

# Figure - 143

## PRESSURE REDUCING VALVE



**Figure - 143**

- Brass pressure reducing valve;
- Specific for potable water;
- PN 25;
- Adjustable outlet pressure between 0,5 and 6 bar;
- Brass diaphragm mechanism;
- System of pressure compensation;
- Max temperature of use 80° C;



### FIELDS:

The pressure reducing valves series 143 are suitable for reduction and control of pressure in plants with the following characteristics:

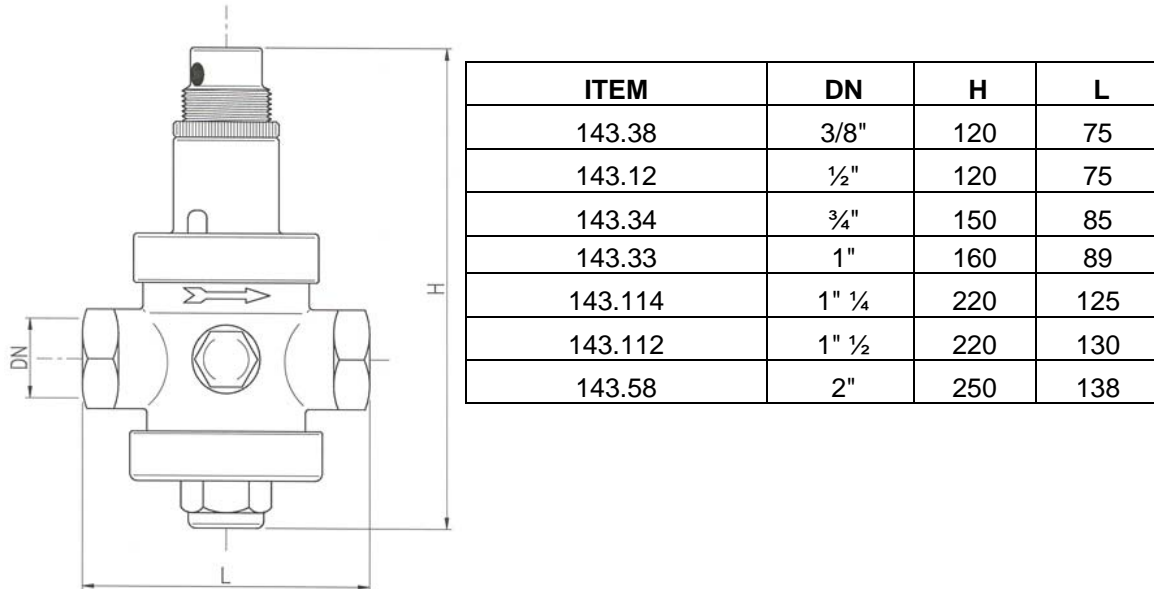
<b>Max inlet pressure:</b>	<b>25 Bar</b>
<b>Field of action (outlet pressure):</b>	<b>0,5 – 6 bar</b>
<b>Max temperature of use:</b>	<b>80° C</b>
<b>Threaded of connection:</b>	<b>ISO 228/1</b>
<b>Tested according to rules:</b>	<b>DIN EN 1567</b>
<b>Suitable fluids:</b>	<b>Water, air</b>
<b>Reduction rate:</b>	<b>10 : 1</b>

### MATERIALS:

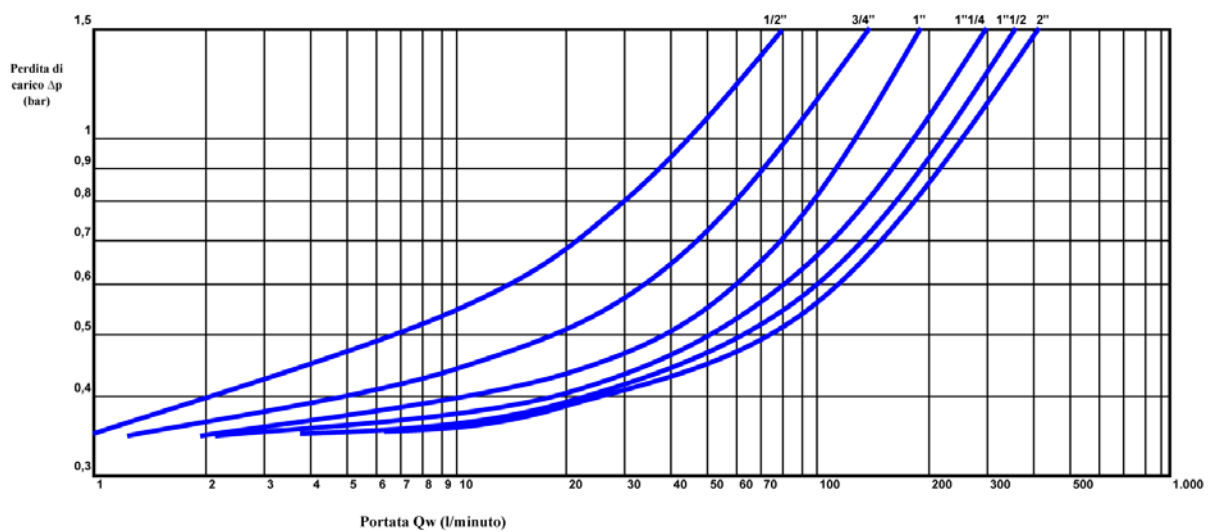
<b>Metal of the body:</b>	<b>Brass alloy CW617N UNI EN 12165 - CB753S EN 1984</b>
<b>Metal of the inner parts:</b>	<b>Brass alloy CW614N UNI EN 12164</b>
<b>Seat:</b>	<b>Stainless steel AISI 303</b>
<b>Bar:</b>	<b>Brass alloy CW614N UNI EN 12164 Stainless steel AISI 3031</b>
<b>O-rings:</b>	<b>NBR 70sh - DIN EN 549</b>
<b>Flat gaskets:</b>	<b>MecSint – alimentary fibre</b>
<b>Plastic parts:</b>	<b>Ultramid® A3K (BASF)</b>
<b>Lubricant:</b>	<b>L100 – for alimentary use</b>

# Figure - 143 PRESSURE REDUCING VALVE

## MAIN DIMENSIONS OF THE PRESSURE REDUCING VALVES



## DISCHARGE AND HEADLOSS CHART:



# Figure - 143

## PRESSURE REDUCING VALVE

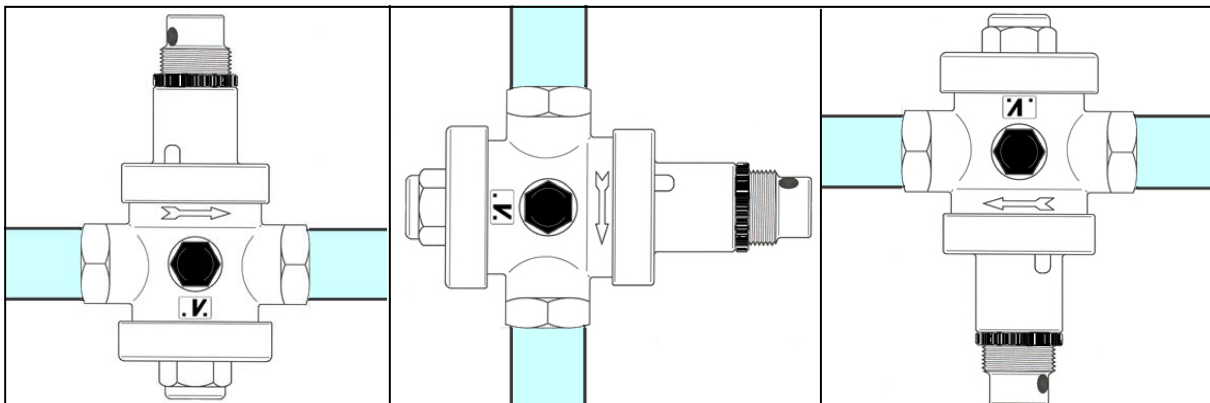
### BEST HYDRAULIC DISCHARGE OF PRESSURE REDUCERS Figure 143

In order to choose the best pressure reducers for any plant, we suggest to follow the indications mentioned in the underexposed table with the best running pressure of the valves Fig 143; the values are exposed both in litres/minute and m3/hour, and indicate the field of use where you can obtain the best functioning, silence and smaller loss of charge of the valves.

MODEL	SIZE	AVERAGE HYDRAULIC DISCHARGE L/min	AVERAGE HYDRAULIC DISCHARGE m3/Hr
143	3/8"	15 - 30	0,9 - 1,8
143	1/2"	20 - 50	1,2 - 3
143	3/4"	50 - 75	3 - 4,5
143	1"	75 - 95	4,5 - 6
143	1" 1/4	95 - 130	6 - 8
143	1" 1/2	110 - 140	7 - 8,5
143	2"	120 - 160	7,5 - 10

### INSTALLATION OF THE PRESSURE REDUCING VALVE

The pressure reducers figure 143 are not affected by gravity force; therefore they can be installed in the plant in any position:



Pressure reducing valves can be damaged by dirty water; therefore we advise to install a self-cleaning filter upstream before the pressure reducer, in order to protect the valve and any other mechanism (thermostatic mixers, taps, etc.).

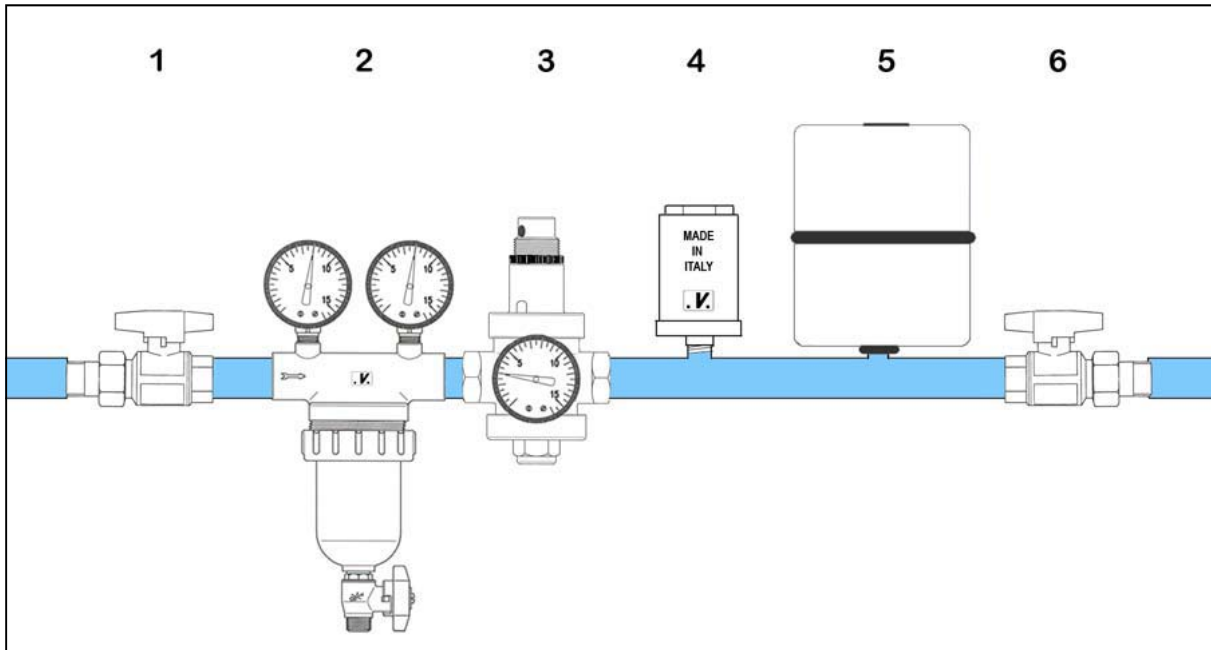
When there is a device which produce or store hot water or pipes are exposed to sudden changes in temperature, an increase of outlet pressure may occur; this event is due to the raise in pressure that follows the temperature rising; an expansion vessel between downstream the pressure reducing valve will avoid this problem.

We recommend moreover to install a Stopcock valve to prevent water hammer which would damage the inner parts of the pressure reducer and other devices in the waterworks.

# Figure 143

## PRESSURE REDUCING VALVE

A recommended installation of the pressure reducing valve:



1 – BALL VALVES

2 – NEPTUN SEF-CLEANING FILTER

3 – EUROBRASS PRESSURE REDUCER

4 – STOPSHOCK VALVE

5 – EXPANSION VESSEL

6 – BALL VALVE

### HOW TO REGULATE THE PRESSURE

All 143 pressure reducers are tested before being packaged; during the proof they are pre-set at the outlet pressure of 3 bars; the outlet pressure can be easily modified when the valve is installed on the plant.

In order to modify the outlet pressure, you should only loosen the fixing ring and turn the spring holder as indicated in the pictures sequence. By turning clockwise the pressure increases, while counter-clockwise the pressure decreases.

A right setting should be made while the plant is closed.

