

### GENERAL

Pressure Reducer Valve is utilized in water systems for reducing and stabilizing the pressure throughout the system. It represents a vital component for every system that receives wide fluctuations of water pressure, as it achieves the desired level of operating pressure of the entire system. The design of the pressure valve is according to the EN-1567 standard and suitable to sustain a maximum upstream pressure of **25 bars**. The valve is featuring the Pre-adjustable setting which allows the adjustment of the desired pressure, before it is installed and delivers to the system (DN15 / PN25).

### TECHNICAL SPECIFICATIONS

The valve design and manufacture process results in a final product that delivers the maximum flow on a minimum noise level, even in the low end of the operating upstream pressure range. This design sets the standard for this valve and makes it ideal for water mains installation, draining installation, HVAC and refrigerant systems, as well as for the most demanding industrial applications. As the piston of the valve is constantly in motion, the way to achieve sufficient sealant performance is by utilizing stainless steel valve seats, which also offer increased lifetime expectancy. The valve is also equipped with stainless steel filter element, filtering all small size debris and burr flowing through the feed/upstreaming system. Replacement of the filter is also a key feature of the valve, as it is very straightforward process, without the need to disassemble the valve entirely. Additionally, there are two points for installing pressure gauges, taking inlet and outlet valve pressure readings.

- Pressure Indicator Handle**, ranged from 0.5 up to 6.5 bar  
Acetal (POM), polymer material
- Adjustment Mechanism Cap**  
Hot forged brass (CW617N)
- Adjustment Mechanism**  
Brass made (CW614N)
- Compensating Piston Compression Spring**  
Galvanized steel
- Threaded 1/4 Cap in Position of Pressure Gauge**  
Brass made (CW614N)
- Operation Diaphragm**  
NBR sh70 double layer mesh
- Main Operation Mechanism**  
Brass made (CW614N)
- Connection Terminal Threads**  
Male 3/4" & Female 1/2"
- Pressure Reducing Valve Unit**  
Hot forged brass (CW617N)
- Valve Maintenance Cover**  
Hot forged brass (CW617N)
- Filter Protection Cap**  
Polycarbonates (PC), polymer material
- Filter**  
Stainless Steel, Mesh of 0.2mm
- Terminals 1/2 and 3/4**  
Brass made according to ISO228
- Gasket**  
NBR sh70
- Operation Diaphragm Seat**  
Acetal (POM), polymer material

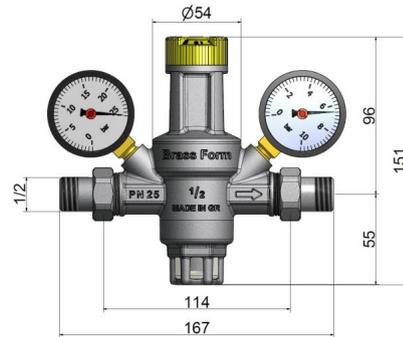
### SPECIAL FEATURES

- Pre-adjustable pressure indication from **0.5 to 6.5 bars**
- Maximum inlet pressure **25 bars**
- Valve Operating tolerance  $\pm 0.2$  bar
- Factory pre-set setting at 3.5 bar
- Visible stainless steel filter, mesh size 0.20mm – fast and easy maintenance procedure



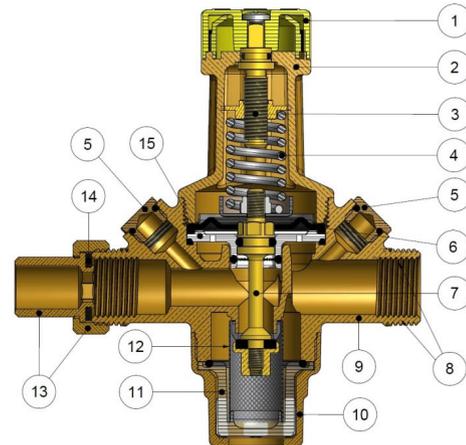
Corporate video

- Two terminal pressure gauge connection points, for measuring Downstream and Upstream pressure (gauges are sold separately)
- Operating Temperature Range from +5°C to +80°C
- Terminal Connection Threads option 1/2 or 3/4



### SETTING INSTRUCTION

The Pressure Reducing Valve has factory pre – set at 3.5 bar. It utilizes the option to set the desired outlet pressure value, before installing it on the system. To achieve the desired pressure value, turn the adjustment knob in a clockwise direction, to increase, or anti-clockwise direction to reduce the pressure setting.

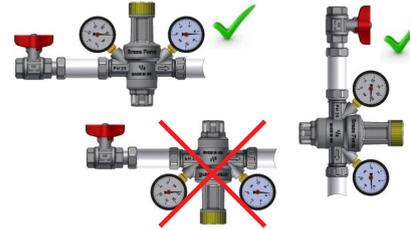


### INSTALLATION

The Reducing Valve should be installed in such manner so that the flow arrow is ALWAYS in accordance with the water flow in the system. The Unit flow arrow is carved on the face of the brass body of the Reducing Valve.

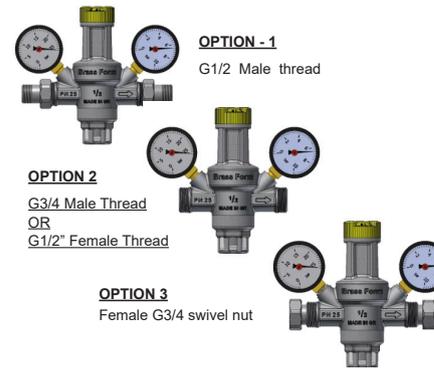


**CAUTION:** The Reducing Valve should NEVER be installed on an upside down manner (see image below)



### TERMINAL CONNECTION OPTIONS

The Pressure Reducing Valve is available with Male 3/4" and Female 1/2" (ISO 228). Additionally combine the 1/2 tail-end fitting and G3/4 nut to achieve a Female 3/4" swivel nut, offering numerous options for installation, delivering connections at variable length size, making the refurbish of old installations an easy job. It is also a plus for new installations where connection length size varies.



### INSTALLATION

Set the adjustment knob to the desired operating pressure and proceed with the installation of the Reducing Valve on the system – always mind the flow arrow direction.

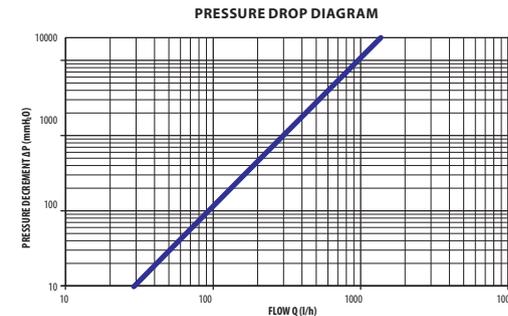
In order to manage an easy installation, shut-off valves before and after the Reduction Valve are essential, so that maintenance and repairing operations are totally isolated from the system flow.

After setting and installing the Reducing Valve, slowly and steadily open the upstream (inlet) shut-off valve, so that water flows into the unit.

Always check that pressure setting is always according to the pressure reading on the downstream (outlet) gauge.

When the desired pressure is achieved and indicated on the gauge (outlet), open the downstream (outlet) shut-off valve, filling the system.

Please allow considerable time for the system to fill in and reach the setting pressure value. When it is filled, the Reducing Valve mechanism will automatically control the system pressure to the desired value.



### MAINTENANCE INSTRUCTIONS

The utilization of a visible, easy to replace filter element inside the Reducing Valve Unit, offer the option to perform maintenance procedures whenever it is considered needed, extending the lifetime expectancy of the product. Also, maintenance of the Reducing Valve offers a better flow of the system, as it now deliver nominal flow since the filter is always free of debris and particles.

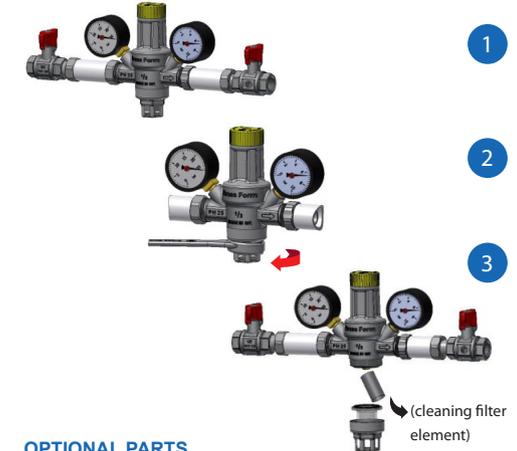
The innovative design of the lower end of the unit makes maintenance an easy process, with no need of disassembling and re-installing the unit back to the system.

Furthermore, there no need for special tools in order to perform maintenance work on the unit. The process now requires a basic toolset.

This way, not only the maintenance of the filter is an easy job, also the replacement of the filter is easy too.

For the maintenance procedure, please note the following steps:

- Isolate the Reducing Valve for the system, closing the shut-off valves before and after the unit.
- Using the correct hand-tool, carefully undo the filter cover – always in mind to grab the part from the solid hex form of its surface. **CAUTION: NEVER** attach the tool on the clear/visible part of the cover.
- Remove the filter element and carefully visually check if there is the need to cleaning the part. If indeed cleaning is needed, do so in such a way that the mesh does not suffer damage in any way. In case of damaging the filter mesh, replace the element with a new one.
- Reversing the process, put back together the sealing o-ring, the filter element, the clear protective cap and finally the cover using the correct hand-tool we used in the beginning.



### OPTIONAL PARTS

