

SELF ACTUATING PRESSURE REDUCING VALVE

MODEL **PRV44**



PRODUCT FEATURES

Self-actuating pressure reducing valve balancing by bellow used to provide a constant downstream still there being 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:

0,2 - 2 barg | 1 - 8 barg | 4 - 12 barg

Temperature range -30 to 210 °C.

Fluids

Liquids and gases of group 1 and 2

Steam, compressed air, fuel-oil, water, nitrogen, neutral gases, ...

Body material → Stainless steel Aisi 316L

Trim material → Stainless steel Aisi 316L

Cover material → Stainless steel Aisi 316L

Connections → Screwed BSP or NPT
→ Flanges DIN or ANSI

More common applications

Chemical laboratory installations, sanitary plants, compressed air, sprinkler systems, fuel-oil, steam, heat exchangers, steam plants, stills, chemical laboratories, cylinders and vulcanized, dry cleaner's, laundries,...

Characteristics

Easy to adjust, Doesn't need any maintenance, It is possible to install the valve in any position, bellows of stainless steel (AISI-316 PN16) welded in micro-plasma, internal design conceived to provide an effective circulation of the fluid.

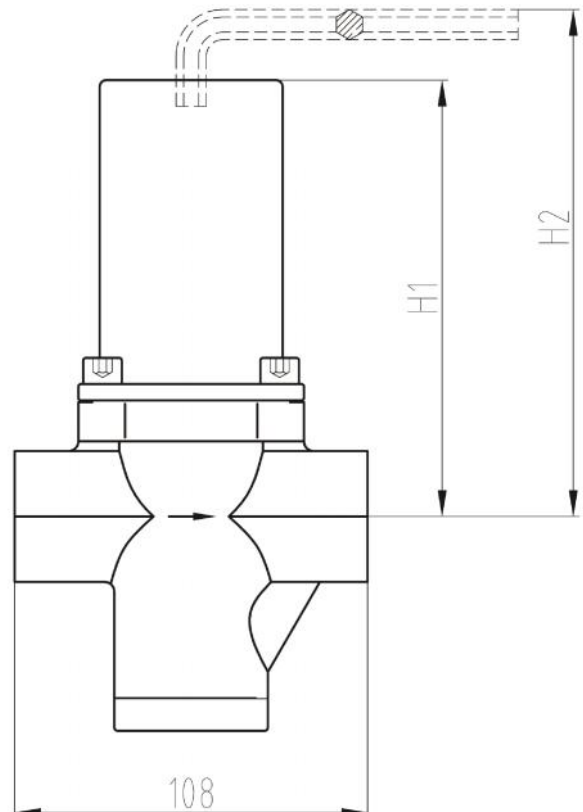
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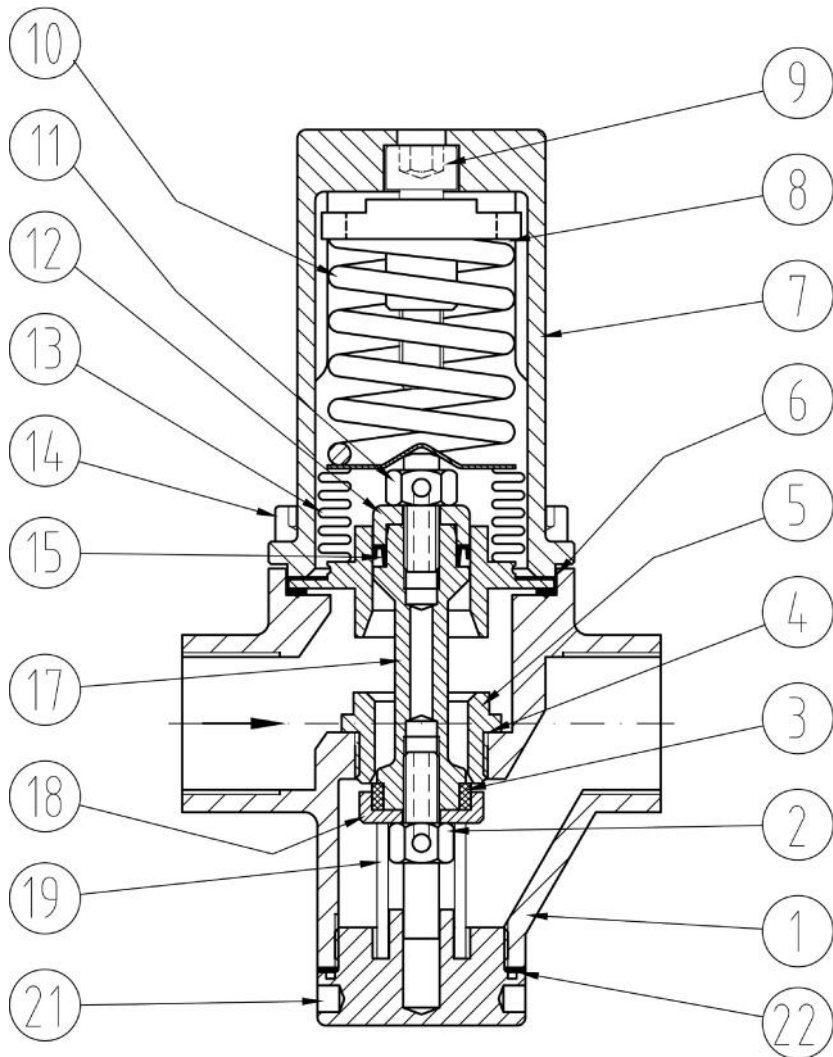
- reduced Kv available to:
0,2 / 0,4 / 0,6 / 1 m3/h
- Bronze / Super duplex body/cover material
- Connection Socked weld or butt welding
- Connection Clamp
- Degreased valve for oxygen services
- Soft seals: EPDM, PEEK, Viton, Aflas, ...

Recommended spare part:

Reference	Description	Item
PRV44.SP1	Seal Kit and balancing system	2 + 3 + 11 + 12 + 15 + 17
PRV44.SP2	Gasket kit	6 + 22
PRV44.SP3	Bellow	13
PRV44.SP4	Springs kit	10 + 19
PRV44.SP5	Seat kit	5
PRV44.SP6	Gasket + seal kit	3 + 6 + 15 + 22

	Description	Material
1	Body	Stainless steel Aisi 316L
2	Seal screw	Stainless steel Aisi 316L
3	Seal	Graphited PTFE
4	Gasket	PTFE
5	Seat	Stainless steel Aisi 316L
6	Gasket (x2)	PTFE
7	Spring cover	Stainless steel Aisi 316L
8	Washer spring	Galvanized steel 1.1191
9	Regulation screw	Stainless steel A2-70
10	Regulation spring	Spring steel 52SiCrNi5 (epoxy painted 60-100 micras)
11	Bellow screw	Stainless steel Aisi 316L
12	Gasket cover	Stainless steel Aisi 316L
13	Bellow kit	Stainless steel Aisi 316L
14	Allen screw	Stainless steel A2-70
15	Gasket	Graphited PTFE
17	Stem	Stainless steel Aisi 316L
18	Guide seal	Stainless steel Aisi 316L
19	Seal spring	Stainless steel 302
21	Lower Cover	Stainless steel Aisi 316L
22	Gasket	Viton
Special gaskets for special fluid on demand		





METHOD OF FUNCTION

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

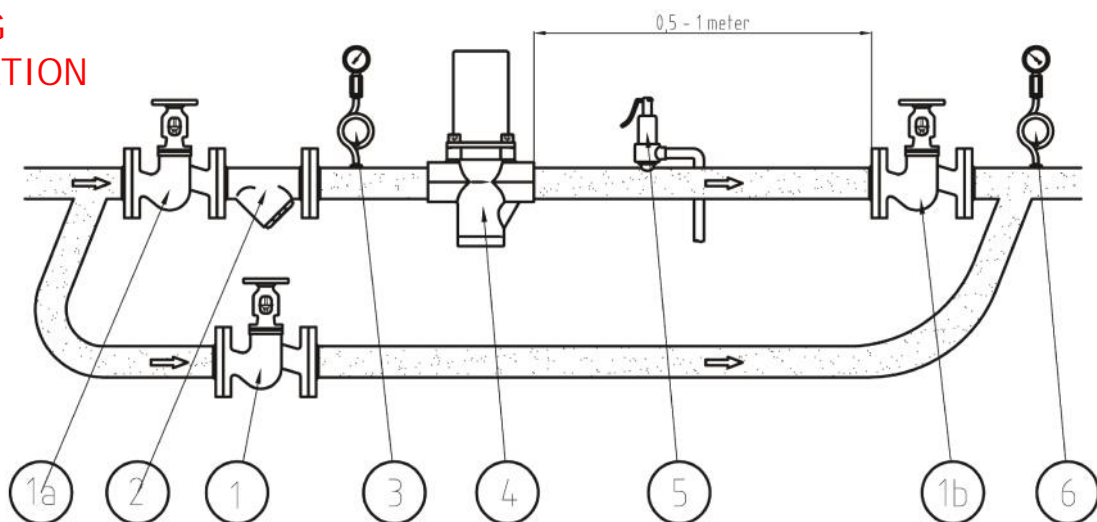
When we compress spring (10) through regulating screw (9), all bellow-stem-seal (13, 17 and 3) opens the valve and permits the regulation.

When any downstream valve is closed and flow=0, PRV will absorb oscillations and maintain outlet pressure according to regulation. The valve closes when the downstream pressure exceeds the regulating set pressure.

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

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

DRAWING INSTALLATION



1, 1a y 1b → Isolation valves

4 → Pressure reducing valve PRV44

2 → filter

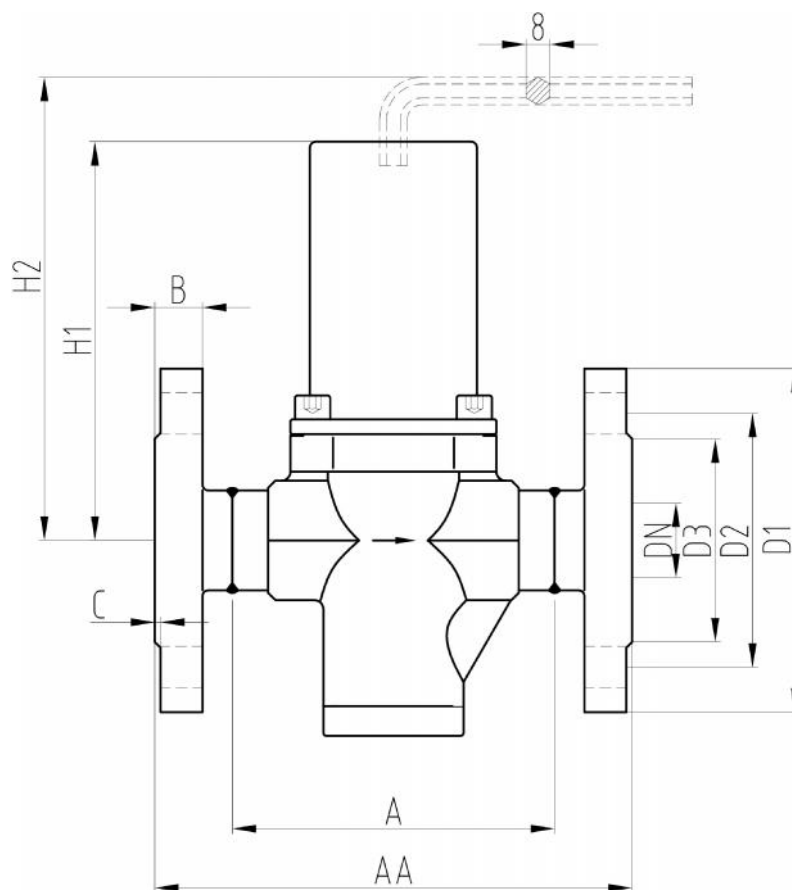
5 → Safety valve

3 → Inlet pressure gauge

6 → Outlet pressure gauge

DN	½"	¾"	1"	15	20	25	15	20	25
Connection	Threaded			Flanged EN PN16/25			Flanged ANSI CL150		
Kv value (m3/h)	2	2.5	3.5	2	2.5	3.5	2	2.5	3.5
A	108	108	108	-	-	-	-	-	-
AA	-	-	-	150	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
B	-	-	-	16	16	16	12	12	12
C	-	-	-	2	2	2	2	2	2
N° holes	-	-	-	4	4	4	4	4	4
Ø hole	-	-	-	14	14	14	16	16	16
Weight (Kg)	2.5	2.5	2.5	5	5	5	5	5	5

All sizes in millimeters. In red color, sizes out of standards



Classification according pressure equipment Directive, 2014/68/UE

Fluid	Chart	PN	Size	Category	CE Marked
Gases and liquids group 2	7	PN25	DN15 – DN25	Apar 3-art 3	Not required
Gases and liquids group 1	6	PN25	DN15 – DN25	Apar 3-art 3	Not required