your benefits

- High application performance, availability and reliability by using tried-and-tested technology with high power-to-volume-ratio.
- The modern electronic injection system ensures low fuel consumption and therefore high operating economy.
- Low noise emissions, smooth running characteristics and durability result from tried-and-tested technology.
- The compact 2015 engine saves installation space and thus reduces installation cost.
- The 2015 meets exhaust emission regulations 2004/26/EU, Step III A as well as US-EPA Tier 3 for mobile machinery.

Engine model		**TCD 2015 V6**	**TCD 2015 V8**
Number of cylinders		6	8
Bore/stroke	mm | inch	132/145 | 5.19/5.71	132/145 | 5.19/5.71
Swept volume	l | cu inch	11.91 | 726	15.9 | 970
Rated speed	rpm	2100	2100
Minimum idle speed	rpm	600	600
Mean piston speed	m/s | ft/m	10.15 | 1998	10.15 | 1998
EU Stage III A / US-EPA Tier 3 Power ratings for mobile construction machines[1]			
Power output to ISO 14396	kW | hp	360 | 482	500 | 670
Engine speed	rpm	1900	1900
Mean effective pressure	bar | psi	19.1 | 276	19.9 | 275
Max. torque	Nm | ft-lb	2080 | 1535	2890 | 2132
at engine speed	rpm	1300	1400
Engine speed	rpm	2100	2100
Power output[1]	kW | hp	360 | 482	500 | 670
Mean effective pressure	bar | psi	17.2 | 246	18.0 | 261
Max. torque	Nm | ft-lb	2080 | 1535	2890 | 2132
at engine speed	rpm	1300	1400
Specific fuel consumption[2]	g/kWh | lb/hph	202 | 0.33	208 | 0.34
Weight acc. to DIN 70020, Part 7A[3]	kg | lbs	850 | 1873	1160 | 2557

Dimensions		**A**	**B**	**C**	**D**	**E**	**F**	**G**
TCD 2015 V6	mm	814	462	1150	665	940	143	200
	inch	32	18	45	26	37	6	8
TCD 2015 V8	mm	1044	462	1150	690	940	143	159
	inch	41	18	45	27	37	5.6	6.3





1) Power ratings without cooling system.

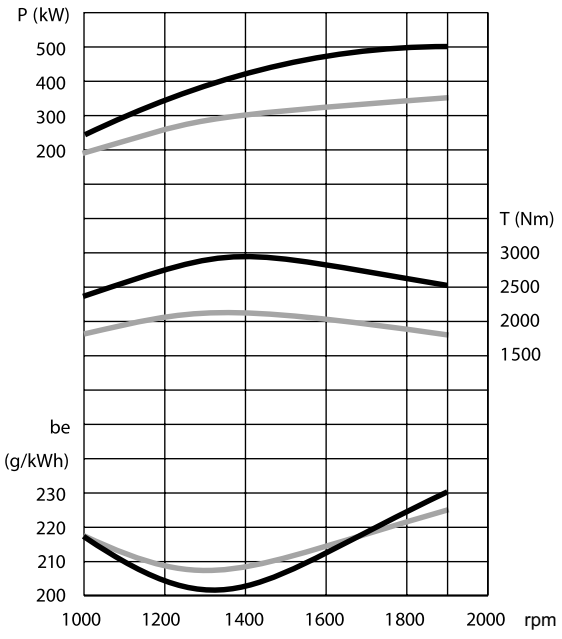
2) At optimal operating point without cooling system, based on diesel fuel with a specific gravity of 0.835 kg/dm³ at 15° C (6.96lb/US gallon at 60° F).

3) Without starter/generator, however with flywheel, flywheel housing, lube oil and cooling system.

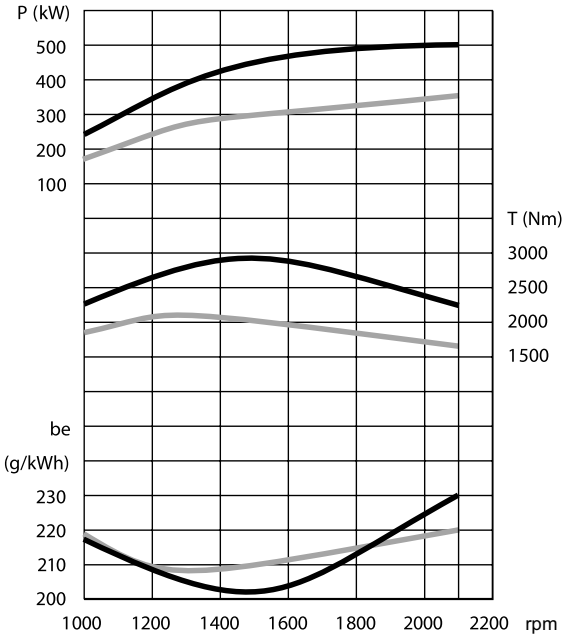
The figures indicated in this data sheet are for information purposes only and are not binding.

The specifications in the quote are determinative.

Engines TCD 2015 V6 | TCD 2015 V8



Engines TCD 2015 V6 | TCD 2015 V8



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