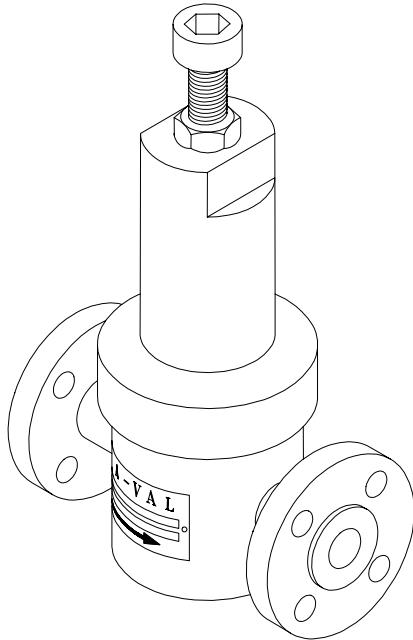


Model PRS-09I-FLG IN-LINE PRESSURE-REDUCING VALVE



- Spring diaphragm operated
- 1"-2" flanged in-line
- Inlet pressures to 275 PSI (19 Bar)
- Outlet pressures 5 to 75 PSI (5 Bar) (multiple spring ranges) (consult factory for higher pressures)

Features

- **Pressure-containing parts** made from solid bar stock materials — unlike castings which have wall thickness variations.
- **Body and flanges:** Standard material is type 316 stainless steel. Special alloys (e.g. Monel, titanium, and Hastelloy) also available.
- **Trim:** Stainless steel for main valve and seat is standard. Teflon sealing option is also available for air or gas service.
- **Teflon-Viton composite reinforced diaphragm** is rated pressure of 100 PSI and minimum burst pressure of 300 PSI. Teflon film on the wetted side provides good corrosion resistance to a wide range of fluids and gases including steam. Max temperature rating is 350 °F. Viton is the elastomeric seal on the non-wetted side.
- **In-line flanges:** 150 ANSI RF is standard for this model with face-to-face dimensions as illustrated. Custom flange facing can also be made available. Bolt holes straddle centerline. Standard inlet flanges and outlet flanges are equal in size. Unequal flange combinations (larger outlet than inlet) are also available to compensate for expansion of gases at reduced pressures.

Applications

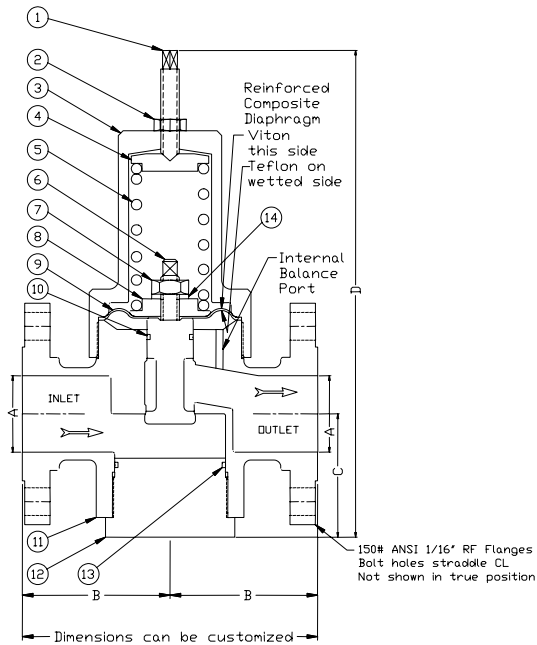
This is a direct-acting pressure-reducing valve with an adjustable spring operating against a flexible elastomeric diaphragm subjected to the reduced outlet pressure of the valve.

This valve is used for medium to low flow applications. See flow data below. For larger capacities refer to model PRS-09-FLG with offset flanges. Corresponding threaded NPT models are also available.

This valve can be used for water, air, gases, chemicals, solvents, and fluids including steam, depending on the materials selected (consult factory). Only clean, filtered, or strained liquids and gases should be used for best operation of the valve. A strainer or filter, depending on the degree of contamination, should be installed before the inlet of the valve. Strainers or filters can be purchased from Stra-Val to provide some degree of protection.

Unlike unbalanced pressure-reducing valves, this valve is a balanced inlet design and will work quite well on applications where the inlet pressure will fluctuate widely and will have little effect on outlet pressure.

This valve should not be used as a shutoff valve. If the valve is expected to be dead ended (having no flow passing through the valve) for prolonged periods, pressure at the inlet should be shut off, or a relief valve installed on the outlet side of the valve in case of excessive pressure buildup, reducing the life of the diaphragm or causing possible equipment damage downstream of the valve.



Material List and Specification

1. Adjusting screw	Steel
2. Lock nut	Steel
3. Spring chamber	Steel
4. Spring pusher	Steel
5. Adjusting spring	Steel
6. Main valve	Stainless steel
7. Lock nut	Steel
8. Nut, diaphragm	Steel
9. Diaphragm	TFE / Viton
10. Seal	Viton
11. Body	Stainless steel
12. Bottom plug	Stainless steel
13. Seal	Viton
14. Washer	Steel

- All carbon steel parts upgradeable to stainless steel

Size	Dimensions (inches)			Flow data		
	B	C	D	Cv	Flow orifice	GPM*
	inch					
1	3.50	2.2125	11.75	8.40	.75	42
1.5	3.75	2.50	13.50	14.90	1.00	75
2	4.00	3.38	14.25	23.3	1.25	117

* Flow is in USGPM based on 25 PSI pressure drop

Note: Dimensions are approximate and are subject to change without notice. Request certified dimensions before final product installation.