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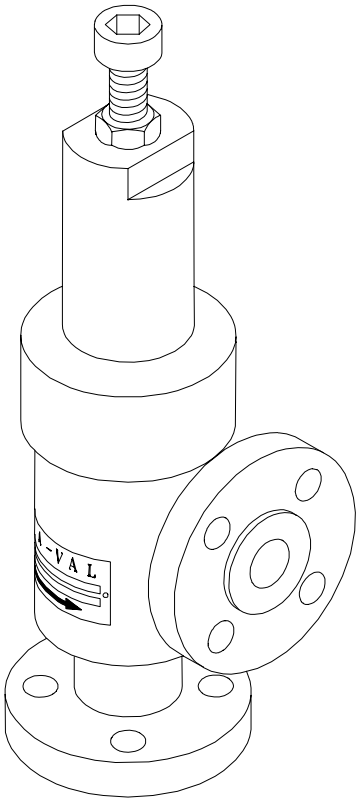
Model PRH-04-FLG PRESSURE-REDUCING VALVE (PRESSURE REGULATOR)



- Spring and piston operated
- 1/2"-2" ANSI flanged 150#, 300#, 600# illustrated below
- Higher pressure units to 2500# flange rating are also available, consult factory
- Inlet pressures to 1440 PSI (100 Bar)
- Outlet pressures to 50-1400 PSI (3.5-96 Bar) (Consult factory for available spring ranges)

Features

- **Pressure-containing parts** made from solid bar stock materials; unlike castings which have wall thickness variations with reduced strength and porosity problems.
- **Body:** Standard material is stainless steel (type 303SS and 316SS). Special alloys (e.g. Hastelloy, titanium, Monel, and Alloy 20) also available.
- **Trim:** All internal wetted parts are of the same class of corrosion-resistant materials as the body.
- **Soft seats:** For some pressures and temperatures, elastomeric seats can be offered in Teflon, Viton, Buna, and EPDM to improve seating for liquids and especially for gases.
- **Teflon V packing seal:** Low-friction design permits operation with small differences between inlet and outlet pressures (approximately 25 PSI). Max temperature rating for Teflon seals is 400 °F (204 °C).

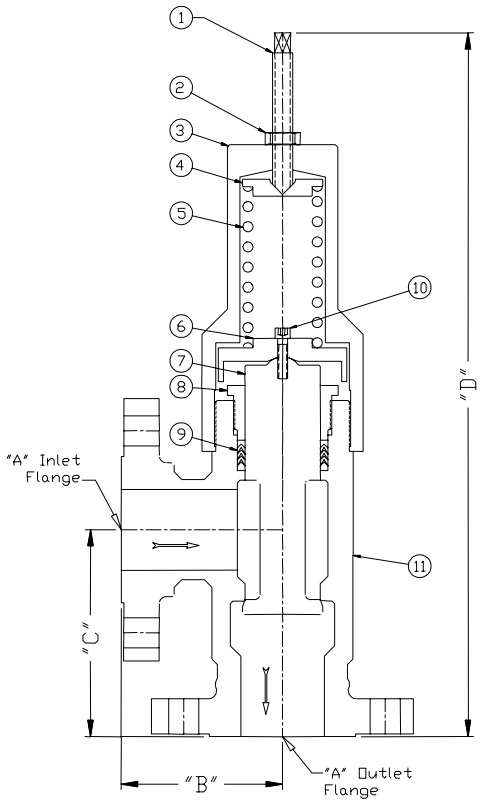
Applications

Valve can be used for non-corrosive or mildly corrosive fluids, depending on the compatible materials selected. When liquids or gases contain debris or other solid matter which might cause internal clogging or improper operation of the valve, a strainer or filter 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. For this reason, this valve, as with most metal-seated regulators, **should not be used for dead ended, shutoff service, or where the valve is operating at or near zero flow.** When the valve is expected to be subjected to prolonged periods of shutoff, install a separate shutoff or isolation valve at the inlet of the valve. Always install a relief valve on the outlet side of the valve to handle any overpressure that may result from seat buildup or particle contamination.

This valve will work quite well on applications where the inlet pressure will fluctuate widely as it is a balanced inlet design.

Principle of Operation

This valve operates with a compression spring acting on the main valve which is used to adjust the outlet pressure with an adjusting screw. Therefore a desired increase in outlet pressure requires an increase in spring compression. Similarly, to get a reduction in outlet pressure requires a reduction in spring compression. The adjusting screw is locked in position with a lock nut. However, locking caps or a locking wire seal are also available to prevent tampering. The spring chamber which is non-wetted and does not come in contact with the fluid or gas is normally constructed in carbon steel (painted) but can be upgraded to stainless steel type 303SS and 316SS. The valve can operate in any orientation, vertical, or horizontal, etc.



Standard Material List and Specifications

1.	Adjusting screw	Steel
2.	Lock nut	Steel
3.	Spring chamber	Steel
4.	Spring pusher	Steel
5.	Spring	Steel
6.	Spring carrier	Steel
7.	Main valve	Stainless steel
8.	Packing nut	Stainless steel
9.	V-rings packing	Teflon
10.	Retaining screw	Steel
11.	Body	Stainless steel

Dimensions (in)

Max for 600# flange

A	B	C	D	Flow Cv
1/2	2.75	2.75	11.75	3.93
3/4	3.25	3.50	13	4.91
1	3.50	3.50	15	9.57
1-1/4	4.00	4.25	16	12.1
1-1/2	4.25	4.50	16.5	17.1
2	4.50	5.50	17.5	35.3

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