

PRESSURE REGULATOR EQA E67

Series 67 regulators are used to provide constant pressure for pressure controllers and other instruments that need an accurate grading for input pressure.

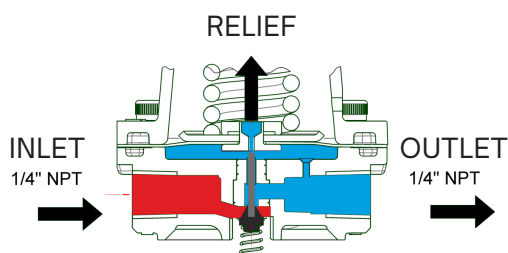
These self-operated regulators can be adapted to most uses of natural gas, LPG, and other non-corrosive gases.

They are widely used for instrumentation and small burners where working pressure must be kept at a constant rate.

We are able to offer EQA Type 67 pilot models with and without filter. This filter element separates the particles present in the flow, protecting the sealing system and delivering a clean flow to the main instrument.

The 67 FR pilot has a purge system before the filter which allows the draining of liquids that might get into the system.

The 67 FR and R pilot can be supplied with an overpressure relief system against occasional overpressures.



TECHNICAL DATA

Connections		1/4" NPT				
Working temperature		-20°C to 60°C				
		R	R2	FR	HR	HR i
Weight		0.54 Kg	1 kg	0.66 kg	1.6 kg	2.4 kg
Working Range	Inlet pressure	22 bar máx.	22 bar máx.	22 bar máx.	90 bar máx.	90 bar máx.
	Max. outlet pressure	7 bar	7 bar	7 bar	7 bar	40 bar
	Min. Outlet pressure	0.5 bar	0.5 bar	0.5 bar	0.5 bar	0.5 bar
Filter		NO	YES	YES	YES	YES

MATERIALS

Main Body	Aluminum	Brass	Aluminum	Stainless *	Stainless *
Bonnet	Aluminum	Aluminum	Aluminum	Aluminum	Stainless **
Diaphragm	NBR	NBR	NBR	NBR	NBR
Seal and obturator	NBR	NBR	NBR	NBR	NBR

* Brass option available.

** Carbon steel option available.



FLOW RATE CONVERSION

TO OBTAIN	CUBIC FOOT PER HOUR	CUBIC METER PER HOUR	CUBIC FOOT PER DAY	CUBIC METER PER DAY
MULTIPLY	(Scf/h)	(Scm/h)	(Scf/d)	(Scm/d)
Cubic foot per hour	1	0.028	24	0.672
Cubic meter per hour (15°C, 1.01325 bara)	35.71	1	857.04	24
Cubic foot per day	0.0417	0.0012	1	0.028
Cubic meter per day	1.4879	0.0417	35.71	1

UNIT CONVERSION

TO OBTAIN	POUNDS PER SQUARE INCH	INCHES OF WATER COLUMN W	MILIMETER S OF WATER COLUMN W	INCHES OF MERCURY	MILIMETER S OF MERCURY	BAR	MILIBAR	KILOGRAMS PER SQUARE CENTIMETER	KILOPASCALS
MULTIPLY	psi	in H2O	mm H2O	in Hg	mm Hg	bar	mbar	Kg/cm ²	Kpa
psi	1	27.68	703.1	2.036	51.7	0.06895	68.95	0.0703	6.895
in H2O	0.0361	1	25.4	0.07355	1.87	0.002491	2.491	0.00254	0.22491
mm H2O	0.0014	0.0394	1	0.00289	0.07355	0.000098	0.0981	0.0001	0.00981
in Hg	0.4911	13.6	345.4	1	25.4	0.03386	33.86	0.03453	3.386
mm Hg	0.01934	0.535	13.6	0.03937	1	0.001333	1.333	0.00136	0.1333
bar	14.5	401.5	10198.1	29.53	750.06	1	1000	1.02	100
mbar	0.0145	0.4015	10.1981	0.02953	0.7501	0.0001	1	0.00102	0.1
Kg/cm ²	14.22	393.7	10000	28.96	735.58	0.9807	980.7	1	98.07
Kpa	0.145	4.015	101.98	0.2953	7.501	0.01	10	0.0102	1



Capacity

Series 67 pressure regulators are designed for equipment and instrumentation that require constant pressure and low flow rates.

The series 67 works with an 8.5 flow coefficient (Cv) for natural gas with a 0.6 specific gravity (SG).

To estimate the flow coefficient (Cv), use the following information:

- Q= Sm³/h flow.
- P1= Absolute inlet pressure.
- P2= Absolute outlet pressure.
- d= Specific gravity (SG).
- t= Temperature in °C

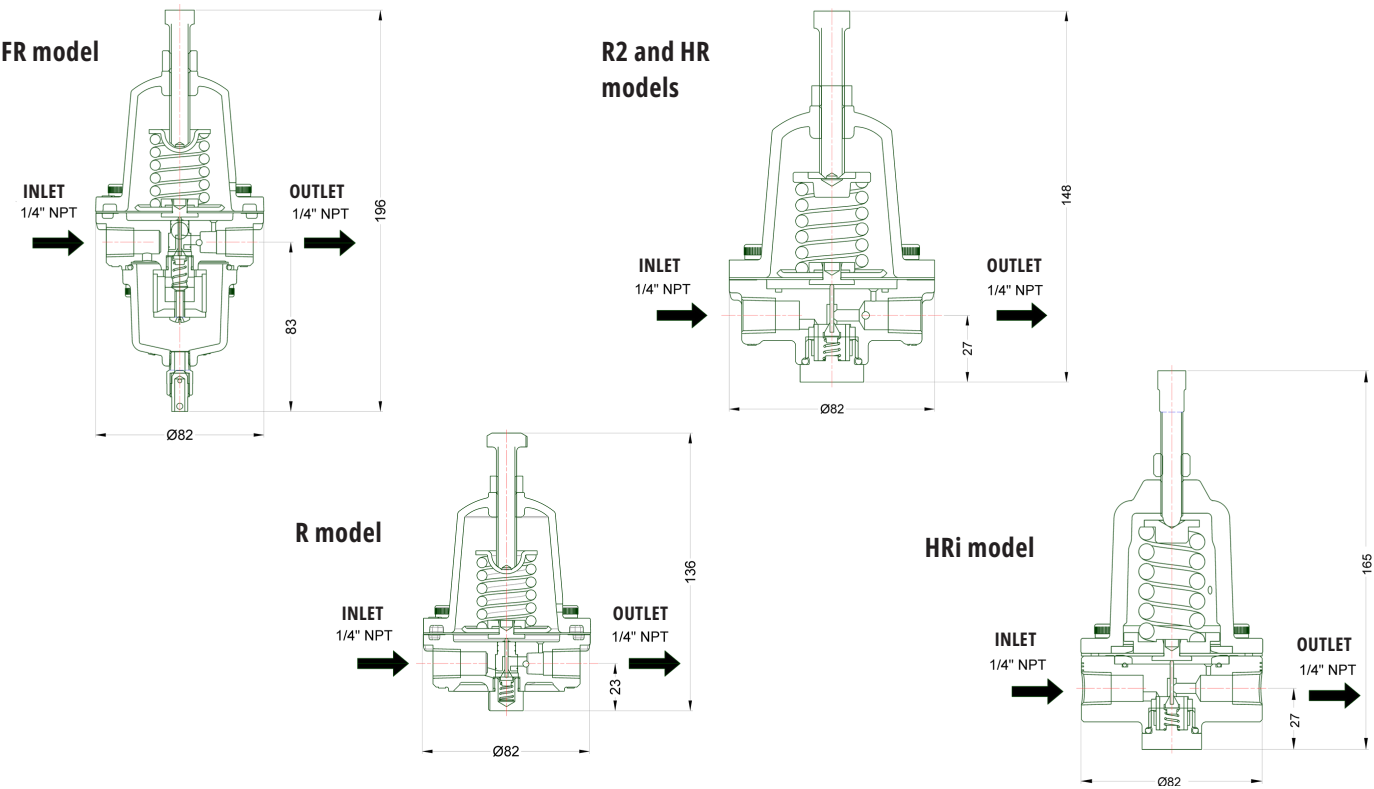
GAS	DENSITY	K FACTOR
BUTANE	2	0.55
PROPANE (LPG)	1.5	0.63
CARBONIC ANHYDRIDE	1.5	0.63
OXIGEN	1.1	0.74
AIR	1	0.77
NITROGEN	0.97	0.79
ACETYLENE	0.9	0.82
AMMONIA	0.59	1.02
HIDROGEN	0.07	3

To obtain capacities with other gases, multiply the K factor by the calculated flow.

CRITICAL REGIME P1 ≥ 2P2 $C_g = \frac{Q}{6,97 \times P_1} \times \sqrt{d \times (273,15+t)}$

SUBCRITICAL REGIME P1 < 2P2 $C_g = \frac{Q}{13,94} \times \sqrt{\frac{d \times (273,15+t)}{P_2 \times (P_1-P_2)}}$

OVERALL DIMENSIONS (mm)



At EQA, we strive to minimize our environmental impact through sustainable and responsible practices. For this reason, we invite you to join our commitment and, at the end of the product's life cycle, adhere to the current Municipal, Provincial, and National regulations when classifying, recycling, destroying, or disposing of the product, spare parts, non-reusable parts, or packaging. In this way, we prevent damage to the environment and also promote, together, the reuse and recycling whenever possible. We appreciate your commitment and effort in joining these actions.