

# SELF ACTUATING PRESSURE REDUCING VALVE MODEL PRV30





# MAIN CHARACTERISTICS

Self-actuating pressure reducing valve balancing by piston used to provide a constant downstream with oscillations in inlet pressure.

Easy to adjust and doesn't need any maintenance. It's possible to install the valve in any position.

Maximum inlet pressure: 25 bar.

Pressure ranges:  $0,5-3 \mid 1-8 \mid 4-12 \text{ barg}$ 

Temperature range: -30 to 80 °C (NBR seals)
Temperature range: -10 to 125 °C (EPDM seals)
Temperature range: -10 to 150 °C (VITON seals)

### **Fluids**

Liquids and gases, group 2.

Compressed air, water, neutral gases ...

**Body material** → Stainless steel Aisi 316L **Trim material** → Stainless steel Aisi 316L

**Cover material** → Stainless steel Aisi 316L

**Connections** → Threaded BSP or NPT

→ Flanges DIN or ANSI

# More common applications

Chemical laboratory installations, sanitary plants, compressed air, sprinkler systems, ...

### **Characteristics**

It is easy to adjust; it does not need any maintenance. It is possible to install it in any position; its internal design is conceived to provide an effective circulation of the fluid.

# Under request:

- reduced Kv available to:

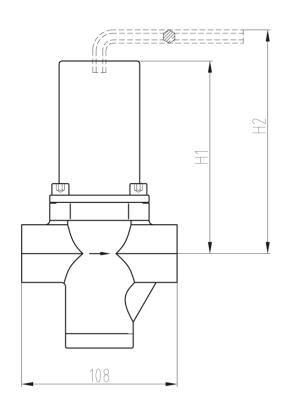
0,2 / 0,4 / 0,6 / 1 m3/h

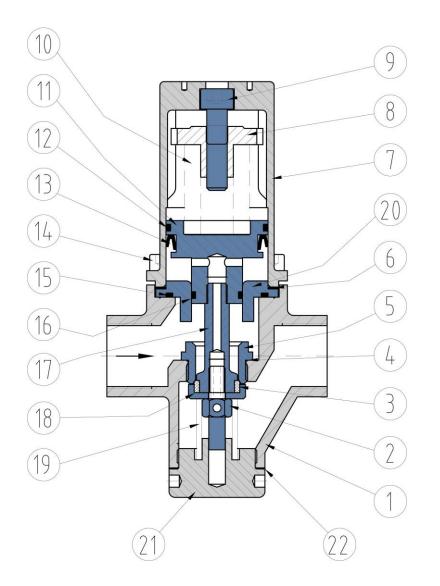
- Bronze / Super duplex body/cover material
- Connection Socked weld or butt welding
- Connection clamp
- Degreased valve for oxygen services
- Soft seals: EPDM, PEEK, Viton, Aflas, ...

## Recommended spare part:

Reference	Description	Item
PRV30.SP1	Seal Kit	3 + 6 + 12 + 13 + 15 + 16 +22
PRV30.SP2	Gasket kit	6 + 22
PRV30.SP3	Springs	10 + 19

DECODIDATION MATERIAL							
	DESCRIPTION	MATERIAL					
1	Body	1.4404 - SS 316L					
2	Seal screw	1.4404 - SS 316L					
3	Seal	NBR					
5	Seat	1.4404 - SS 316L					
6	Gasket	PTFE					
7	Spring cover	1.4404 - SS 316L					
8	Washer spring	Galvanized steel 1.1191					
9	Regulation screw	Stainless steel A2-70					
10	Regulation spring	Spring steel 52SiCrNi5 (epoxy painting 60-100 micras)					
11	Piston	1.4404 - SS 316L					
12	O-ring	NBR					
13	Gasket	NBR					
14	Screw (x4)	Stainless steel A2-70					
15	O-ring	NBR ( = item 12)					
16	O-ring	NBR					
17	Stem	1.4404 - SS 316L					
18	Guide seal	1.4404 - SS 316L					
19	Seal spring	Stainless steel 302					
20	Guide bush	1.4404 - SS 316L					
21	Lower Cover	1.4404 - SS 316L					
22	Gasket	NBR					
	Special gaskets for special fluid on demand						





# **OPERATION**

PRV concept is direct action. Inlet pressure comes into the valve and closes it **because of the sections difference.** 

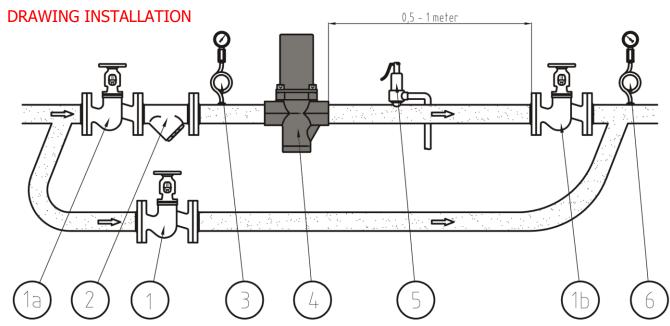
When we compress the spring (10) through the regulating screw (9), the stem-seal (11, 17 and 3) opens the valve and allows the regulation.

When any downstream valve is closed and flow=0, PRV will absorb the oscillations and keep the outlet pressure according to the regulation.

The valve closes when the downstream pressure exceeds the regulating set pressure.

It is recommended to leave a space (between 0,5 and 1 meter) until the check valve, for a better compensation.

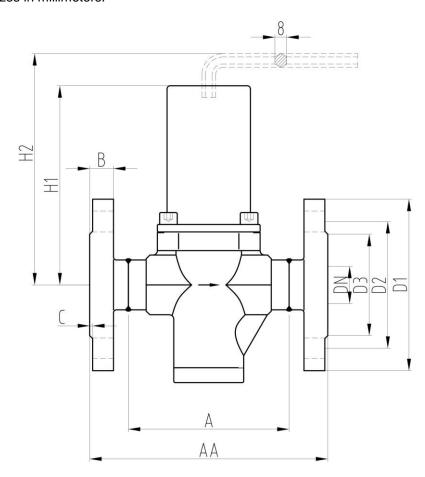
To increase outlet pressure, the regulating screw (9) should be turned anticlockwise.



- 1, 1a y 1b  $\rightarrow$  Isolation valves
- 4 → Pressure reducing valve PRV
- $2 \rightarrow Filter$
- 5 → Safety valve
- 3 → Inlet pressure Manometer
- 6 → Outlet pressure Manometer

DN	1/2"	3/4"	1″	15	20	25	15	20	25
Connection	Threaded			Flanged EN PN16/25		Flanged ANSI CL150			
Kv value	2	2.5	3.5	2	2.5	3.5	2	2.5	3.5
Α	108	108	108	-	-	-	-	-	-
AA	-	-	-	130	150	160	184	184	184
H1	135			135		135			
H2	185			185		185			
D1	-	-	-	95	105	115	89	98	108
D2	-	-	-	65	75	85	60.5	70	79.5
D3	-	_	-	45	58	68	35	43	51
В	-	-	-	16	16	16	12	12	12
С	-	-	-	2	2	2	2	2	2
Nº holes	-	-	-	4	4	4	4	4	4
Ø hole	-	-	-	14	14	14	16	16	16
Weight (Kg)	3.5	3.5	3.5	5	5	5	5	5	5

All sizes in millimeters.



Classification according pressure equipment Directive, PED 2014/68/UE

Fluid	PN	Size	Category	CE marked	Chart
Gases and liquids of group 2	PN25	DN15 – DN25	Apar 3-art 3	No requerido / Not required	7