

# DEUTZ TCD 2.2

For mobile machinery ■ 22,5-55,4 kW / 30-75 hp at 2200-2600 min<sup>-1</sup>/rpm ■ EU Stage V / US EPA Tier 4

- Newly-designed, 3-cylinder engine with cooled, external exhaust gas recirculation with and without turbocharging and optionally with and without charge air cooling.
- Robust engine design for demanding industrial applications based on the successful TCD 2.9 series.
- Use of DVERT<sup>®</sup> oxidation catalyst (DOC) enables maintenance-free operation under all application and ambient conditions for Tier 4 respectively use of DVERT<sup>®</sup> particulate filter (DPF) for Stage V.
- The powerful Common Rail injection system and highly-efficient combustion process ensure optimum engine performance at low fuel consumption.
- Similar foot print and major installation interfaces as TCD 2.9 and G 2.2 / G 2.9 LPG engines for ease of installation in diesel and gas powered machines.
- Up to 1000 h oil change intervals, maintenance-free valve train and optionally service-friendly multi-V belt drive result in low maintenance costs and increased machine availability.
- The extremely compact engine design and customer friendly accessories reduce the installation cost and increase the number of applications.
- The engines come with a modular exhaust aftertreatment system (EAT) configuration including the option of engine mounted systems. This simplifies machine integration for the OEM considerably and virtually means a drop-in solution.
- 100% power take-off at flywheel and front end and additional side PTO drive with up to 120 Nm for the mounting of hydraulic pumps.
- Variants without EAT for lesser regulated markets will enlarge the product range at a later point of time.



STAGE  
ready V

## TECHNICAL DATA

Engine type		D 2.2 L3	TD 2.2 L3	TCD 2.2 L3
No. of cylinders		3	3	3
Bore/stroke	mm   in	92/110   3,6/4,3	92/110   3,6/4,3	92/110   3,6/4,3
Displacement	l   cu in	2,2   133	2,2   133	2,2   133
Max. nominal speed	min <sup>-1</sup>   rpm	2200-2600	2200-2600	2200-2600

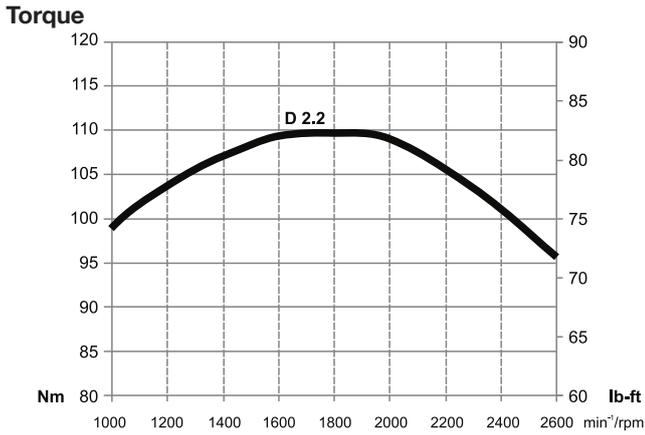
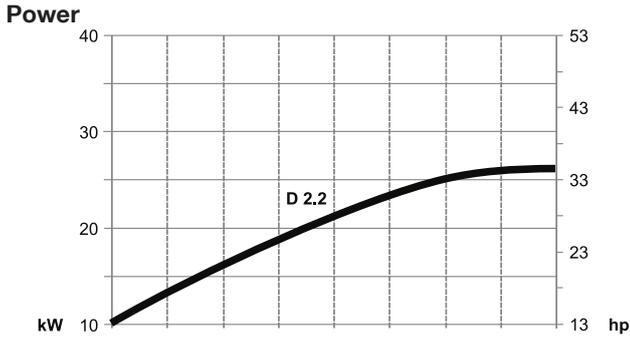
Engine type		D 2.2 L3	TD 2.2 L3	TCD 2.2 L3
Power output as per ISO 14396 <sup>1)</sup>	kW   hp	26   35	44,5   60	55,4   75
at speed	min <sup>-1</sup>   rpm	2600	2600	2600
Max. torque	Nm   lb/ft	110   81	200   147	250   184
at speed	min <sup>-1</sup>   rpm	1600	1600	1600
Minimum idling speed	min <sup>-1</sup>   rpm	900	900	900
Weight as per DIN 70020 Part 7A <sup>2)</sup>	kg   lb	200   441	215   474	215   474

1) Power data without deduction of fan power

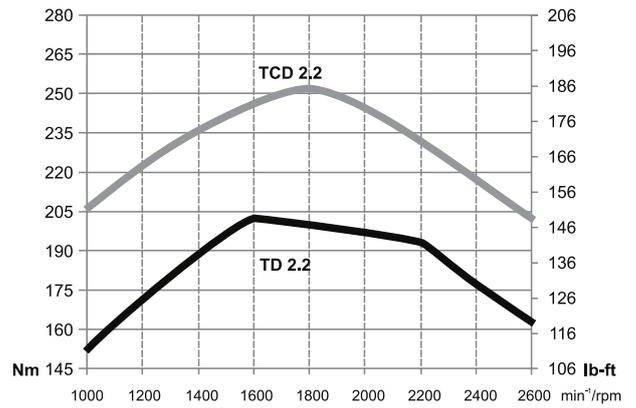
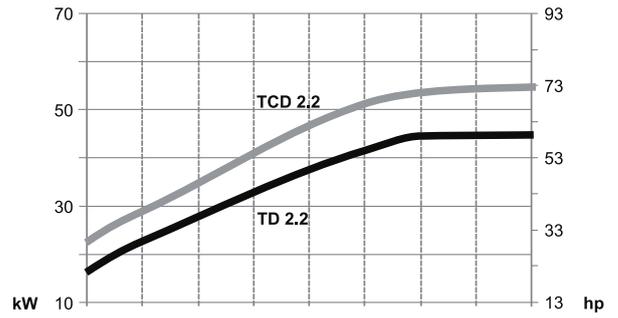
2) Without starter/alternator, cooler and fluids but with flywheel and flywheel housing

# CHARACTERISTIC CURVES

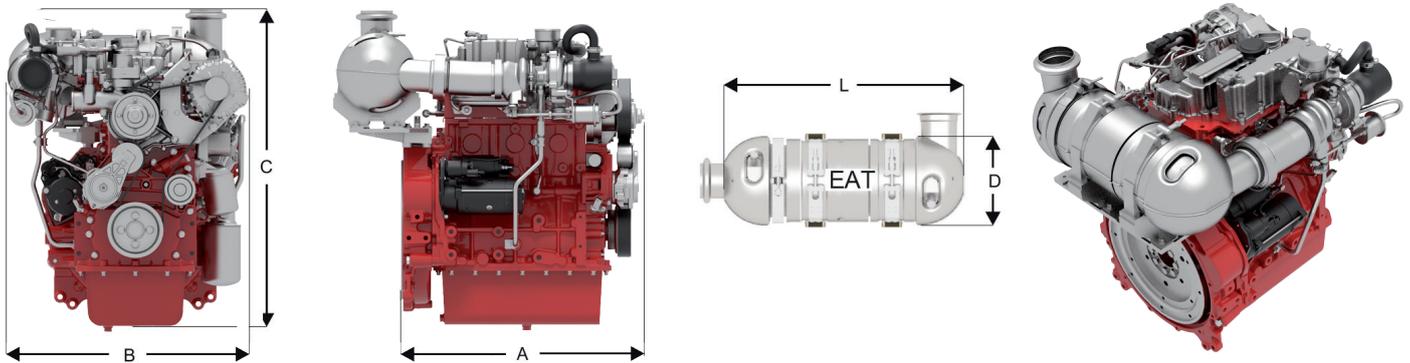
## D 2.2



## TD / TCD 2.2



## DIMENSIONS



Engine type	mm   in	A		B		C		DOC (Tier 4)		DPF (Stage V)		DVERT <sup>®</sup> EAT	
		D	L	D	L	D	L	D	L	DOC	DPF	DOC	DPF
D 2.2		555   21,9	576   22,7	708   27,9	199   7,8	400   15,7	199   7,8	613   24,1	■	●	■	●	
TD 2.2		555   21,9	576   22,7	708   27,9	199   7,8	400   15,7	199   7,8	613   24,1	■	●	■	●	
TCD 2.2		555   21,9	576   22,7	708   27,9	199   7,8	400   15,7	199   7,8	613   24,1	■	●	■	●	

- Standard for Stage IIIB / T4
- Standard for Stage V

For EU Step IV / EPA Tier 4 or standard for EU Step V. The DVERT<sup>®</sup> 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<sup>®</sup> 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. **DEUTZ**<sup>®</sup>