

1015. The engine for construction.

187-440 kW at 1500-2100 rpm



Engines for exhaust emission step 2

These are the characteristics of the 1015:

Water-cooled 6- and 8-cylinder V-engines.

Turbocharging with charge air cooling.

Four-valve technology.

Injection system with mechanical governor, mechanically actuated/
electronically controlled high-pressure injection on request.

Separate gear-driven PTOs, beltless fan drive.

Very compact design.

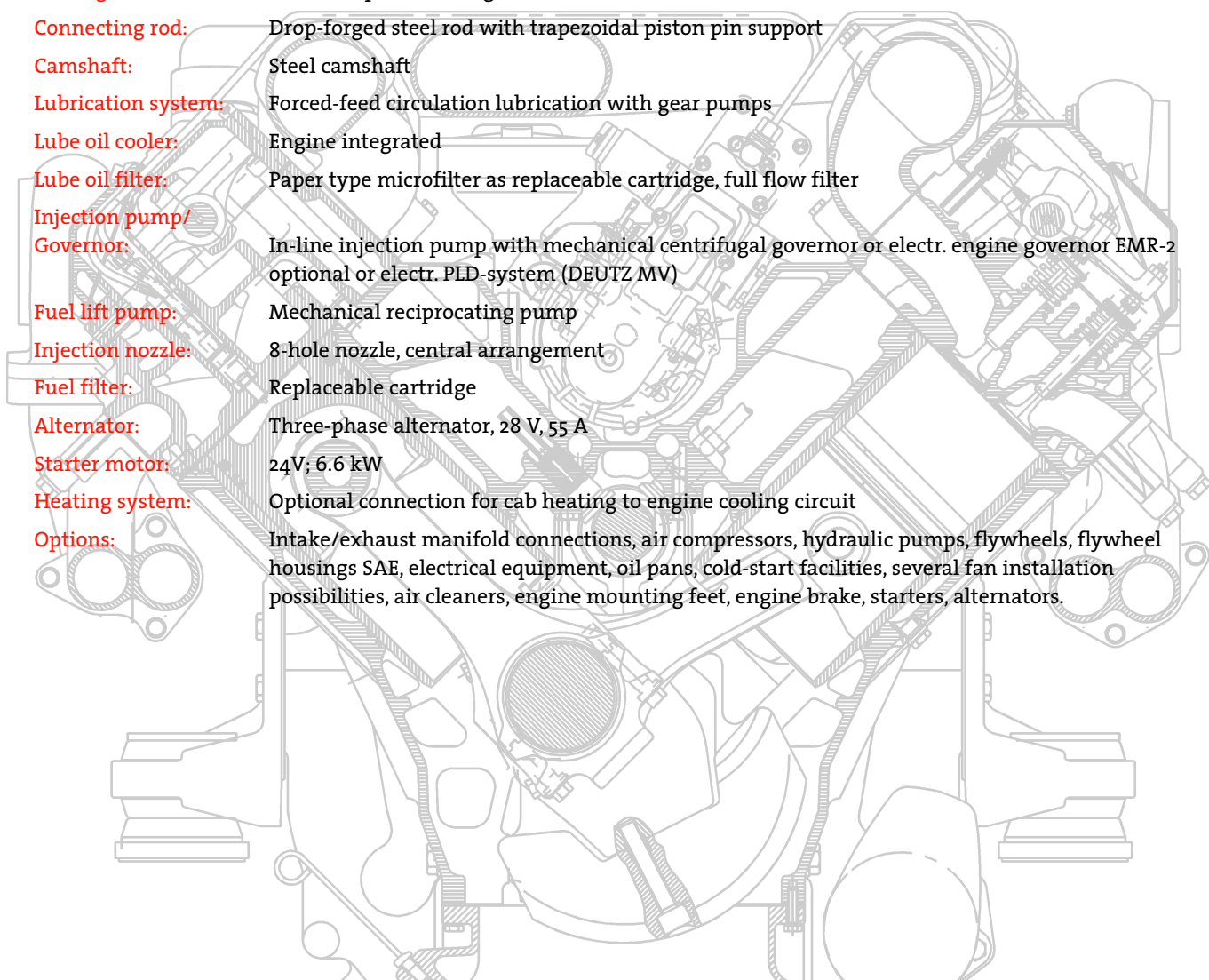
Powerful and rugged engine with a high power-to-volume ratio.



Your benefit:

- ▶ Extremely low noise emission, reduces insulation measures significantly.
- ▶ High torque ensures excellent flexible and powerful response to changing operating duties.
- ▶ Savings in investment costs thanks to long life cycles. Low fuel consumption and long oil change intervals (500 running hours) increase savings in operating costs.
- ▶ Easily accessible and clearly arranged service points make inspection and maintenance work quick and easy.
- ▶ Environment-friendly and long-term use. Meets exhaust emission regulations EU-RL 97/68 EG, Step II and US EPA Tier II Nonroad.

► Engine description



Type of cooling:	Liquid cooling
Crankcase:	Crankcase of grey cast iron with wet liner
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:	V6 with one turbocharger and with charge air cooler V8 with two turbochargers and charge-air cooler
Piston:	Three-ring pistons: two compression rings and one oil scraper ring
Piston cooling:	Oil-cooled with spray nozzles (CP-engines: channel-cooled piston)
Crankshaft:	Drop-forged steel crankshaft with bolted counterweights. V6 with 30° offset crankpins (split-pin)
Main and big-end bearings:	Tri-metal plain bearings
Connecting rod:	Drop-forged steel rod with trapezoidal piston pin support
Camshaft:	Steel camshaft
Lubrication system:	Forced-feed circulation lubrication with gear pumps
Lube oil cooler:	Engine integrated
Lube oil filter:	Paper type microfilter as replaceable cartridge, full flow filter
Injection pump/ Governor:	In-line injection pump with mechanical centrifugal governor or electr. engine governor EMR-2 optional or electr. PLD-system (DEUTZ MV)
Fuel lift pump:	Mechanical reciprocating pump
Injection nozzle:	8-hole nozzle, central arrangement
Fuel filter:	Replaceable cartridge
Alternator:	Three-phase alternator, 28 V, 55 A
Starter motor:	24V; 6.6 kW
Heating system:	Optional connection for cab heating to engine cooling circuit
Options:	Intake/exhaust manifold connections, air compressors, hydraulic pumps, flywheels, flywheel housings SAE, electrical equipment, oil pans, cold-start facilities, several fan installation possibilities, air cleaners, engine mounting feet, engine brake, starters, alternators.

► Technical Data

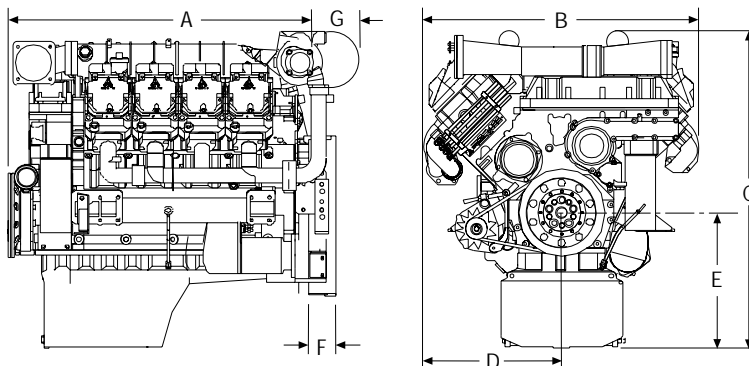
Engine Type		BF6M1015C	BF6M1015CP	BF8M1015C	BF8M1015CP
Number of cylinders		6	6	8	8
Bore/stroke	mm	132/145	132/145	132/145	132/145
Displacement	l	11.91	11.91	15.87	15.87
Compression ratio		16.5	16.5	16.5	16.5
Max. rated speed	rpm	2100	2100	2100	2100
Mean piston speed	m/s	10.15	10.15	10.15	10.15

Power ratings for construction equipment engines¹⁾

Power ratings for industrial engines

Group I	kW	300	330	400	440
at speed	rpm	1900	2100	1900	2100
Mean effective pressure	bar	14.4	15.8	14.4	15.8
Group III ²⁾	kW	273	300	364	400
at speed	rpm	1900	2100	1900	2100
Mean effective pressure	bar	13.1	14.4	13.1	14.4
Max. torque	Nm	1980	1875	2637	2500
at speed	rpm	1200	1300	1200	1300
Minimum idle speed	rpm	550	550	550	550
Weight to DIN 70020, Part 7A ³⁾	kg	850	850	1060	1060

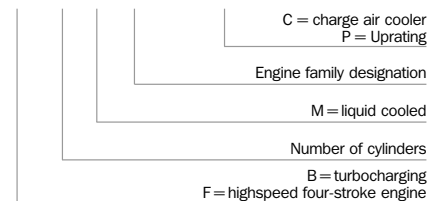
► Dimensions



Engine type		A	B	C	D	E	F	G
BF6M1015C	mm	841	932	1174	466	462	143	198
BF6M1015CP	mm	841	932	1174	466	462	143	198
BF8M1015C	mm	1010	955	1174	478	462	143	198
BF8M1015CP	mm	1010	955	1174	478	462	143	198

► Model designation

BF 8 M 1015 CP



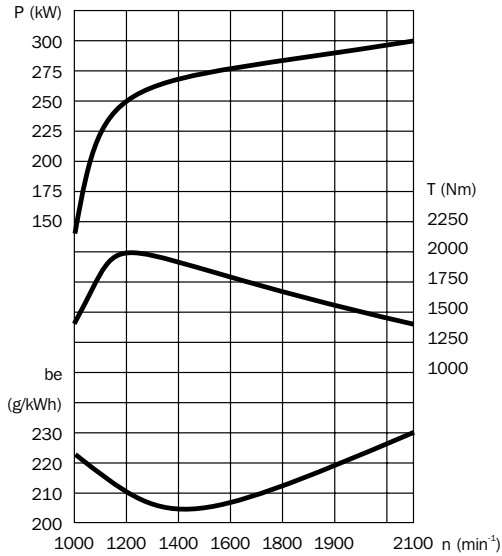
1) Power ratings without deduction of fan power requirement.

2) Fuel stop power to ISO 3046/1 (IFN), DIN 6271. The fuel stop IFN power is an ISO net power at flywheel under reference conditions with all essential auxiliaries driven by the engine.

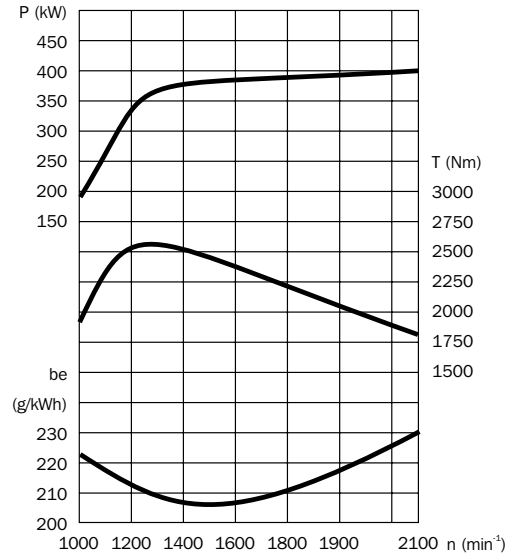
3) Weights are for a dry engine.

The values given in this data sheet are for information purposes only and not binding. The information given in the offer is decisive.

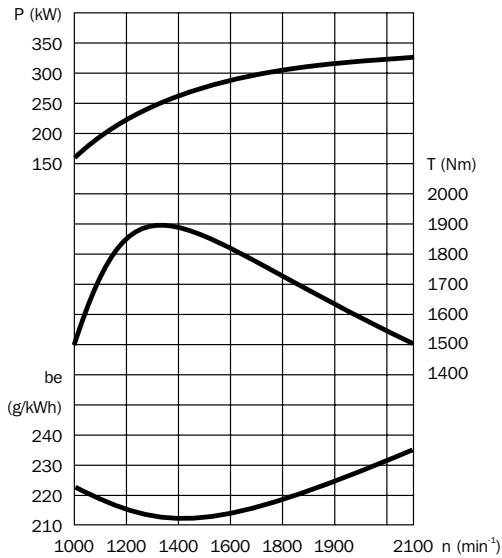
► Standard engines



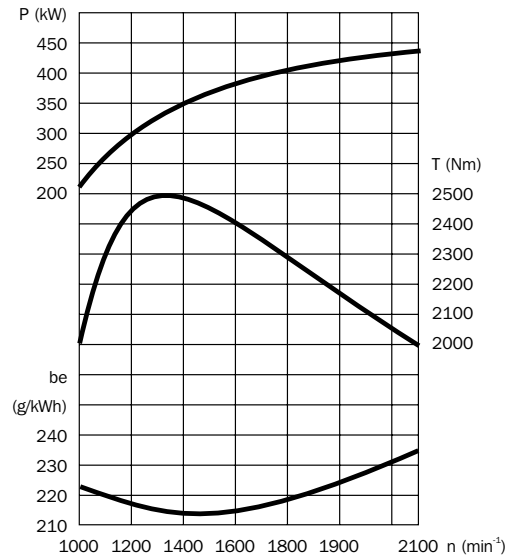
► BF6M1015C



► BF8M1015C



► BF6M1015CP



► BF8M1015CP



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