

# PRESSURE REGULATORS

Type R



Type R/70



Type R/72

# R Regulators

## Spring-Loaded Pressure Regulators

### Available Models



R/70 Threaded right angle connections



R/72 Threaded axial connections

### Construction Features

- Two-stage regulation
- Built-in relief valve only for following models:  
R/70 • R/71 • R/72 • R/72-FS • R/73 • R/74 • R/75
- Overpressure and underpressure slam shut valve
- Manual reset
- Built-in filter with 0.5 mm filtering capacity

### Special Models

- Without relief valve
- Without underpressure slam shut-valve
- Without overpressure slam shut-valve



R/72-FS Flanged axial connections

### Applications

Gas distribution for domestic and industrial use. Burners, furnaces, boilers and other installations requiring accurate regulation and quick response time

### Installation

Installation in multiple positions and on bearing column  
Assembly in protected environments

### Advantages

- **Regulated pressure accuracy guaranteed even in the case of strong variations in the regulator inlet pressure**
- **High flow rates even in the case of low inlet pressure**
- **Reduced overall dimensions**

## Operation

The gas enters the regulator through the inlet piping, passes through the filter and then reaches the first regulation stage where first pressure reduction takes place.

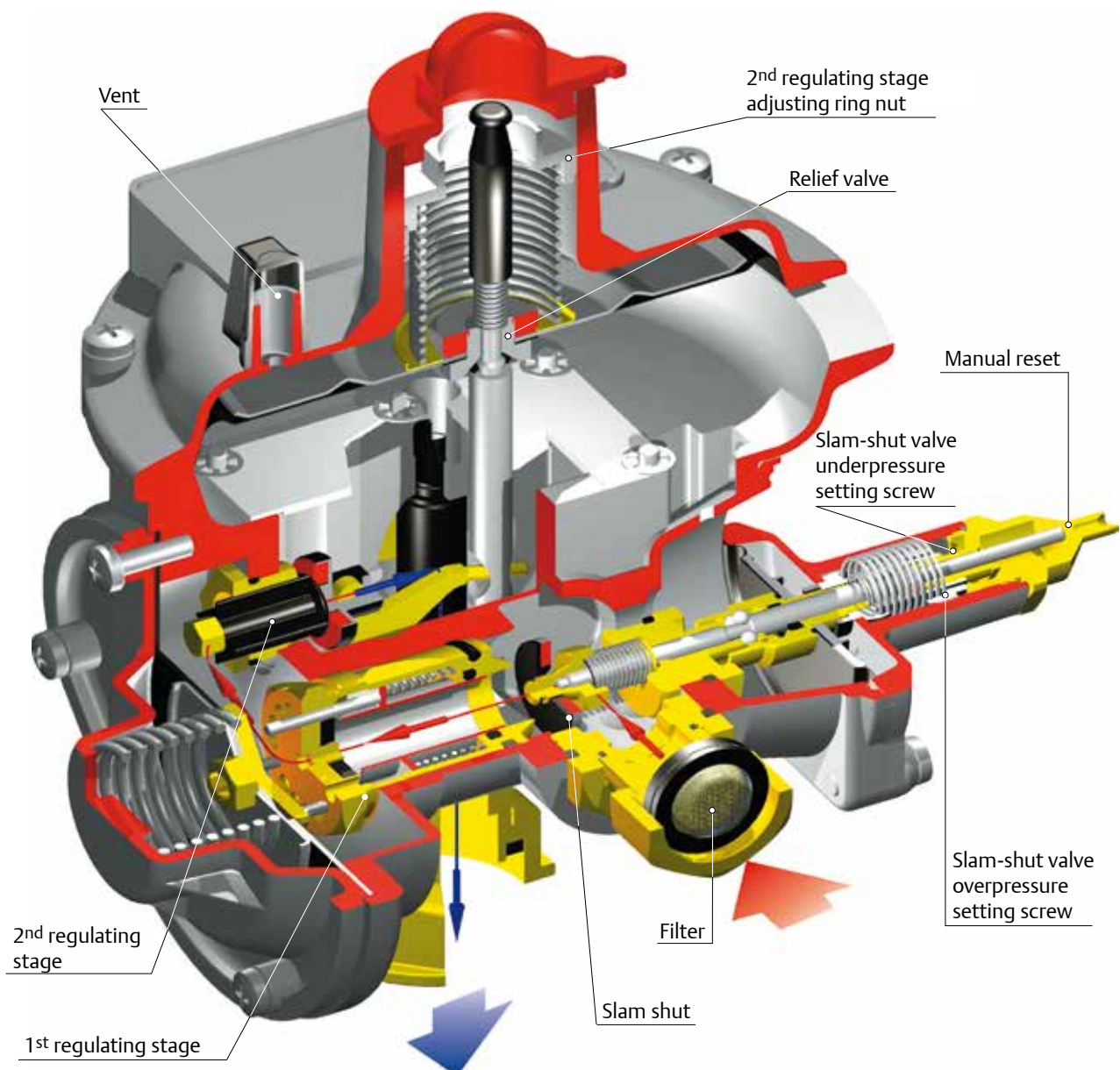
Due to this pressure, the gas arrives at the second regulating stage where a second pressure reduction takes place according to the setpoint (set by means of the provided adjusting ring nut).

The regulator is equipped with a manual reset slam-shut valve which triggers if the downstream pressure is not within established set ranges.

Slam-shut valve overpressure and underpressure set values can be adjusted by means of the provided setting screws.

The regulator is also equipped with a built-in relief valve which, in case of gas leakage at zero flow, allows to release small quantities of gas thus avoiding the slam-shut valve to trigger.

The setpoint of the relief valve (usually 10 mbar higher than the downstream pressure) cannot be adjusted.



# R Regulators

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## Features

### Technical Features

#### R/70 • R/71 • R/72 • R/72-FS • R/73 • R/74 • R/75

Permissible inlet pressure	$P_{umax}$ : 6 bar
Inlet pressure range	$b_{pu}$ : 0.1 to 6 bar (*)
Set range	$W_d$ : 15 to 70 mbar
Accuracy class	AC : up to $\pm 5\%$
Lock-up pressure class	SG : up to + 10 %

#### R/70-AP • R/71-AP • R/72-AP • R/72-FS-AP • R/73-AP • R/74-AP • R/75-AP

Permissible inlet pressure	$P_{umax}$ : 10 bar
Inlet pressure range	$b_{pu}$ : 0.1 to 10 bar (*)
Set range	$W_d$ : 70 to 300 mbar
Accuracy class	AC : up to $\pm 5\%$
Lock-up pressure class	SG : up to + 10 %

#### Built-in Slam Shut-Valve

Overpressure set range	$W_{do}$ : 30 to 380 mbar
Underpressure set range	$W_{du}$ : 8 to 155 mbar
Accuracy class	AG : $\pm 5\%$
Response time	$t_a$ : $\leq 1$ s

(\*) According to the standards enacted

#### Temperature

Working -20 °C +60 °C

#### Connections

<b>R/70 • R/70-AP</b>	: G 3/4" x G 1 1/4" UNI ISO 228/1 - right angle (3/4" soft seal x 1 1/4" GAS)
<b>R/71 • R/71-AP</b>	: G 3/4" x G 1 1/4" UNI ISO 228/1 - right angle (3/4" metallic seal x 1 1/4" GAS)
<b>R/72 • R/72-AP</b>	: G 1" UNI ISO 228/1 - axial flow (1" GAS)
<b>R/72-FS • R/72-FS-AP</b>	: DN 25 PN 16 - axial flow
<b>R/73 • R/73-AP</b>	: G 1 1/4" UNI ISO 228/1 - axial flow (1 1/4" GAS)
<b>R/74 • R/74-AP</b>	: G 3/4" x G 1 1/4" UNI ISO 228/1 - axial flow (3/4" soft seal x 1 1/4" GAS)
<b>R/75 • R/75-AP</b>	: G 3/4" x G 1" UNI ISO 228/1 - axial flow (3/4" soft seal x 1" GAS)

## Features

<b>Materials</b>	Body	: Die-cast Aluminium
	1st and 2nd stage cover	: Die-cast Aluminium
	Slam-shut valve cover	: Die-cast Zama
	Connections	: Brass
	Seals	: Nitrile Rubber NBR
	Slam-shut valve diaphragm	: Nitrile Rubber NBR
	1st and 2nd stage diaphragm	: Clothed Nitrile Rubber NBR



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## Flow rates

Outlet Pressure (mbar)	Inlet Pressure (bar)							
	0.1	0.2	0.3	0.4	0.5	0.75	1 ÷ 6	1 ÷ 10
15	25	35	50	60	70	70	75	-
20	25	35	50	60	70	70	75	-
30	25	30	45	55	70	70	75	-
40	25	30	40	50	65	70	70	-
50	20	30	40	50	65	70	70	-
60	15	30	40	50	60	60	65	-
70	15	30	40	45	55	60	60	-
70	20	30	40	45	55	70	-	100
80	20	30	35	45	55	70	-	95
90	20	30	35	45	50	70	-	90
100	-	20	30	35	45	65	-	80
150	-	20	30	35	45	60	-	75
200	-	-	25	30	40	50	-	70
250	-	-	20	30	40	50	-	60
300	-	-	-	25	30	45	-	60

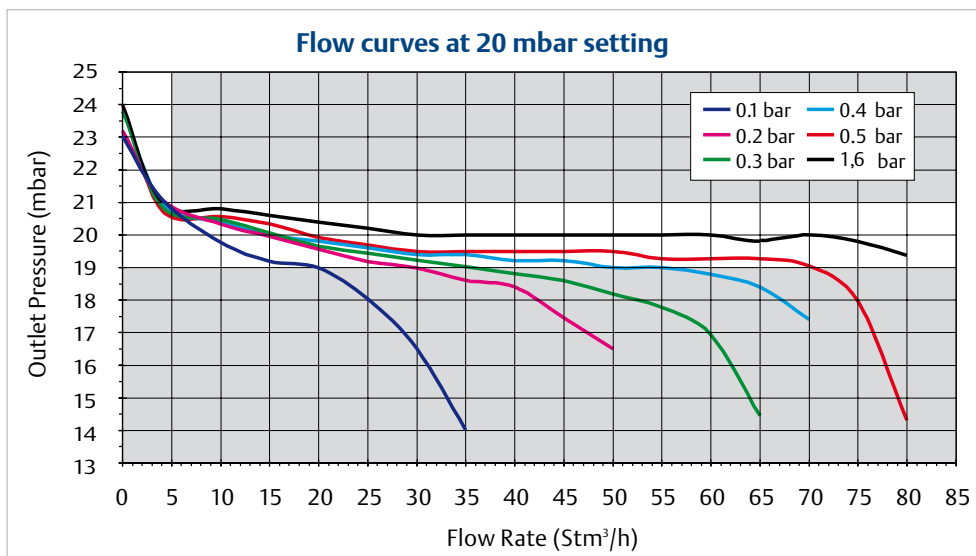
□ R/70 • R/71 • R/72 • R/72-FS • R/73 • R/74 • R/75

■ R/70-AP • R/71-AP • R/72-AP • R/72-FS-AP • R/73-AP • R/74-AP • R/75-AP

Flow rate values in Stm<sup>3</sup>/h refer to natural gas with 0.6 relative density.

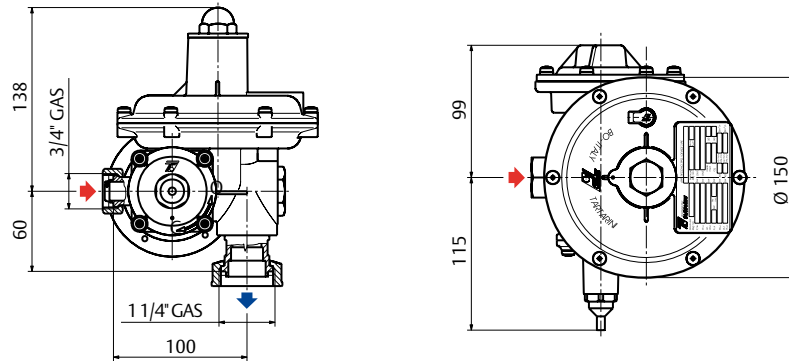
For other gases multiply the flow rate by the conversion factor (F) as indicated in the following table.

Gas	Relative Density d	Factor F
Air	1	0.78
Butane	2.01	0.55
Propane	1.53	0.63
Nitrogen	0.97	0.79

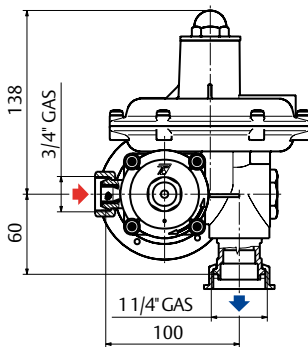


## Overall dimensions (mm)

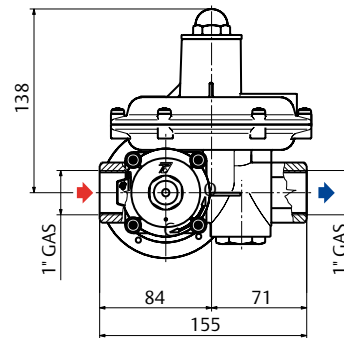
R/70 • R/70-AP



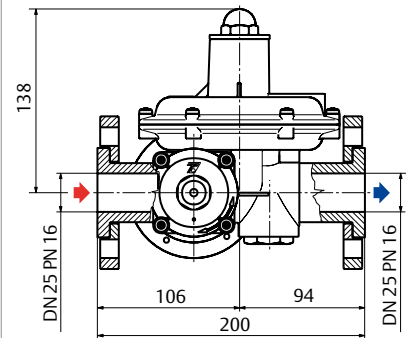
R/71 • R/71-AP



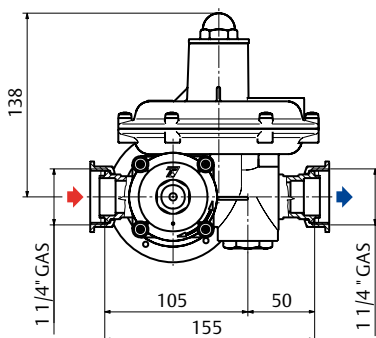
R/72 • R/72-AP



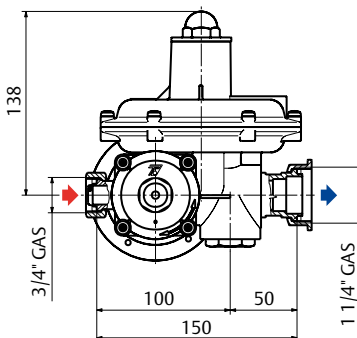
R/72-FS • R/72-FS-AP



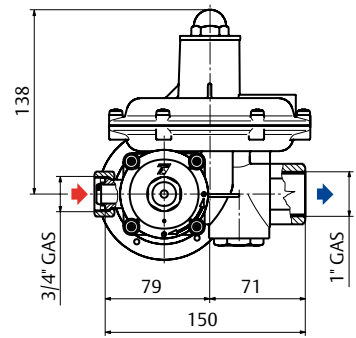
R/73 • R/73-AP



R/74 • R/74-AP



R/75 • R/75-AP





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