



SELF OPERATED PRESSURE REGULATORS

PRESSURE REDUCING VALVE MODEL **VD**

MAIN CHARACTERISTICS

Globe valve, simple seat, direct action and self-operated pressure reducing valve built with piston and specially designed to maintain constant outlet pressure.

Piston guided through 3 points.

Easy and very low maintenance.

Extremely hard baked enamel

Pressure range from 1,5 to 16 barg
(Standard range 1,5 – 8 barg)

Maximum admitted pressure 40 barg

Maximum admitted temperature 80 °C (NBR collars)
(Optionally, EPDM 125°C and VITON 150°C)

Fluids

Liquids, compressed air,gases.

Connections

Flanged DIN PN16 - PN40

Flanged ANSI Class 150 and 300 Lb.

Threaded, BSP and NPT female, up to 2"

Body material → Nodular Iron GGG40.3,
Bronze, Carbon steel GSC25N and Stainless steel AISI 316L (CF3M).

Trim material Stainless steel AISI 316L
(optionally Bronze).

Applications

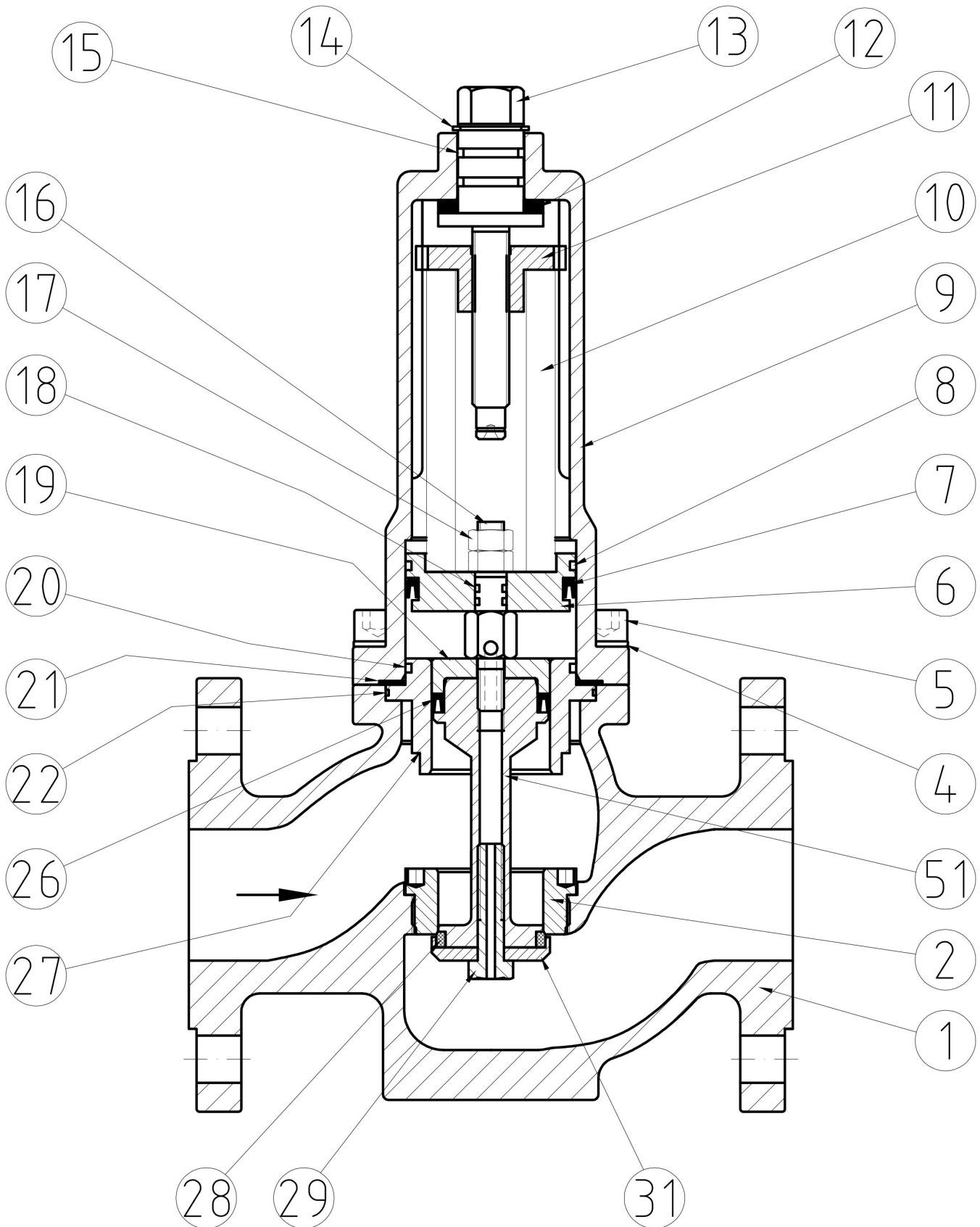
Chemical laboratory installations, waters distribution systems, installation of waste water, industrial, compressed air, sprinkler systems, fuel-oil,...



METHOD OF FUNCTION

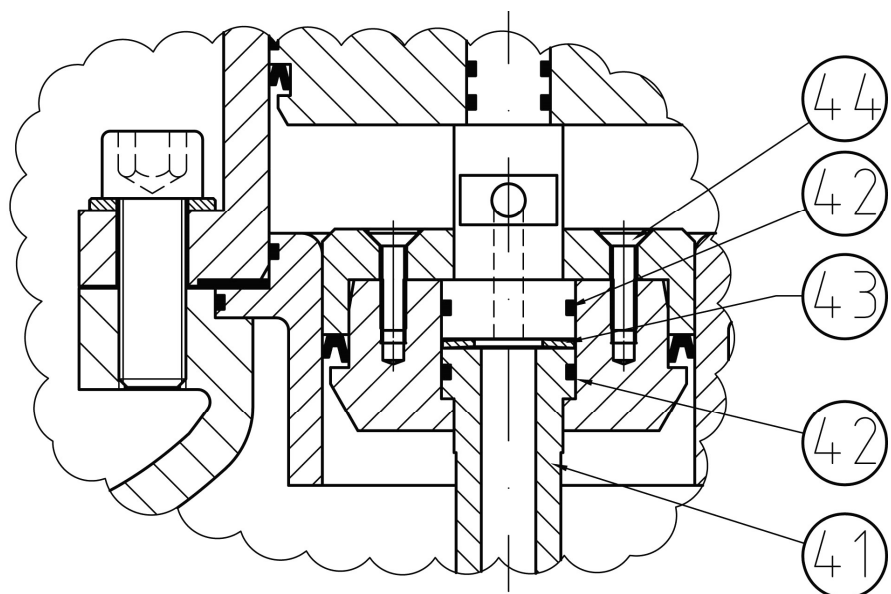
Medium flows through the valve as indicated by the arrow and force stem-piston-gasket (3 – 19 – 26) to close the valve. Inlet and outlet forces are balanced. Outlet pressure is controlled rotating the stem (13) in clockwise. This causes displacement of the spring (10), which itself acts on the seal, opening the valve until it reaches the required downstream pressure.

Any variation on the upstream pressure will be absorbed by reducing by compensating piston (26) and downstream by the bushing (8).





Description		Material	Description		Material
1	Body	Stainless steel CF8M-316 Bronze RG10 Carbon steel WCB Nodular Iron GGG40.3	18	O-ring	NBR
2	Seat	1.4404 - SS 316L	19	Lower bushing	1.4404 - SS 316L
3	Stem (DN65-100)	1.4404 - SS 316L	20	O-ring	NBR
4	Washer	Stainless steel A2-70	21	Flat Gasket	PTFE
5	Bolts	Stainless steel A2-70	22	O-ring	NBR
6	Piston	1.4404 - SS 316L	26	Balanced gasket	NBR Graphited PTFE + St. steel
7	Gasket	NBR	27	Lower bushing guide	1.4404 - SS 316L
8	O-ring	NBR	28	Seal	NBR Graphited PTFE
9	Spring cover	Stainless steel CF3M-316	29	Screw	Stainless steel A2-70
10	Spring	Steel spring	30	Guide seal(DN65-100)	1.4404 - SS 316L
11	Regulation nut	Steel 1.1191	31	Support seal	1.4404 - SS 316L
12	Ball bearing	1.3505 (Bearing steel 100 Cr 6)			
13	Regulation stem	1.4404 - SS 316L	41	Stem (DN100)	Stainless steel Aisi 316L
14	Safety reg. stem washer	Stainless steel A2-70	42	O-ring (DN100)	NBR
15	Block Pin	Stainless steel A2-70	43	Washer spring(DN100)	Stainless steel Aisi 316L
16	Piston stem	1.4404 - SS 316L	44	Screw (DN100)	Stainless steel A2-70
17	Nut(s)	Stainless steel A2-70	51	Stem (DN15-50)	1.4404 - SS 316L
				Recommended spare parts	



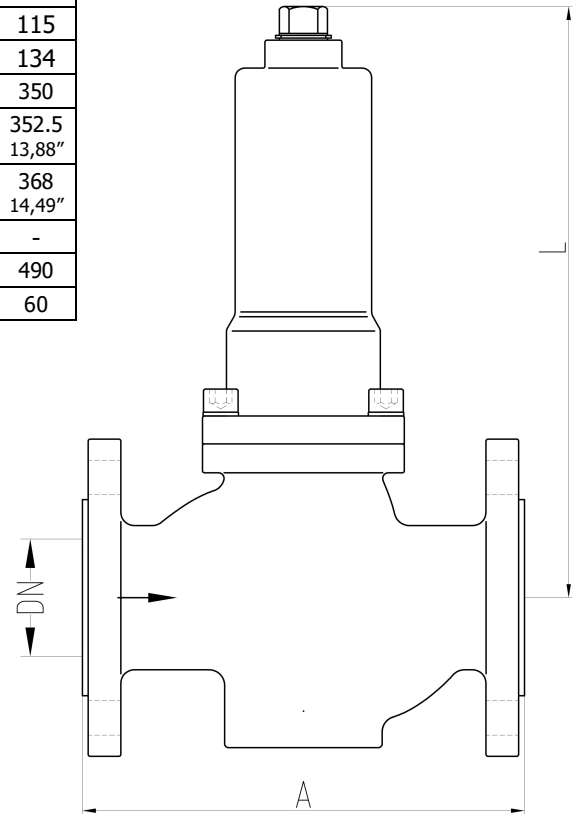
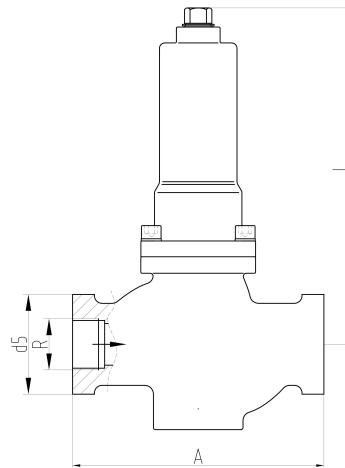
DN100 scheme



Dimensions, weight and Kv value

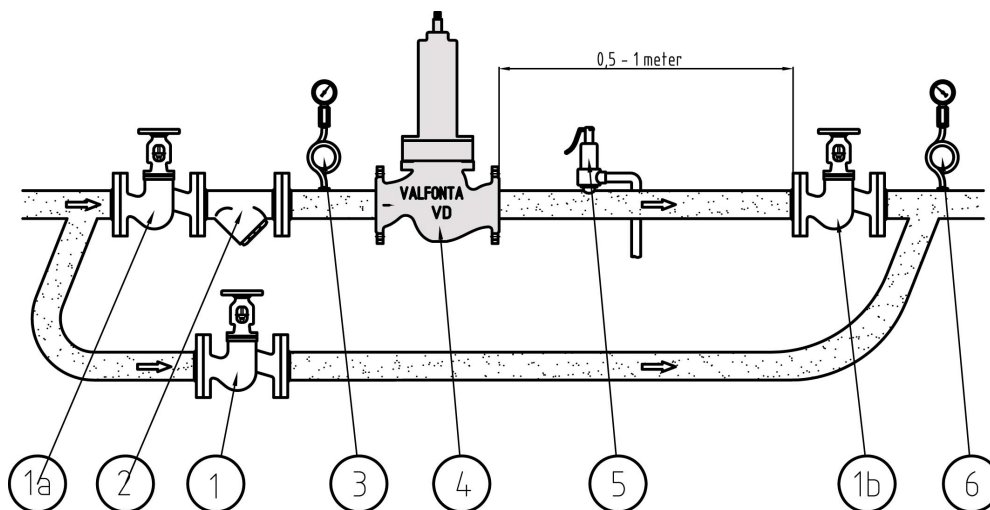
DN	15	20	25	32	40	50	65	80	100
Kv (m ³ /h)	3.5	5	9	13.5	22	32	57	82	115
Cv (gpm)	4	5.8	10.4	15.6	25	37	66	95	134
A DIN (mm)	130	150	160	180	200	230	290	310	350
A ANSI150 (mm) (inches)	○	○	184 7,25"	-	222 8,75"	254 10"	276 10,9"	298.5 11,75"	352.5 13,88"
A ANSI300 (mm) (inches)	○	○	197 7,76"	-	235 9,25"	267 10,51"	292 11,5"	317.5 12,50"	368 14,49"
B Threaded BSP / NPT	1/2"	3/4"	1"	1.25"	1.5"	2"	-	-	-
L (mm)	240	240	250	250	300	300	415	430	490
Weight (kg.)	10	10	12	13	16	18	35	50	60

○ Available under request



INSTALLATION DRAWING

Installation is recommended according to the following drawing:



- 1, 1a y 1b → Isolation globe valves
- 2 → Filter
- 3 → Inlet pressure
- 4 → Pressure reducing valve VD
- 5 → Safety valve
- 6 → Outlet pressure