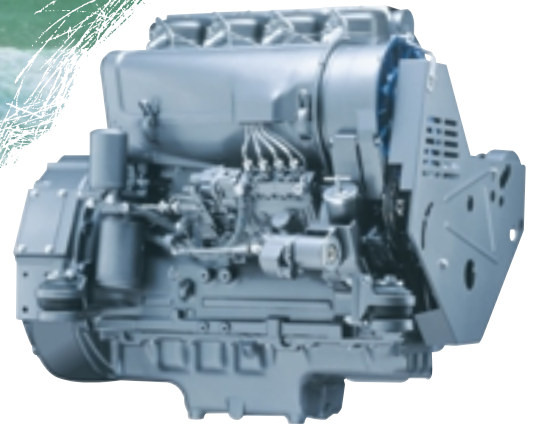


912. The Genset Engine.



29-77 kVA at 1500/1800 min⁻¹



The engine with integrated cooling system.

These are the characteristics of the 912 GEN:

3-, 4-, 6-cylinder naturally aspirated in-line engine.

Displacement: 0.94 l/cylinder.

Unit construction system with single cylinder heads.

Optimized injection and combustion system.

Electronic governor (option).

Worldwide proven: Over 2.7 million engines sold.

Only a few servicing points.

Powerful and compact, low weight.

Global service network with over 3,000 locations.

These are the benefits for you:

- ▶ Low operating noise level. This eliminates the need for costly noise attenuation measures.
- ▶ Exemplarily low fuel and oil consumption. User-friendly maintenance and long service intervals ensure low operating costs.
- ▶ Easy and cost-effective installation with minimum weight and small space requirement.
- ▶ Outstanding load acceptance ensures immediate power supply.
- ▶ Incomparably low exhaust emission, meets all industrial exhaust regulations.

► Technical data

Engine type		F3L 912 GEN		F4L 912 GEN		F6L 912 GEN	
Speed	min-1	1500	1800	1500	1800	1500	1800
Frequency	Hz	50	60	50	60	50	60
Engine/genset ratings¹⁾							
Continuous power, ICN (COP) ²⁾	kW	25	29	33	39	50	60
Prime power, ICN (PRP) ³⁾	kW	26	30.5	35	41	52	63
Limited-time runing power, IFN (LTP) ⁴⁾	kW	27	32	36	43	55	66
Typical generator power output (COP) ⁵⁾	kVA	29	34	38	45	58	70
Typical generator power output (PRP) ⁵⁾	kVA	30	35	41	48	60	73
Typical generator power output (LTP) ⁵⁾	kVA	31	37	42	50	64	77
Basic engine data							
Inertia moment J							
- Engine without flywheel	kg/m ²	0.15	0.15	0.16	0.16	0.21	0.21
- Flywheel	kg/m ²	1.02	1.02	1.02	1.02	1.02	1.02
Weight, engine with radiator	kg	351	351	402	402	541	541
Governing							
Governor mechanical		Bosch RSV Governor		Bosch RSV Governor		Bosch RSV Governor	
- Speed droop (static)	%	5-6	5-6	5-6	5-6	5-6	5-6
Governor electronic		GAC, ACD 176+Governor		GAC, ACD 176+Governor		GAC, ACD 176+Governor	
- Speed droop (static, option)	%	0	0	0	0	0	0
Control quality, mech. (electr.) ⁶⁾		G 2 (G 3/4)	G 2 (G 3/4)	G 2 (G 3/4)	G 2 (G 3/4)	G 2 (G 3/4)	G 2 (G 3/4)
Load acceptance							
Recovery time							
at 80 % continuous power (COP)	sec.	3	3	3	3	3	3
at 100 % continuous power (COP)	sec.	3	3	3	3	3	3
Fuel system							
Specific fuel consumption at COP ⁷⁾							
100 % load	g/kWh	215	223	215	223	215	224
75 % load	g/kWh	217	226	217	226	217	225
50 % load	g/kWh	235	245	236	244	235	243
25 % load	g/kWh	344	372	348	370	344	367
Cooling system/cooling capacity							
Coolant volume engine	m ³ /h	1565	1875	1810	2170	2610	3135
Cooling air temperature increase*	°C	50-55	50-55	50-55	50-55	50-55	50-55
Lubrication system							
Lube oil consumption relative to fuel consumption at full load	ca. %	0.5	0.5	0.5	0.5	0.5	0.5
Lube oil specification		For further details on fuel specification see operation manual					
Lube oil volume, oil pan (max./min.)	l	9/7	9/7	11/8	11/8	13.5/10	13.5/10
Oil temperature max.	°C	130	130	130	130	130	130
Full-flow filter	No./l	1/1	1/1	1/1	1/1	1/1.5	1/1.5
Min. oil pressure (alarm)	bar	1	1	1	1	1	1

► Technical data

Engine type		F3L 912 GEN		F4L 912 GEN		F6L 912 GEN	
Speed	min ⁻¹	1500	1800	1500	1800	1500	1800
Frequency	Hz	50	60	50	60	50	60
Combustion air system							
Combustion air volume flow	m ³ /h	108	130	144	173	216	259
Max. intake vacuum (filter clean)	mbar	10	10	10	10	10	10
Exhaust system							
Exhaust gas mass flow at full load (COP)	kg/h	123	148	163	197	245	295
Exhaust temperature at full load and 25°C ambient temperature	°C	460	475	455	480	460	490
Max. permissible exhaust backpressure	mbar	63.5	63.5	75	75	75	75
Exhaust flange	mm	66	66	66	66	66	66
TA-Luft (4000)	mg/nm ³	yes	yes	yes	yes	yes	yes
Engine electrics							
Electrical equipment:							
- Voltage	V	12	12	12	12	12	12
- Starter	kW	3	3	3	3	3	3
- Alternator	A/V	55/12	55/12	55/12	55/12	55/12	55/12
- Battery (min. capacity)	Ah	110	110	110	110	110	110
Cold-start capability							
Cold-start limit temperature:							
- with starting aid	°C	-17	-17	-16	-16	-14	-14
- without starting aid	°C	-8	-8	-7	-7	-6	-6
Noise emission⁸⁾							
Sound power level	dB(A)/1 pW	103	105	104	106	106	110.5
Sound pressure level at full load, 1 m distance	dB(A)	90	-	91	-	93	-

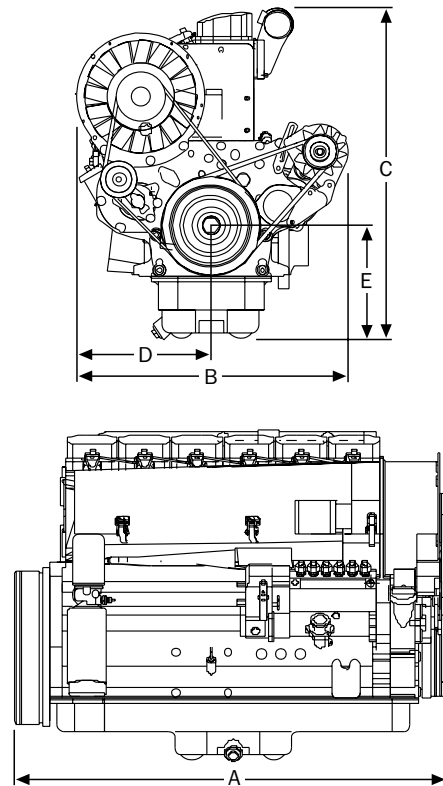
- 1) Power reduction caused by altitude and temperature possible. For more details please contact DEUTZ. Emission optimized version.
 - 2) Continuous power 100% available at flywheel, no time limitation, plus 10% extra power for governing purposes.
 - 3) Prime power 100%, permissible average power output equal to or below 60%, no time limitation plus 5% extra power for governing purposes.
 - 4) Limited-time running power 100%, which can be delivered during 500 running h/year, thereof max. 300 running h/year continuously, no overload permissible; the required extra power for governing purposes must be taken into account however.
 - 5) Taking into account typical generator efficiency (0.93) and power factor cos (φ) = 0.8 including fan power input HT cooling system.
 - 6) Performance acc. to ISO 8528.
 - 7) Fuel specification: see operation manual.
 - 8) With standard cooling system.
- *) Referring to intake temperature of cylinders.

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

► Standard specification

- Standard engine:** Basic parts
- Cooling system:** Intergrated cooling system
V-belt guard
Cooling air discharge duct
- Exhaust system components:** Exhaust manifold
Counterflange (loose)
Without exhaust silencer
- Filter:** Dry air cleaner (loose)
Mounted bracket
Rain cap (loose)
Mech. restriction indicator (loose)
Fuel filter
- Governor:** Mech. governor
Fine speed control
- Flywheel:** Flywheel for 8" and 10" connection
J=1.02 kgm²
- Adapter housing:** SAE 3 housing
- Engine mounting:** Rigid engine mounting, front end
- Engine electrics:** Electric engine shutdown
(de-energized for shutdown)
Starter motor 12 V, 3.1 kW
Alternator 14 V, 55 A
Oil pressure switch,
(speed-dependent)
Without cable harness and
without connector
- Miscellaneous:** Painting
Without operation manual

► Dimensions



Engine type		A	B	C	D	E
F3L912E	mm	719	690	808	340	267
F4L912E	mm	749	690	793	340	265
F6L912E	mm	1142	690	803	339	278



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