

PRESSURE REGULATORS

EQA S-218

The S-218 pressure regulator belongs to the S-200 series of regulators, widely used in commercial and industrial installations, where the inlet pressure is up to 4 bar, and provides a regulated pressure from 20 mbar to 30 mbar.

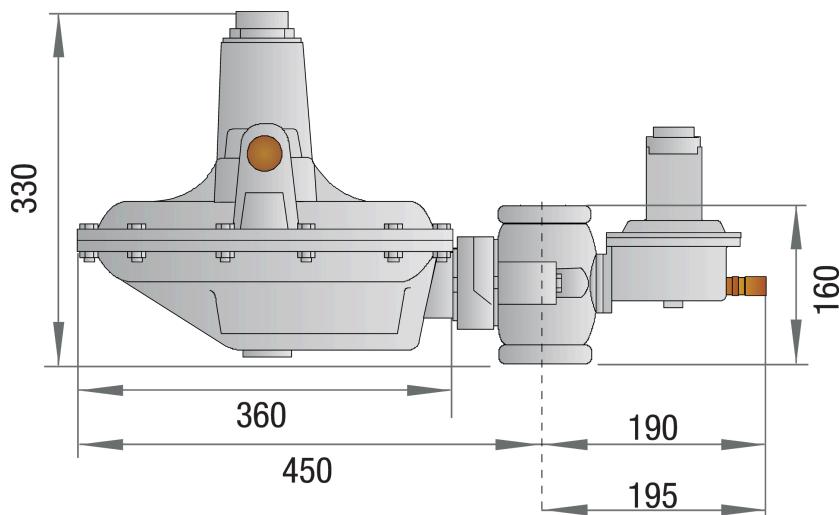
It has protection against excesses in the regulated outlet pressure, by means of its manually resettable locking system.

Although it is a direct acting regulator, it has an internal compensated system to stabilize the obturator and achieve much higher capacities than similar regulators in its line, even replacing piloted regulators.

Its connection to the pipe is made by means of Ø 2" threads at the inlet and outlet. The installation position is indistinct and the diaphragm box can be rotated 360° with respect to the body.



DIMENSIONS in mm.





CAPACITY TABLE in Nm ³ /hour Sensitivity 10%	
Inlet Pressure (bar)	Regulated Pressure 0.02 (bar)
0.5	200
1	260
1.5	680
2	800
2.5	800
3	800
3.5	800
4	800

GAS	DENSITY	K FACTOR
Butane	2	0.55
Propane (LPG)	1.5	0.63
Carbon Dioxide	1.5	0.63
Oxygen	1.1	0.74
Air	1	0.77
Nitrogen	0.97	0.79
Acetylene	0.9	0.82
Ammonia	0.59	1.02
Hydrogen	0.07	3
Biogas*	máx 1.2 mín 0.8	0.7 0.75

*The proper operation is guaranteed only for treated Biogas (Low content of sulfur)

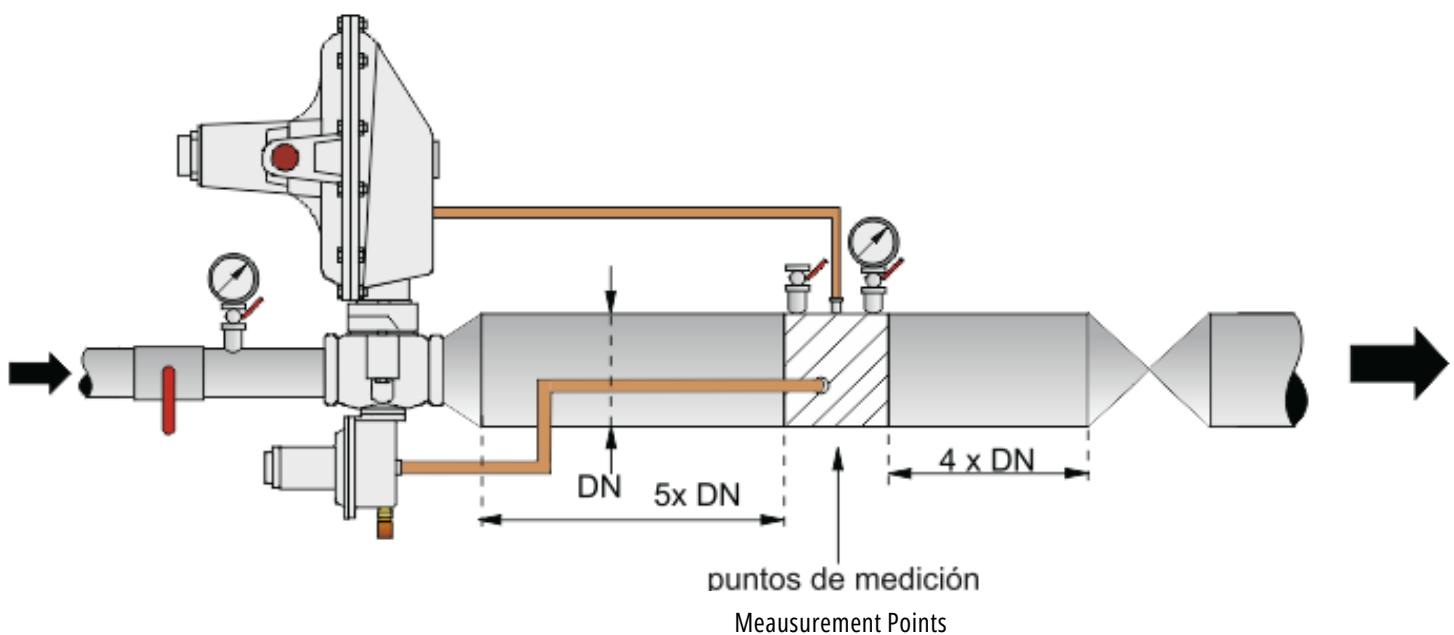
In order to calculate capacities with other gases, multiply the values of the chart by K factor.

INITIAL START-UP OR IN CASE OF SAFETY VALVE ACTIVATION

It is advisable to perform the start-up using pressure gauges suitable for the regulator's inlet and outlet pressures to monitor this procedure.

1. Close the downstream shut-off valve.
2. Slowly open the shut-off valve upstream of the regulator.
3. GENTLY pull the reset, allowing a small flow of gas to pass through the valve until the downstream piping is filled.
4. Hold the RESET for a few seconds until it latches (this will only be possible when the regulation pressure is within the established parameters).
5. Slowly open the downstream shut-off valve.

INSTALLATION SCHEMA



FLOW RATE CONVERSION

TO OBTAIN	CUBIC FOOT PER HOUR (Scf/h)	CUBIC METER PER HOUR (Scm/h)	CUBIC FOOT PER DAY (Scf/d)	CUBIC METER PER DAY (Scm/d)
MULTIPLY				
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	MILIMETERS OF WATER COLUMN	INCHES OF MERCURY	MILIMETERS OF MERCURY	BAR	MILIBAR	KILOGRAMS PER SQUARE CENTIMETER	KIOPASCALS
MULTIPLY	psi	in H ₂ O	mm H ₂ O	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 H ₂ O	0.0361	1	25.4	0.07355	1.87	0.002491	2.491	0.00254	0.22491
mm H ₂ O	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	0.001	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

INSTALLATION RECOMMENDATIONS

It is very important to pay attention to the position of the regulator vent as it also acts as a vent. If it becomes obstructed it can cause dangerous operation of the installation. Therefore it must be protected from water, dust or other dangerous elements. In general, it should always be installed downwards.

If the regulator is to be installed in a closed room (only allowed for the 2nd stage), a vent pipe of not less than Ø ¾" must be installed to evacuate possible gases vented by the regulator.

If the regulator will be installed in a subway tank, the vent must be elevated with a pipe above the possible water level.

Any gas leakage outside the valve indicates that service should be shut off and a service technician should be contacted.

Only a qualified technician should install or repair the regulator.

Whenever a spare part or service is requested, mention the valve plate data (Model - Serial No. - Pressures - Orifice - Flow rate).

INSTALLATION

Before installing the regulator, inspect if there was any damage during transportation. If it does not have any of the protective plastic plugs, verify that no element has entered through the connections.

Vent the supply pipe several times until no particles come out (this is the cause of most start-up problems).

The regulator can be installed in any position as long as the gas flow direction indicated by the arrow on the body is respected and the venting orifice is not obstructed or exposed to rain or dust. It must also be protected from possible shocks caused by vehicular traffic.

The vent hole should be checked periodically to ensure that it is not clogged.

It is always advisable to install 2 regulating branches with upstream and downstream block valves independently of each other, to avoid cutting off the gas during maintenance or repair.

 At EQA, we strive to minimize our environmental impact through sustainable and responsible practices. Therefore, we encourage you to join our commitment and, at the end of the product's lifecycle, adhere to the current Municipal, Provincial, and National regulations regarding the classification, recycling, destruction, or disposal of the product, spare parts, non-reusable parts, and packaging. By doing so, we prevent environmental damage and promote reuse and recycling whenever possible. Thank you for your commitment and efforts in joining these actions.