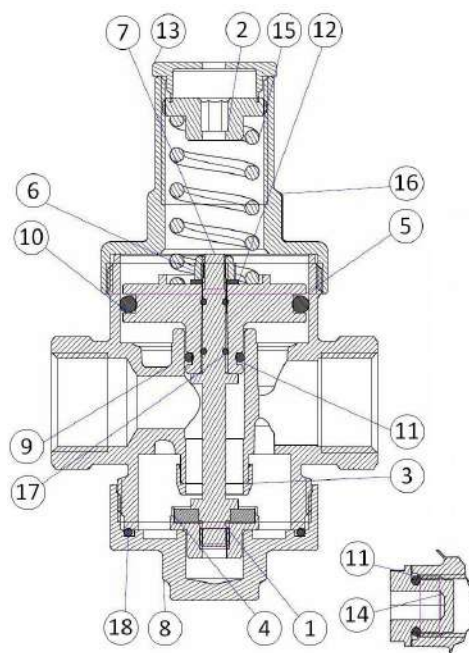


## Art3318

### REDUX GE Brass Piston Type Pressure Reducing Valve

#### Features

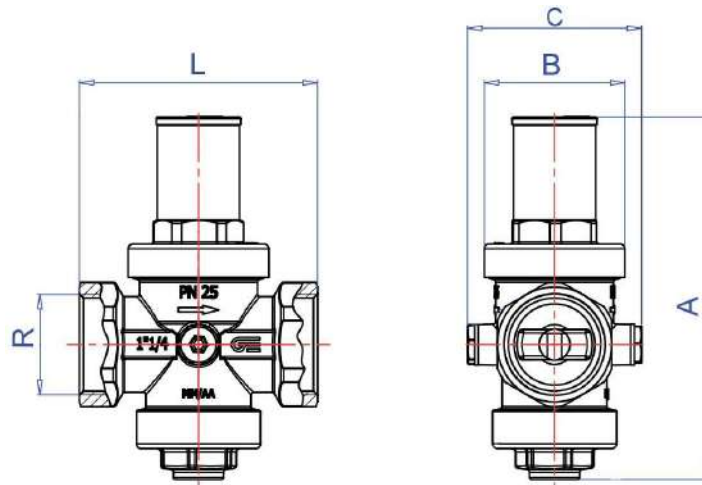
1. Maximum working pressure 25 bar (PN-25).
2. Body in brass, nickel plated finished: CW617N acc/ EN12165 for 1/2" to 2" and CB753S acc/ EN1982 for 2 1/2", 3" and 4".
3. Other components: See table
4. Adjustable range: 1 to 5,5 bar (1/2" to 2") and 1,5 to 7 bar (2 1/2" to 4").
5. Outlet setting pressure 3 bar.
6. Working temperature from 0°C to 130°C.
7. Compatible for water, 50% glycol solution and compressed air.
8. F-F threaded gas (BSP) ends acc/ ISO 228/1.
9. Pressure gauge connection Rp1/4" according to EN 10226 (ISO 7/1). (pressure gauge not included).
10. Tests and checking according to EN 1567.



N°	Name	Material
1	Piston Stem	Brass CW614N
2	Calibration Spring	Brass CW614N
3	Seat	Stainless Steel
4	Gasket Seat	EPDM (1/2" - 2") / Fasit Italy (2 1/2" - 4")
5	Piston	PA + Glass fiber (1/2" - 2") / CW617N (2 1/2" - 4")
6	Piston Stop	SS Inox + PA (1/2" - 2") / CW617N (2 1/2" - 4")
7	Pin	
8	Piston Cap	Brass CW617N

# GENEBRE

N°	Name	Material
9	Body	CW617N (1/2" - 2") / CB753S (2 1/2" - 4")
10	O-Ring	EPDM (1/2" - 2") / FPM75 (2 1/2" - 4")
11	O-Ring	EPDM (1/2" - 2") / FPM75 (2 1/2" - 4")
12	Washer	Stainless Steel
13	Cap	PE (1/2" - 2")
14	Cap	PA + Glass Fiber (1/2"- 2") / POM (2 1/2" - 4")
15	Spring	Steel
16	Cap	CB753S (2 1/2" - 4")
17	O-Ring	EPDM (1/2" - 2") / FPM75 (2 1/2" - 4")
18	O-Ring	EPDM (1/2" - 2") / FPM75 (2 1/2" - 4")



Ref	Size	Dimensions (mm)				Adjust Pressure (bar)	Weight (Kg)
		A	ØB	C	L		
3318 04	1/2"	114	48	63	69	1 - 5,5	0,540
3318 05	3/4"	114	48	63	82	1 - 5,5	0,600
3318 06	1"	146	59	73	96	1 - 5,5	1,020
3318 07	1 1/4"	152	59	73	100	1 - 5,5	1,120
3318 08	1 1/2"	148,5	59	77	91	1 - 5,5	1,340
3318 09	2"	151	59	81	97	1 - 5,5	1,450
3318 10	2 1/2"	260	93	112	148	1,5 - 7	4,100
3318 11	3"	285	98	112	177	1,5 - 7	5,520
3318 12	4"	310	105	124	190	1,5 - 7	6,970

Ref	Size	Spare Parts
K3318 10	2 1/2"	Complete Service Kit 2 1/2"
K3318 11	3"	Complete Service Kit 3"
K3318 12	4"	Complete Service Kit 4"

**The spare parts set includes:**

- Diaphragm O-rings
- Piston O-rings
- Bottom cover O-ring
- Complete piston stem
- Spring

## Hydraulics Features

Redux GE pressure reducer is a valve that reduces and stabilizes fluid pressure based on preset value. The use of this hydraulic device is necessary when fluid pressure of a facility can overcome maximum admissible pressure of other devices that form the facility.

The piston reducer is suitable for systems of hydraulic supply, either outside or inside of buildings, where net pressure doesn't reach values above 25 bar.

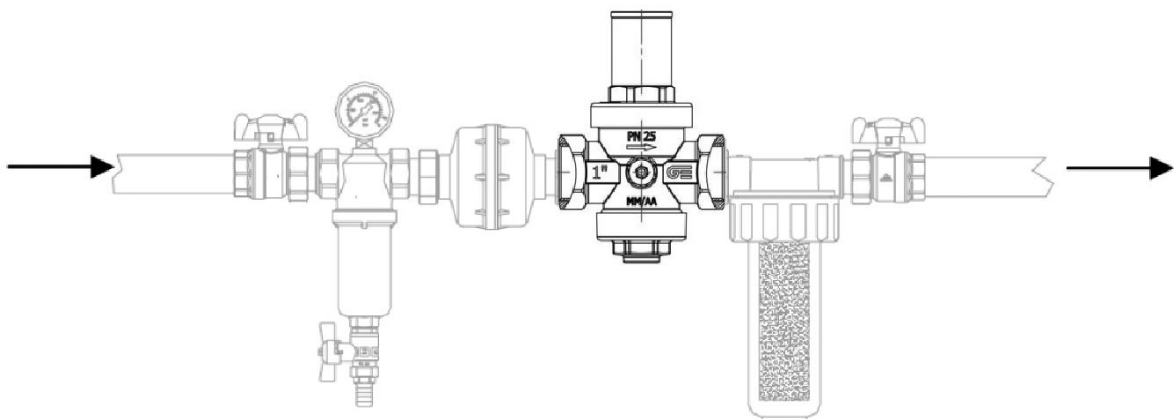
The structure of inner piston ensures rigidity, strength and high control accuracy, due to the seat compensation.

The sealing O-ring assures a low static friction coefficient, ensuring wear resistance and reducing maintenance.

The use is for installation of conditioning, sanitary, irrigation, compressed air distribution, against fire and water distribution in buildings.

## Installation

- The pressure reducing must be installed respecting the arrow direction engraved on the body.
- It is necessary to install a filter at the beginning of installation to get a long and good working.
- Consider a periodic maintenance of the filters (mesh could need a replacement).
- Use valves just to let maintenance operations of pressure reducer.

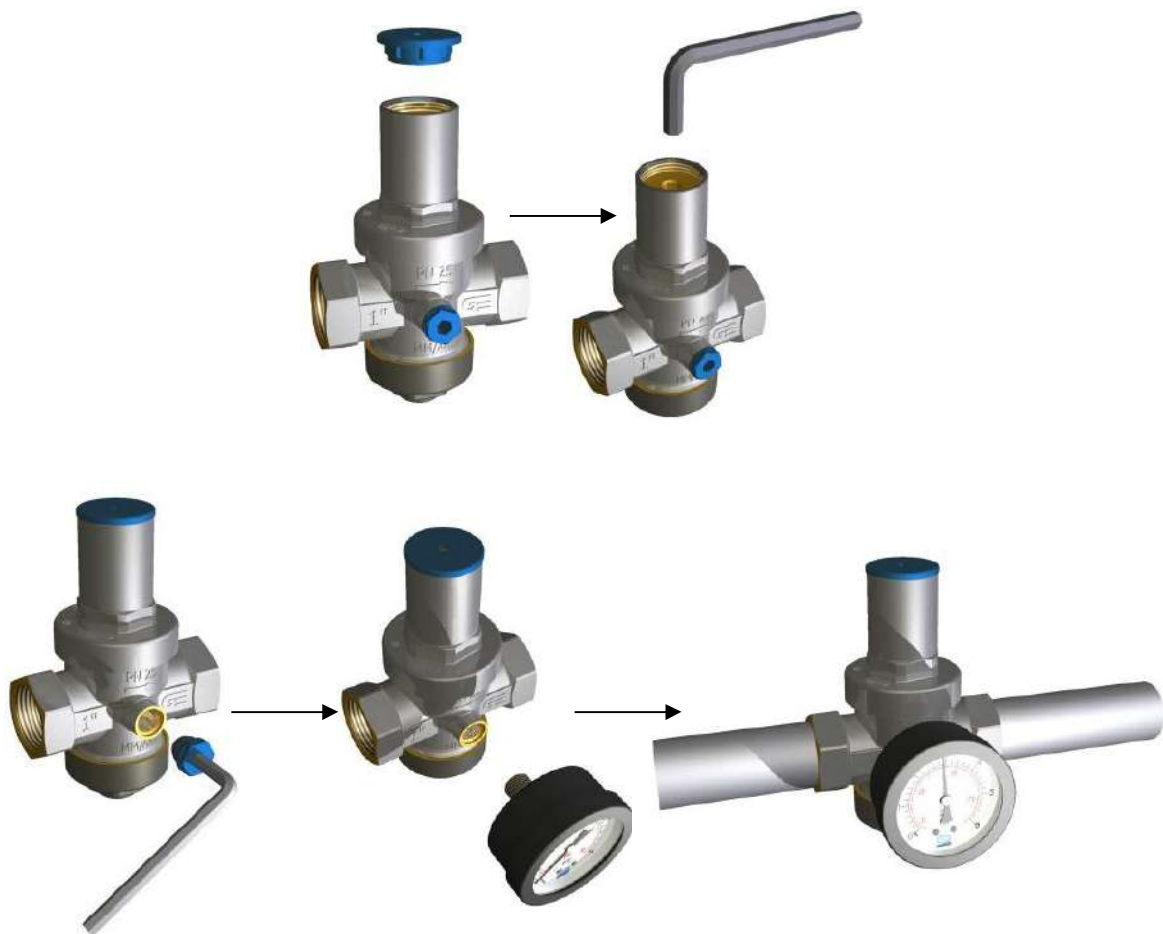


## Setting instructions

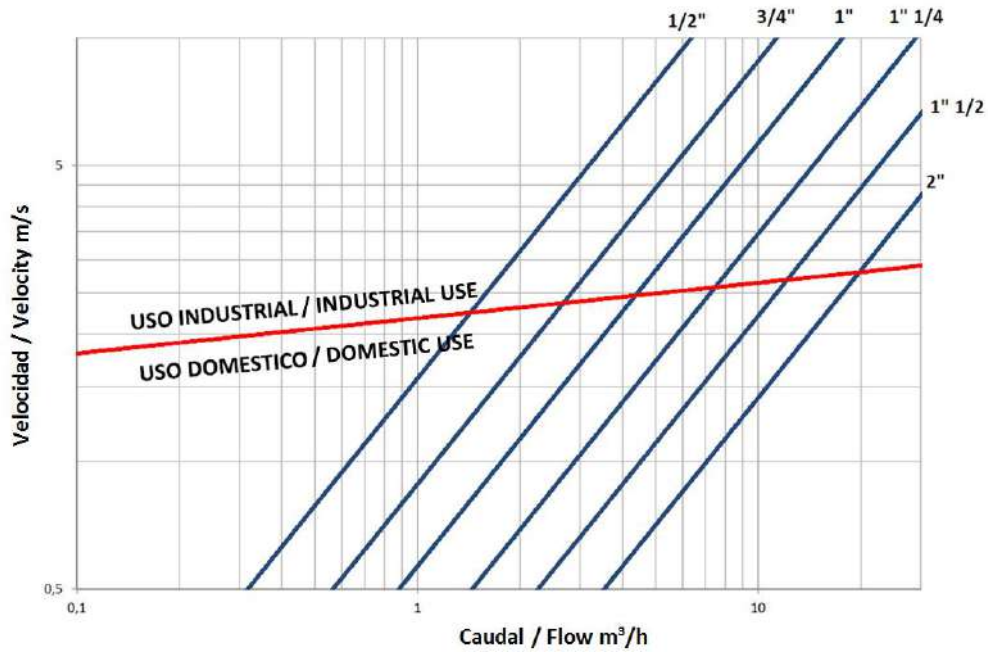
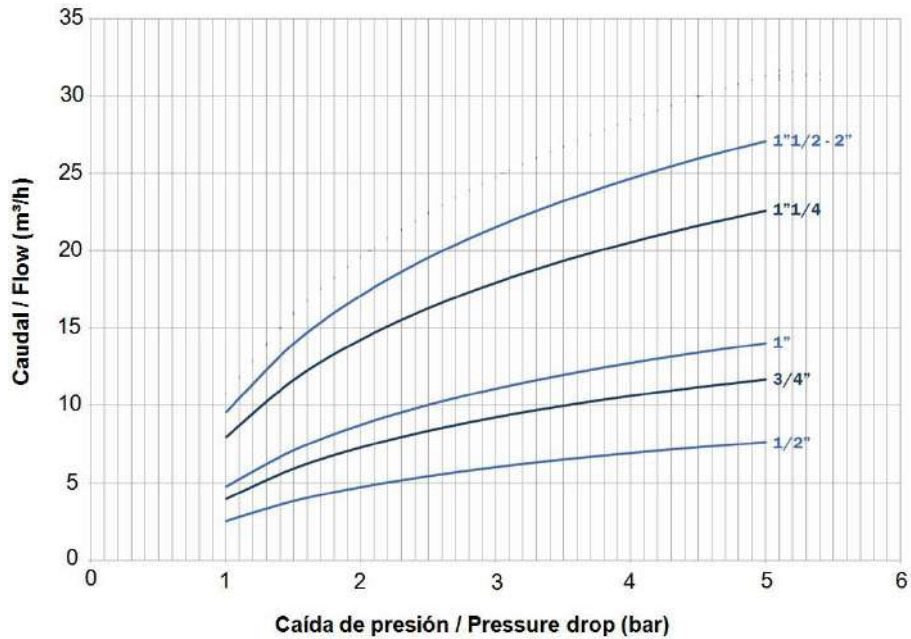
The pressure reducer has been preset at 3 bar of outlet pressure. If is necessary to modify it, follow next instructions:

- Check that hydraulic circuit is completely full and close all devices (valves, taps, etc.).
- Remove plastic cap from the top that is inserted by pressure.
- To **reduce** the outlet pressure, slotted screw must be **unthreaded** (rotating counter clockwise).
- To **increase** the outlet pressure, slotted screw must be **threaded** (rotating clockwise).

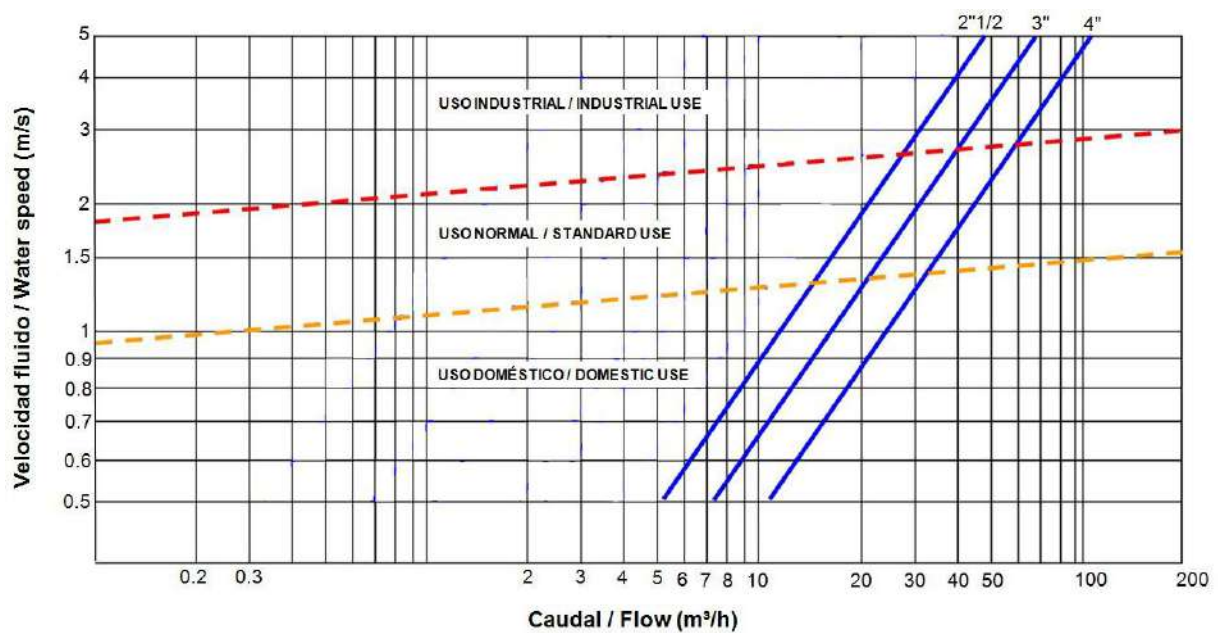
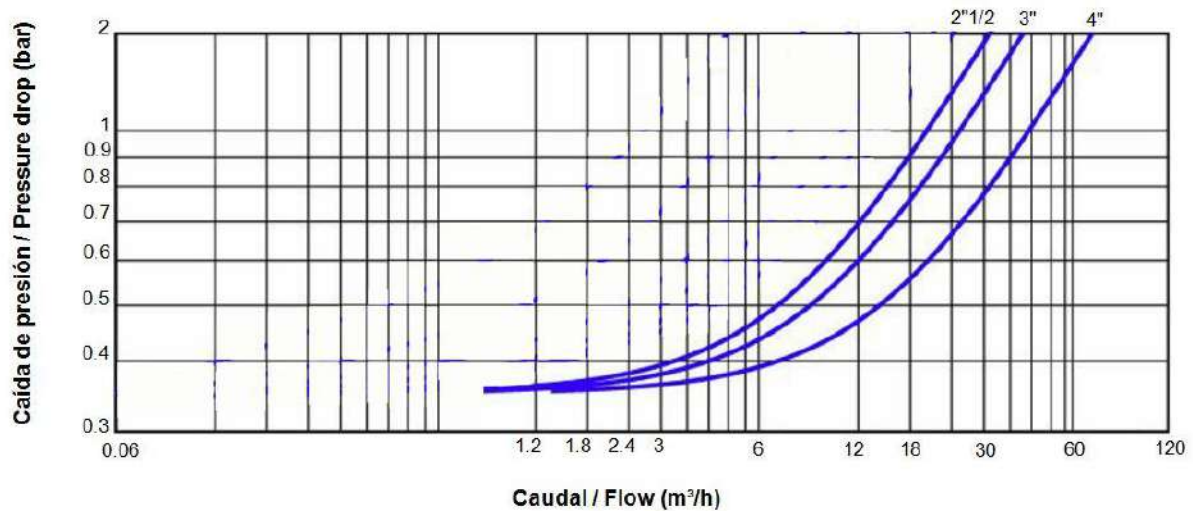
In order to simplify this operation, connect a pressure gauge replacing the plastic lateral cap, which indicates outlet pressure.



## Head Loss Chart Art3318 - Pressure Reducing Valve







The figures represented on the chart are obtained with:  
 Inlet pressure: 8 bar  
 Outlet pressure: 3 bar

#### Reading the diagram:

The pressure loss chart for the pressure reducer valve represents the pressure drop depending on the flow rate in the valve outlet. The correct sizing of the installation and the reducer itself is performed according to the required flow rate (it is advisable to maintain the flow velocity in the pipes between 1 and 2 m/sec).

#### Example:

Considering the 3" pressure reducing valve with 8 bar inlet and set pressure of 3 bar and 30m<sup>3</sup>/h at the outlet, in the chart we see that for that flow, the corresponding pressure drop is 1.4 bar. The pressure detected by the pressure gauge at the outlet of the pressure reducer valve will no longer be 3 bar, but  $3 - 1.4 = 1.6$  bar.