

# Solenoid Valve, manually reset

## SV Serie

### Main Features

Gas filter for the protection against blockage of devices and fittings connected downstream.  
GF Serie Gas Filters According to 2016/68/EU directive.



- High filtration efficiency
- Low pressure loss
- High dust accumulation
- Easily replaceable filter cartridge
- Outdoor version as standard
- Optionally available with differential pressure measurement (differential pressure gauge with limit switch)

### Technical Features

Maximum allowable pressure –PS	SV Serie 0.5, SVxx/6b 6 bar
Ambient temperature –TS <sup>(1)</sup>	-20 °C to +70 °C
Connection	Threaded conn. according to EN 10226 or NPT ASME 1/2"   3/4"   1"   1 1/4"   1 1/2"   2"  Flanged Conn. According to EN 1092-1 or ANSI 150 DN25   DN32   DN40   DN50   DN65   DN80   DN100 DN125   DN150   DN200   DN250   DN300
Working Voltage	12 Vdc   12 V/50 Hz   24 Vdc   24 V/50 Hz   110 V/50-60 Hz   230 V/50-60 Hz
Power supply voltage tolerance	-15% ... +10%
Protection degree <sup>(2)</sup>	IP65



<sup>(1)</sup> Low temperature version -40°C: available on request

<sup>(2)</sup> Option ATEX – Explosion Proof version

### Metaterials

Body	Aluminium
Covers	Threaded Connection Aluminium Flanged Connection
Internal Parts	Stainless Steel and Brass
Seals	NBR
Pressure Test Points	Brass

**Gas Pressure Regulator, SV Serie**

**Standards and certificates**

**Applied directives:**

Pressure Equipment Directive –PED

(EU) EU/2014/68



Compliance with the regulations of the applied directives is verified by the adherence to the following standards / regulations:

• UkrSepro Technical Regulations for Pressure Equipment UA.TR.012C.0368



• EAC Conformity mark TP TC004/2011 TP TC020/2011



**The relevant valid edition of the standards can be found in the declaration of conformity!**

**Use**

**General Gases :**

Natural gas, town gas, propane, butane, air, nitrogen or all non-corrosive gases

Suitable for use with previously filtered gaseous fluids, it is mainly used for medium and low pressure natural gas systems.

**Hydrogen Ready :**

Suitability of natural gas-hydrogen mixtures or pure hydrogen.

When using the SV series, a manufacturer’s declaration and notified body reports can be provided on request.

**Biogas or Biomethane Version :**

Suitable for biogases and recycling gases

– up to maximum 1% by volume H<sub>2</sub>S, dry

– up to maximum 1% by volume NH<sub>3</sub>,

dry No non-ferrous metals (except in very small quantities found in the plastic components)

Biogas version of SV Series are also designed for slightly aggressive, dry gases.

Gases according such as biogases, landfill gases, sewage gases, other recycled gases, process gases, and air. The chemical composition and aggressiveness of each biogas or recycled gas is different, not constant, and dependent on several factors.

The aggressiveness of the gas notably increases:

- as the hydrogen sulfide content H<sub>2</sub>S increases

- with the moisture content of the gas, condensation is not permitted inside the regulator

In consultation with Gastech, users must decide whether the materials used for the SV Series are suitable for the intended types of recycling gas. These gases can vary in terms of both their composition and the respective concentration of the components.

As a result, it is not possible to make any warranties or definitive statements regarding service life. An assessment should be carried out to determine the suitability of the gas used.



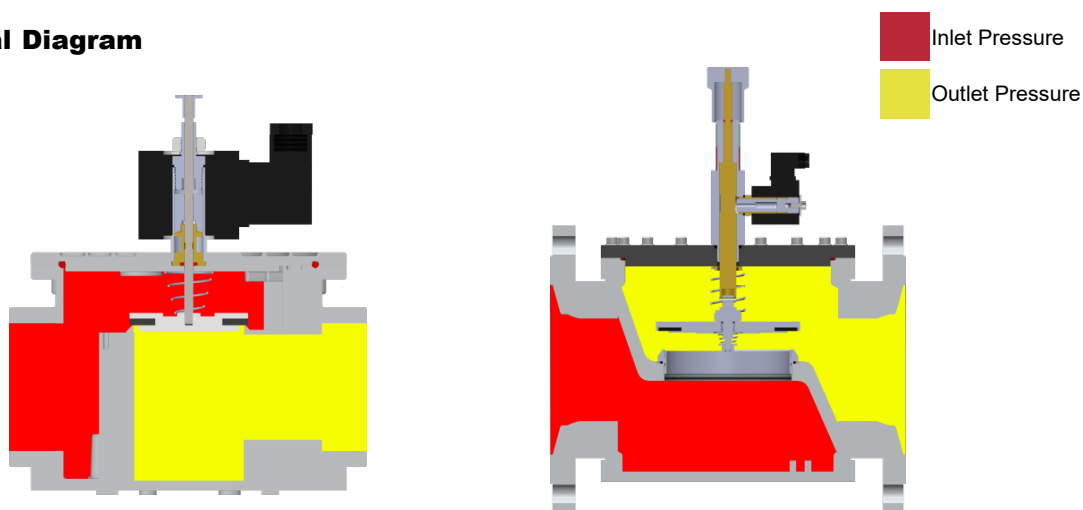
For safety reasons, we strongly recommend

- a visual inspection of the SV Serie regulator at intervals of 3 to 6 months

- Function and leakage tests

**Gas Pressure Regulator, SV Serie**

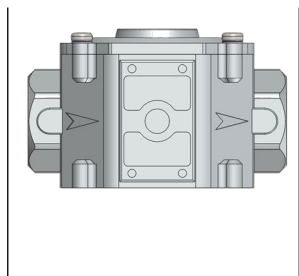
**Desing,  
 Operational Diagram**



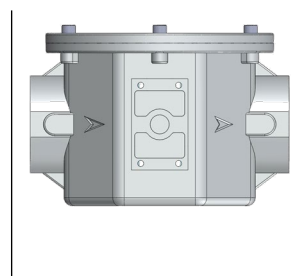
**Manually Reset Solenoid Valve  
 1/2" – 2" Threaded Connection**

**Manually Reset Solenoid Valve  
 DN25 – DN300 Flanged Connection**

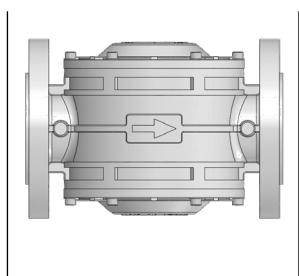
**Configurations**



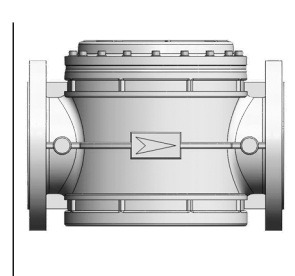
**Gas Filter  
 1/2" – 3/4" – 1"**



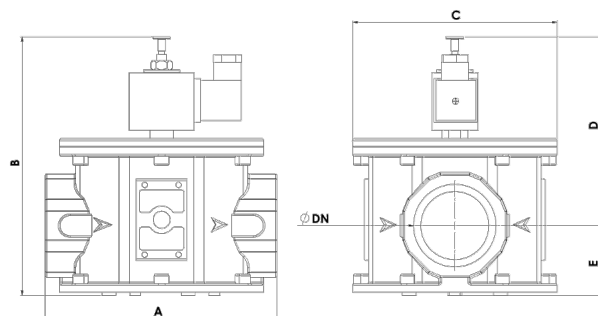
**Gas Filter  
 1 1/4" – 1 1/2" – 2"**



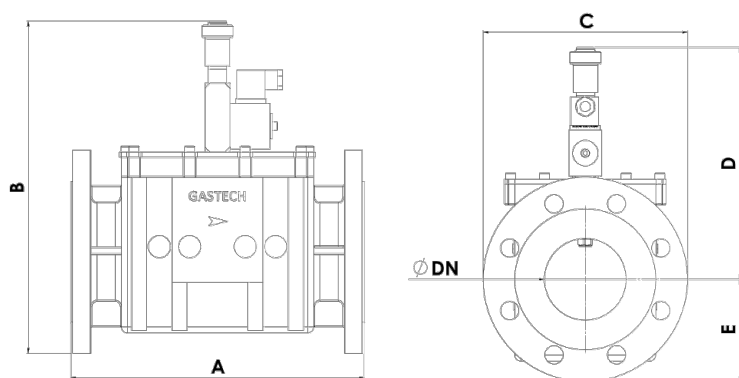
**Gas Filter  
 DN25 – DN50**



**Gas Filter  
 DN125 – DN300**

**Gas Pressure Regulator, SV Serie**
**Dimensions and Weights**
**RL - RLH Serie -without SSV**


DN	A	B	C	D	E
Rp. 1/2"	120	165	140	122	42
Rp. 3/4"	120	165	140	122	42
Rp. 1"	120	165	140	122	42
Rp. 1 1/4"	160	260	225	197	64
Rp. 1 1/2"	160	260	225	197	64
Rp. 2"	160	260	225	197	64

**RL - RLH Serie -with SSV**


DN	A	B	C	D	E
Rp. 1/2"	120	242	140	122	120
Rp. 3/4"	120	242	140	122	120
Rp. 1"	120	242	140	122	120
Rp. 1 1/4"	160	347	225	197	150
Rp. 1 1/2"	160	347	225	197	150
Rp. 2"	160	347	225	197	150

**Gas Pressure Regulator, SV Serie**
**Capacity Tables**
**RL - RLH 32 – 11/4" x 11/4"**

Inlet pressure (mbar)	Outlet Pressure (mbar)					
	20	30	50	100	200	300
50	58	42	-	-	-	-
100	98	92	83	-	-	-
200	160	160	150	140	-	-
300	190	195	195	170	110	-
500	260	265	270	245	185	185
1000	420	420	430	415	330	315
2000	425	480	520	600	540	610

**RL - RLH 40 – 11/2" x 11/2"**

Inlet pressure (mbar)	Outlet Pressure (mbar)					
	20	30	50	100	200	300
50	59	46	-	-	-	-
100	100	98	91	-	-	-
200	160	160	155	140	-	-
300	190	195	195	180	110	-
500	275	280	280	270	220	180
1000	400	415	415	420	350	350
2000	615	615	640	675	620	620

**RL - RLH 50 – 2" x 2"**

Inlet pressure (mbar)	Outlet Pressure (mbar)					
	20	30	50	100	200	300
50	60	55	-	-	-	-
100	105	105	95	-	-	-
200	160	160	165	140	-	-
300	210	210	205	195	120	-
500	280	280	275	270	200	210
1000	450	450	455	440	400	400
2000	705	710	710	720	720	700

**Gas Pressure Regulator, SV Serie**

**Correction factor for non-natural gas applications**

The flow rates are indicated for a 0.6 specific gravity gas. To determine the volumetric flow rate for gases other than natural gas, multiply or calculate the values in the capacity tables using the sizing equations with a correction factor. The table below lists correction factors for some common gases:

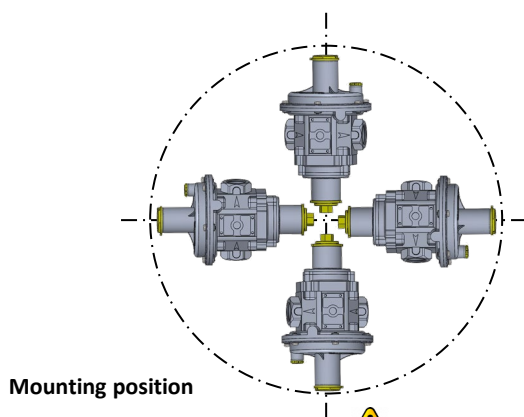
Gas Type	Density ratio to air	Conversion factor
Air	1.00	0.77
Butane	2.00	0.55
Propane	1.52	0.63
Propane+Air Mix	1.2	0.71
Hydrogen	0.07	2.94
Nitrogen	0.97	0.79
Carbondioxide	1.52	0.63

Use the following formula to calculate the correction factor for gases not listed above. In the formula, d is the specific gravity of the gas.

$$\text{Conversion factor} = \sqrt{\frac{0.6}{d}}$$

Stm3 /h /reference conditions 15 °C, 1 barg

Stm3 /h x 0.94795 = Nm3 /h      Nm3 /h reference conditions 0 °C, 1 barg



**!** Mounting the regulator upside down will reduce the adjustment range of the outlet pressure by approximately 3 mbar

**Gas Pressure Regulator, SV Serie**






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**Color of Products**

Standard Colors Natural Aluminium

**Optional Colors**

You can choose one or more of the following colors.

Part	RAL Code	Color
All Parts	1021	
All Parts	3000	
All Parts	9005	
All Parts	6011	
All Parts	5010	

 delivery times and price may vary in optional color options.

**NOTES**

For more information, contact your local sales representative or agency.



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