

SELF OPERATED PRESSURE REGULATORS

PRESSURE REDUCING VALVE MODEL VD

MAIN CHARACTERISTICS

Globe valve, simple seat, direct action and selfoperated 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)

Fluids

Liquids, compressed air, non-hazardous gases.

Connections Flanged DIN PN16 - PN40

Flanged ANSI Class 150 and 300 Lb. Threaded, BSP and NPT female, up to 2"

Body material \rightarrow 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,...

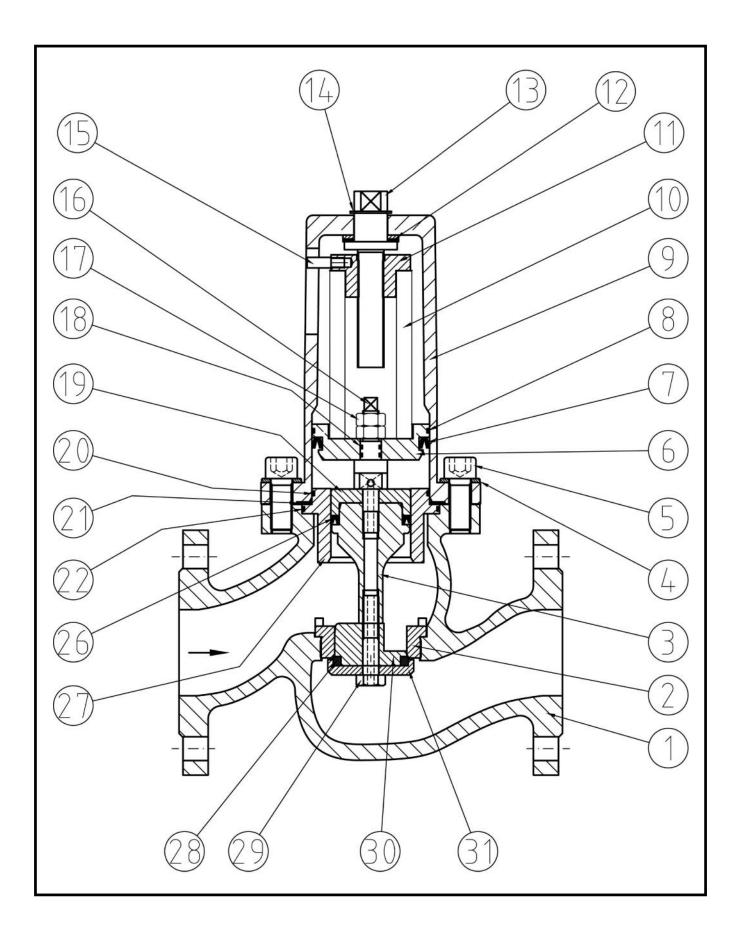


METHOD OF FUNCTION

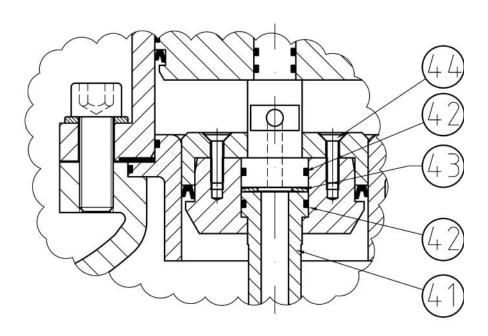
Medium flows through the valve as indicated by the arrow and force stem-piston-gasket (3 - 19 - 26) to close the valve. Inlet and outlet forces are balanced. Outlet pressure is controlled rotating the stem (13) in clockwise. This causes displacement of the spring (10), which itself acts on the seal,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





	Descripción	Material		Descripción	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	1.4404 - SS 316L	20	O-ring	NBR
4	Washer	Stainless steel A-2	21	Flat Gasket	PTFE
5	Bolts	Stainless steel A-2	22	O-ring	NBR
6	Upper bushing	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 A-2
10	Spring	Steel spring	30	Guide seal	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	Stainless steel Aisi 316L (DN100)
14	Safety reg. stem washer	Stainless steel A-2	42	O-ring	NBR (DN100)
15	Block Pin	Stainless steel A-2	43	Washer spring	Stainless steel Aisi 316L (DN100)
16	Bushing stem	1.4404 - SS 316L	44	Screw	Stainless steel A-2 (DN100)
17	Nut(s)	Stainless steel A-2			
				Recommended spare	parts



DN100 scheme

Dimensions, weight and Kv value

DN							1				1
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) 184 - 222 254 276 298.5 352.5 (inches) 7.25° - 8.75° 10° 10.9° 11.75° 13.88° A ANSI300 (mm) 197 - 235 267 292 317.5 368 (inches) 1.7,76° - 9.25° 10.51° 11.5° 12.50° 14.49° B Threaded BSP / NPT ½" ¾" 1" 1.25" 1.5" 2"											
A DIN (mm) 130 150 160 180 200 230 290 310 350 A ANSI150 (mm) 184 - 222 254 276 298.5 352.5 (inches) 7.25" - 8,75" 10" 10,9" 11,75" 13,88" A ANSI300 (mm) 197 7.76" - 9,25" 10,51" 11,5" 12,50" 14,49" B Threaded BSP / NPT 19" 19" 1.25" 1.5" 2"	KV (m ³ /h)	3.5	5	9	13.5	22	32	57	82	115	
A ANSI150 (mm)	CV (gpm)	4	5.8	10.4	15.6	25	37	66	95	134	
(inches)	A DIN (mm)	130	150	160	180	200	230	290	310	350	
(inches)					-						
B Threaded BSP / NPT ½" ¾" 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 30 40 50	A ANSI300 (mm)				-		267 10,51"				15.41
Weight (kg.) 10 10 12 13 16 18 30 40 50 Available under request	• • •	1/2"	3/4"		1.25"	1.5"			-	-	
Available under request	L (mm)	240	240	250	250	300	300	415	430	490	
Available under request	Weight (kg.)	10	10	12	13	16	18	30	40	50	
			d5			_		7	•	NO	

INSTALLATION DRAWING

Installation is recommended according to the following drawing:

