Pressure regulator series RG-FRG 1-2 bar

Tight pressure regulators of series RG–FRG 1-2 bar are suitable for application on domestic and industrial combustion plants for pressure regulation of gases belonging to the first, second and third family.
They are normally applied on the most common combustion plants like furnaces, boilers, dryers and compact burners.

Tight pressure regulators of series RG-FRG 1-2 bar are certified CE according to norm EN 88-2, gas directive 2014/68/EU PED and regulation EU 2016/426.

TECNICAL FEATURES

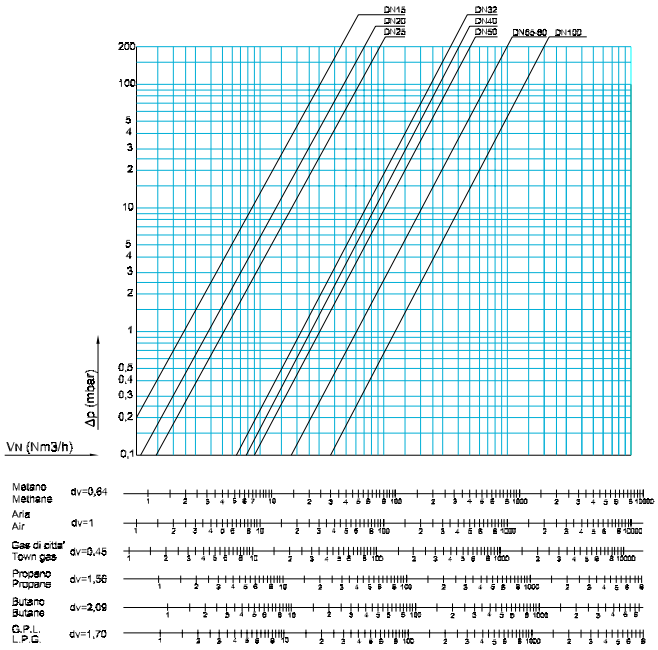
Body valve	Die-casted aluminium
Thread connections	Rp 1/2÷Rp 2
Flanged connections PN16	DN25÷DN150 according to norm ISO 7005
Flanged connections ANSI 150	Available on request
Max inlet pressure	1 ÷ 2 bar
Downstream pressure	Various ranges of springs available. Please check tables in next pages
Ambient temperature	-15 ÷ +60°C
Mechanical resistance	Group 2

FEATURES

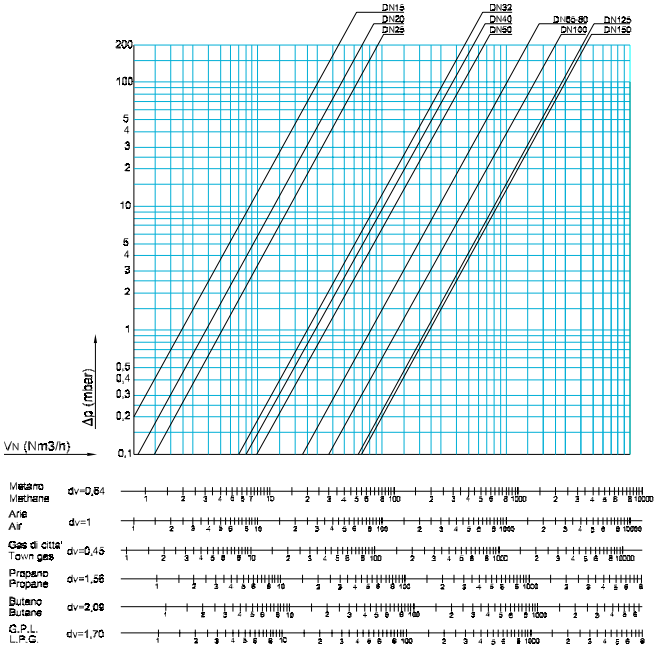
- Installation in horizontal (preferred) or vertical position
- Pressure regulators equipped with 50 µm filter (FRG version) on request
- Easy installation, spring regulation and maintenance
- Accuracy class of downstream pressure : 10
- Version with integrated shut-off valve (minimum, maximum or both) available
- Special execution for biogas on request

FLOW CHART

FILTROREGOLATORE FRG/2M



REGOLATORE RG/2M



MODELS

RG = Pressure regulator
FRG= Filter pressure regulator

Operation
/2MC = inlet pressure 1 + 2 bar
/2MB MAX = with OPSO shut-off valve
/2MB MIN = with UPSO shut-off valve

Max Pressure
1 = 1 bar
2 = 2 bar

Connections
15 = Rp 1/2
20 = Rp 3/4
25 = Rp 1
32 = Rp 1. 1/4
40 = Rp 1. 1/2
50 = Rp 2
65 = DN65
80 = DN80
100 = DN100
125 = DN125
150 = DN150

Spring range
check table

FRG	/2MC	2	20	C

RG-FRG SPRING RANGE P1 = 1bar

	1/2 " - 3/4" - 1"	1.1/4 "- 1.1/2 - 2"	DN65 - 80 - 100	DN125 - 150**
A	9 - 28 mbar	8 -13 mbar	7 - 18 mbar	20 - 150 mbar
B	18 - 40 mbar	13 -23 mbar	13 - 27 mbar	150 - 250 mbar
C	40 -110 mbar	20 -36 mbar	22 - 50 mbar	
D	110 - 150 mbar	33 - 58 mbar	50 - 130 mbar	
E	150 - 200 mbar	55 -100 mbar	110 - 200 mbar	**P1 max 500 mbar
F	200 - 600 mbar	90 - 190 mbar	200 - 600 mbar	
G		190 - 500 mbar		

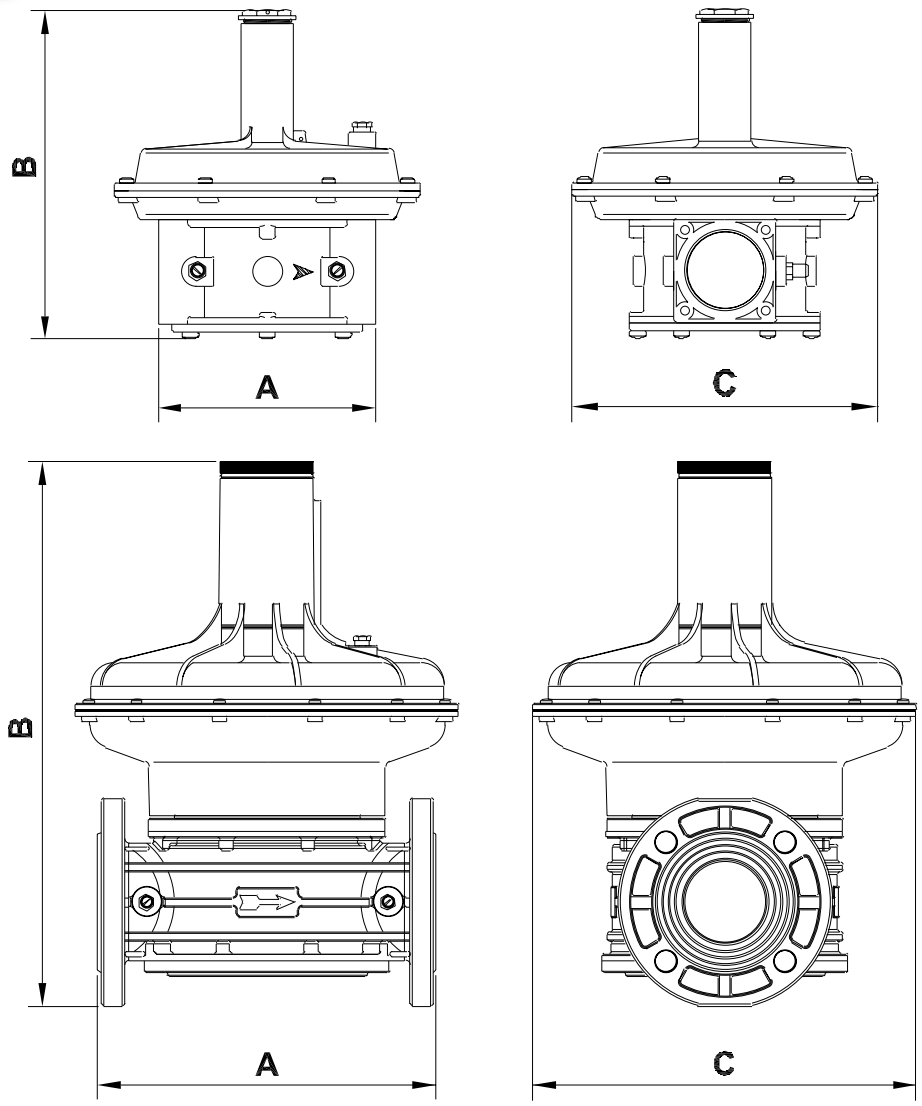
RG-FRG SPRING RANGE P1 = 2bar

	1/2 " - 3/4" - 1"	1.1/4 "- 1.1/2 - 2"	DN65 - 80 - 100
A	9 - 22 mbar	12 - 36 mbar	7 - 18 mbar
B	20 - 40 mbar	30 - 50 mbar	13 - 27 mbar
C	40 -110 mbar	40 - 60 mbar	22 - 50 mbar
D	110 - 150 mbar	60 - 95 mbar	50 - 130 mbar
E	150 - 200 mbar	90 -190 mbar	110 - 200 mbar
F	200 - 600 mbar	190 - 500 mbar	200 - 600 mbar

RG-FRG MAX-MIN SPRING RANGE P1 = 1 e 2bar

	3/4" - 1"	1.1/4 "- 1.1/2 - 2"	DN65 - 80 - 100
A	9 - 20 mbar	5 - 23 mbar	7 - 18 mbar
B	15 - 30 mbar	15 - 35 mbar	13 - 27 mbar
C	30 -110 mbar	32 - 100 mbar	22 - 50 mbar
D	90 - 150 mbar	85 - 200 mbar	50 - 130 mbar
E	140 - 320 mbar	200 -500 mbar	110 - 200 mbar
F	200 - 500 mbar		200 - 600 mbar

DIMENSION



indicative images

Model	Connection	Dimentions (mm)			Weight (Kg)
		A	B	C	
RG-FRG/2MC	1/2" - 3/4" - 1"	120	194	140	1,3
RG-FRG/2MC	1.1/4" - 1.1/2" - 2"	160	245	225	3,2
RG-FRG/2MC	DN65	290	465	330	12,1
RG-FRG/2MC	DN80	310	472	330	12,5
RG-FRG/2MC	DN100	350	504	330	17,7
RG-FRG/2MC	DN125	480	1000	560	45,5
RG-FRG/2MC	DN150	480	1000	560	45,0
RG-FRG/2MB MIN-MAX	3/4" - 1"	120	311	344	2,2
RG-FRG/2MB MIN-MAX	1.1/4" - 1.1/2"	160	368	401	3,9
RG-FRG/2MB MIN-MAX	2"	160	390	424	4,1

INSTALLATION AND CALIBRATION INSTRUCTIONS

WARNING
Installation, regulation and maintenance of the valve must be done exclusively by skill and trained people.

1. INSTALLATION

1.1 The gas supply must be shut off before installation.

1.2 Check that the line pressure DOES NOT EXCEED the maximum pressure stated on the product label.

1.3 The regulator is normally installed before the user. It must be installed with the arrow on the body towards the user.

1.4 It can be installed in any position but it is preferable the installation with the spring in vertical position. On outside the regulator, downstream of it, there is a checking pressure-tap for the control of the regulation pressure.

1.5 During installation take care not to allow debris or scraps of metal to enter the device.

1.6 If the device is threaded check that the pipeline thread is not too long; overlong threads may damage the body of the device when screwed into place.

1.7 Do not use the spring casing for leverage when screwing into place; use the appropriate tool.

1.8 If the device is flanged check that the inlet and outlet counter-flanges are perfectly parallel to avoid unnecessary mechanical stresses on the body of the device. Also calculate the space needed to fit the seal. If the gap left after the seal is fitted is too wide, do not try to close it by over-tightening the device's bolts.

1.9 Always check that the system is gas-tight after installation.

2. CALIBRATION

2.1 Before starting the system, pay attention that the standard regulation spring is suitable with the needed regulation pressure.

2.2 After removing the cap, calibrate the regulator at the minimum (completely unscrewed), then start the system and checking the regulation pressure, screw the regulator up to the needed pressure.

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