

DEUTZ TCD 2.9

For mobile machinery ■ 30-75 kW / 40-100 hp at 2200-2600 min⁻¹/rpm ■ EU Stage IIIB and V / US EPA Tier 4

- Water-cooled 4-cylinder inline engine with cooled, external exhaust gas recirculation with and without turbocharging and optionally with and without charge air cooling.
- The powerful Common Rail injection system and highly-efficient combustion process with cooled external exhaust gas recirculation ensure optimum engine performance at low fuel consumption and exhaust emissions.
- The DVERT[®] oxidation catalyst for EU Stage IIIB and US EPA Tier 4 enables maintenance-free operation under all application and ambient conditions. A DVERT[®] particulate filter (DPF) is available as an option. With the introduction of EU Stage V, DPF will be available for all engine types. Through the use of the diesel particulate filter, the engines already comply with the EU Stage V emissions standard expected from 2019*.
- For ease of machine installation engine foot print and all major installation interfaces will stay unchanged for Stage V.
- Up to 1000 h oil change intervals and a maintenance-free valve train result in low maintenance costs and increased machine availability.
- The extremely compact engine design and customer friendly accessories reduce the installation costs and increase the number of applications.
- 100% power take-off at flywheel and front end and additional side PTO drive with up to 120 Nm for the mounting of up to two hydraulic pumps.
- A variant without EAT is optionally available for EU Stage III A, US EPA Tier 4i and for less regulated markets.
- New High Power engine version to extend the 2.9 platform to 100 hp.
- New High Torque engine version for extraordinary strong performance below 56 kW.



TECHNICAL DATA

Engine type	D 2.9 L4	TD 2.9 L4	TCD 2.9 L4	TCD 2.9 L4 HT ⁽¹⁾	TCD 2.9 L4 HP ⁽¹⁾
No. of cylinders	4	4	4	4	4
Bore/stroke	mm in	92/110 3.6/4.3	92/110 3.6/4.3	92/110 3.6/4.3	92/110 3.6/4.3

Displacement	l cu in	2,9 177	2,9 177	2,9 177	2,9 177	2,9 177
Max. nominal speed	min ⁻¹ rpm	2600	2600	2600	2600	2300

Engine type		D 2.9 L4	TD 2.9 L4	TCD 2.9 L4	TCD 2.9 L4 HT ¹⁾	TCD 2.9 L4 HP ²⁾
Power output as per ISO 14396 ¹⁾	kW hp	36,4 50	55,4 75	55,4 75	55,4 75	75 100
at speed	min ⁻¹ rpm	2600	2600	2600	2600	2300
Max. torque	Nm lb/ft	147 108	260 192	300 221	375 277	400 295
at speed	min ⁻¹ rpm	1600	1600-1800	1600	1600	1600
Minimum idling speed	min ⁻¹ rpm	900	900	900	900	900
Specific fuel consumption ²⁾	g/kWh lb/hph	225 0,37	225 0,37	210 0,35	210 0,35	210 0,35
Weight as per DIN 70020 Part 7A ³⁾	kg lb	220 485	237 522	237 522	237 522	237 522

* Based on the proposal by the EU Commission COM (2014) 581 final from 25.09.2014

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

¹⁾ HT = High Torque

²⁾ HP = High Power

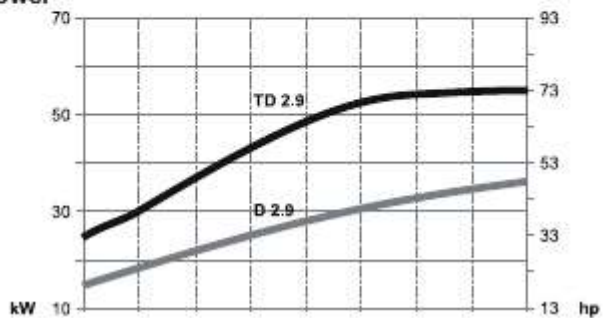
The engine company.



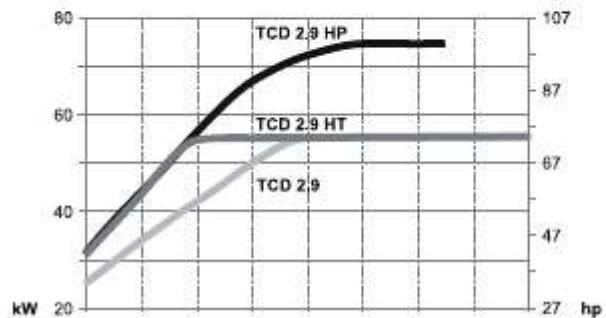
CHARACTERISTIC CURVES

D 2.9 / TD 2.9 L4

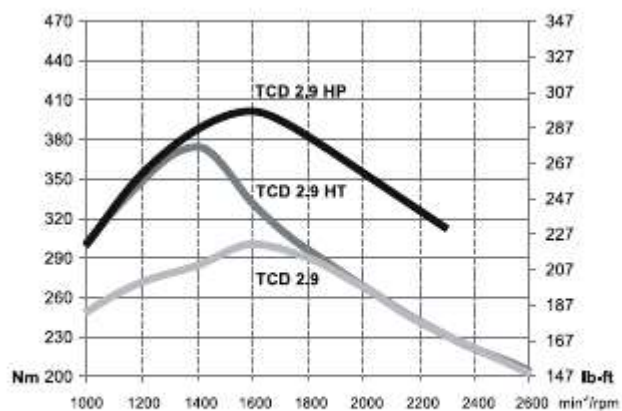
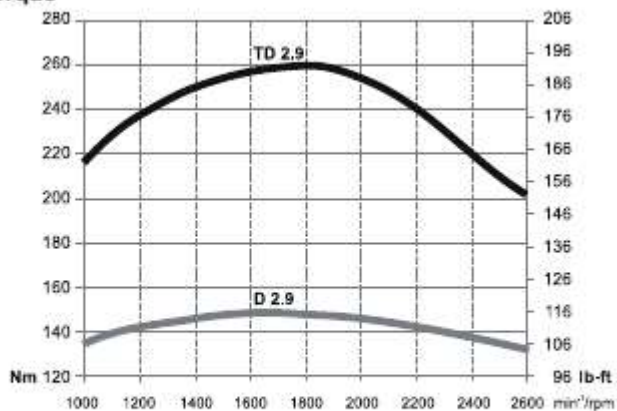
Power



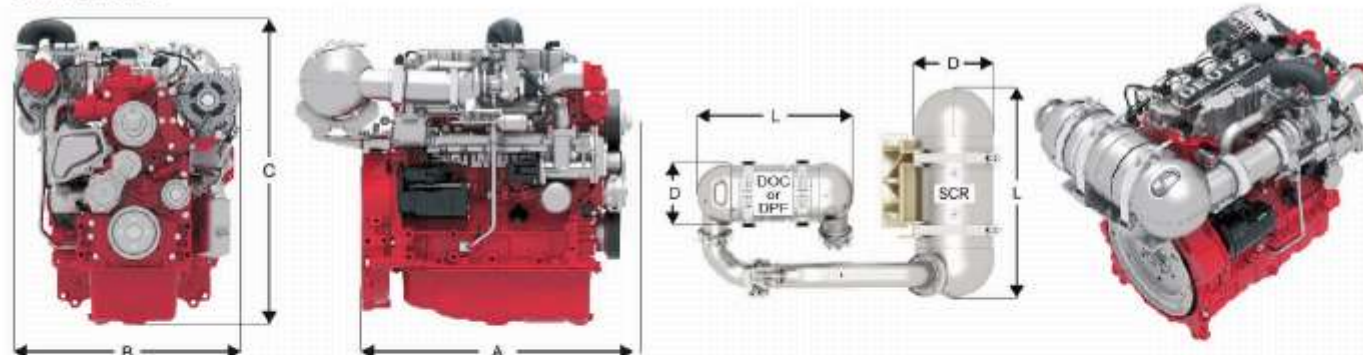
TCD 2.9 L4 - Standard, HT and HP



Torque



DIMENSIONS



Engine type				DOC		SCR		DPF		DVERT® EAT			
	A	B	C	D	L	D	L	D	L	DOC	SCR	DPF	
D 2.9 < 37 kW	mm in	648 26,7	483 19,0	685 27,8	199 7,8	380 15,0	-	-	-	-	■	-	-
TD 2.9 < 56 kW	mm in	648 26,7	560 22,0	685 27,8	199 7,8	523 20,6	-	-	-	-	■	-	-
TCD 2.9 < 56 kW	mm in	648 26,7	560 22,0	685 27,8	199 7,8	380 15,0	-	-	199 7,8	613 24,1	■	-	●
TCD 2.9 / HT < 56 kW	mm in	648 26,7	560 22,0	685 27,8	199 7,8	380 15,0	-	-	199 7,8	613 24,1	■	-	●
TCD 2.9 / HP > 56 kW	mm in	648 26,7	560 22,0	685 27,8	-	-	246 9,7	659 25,9	199 7,8	613 24,1	-	●	●

- Standard for Stage IIIB / T4
- Optional for Stage IIIB / T4, but DPF and SCR standard for Stage V

For EU Step IV / EPA Tier 4 or standard for EU Step V. The DVERT® oxidation catalyst (DOC) does not satisfy the regulations of certain markets that have specified additional limit values for the number of particles (e.g. Switzerland). DEUTZ offers the DVERT® wallflow particulate filter as an option for these markets.

All 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.



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