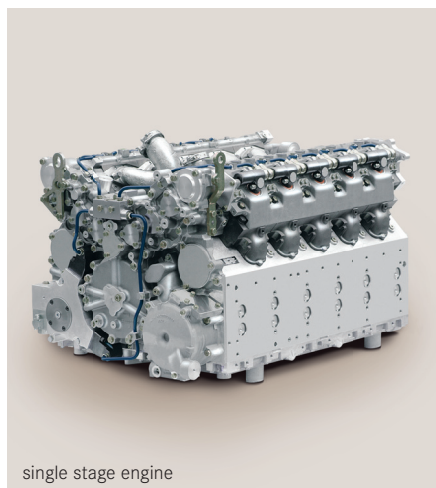


Defense

Diesel Engine 10V 890

for Medium and Heavy Military Vehicles,
920 kW (1250 hp) at 3800 rpm, 1000 kW (1360 hp) at 4250 rpm



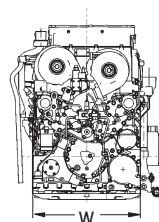
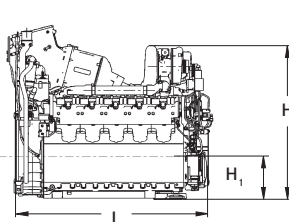
single stage engine

Dimensions and Masses

Engine	Dimensions (LxWxH; H ₁) mm (in) ①	Mass, dry kg (lbs) ①
10V 890	1240x700x1015; 278 (48.8x28x40; 11)	830 (1830)

① Basic engine configuration incl. charge-air-cooler and single turbocharger, but excl. starter/generator.

Starter/Generator: Weight-optimized, compact starter/generators are available for the performance of the starting procedure and the generation of electrical power in accordance with the needs of the customer.



single stage engine

Engine version		10V 890	
Bore/stroke	mm (in)	115/107 (4.5/4.2)	
Displacement, cylinder	l (cu in)	1.1 (67.7)	
Displacement, total	l (cu in)	11.0 (677.0)	
Intercooling		Air/coolant charge air cooler	
Number of cylinders		10 cylinders, V, 90°	
Cooling method		Liquid cooled	
Injection method		Common Rail, direct injection	
Starting method		Electric, flywheel starter generator	
Lube oil system		2 stage regulated turbocharger	
		Diesel Electric Drive	Diesel Mechanical Drive
Max. torque	Nm (ft lbs)	2268 (1673) at 3800 rpm	2650 (1699) at 2300 rpm
Rated power	kW (hp)	1000 (1360)*	920 (1250)*
Rated speed	rpm	4250	3800
Charging method		2 stage regulated turbocharger with compressor**	2 stage regulated turbocharger with compressor

* projected development

** single stage for less power available



Power. Passion. Partnership.

Fuels

- Standard	VV-F-800	DF-2/F-54
- Alternatives	MIL-T-83133D	JP8/F-34

Other fuel types to be checked for compliance.

Lube oils

- Standard	TL 9150-0063 / O-236,	TL 9150-0080 / O-1178
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Other oil types to be checked for compliance.

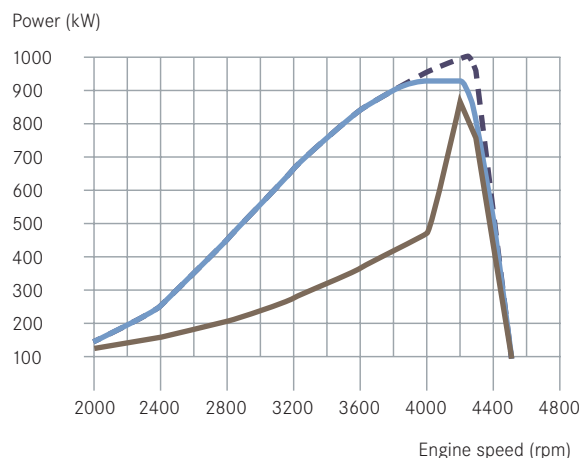
Direction of rotation

Counterclockwise

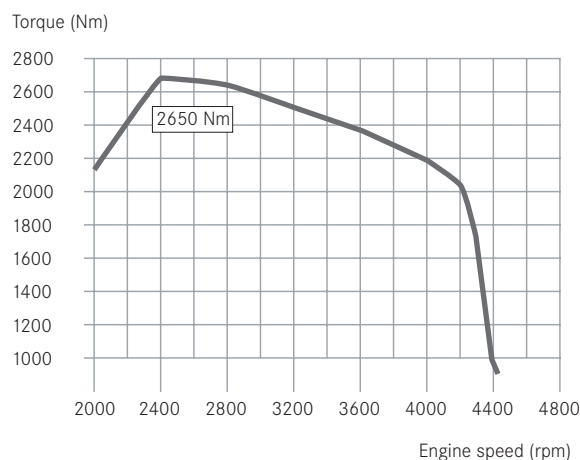
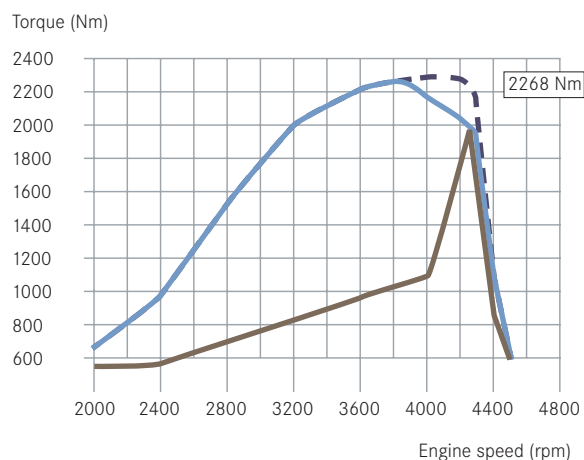
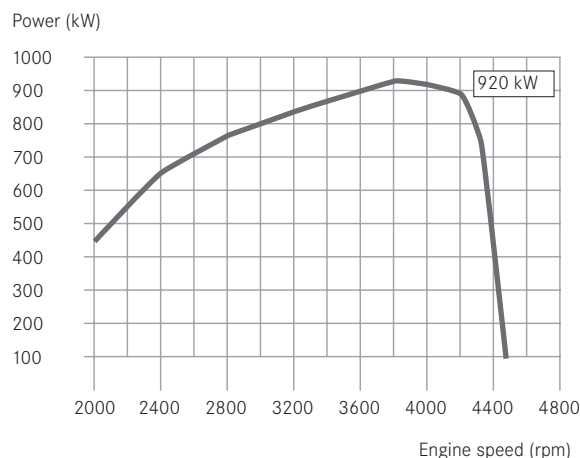
Additional information on request.

Power ratings definition: In accordance with ISO 1585 (fan power requirement to be deducted)
Inclinations: Pitch 35°/roll 35°; any combination of the two inclinations must not exceed 35°.
Climatic conditions: Engines can be operated under ambient temperature conditions of -40°C in accordance with NATO standards. At temperatures below -30°C, oil has to be preheated.

Engine Curves - Diesel Electric



Engine Curves - Diesel Mechanic



--- 1000 kW (1360hp)/4250 rpm, two stage time-limited
 — 920 kW (1250 hp)/4250 rpm, two stage
 — 880 kW (1200 hp)/4250 rpm, single stage

— 920kW (1250 hp)/3800 rpm