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Fine Controls have been supplying process controls & instrumentation equipment since 1994, & now serves an ever expanding customer base, both in the UK & globally.

We offer a full range of valve & instrumentation products & services, with our product rangerepresenting leading technologies & brands:

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Valves: Solenoid & Pneumatic Valves. Control Valves & Positioners. Actuated Ball, Globe or Diaphragm Valves & Isolation Valves

Services: Repair, Calibration, Panel Build, System Design & Commissioning





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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 rangefrom 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 to2,

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, *f*

METHOD OF FUNCTION

Medium flows through the valve as indicated by the arrow and force stem-piston-gasket ($3 \in 19 \in 26$) 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).

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	Descripci€n	Material		Descripci€r	Material	
1	Body	Stainless steel CF8M6 Bronze RG10 Carbon steel WCB Nodular Iron GGG40.3	18	Oring	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 steel2A	21	Flat Gasket	PTFE	
5	Bolts	Stainless steel2A	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 guid	•	
8	Oring	NBR	28	Seal	NBR Graphited PTFE	
9	Spring cover	Stainless steel QF3 16	29	Screw	Stainless steet2A	
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 (Bearisteel 100 Cr 6)				
13	Regulation stem	1.4404 SS 316L	41	Stem	Stainless steel Aisi 316L (DN100)	
14	Safety reg. stem washer	Stainless steet2A	42	O-ring	NBR (DN100)	
15	Block Pin	Stainless steel2A	43	Washer spring	Stainless steel Aisi 316L (DN100)	
16	Bushing stem	1.4404 SS 316L	44	Screw	Stainless steet24(DN100)	
17	Nut(s)	Stainless steel2A				
				Recommended spare parts		

DN100 scheme

Dimensions, weight and Kv value

	DN	15	20	25	32	40	50	65	80	100
Κv	(m,,/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 ANS	SI150 (mm) (inches)	€	€	184 7,25,	-	222 8,75,	254 10,	276 10,9,	298.5 11,75,	352.5 13,88,
A ANS	SI300 (mm) (inches)	€	€	197 7,76,	-	235 9,25,	267 10,51,	292 11,5,	317.5 12,50,	368 14,49,
B Thre	eaded BSP / NPT	•,	f,	1,	1.25,	1.5,	2,	1	-	-
L	(mm)	240	240	250	250	300	300	415	430	490
Weigh	nt (kg.)	10	10	12	13	16	18	30	40	50

€ Available under request

INSTAL LATION DRAWING

Installation is recommended according to the following drawing:

- 2 ð®Filter
- 3 ð®Inlet pressure
- 4 ð®Pressure reducing valve VD
- 5 ð®Safety valve
- 6 ð®Outlet pressure