

Zero pressure regulator and gas/air ratio control series AG/RC

Zero pressure regulator and gas/air ratio control AG/RC 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.

Zero pressure regulator and gas/air ratio control AG/RC are manufactured in conformity to norm EN 88-1 and gas directive 2009/142/CE.



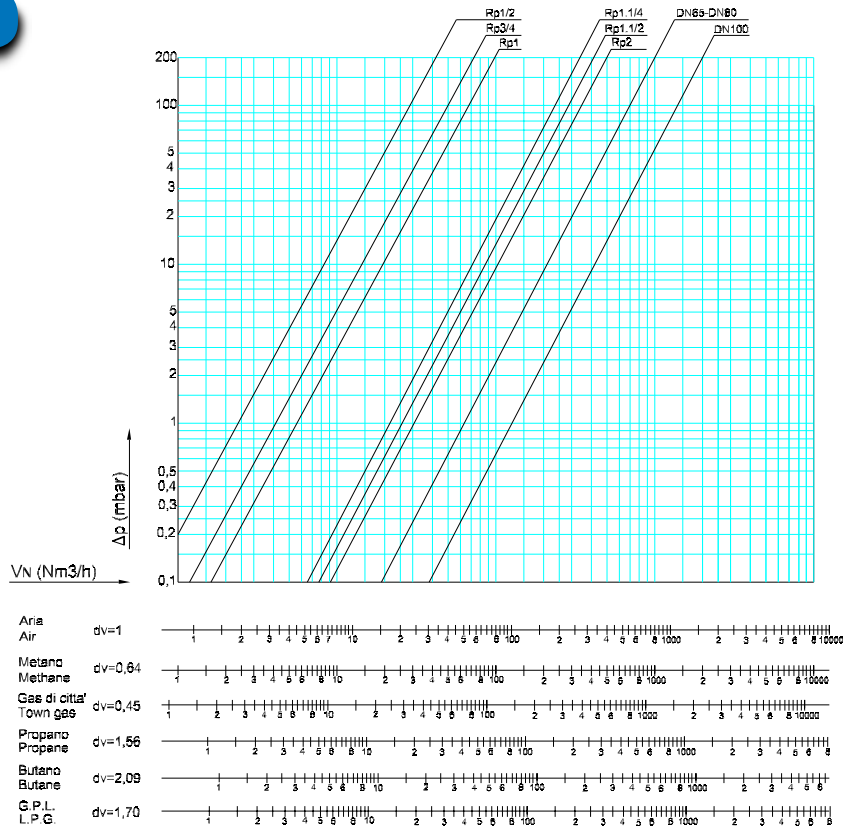
TECHNICAL FEATURES

Body valve	Die-casted aluminium
Thread connections	Rp 1/2 to Rp 2 according to norm EN 10226
Flanged connections PN16	DN25 to DN100 according to norm ISO 7005
Flanged connections ANSI 150	Available on request
Max Inlet Pressure	500 mbar
Gas/air ratio	1/1, 1/2 ÷ 1/10, 2/1 ÷ 10/1
Downstream pressure range	0,2 ÷ 120 mbar
Ambient temperature	-15 ÷ +60°C
Mechanical resistance	Group 2

FEATURES

- Zero pressure regulator and gas/air ratio control can be supplied with 50 µm filter
- Easy installation, spring regulation and maintenance
- Special execution for Biogas on request

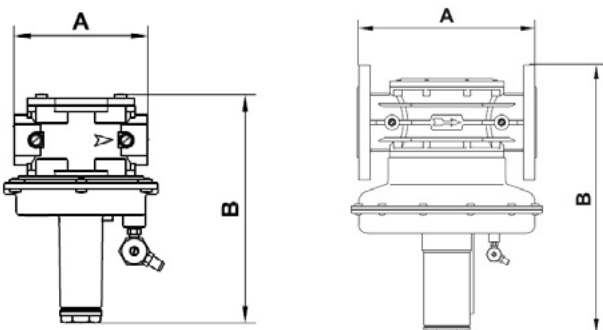
FLOW DIAGRAM



MODELS

Connection	1/1	1/2 ÷ 1/10	2/1 ÷ 10/1
1/2"	AG02	AG02R	AG02I
3/4"	AG03	AG03R	AG03I
1"	AG04	AG04R	AG04I
DN25 flanged	AG25	AG25R	AG25I
1.1/4"	AG05	AG05R	AG05I
DN32 flanged	AG32	AG32R	AG32I
1.1/2"	AG06	AG06R	AG06I
DN40	AG40	AG40R	AG40I
2"	AG07	AG07R	AG07I
DN50 flanged	AG50	AG50R	AG50I
DN65 flanged	AG08	AG08R	AG08I
DN80 flanged	AG09	AG09R	AG09I
DN100 flanged	AG10	AG10R	AG10I

DIMENSIONS



Connection	Dimensions (mm)		
	A	B	Weight (Kg)
1/2" - 3/4" - 1"	120	193	1,4
1.1/4" - 1.1/2" - 2"	160	245	3,3
DN65	290	471	12,20
DN80	310	478	12,60
DN100	350	504	17,8

GAS/AIR RATIO 1:1

This ratio is used when the plant require that the gas pressure be equal to the air one.

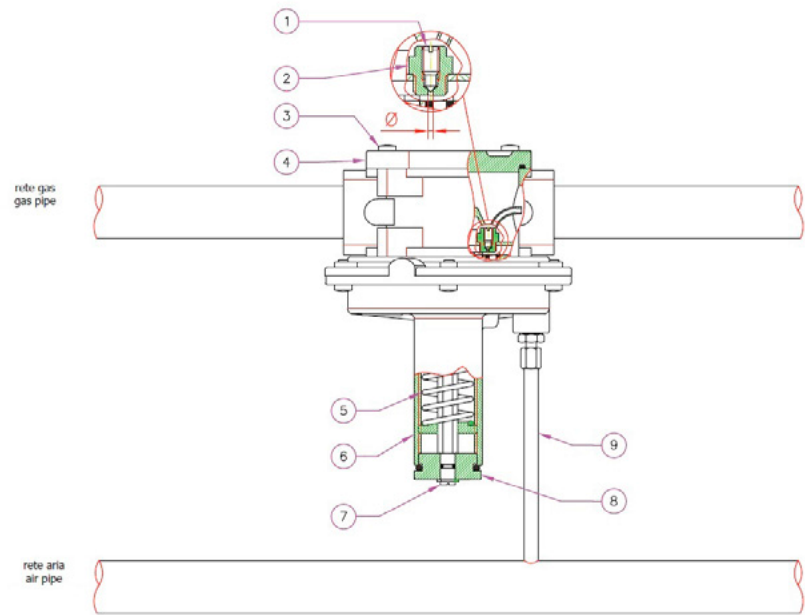
For application as air/gas ratio regulator = 1:1, the upstream gas pressure must be higher than the maximum command pressure.

The ratio regulator is command from the air pressure line. The downstream gas pressure is regulated with a ratio 1:1 comparing the control air pressure. The burner power can be changed acting on air regulation part.

The pressure fluctuations in the burner room act in an equivalent way on the air and gas flow. In this way the gas/air mixing does not get changes.

Acting on the regulation screw (7) for the regulator setting checking with a pressure gauge the gas outlet pressure and the air pressure.

1. Cap screw by-pass hole
2. By-pass
3. Cover fixing screws
4. Cover
5. Setting spring
6. Funnel
7. Zero calibration screw
8. Closing cap
9. Net/air pipe fitting (not supplied)



GAS/AIR RATIO 1/2 ÷ 1/10

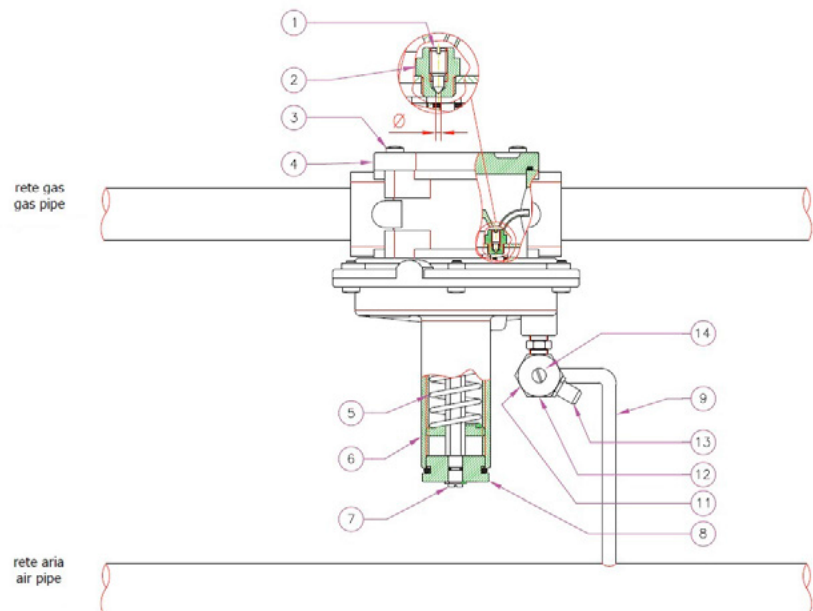
This ratio is used when the plant requires that the gas pressure would be lower than the air one.

The ratio regulator is actuated from the air line pressure. The outlet gas pressure is set with a proportional ratio settable from 1:2 to 1:10 comparing to the air control pressure. It is possible to change the burner power acting on air setting unit.

Before mounting the proportional ratio kit (12) it is needed to make the correct setting of the regulator in gas/air = 1:1 (see scheme 1).

Be sure the exhausting hole (11) (in air) is not blocked. Acting on setting screw (14) till obtaining the gas/air ratio desired checking with a pressure gauge the gas outlet pressure and the air pressure.

1. Cap screw by-pass hole
2. By-pass
3. Cover fixing screws
4. Cover
5. Setting spring
6. Funnel
7. Zero calibration screw
8. Closing cap
9. Net/air pipe fitting (not supplied)
11. Exhaust hole in air discharging
12. Proportional gas/air ratio control device
13. Pressure nipple
14. Ratio gas/air calibration screw



GAS/AIR RATIO 2/1 ÷ 10/1

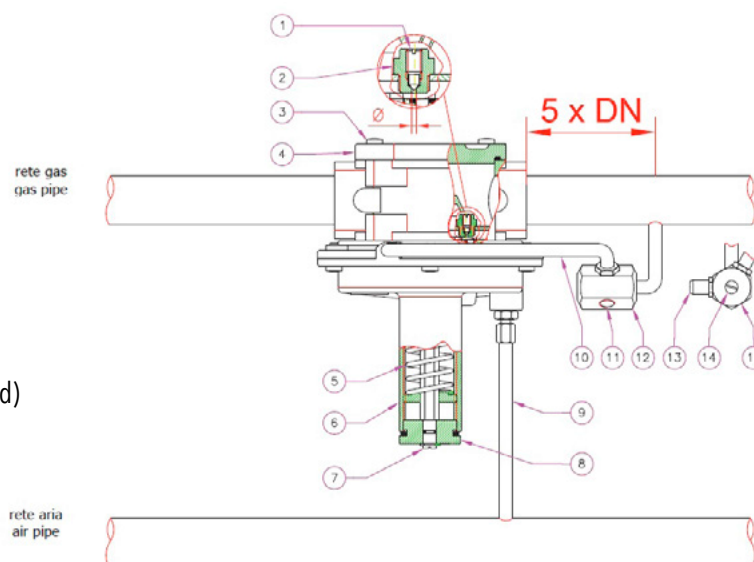
This connection is used when the plant requires the gas pressure is higher than the air one.

The ratio regulator is actuated from the air line pressure. The outlet gas pressure is set with a proportional ratio settable from 2:1 to 10:1 comparing to the air control pressure. It is possible to change the burner power acting on air setting unit.

Before mounting the proportional ratio kit (12) it is needed to make the correct setting of the regulator in gas/air = 1:1 connecting directly the pipe (10) downstream the regulator. Channel the relief (11) in the combustion room through the proper connection.

Act on the regulation screw (14) till obtaining the desired gas/air ratio checking with a pressure gauge the outlet gas pressure and the air pressure.

1. Cap screw by-pass hole
2. By-pass
3. Cover fixing screws
4. Cover
5. Setting spring
6. Funnel
7. Zero calibration screw
8. Closing cap
9. Net/air pipe fitting (not supplied)
10. Ratio proportional KIT connection tube (not supplied)
11. Exhaust hole (channel in the combustion room)
12. Proportional gas/air ratio control device
13. Pressure nipple
14. Ratio gas/air calibration screw

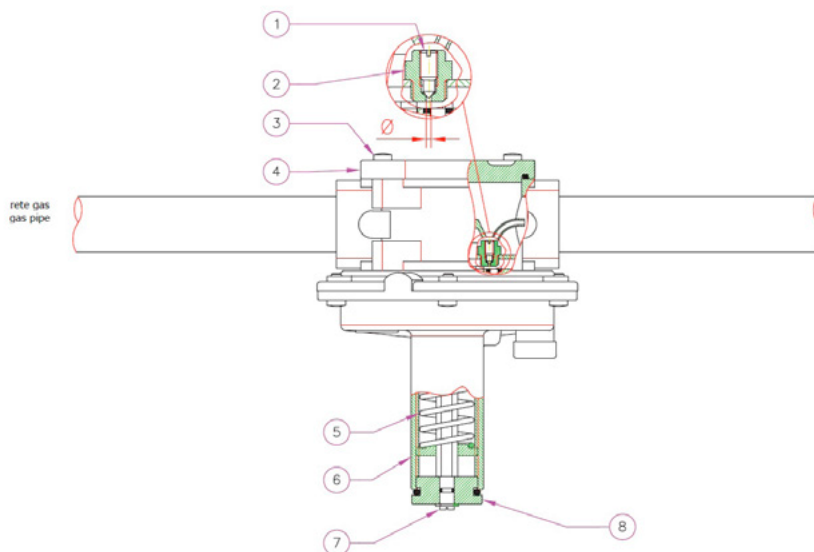


ZERO PRESSURE REGULATOR

This connection is used when the plant requires that the gas downstream pressure of the regulator is equal to zero.

Per applicazioni come regolatore di zero agire sulla vite di regolazione (7) per la taratura del regolatore controllando con un manometro la pressione di uscita del gas.

1. Cap screw by-pass hole
2. By-pass
3. Cover fixing screws
4. Cover
5. Setting spring
6. Funnel
7. Zero calibration screw



All the reported data are subject to be changed without notice.

from 181016