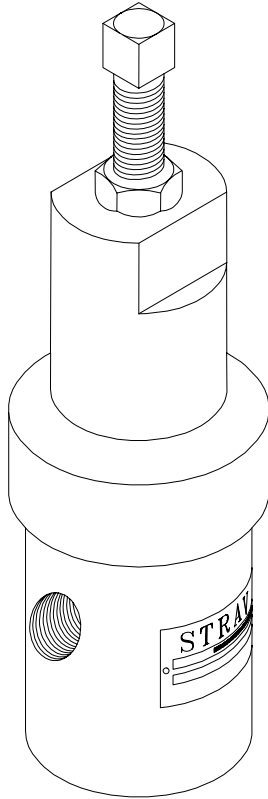


Model PRS-09 THD PRESSURE-REDUCING VALVE



- Spring diaphragm operated
- 1/2"-2" NPT THD
- Inlet pressures to 300 PSI (20 Bar)
- Outlet pressures to 75 PSI (5.1 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:** Standard materials are steel, stainless steel, and brass. 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 designed for much greater main valve travel than the stainless steel diaphragm in model PRS-05. Teflon film on the wetted side provides good corrosion resistance for 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.
- **Parallel-line porting:** Piping is offset by approximately one pipe diameter. Optional bottom outlet is also available to suit piping requirements.

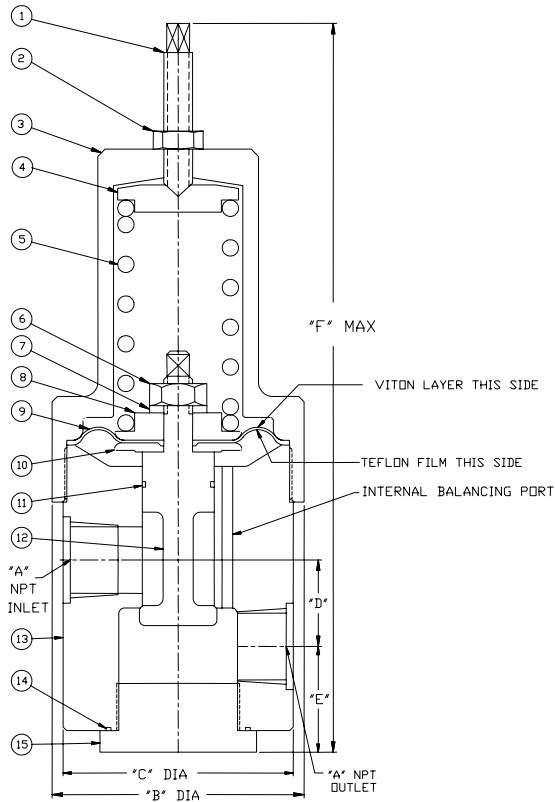
Applications

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 can be used for non-corrosive or mildly corrosive fluids including steam, depending on the materials selected (consult factory). When liquids or gases contain debris or other solid matter which might cause internal clogging or improper operation of the valve, a strainer with a fine wire mesh should be installed before the inlet of the valve. In-line strainer fittings or basket strainers can be purchased from Stra-Val to solve this problem.

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.

When this valve is selected, it is essential that a relief valve be installed on the downstream side of the valve in case the diaphragm is subjected to excessive outlet pressures.



Material List and Specification

1. Adjusting screw	Steel
2. Lock nut	Steel
3. Spring chamber	Steel
4. Spring pusher	Steel
5. Spring	Steel
6. Lock nut	Steel
7. Lock washer	Steel
8. Spring follower	Steel
9. Diaphragm	TFE / Viton
10. Diaphragm disc.	Stainless steel
11. O-ring	Buna
12. Main valve	Stainless steel
13. Body	Stainless steel
14. O-ring	Buna
15. Bottom plug	Stainless steel

- Max outlet pressure 75 PSI (5.1 Bar)
- Based on diaphragm rated press

Dimensions

	A	B	C	D	E	F
1/2	4.50	4.00	1.19	1.50	10.50	
3/4	4.50	4.00	1.25	1.63	11.75	
1	4.50	4.00	1.50	1.88	12.63	
1-1/4	4.50	4.00	2.19	2.63	13.50	
1-1/2	4.50	4.00	2.19	2.75	16.81	
2	5.00	4.50	2.63	2.88	17.50	

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