

MEGASOL 1000



DATA SHEET

Description

MEGASOL 1000 (**M**etering of **G**as by **S**olenoid) is an electrically actuated gas valve for gas injection in manifold. Each cylinder requires one MEGASOL 1000. The MEGASOL 1000 ensures proper gas quantity for each cylinder and allows a gas flow compensation cylinder to cylinder.

The HEINZMANN MEGASOL 1000 is capable to work with higher pressure drop between air and gas due to its state of the art flow dynamic design. Therefore, the gas pressure has less effect on opening and closing duration and there is no delay due to it. MEGASOL 1000 is designed for both, gas engines and dual fuel engines. It is easy to maintain, since its heavy duty construction includes few components that makes it easy to assemble.

Field of application

Features

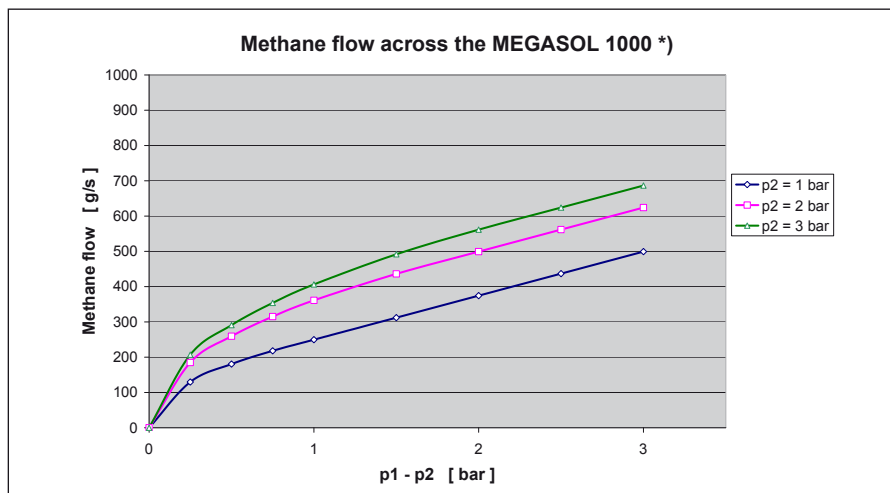
Very fast reacting gas valve

Short opening and closing duration

Low gas pressure generated opening delay

Reduced pressure drop across the valve due to enhanced flow dynamic design

Very low leakage when closed

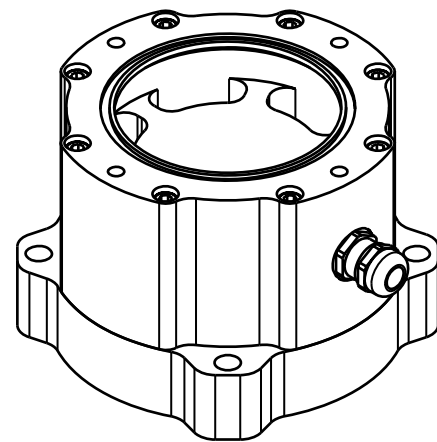
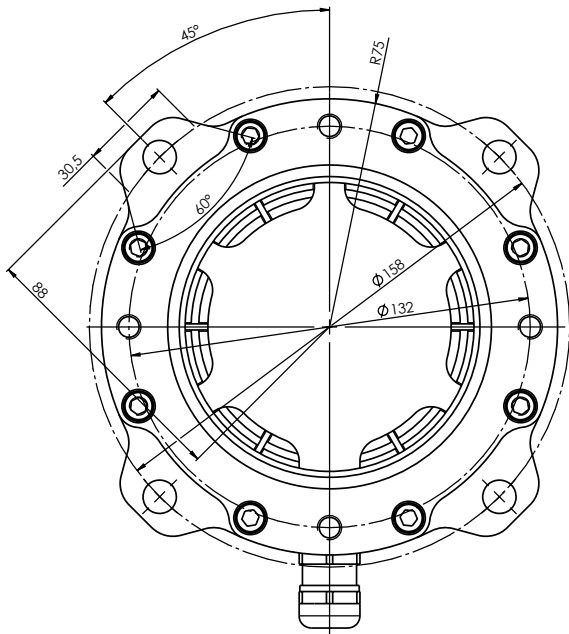
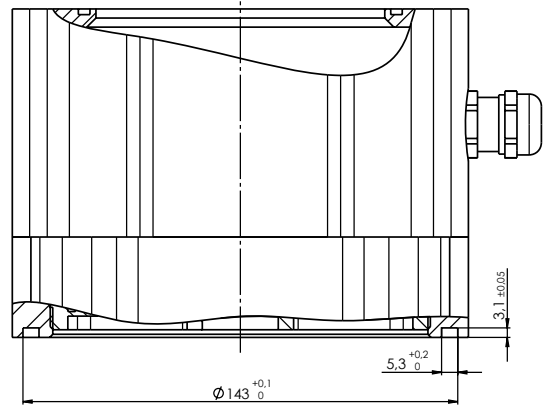
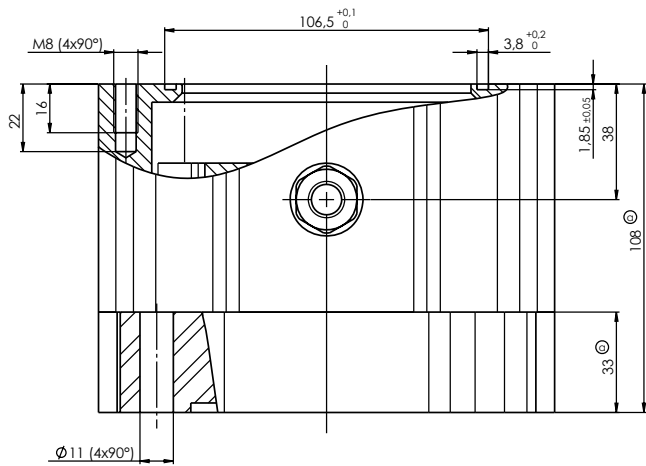


The flow of the MEGASOL 1000 shown in the figure on the left is given for methane for different drops of pressure between gas valve inlet and outlet. The outlet pressure is 1 bar (see table).

Delta P	bar	0	0.25	0.5	0.75	1	1.5	2	2.5	3
Outlet pressure - P2	bar	1	1	1	1	1	1	1	1	1
Inlet pressure - P1	bar	1	1.25	1.5	1.75	2	2.5	3	3.5	4
Flow	g/s	0.0	129.7	180.6	218.0	249.6	312.0	374.4	436.8	499.2
Energy (20 ms injection)*	kJ	0.0	129.7	180.6	218.0	249.6	312.0	374.4	436.8	499.2
Outlet pressure - P2	bar	2	2	2	2	2	2	2	2	2
Inlet pressure - P1	bar	2	2.25	2.5	2.75	3	3.5	4	4.5	5
Flow	g/s	0.0	184.9	259.3	315.1	361.1	436.1	499.2	561.6	624.1
Energy (20 ms injection)*	kJ	0.0	184.9	259.3	315.1	361.1	436.1	499.2	561.6	624.1
Outlet pressure - P2	bar	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Inlet pressure - P1	bar	2.5	2.75	3	3.25	3.5	4	4.5	5	5.5
Flow	g/s	0.0	207.1	290.9	354.0	406.2	491.6	561.5	624.1	686.5
Thermal energy (20 ms injection)*	kJ	0.0	207.1	290.9	354.0	406.2	491.6	561.5	624.1	686.5

* For 20 ms methane injection with 36 MJ/Nm³ and 0.79 kg/Nm³ and with valve fully opened

Dimensions



Certificates

Pending, ATEX  II 3 G Ex nAR IIT4

For further information please see the relevant manual:
KRONOS 40 - System description

Technical data

Opening and closing time	3 ms
Boost current	15 A, during 4 ms
Hold current	5 A
Supply voltage	110 V
Maximum pressure drop	3 bar
Valve lift	0.3 mm
Leakage when closed	< 0.25 % of opened valve flow up to 4 bar pressure difference
Operating temperature	100 °C
Weight	approx. 5.5 kg

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