

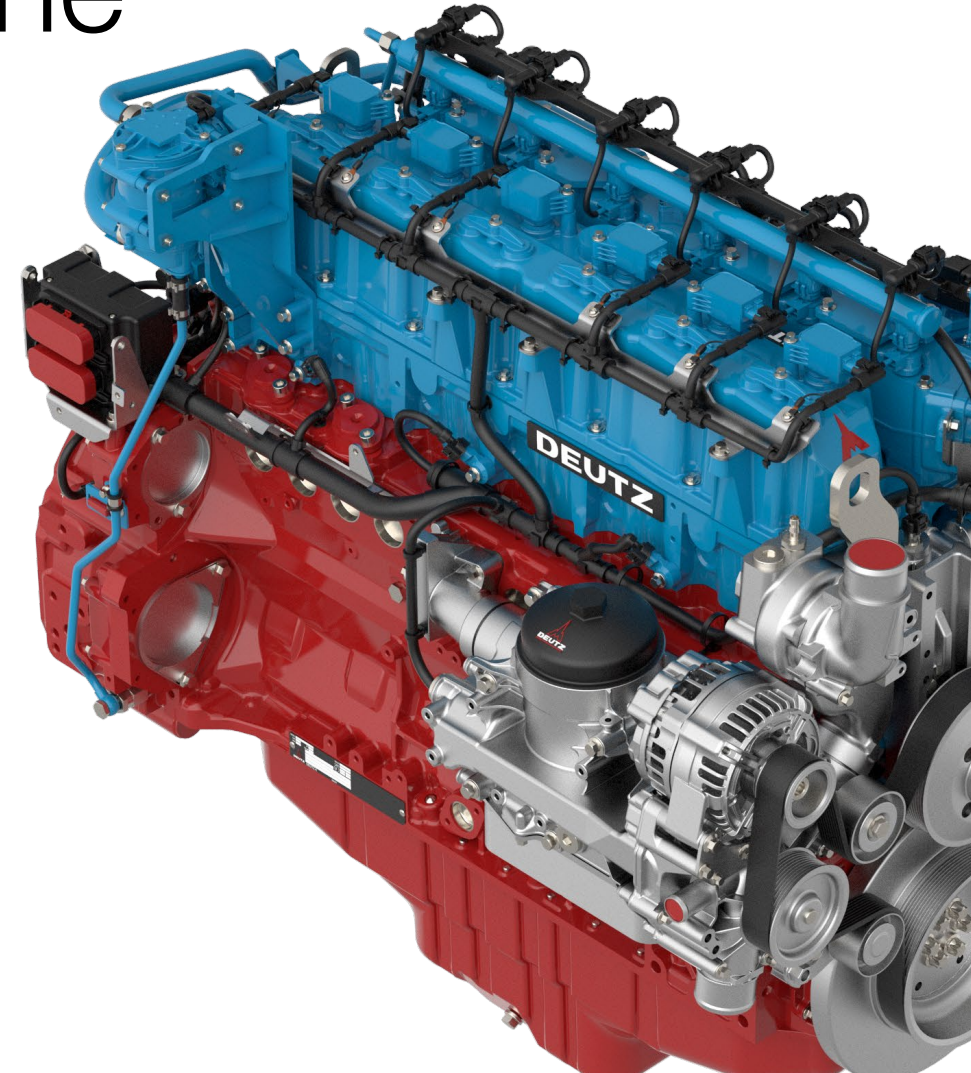
DEUTZ TCG 7.8 Hydrogen



Hydrogen-combustion engine

DEUTZ TCG 7.8 H2

- Max. power: 220 kW (2200 rpm)
- Max. torque: 1000 Nm (1400 - 1600 rpm)
- Hydrogen quality: min. 98% or higher ISO 14687
- H2 consumption: ~19 kg/h @max. power (~12kg/h GenSet)

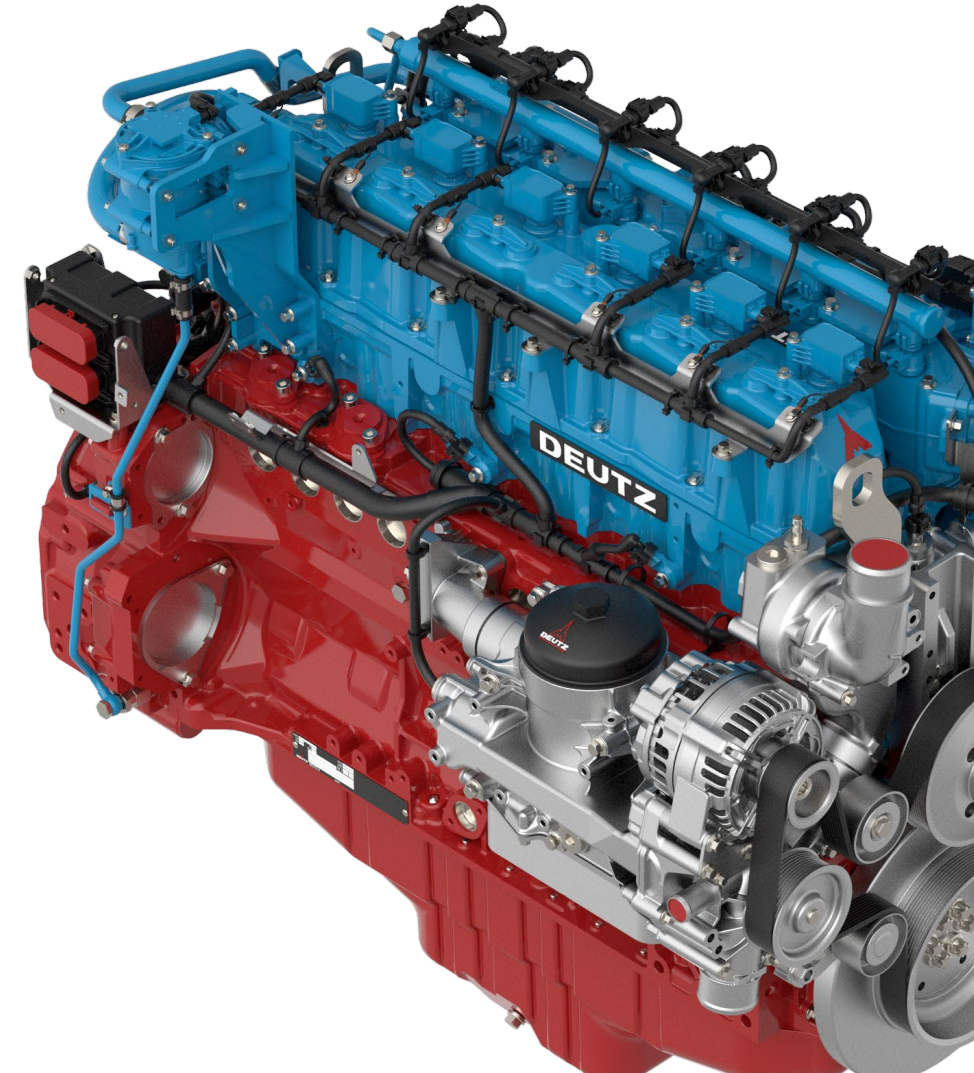


DEUTZ TCG 7.8 Hydrogen



Engine Specification

Engine Specification		TCG 7.8 H2
No. of Cylinders		6
Displacement	l	7,755
Hydrogen quality	ISO 14687	min. 98 % or higher
Pressure interface	bar	25
Max. Power Output	kW	220
At Speed	min ⁻¹	2200
Max. Torque	Nm	1000
At Speed	min ⁻¹	1400 - 1600
H2 Consumption (12 kg/h GenSet)	kg/h	up to ~19 @max. power
Power generating @50 Hz / 1500 rpm (GenSet)	kW	~150kW



DEUTZ TCG 7.8 Hydrogen



Engine Specification

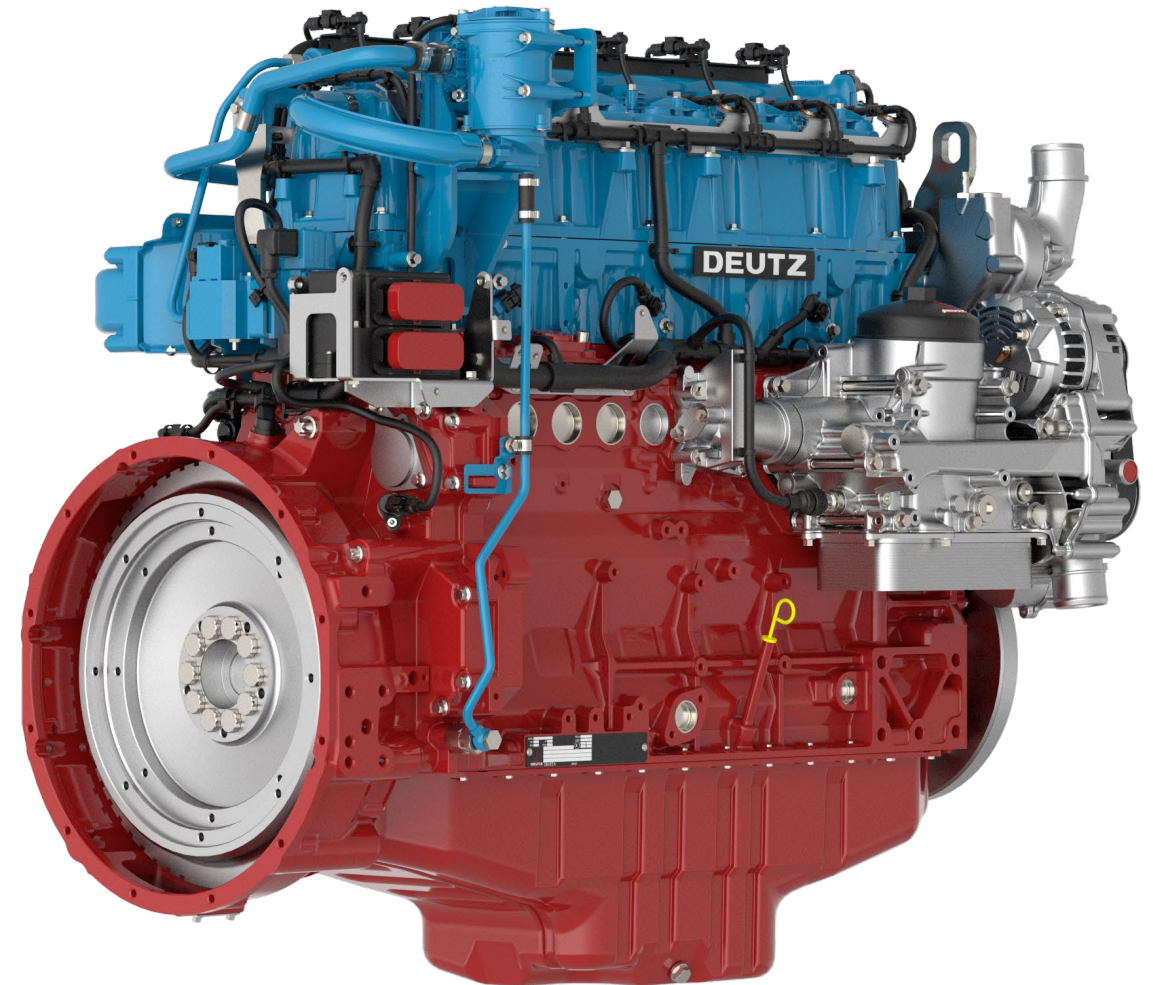
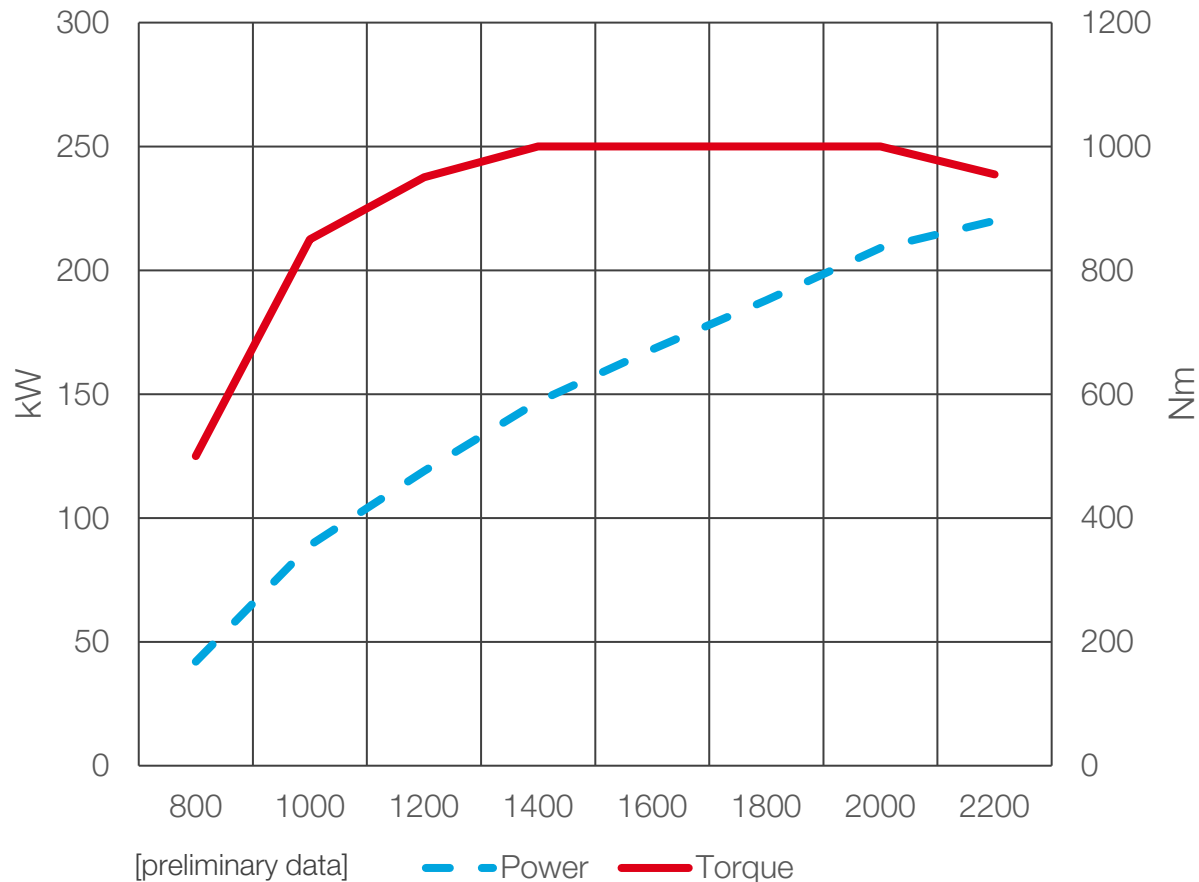
Truck Specification		HyCET
Power	kW	200
Weight front axle	kg	6120
Weight rear axle	kg	3860
Weight total	kg	9980
CO ₂ savings (through TCG 7.8 H ₂)	%	99
Operation	Germany	DEUTZ / Cologne + BMW / Munich



DEUTZ TCG 7.8 Hydrogen



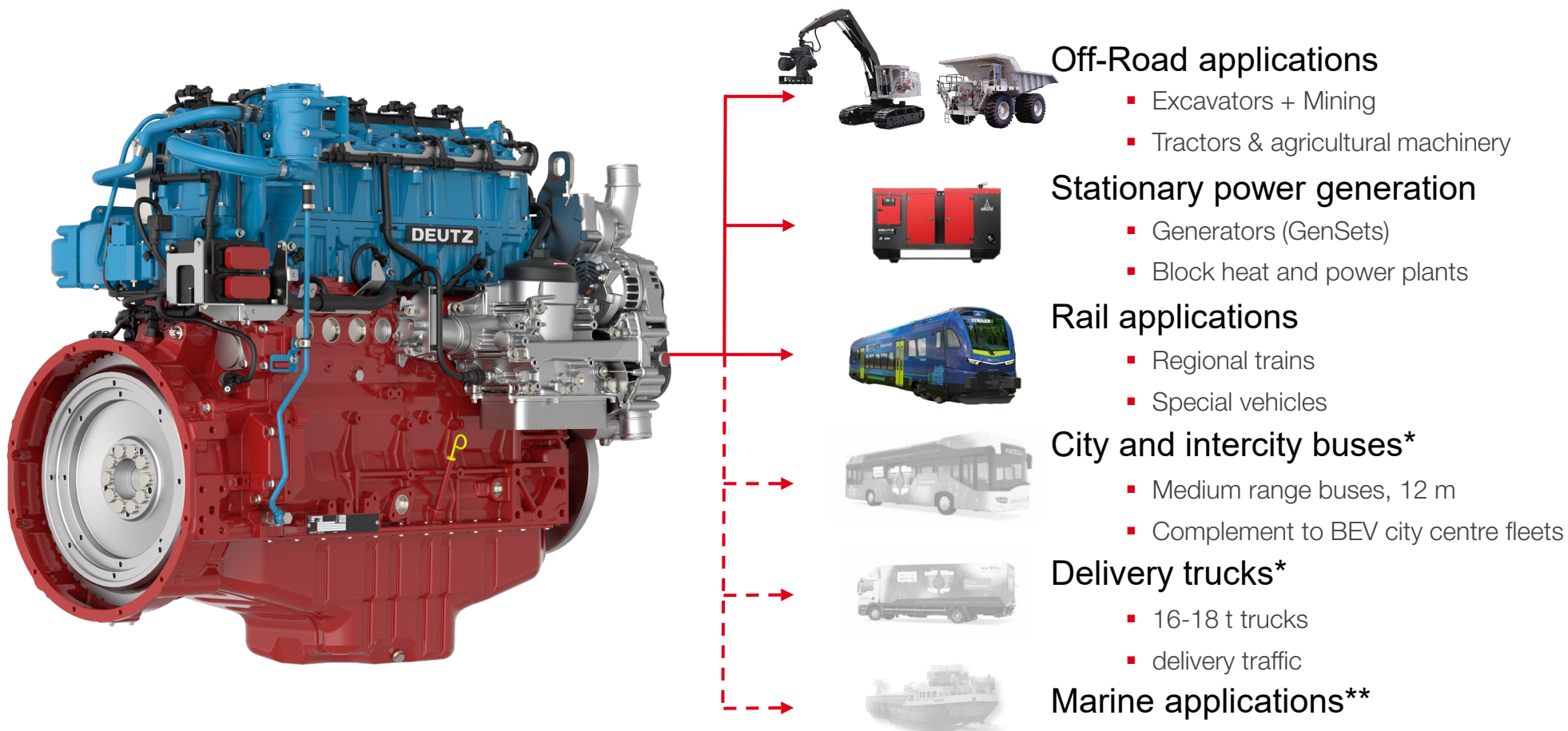
Performance (Power + Torque)



DEUTZ TCG 7.8 Hydrogen



Wide Range of Applications



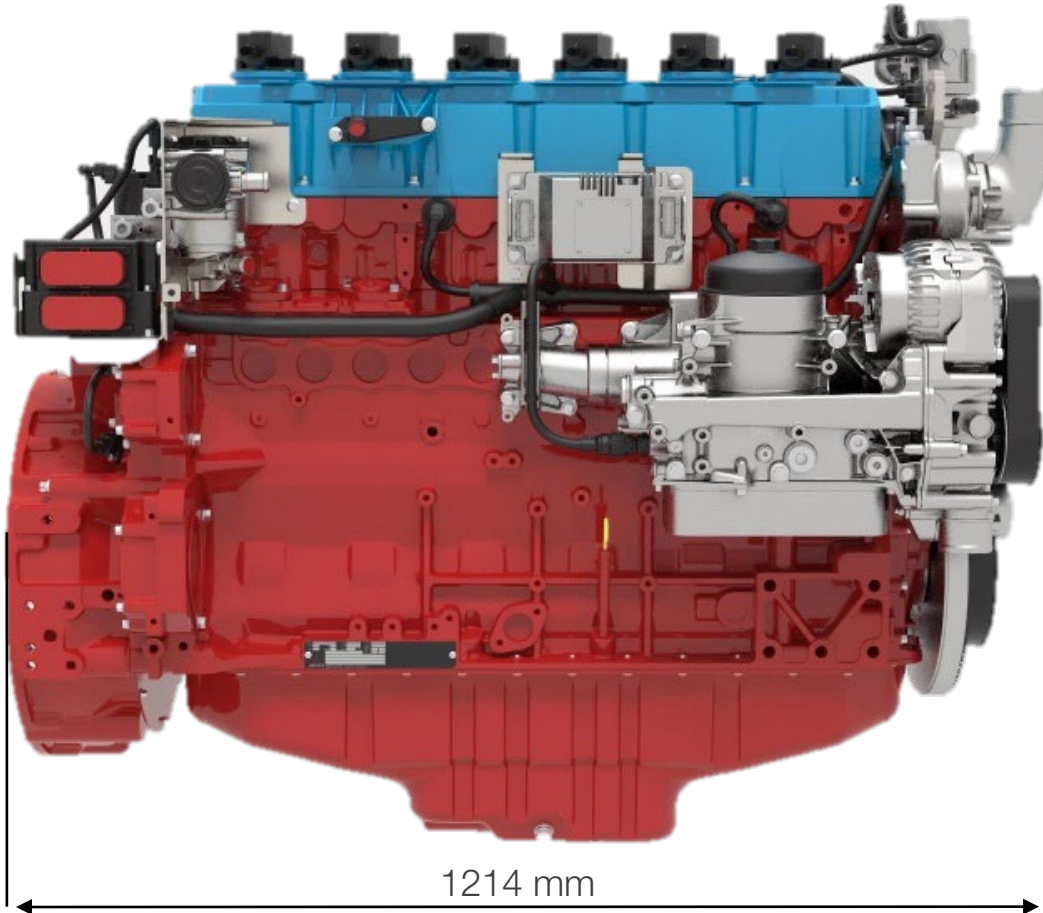
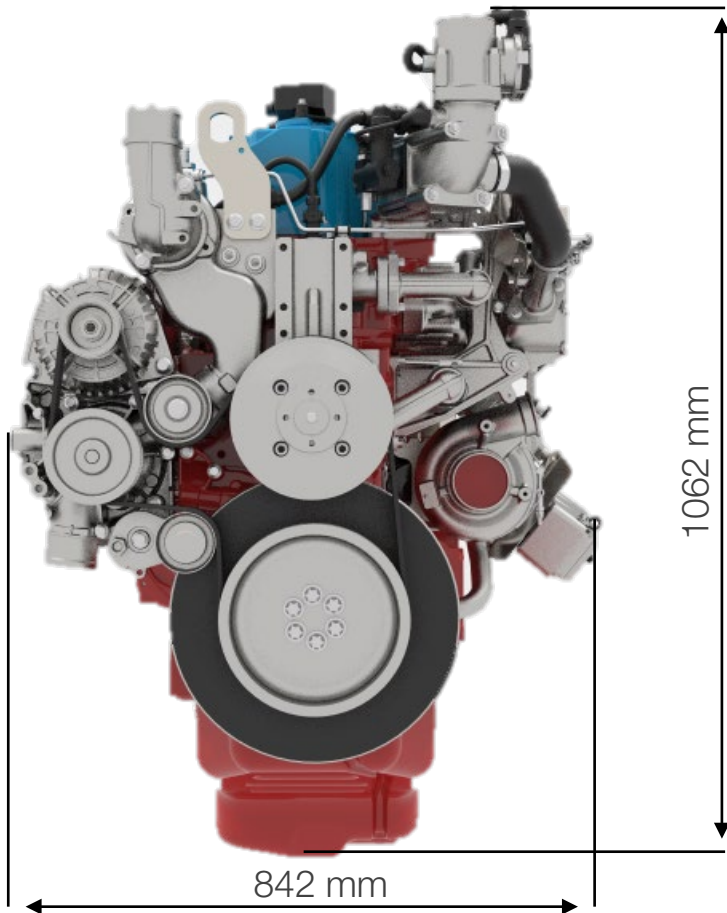
* Development on request

** not foreseen yet

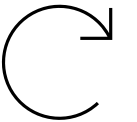
DEUTZ TCG 7.8 Hydrogen



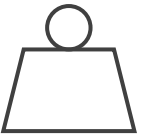
Dimensions



220 kW
2200 rpm



1000 Nm



~740 kg
~90 kg EAT

DEUTZ TCG 7.8 Hydrogen



Robust alternative

- ICE Hydrogen technology
- NO_x-emissions fulfil EU standards
- Robust & good alternative
 - Retro-Fit to existing fleets possible
 - Higher resilience at lower H₂ purity levels (98 vs. 99,999%)
 - Initial invest substantially lower than Fuel-Cell
- Available in series for selected applications
- High reliability due to proven base engine technology especially for off-highway environment
- Growing H₂-infrastructure
- Existing service network for combustion engine