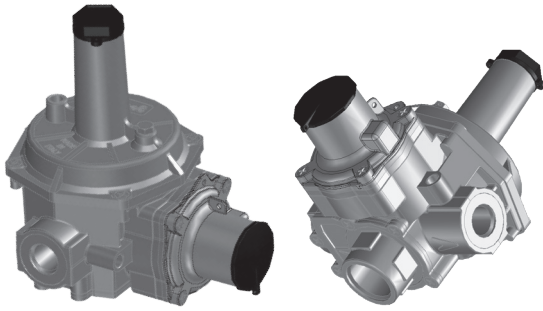




GAS GOVERNOR RG-HC-SSV

English

500mbar/1bar/2bar/5bar



MADE IN ITALY



GAS GOVERNOR

RG015-HC-SSV-90-FT-TPIO-1B



- 1 GAS GOVERNOR:**
RG=Threaded connections
- 2 DIMENSIONS:**
015 =1/2"
020 =3/4"
025= 1"
- 3 CAPACITY:**
HC=High Capacity
SC=Small Capacity
- 4 SSV:**
SLAM SHUT VALVE
- 5 OPTIONAL:**
90 =OUTLET 90°
- 6 OPTIONAL:**
-FT= With Filter
- 7 OPTIONAL:**
TPIO = TEST POINT INLET/OUTLET
- 8 BAR:**
= 500mbar
-1B= 1bar
-2B= 2bar
-5B= 5bar

GENERAL DESCRIPTION

GAS GOVERNOR can be installed in systems with automatic gas burners and in industrial gas distribution systems. GAS GOVERNOR have three membranes fitted inside them: an operating membrane (6), a compensation membrane (7) and a safety membrane (5) (refer to Fig. 1). A breather pipe and external discharge outlet is not necessary because the safety membrane avoids a gas leak into the environment more than 30 dm³/h, point 3.3.2 of the UNI-EN88-1 Norms.

MARKINGS

Depending on which model, GAS GOVERNOR are marked with their technical characteristics.

RG025-HC-SSV			
Body:	1	Class:	A
Filter:	No	Group:	2
Pe max:	500mbar	T. amb:	-20°C ÷ +60°C
Pd:	10 ÷ 27mbar		
S/N:	2312337		

CE 0497
UNI EN 88/1

SPRING SETTING (mbar)

SPRING MODEL	RANGE mbar	RG-HC-SSV from 1/2" to 1"
		500 mbar 1-2-5 bar
WHITE	5 ÷ 14	SPW1-5HC
YELLOW	6 ÷ 22	SPY1-5HC
NEUTRAL	10 ÷ 27	SPN1-5HC
RED	28 ÷ 70	SPR1-5HC
BLACK	60 ÷ 130	SPBK1-5HC
BLUE	120 ÷ 300	SPB1-5HC
BROWN	220 ÷ 480	X

To put out of service replace the spring with the suitable spacer.

1

PRESSURE SETTING

Unscrew the upper cap to gain access to the spring compressor (1) (Fig. 1).

The outlet pressure is regulated by rotating the spring compressor (2) (Fig. 1). Using a 10mm Allen key, turn the spring compressor (2) in a clockwise direction to increase the pressure and in an anticlockwise direction to reduce the pressure. After making the adjustment, replace the upper cap (1).

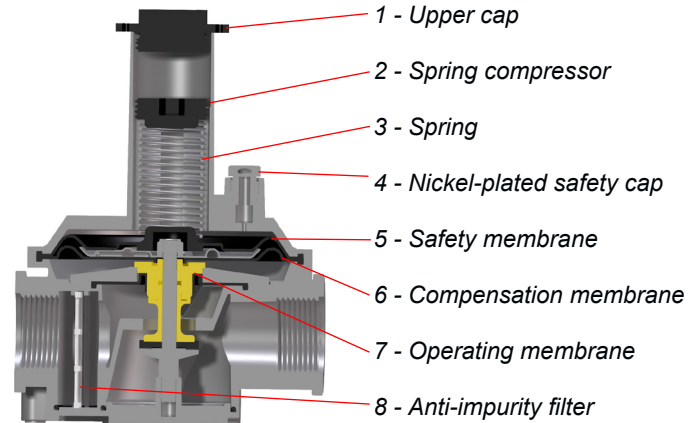


Fig. 1

MAINTENANCE

GAS GOVERNOR do not require any maintenance.

The substitution of the anti-impurity filter positioned at the base of the GAS GOVERNOR (Fig. 2) is recommended for models fitted with a filter.

- Unscrew the six screws and remove the lower cover.
- Extract the anti-impurity filter and substitute it with a new filter.
- Check that the base gasket is integral then clean and replace the lower cover.
- Replace the six fixing screws.

A revision with the relative testing in the factory is recommended if there is a fault.

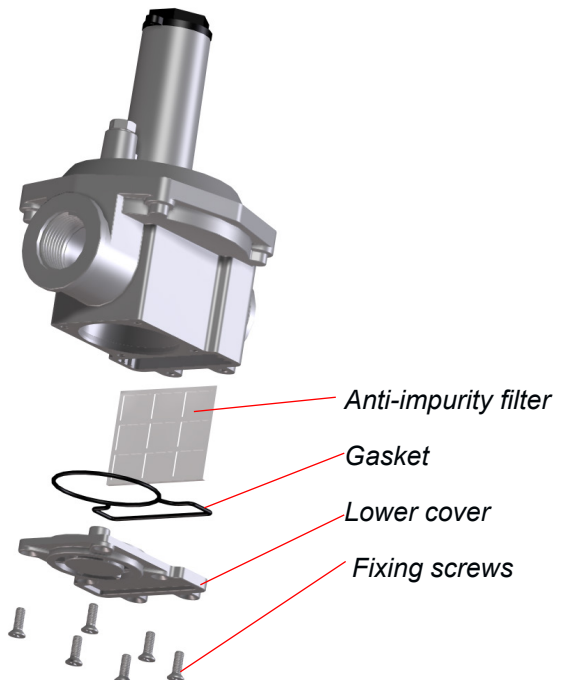


Fig. 2 N.B. The anti-impurity filter must be of our manufacture.

SSV SETTINGS

Geca's gas governor HC integrates a brand new security system called slam shut valve (SSV) thanks to the new design that introduces a shutter upstream the regulation point.

This feature raises the security level avoiding the need for an extra device on the pipeline.

Commanded by a sensing mechanism composed by an actuator that feels the outlet pressure, the SSV intervene both for over and under pressure levels thanks to a double spring system.

How to arm the device:

Gas governor's SSV is a manual device that requires to be set every time it shuts the gas stream.

Unscrew the top lid to access the UPSO and OPSO setting ferrules, the more they get twisted the higher is the pressure of intervention (Fig.3).

Set the UPSO spring based on the required level of under pressure intervention.

Set the OPSO spring based on the required level of over pressure intervention.

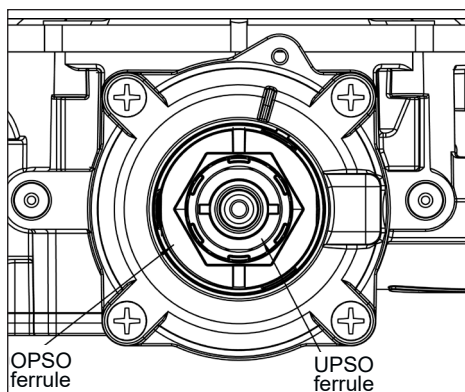


Fig. 3

When the outlet pressure is in between the over and under pressure setting, pulling the knob will unlock the mechanism and the membrane will get to balanced position.

When in balanced position the shutter remains open, ready to intervene any moment the pressure passes the limit we set (Fig.4).

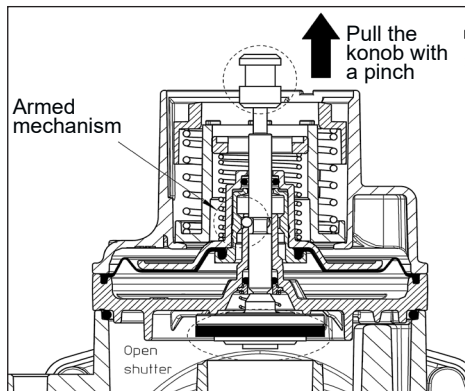


Fig. 4

If the shutter doesn't stay up means that the outlet pressure is not in the range we set, try to unscrew the UPSO and screw the OPSO to widen the range for balanced position (Fig.5).

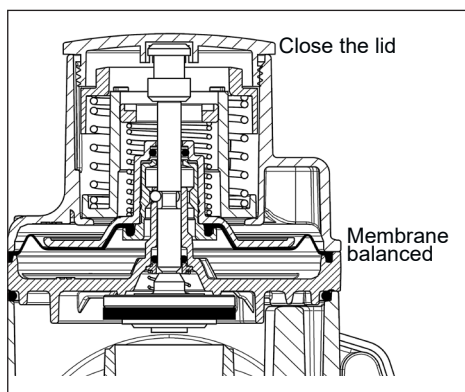


Fig. 5

Once the SSV is correctly set the lid should be closed to avoid humidity to infiltrate the system.

UPSO intervention (Fig.6):

The SSV intervene whenever the outlet pressure goes below the UPSO spring set point.

The membrane gets pushed down from the spring, able to extend due to the lower strenght given from the outlet pressure, allowing the mechanism to releas e the shutter.

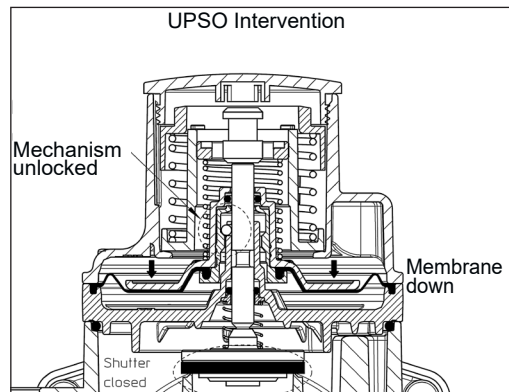


Fig. 6

OPSO intervention (Fig.7):

The SSV intervene everytime the outlet pressure exceeds the OPSO spring set point.

The membrane pushed from the pressure rises, winning the strenght of the OPSO spring, allowing the mechanism to release the shutter.

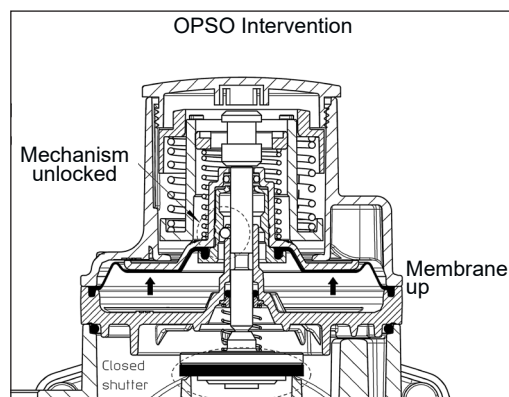
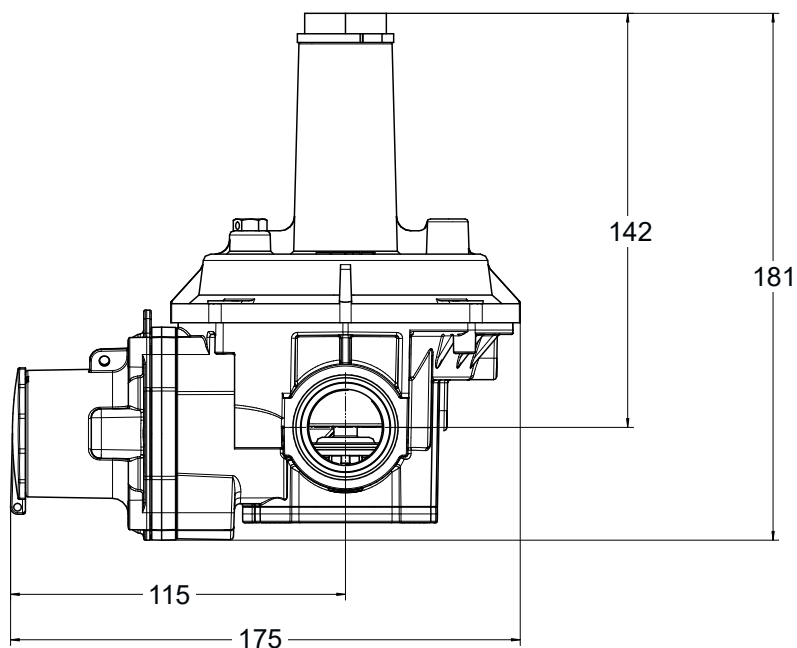
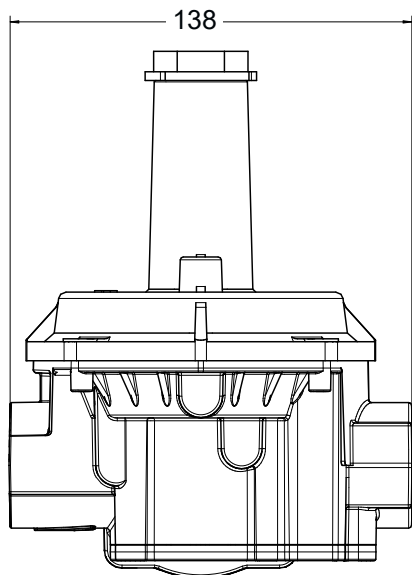


Fig. 7

SSV SPRING SETTING (mbar)

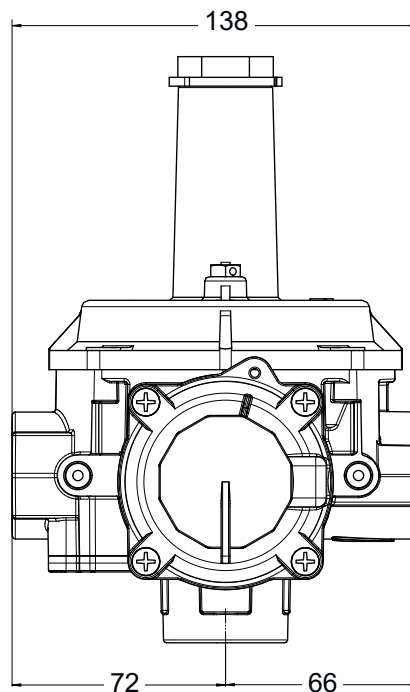
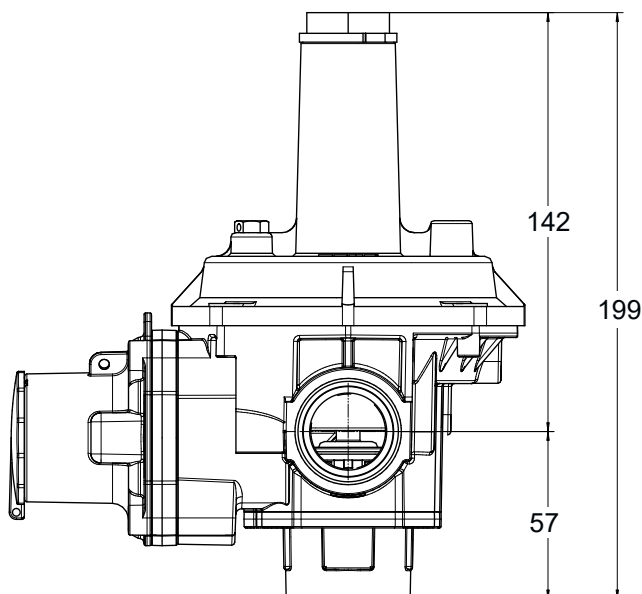
GECA CODE	INTERVENTION	COLOR	RANGE
SPR-OPSO-HC	OPSO	RED	35 ÷ 50
SPG-OPSO-HC		GREEN	50 ÷ 70
SPBK-OPSO-HC		BLACK	70 ÷ 100
SPW-OPSO-HC		WHITE	100 ÷ 160
SPLB-OPSO-HC		LIGHT BLUE	160 ÷ 220
SPY-OPSO-HC		YELLOW	220 ÷ 300
SPR-UPSO-HC	UPSO	RED	8 ÷ 21
SPW-UPSO-HC		WHITE	21 ÷ 35
SPB-UPSO-HC		BLUE	35 ÷ 55
SPG-UPSO-HC		GREEN	55 ÷ 80
SPN-UPSO-HC		NEUTRAL	80 ÷ 130

DIMENSIONS (mm) and WEIGHT (Kgs)



WEIGHT (Kgs)

DIMENSIONS	RG HC SSV	RG HC SSV 90
1/2" - 1/2"HC	1,26	1,31
3/4" - 3/4"HC	1,2	1,25
1" - 1"HC	1,18	1,23



INSTALLATION AND POSITIONING

Carefully read the instructions before utilisation.
This device must be installed in accordance with the laws in force.

The GAS GOVERNOR can be installed in a vertical and horizontal position and with the arrow pressed into the body pointing towards the heating unit.
It must be positioned near to the regulation organs and preferably outside the environment in which the heating unit is present.

N.B. Install the GAS GOVERNOR away from atmospheric agents.
GAS GOVERNOR closes without flow and pressure increase around 30% of the Pd (pressure set) between utility and governor.
This is called lock - up.

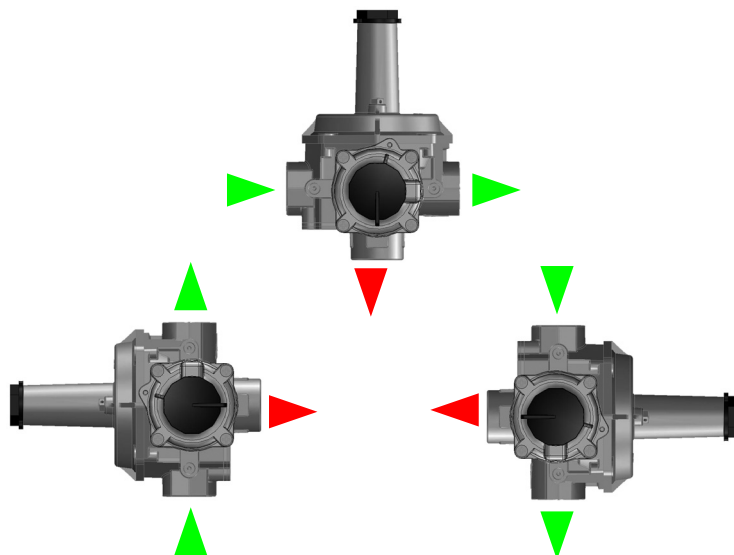
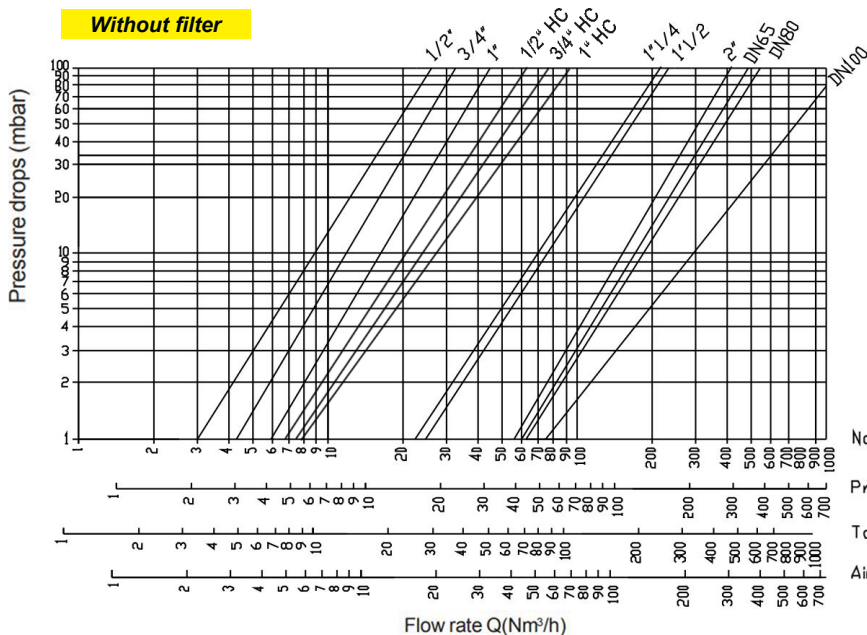


DIAGRAM OF THE FRICTION LOSS

Without filter



DENSITY

TYPE OF GAS	DV
Natural gas	0,64
Propane	1,57
Town gas	0,47
Air	1,0

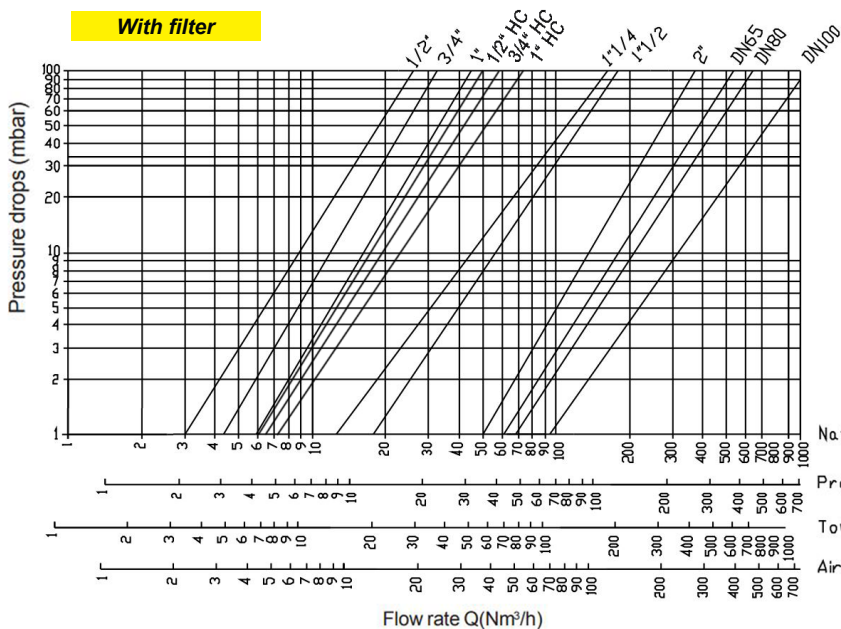
Natural gas CH₄ (d=0.544)

Propane C₃H₈ (d=1.522)

Town gas (d=0.411)

Air (d=1)

With filter



Natural gas CH₄ (d=0.544)

Propane C₃H₈ (d=1.522)

Town gas (d=0.411)

Air (d=1)

OUT OF SERVICE

"OUT OF SERVICE" of GAS GOVERNOR proceed as follows:

- Unscrew the **Upper cap**
- Unscrew the **Spring-Compressor**.
- Replace the **Spring**.
- Screw the **Spring-Compressor**.

TECHNICAL CHARACTERISTICS

Max. Pressure:	0,5bar (50KPa) / 1bar / 2bar / 5bar.
Outlet pressure:	10 - 27 mbar (standard spring).
UPSO	8 mbar ÷ 130 mbar
OPSO	35 mbar ÷ 300 mbar
Operating temperature:	-20°C to +60°C.
Class:	B.
Group:	2.
Filtering:	50um.
Combustible gases:	Methane natural gas, Air, L.P.G. and City gas.
Materials in contact with the gases:	Die cast aluminium, steel and membranes in NBR certified DVGW EN 549.
Position and installation:	With a maximum angulation of 90°.
Conformity:	Regulation 2016/426/UE (GAR). 2014/68/EU (PED).
Attachments and pressure sockets:	Only if requested in the order.
Connections:	Threaded (1/2", 3/4", 1") EN 10226.
Complete Body:	Die - Cast Aluminium Gd - AISi12Cu - EN AB 46100.



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INSTRUCTION SHEET

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Directive 2012/19/UE (Waste Electrical and Electronic Equipment - WEEE):
Information for users:

The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

WEEE



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