



# CONTROL AND SECURITY

## PRESSURE REDUCING VALVE



Compact



Energy saving



Silent

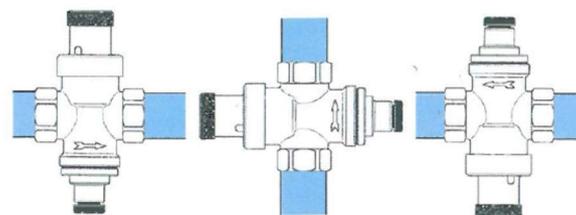


This range of pressure reducers are suitable for small installations, such as domestic ones. The installation of the pressure reducing valve in a domestic water system allows to reduce and stabilize the water supply of the network. Its installation is recommended for:

- Prevent excessive network pressure from damaging hydraulic devices.
- Maintain constant use pressure with variable inlet pressure.

Pressure reducing valves must be installed in the pertinent branches or branches so that the maximum service pressure established in the CTE section HS4 - 2.1 Installation properties is not exceeded. Minimum supply conditions.

TECHNICAL DATA	
Maximum allowable pressure	16 bar
Outlet pressure	1 to 6 bar
Preset pressure	3 bar
Operating temperature	From 0°C (except freezing) to 90°C
Pipe connection	1/2" and 3/4" Female (ISO 228)
Pressure gauge connection	1/4" EN 10226 (ISO 228)
Compatible fluids	Hot and cold water



The pressure reducing valve can be mounted in any position, but the flow direction must always be respected. It is not advisable to install a by-pass.

MATERIALS	
Body and cover	Brass UNE-EN 12165-12164
Seat	EPDM
Piston	Brass UNE-EN 12165-12164
Spring	AISI 304
Joints	EPDM
O-Rings	EPDM
External finished	Nickle plated EN12540

It is recommended to install a filter before the installation of the pressure reducer, to eliminate the impurities, present in the water that could accumulate in the valve seat, causing its malfunction.

The internal piston structure in techno polymer guarantees rigidity, resistance, and high regulation precision, thanks to the balanced seat. The O-rings in EPDM peroxide elastomer, with low coefficient of friction, guarantee wear resistance, limitation of maintenance interventions and optimum resistance in all working conditions.

The piston pressure reducing valve applies to air conditioning systems, sanitary installations for water supply, irrigation and distribution systems, compressed air (without misted oils, fire pipes) and sanitary installations for water supply in buildings.

### Security requirements



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Never exceed the maximum service values. The fluid passing through the regulator must not exceed the maximum admissible temperature and / or pressure. Use the pressure reducer only with compatible fluids. If the reducer is placed at the entrance of accumulators, boilers, or hot water thermoses, it is essential to install, after the reducing valve, an expansion vessel for sanitary use, even if a check valve is already installed.

Do not remove the pressure regulator before you have completely relieved the system pressure. The pressure reducing valve must be installed by qualified personnel, as established by national safety legislation. Failure to follow these instructions can lead to improper installation, improper commissioning, or lack of maintenance, which can lead to improper operation and damage to property or people.

When mounting the pipe connection fittings make sure they are not leaking. Water leaks, even if small, can cause considerable damage. Water leaks at a temperature above 50°C can cause serious burns and dangers for people, therefore, the necessary precautions must be taken to avoid them.

#### Regulation

The valve is pre-calibrated at an outlet pressure of 3 bar. The manometer (item supplied loose) indicates the value of the reduced pressure (P) of the fluid at the outlet. To mount the manometer remove cover D (Fig.1). To obtain a different gearbox calibration, proceed as follows:

- Make sure that the water flow follows the direction of arrow C (Fig.1).
- Close the shutoff valve located downstream of the reducer.
- Remove the plastic cover A (Fig.1).
- To REDUCE the outlet pressure, remove the plastic cover D (Fig.1) insert the screw and turn the adjusting screw B (Fig.2) with the help of an Allen key anticlockwise and to INCREASE the pressure, turn the screw clockwise.
- After each action on adjusting screw B (Fig.2), lower the outlet pressure by opening the shut-off valve and close again after a few moments. Check that the pressure at the outlet of the reducing valve corresponds to that desired.
- Replace the plastic cover A (Fig.1).

Take note of the pressure value established for future maintenance actions.



Fig.1



Fig.2

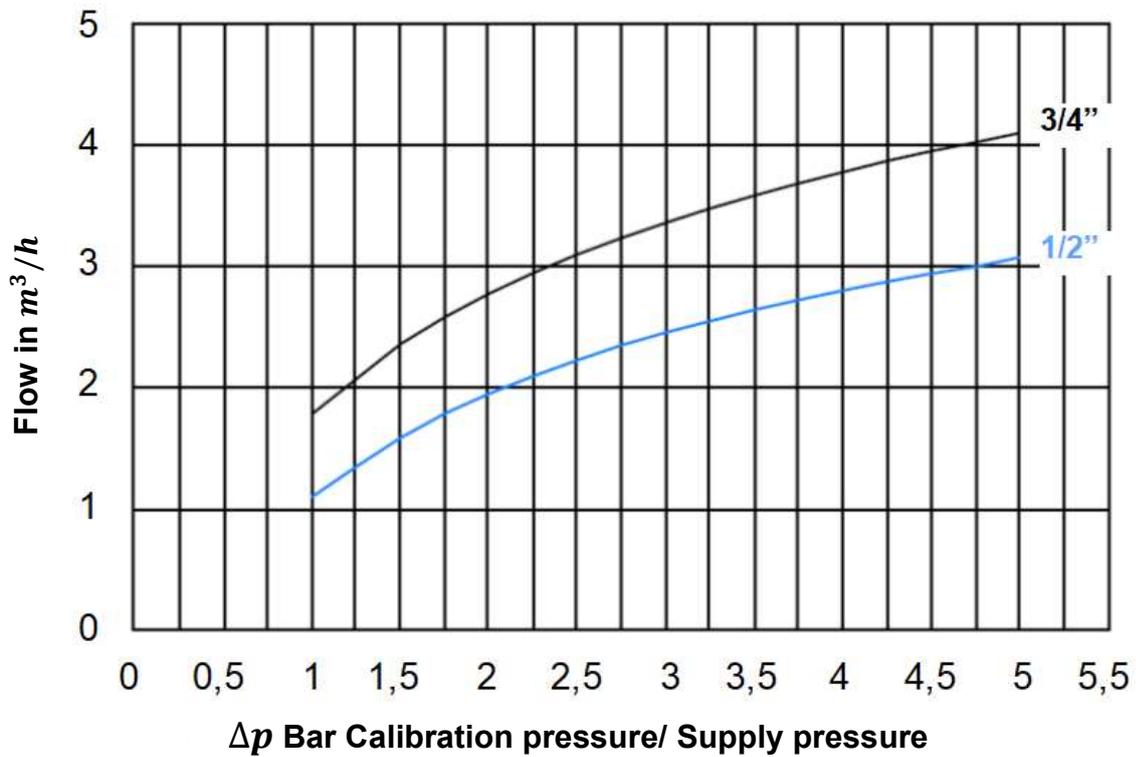
In order to choose the most suitable pressure reducers, we recommend following the indications in the following diagram. It indicates the best operating pressure for each size. With these values it is possible to achieve a better operation, a quieter system and less loss of pressure in the valve.



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### PRESSURE REDUCING VALVE

Pressure reducing valve pn16 (1/2" - 3/4")



Max. pressure 16 bar / outlet pressure 1 to 6 bar

Code	Ø	Ø1	Ø2	A	h	B	C
41018	1/2"	34	28	49	85	36	49
41019	3/4"	34	28	52.5	90	38.5	51.5