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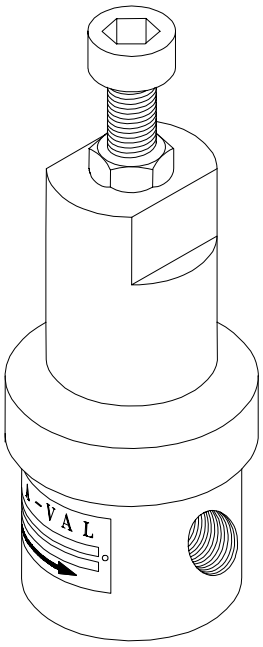
Model PRS-05 THD PRESSURE-REDUCING VALVE



- Spring-diaphragm operated
- 1/8"-1" NPT THD
- Inlet pressures to 300 PSI (20 Bar)
- Outlet pressures to 125 PSI (8.5 Bar) (multiple spring ranges)

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, Hastelloy, and Teflon) also available.
- **Trim: Stainless steel** for valve seat, diaphragm, and internal valve spring is standard.
- **Metal diaphragm seal** permits valve to operate at cryogenic and elevated temperatures to 600 °F (315 °C). This valve is also available with a Teflon seat; see separate model PRS-05-1 which is rated only 450 °F (232 °C).
- **In-line porting** allows for simplified piping installation.

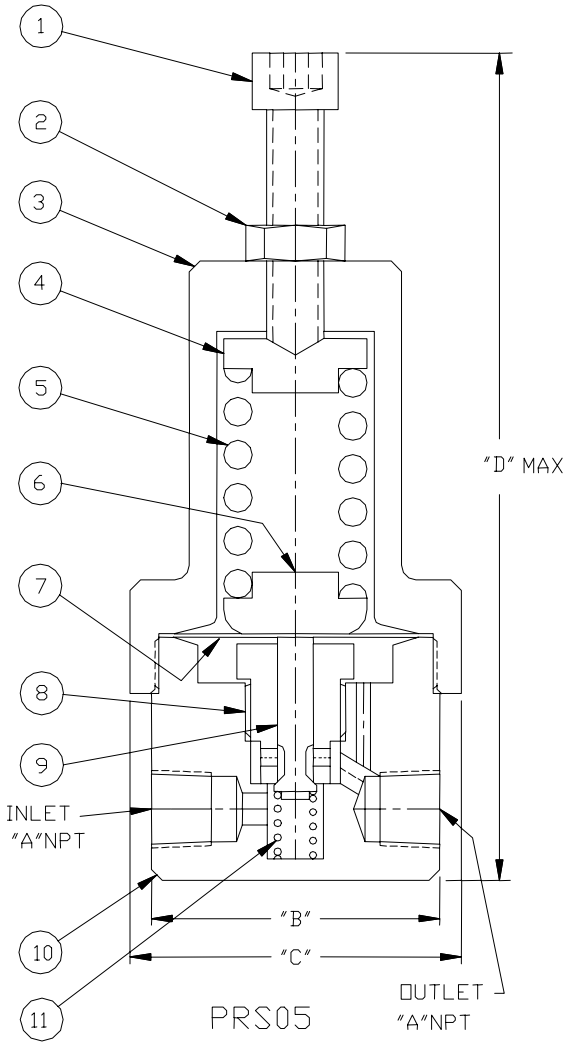
Applications

Valve can be used for non-corrosive or mildly corrosive fluids, 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 STF-05 or basket strainer models SBS-10 or SBV-05 can be purchased from Stra-Val to solve this problem.

This valve will work quite well on applications where the inlet pressure will not fluctuate widely. However, where the condition does exist and the outlet pressure needs to be controlled closely, a pressure-reducing valve with a balanced design is recommended such as the Stra-Val model PRS-09.

Principle of Operation

This is a direct-acting pressure-reducing valve with an adjustable spring operating against a flexible stainless steel diaphragm subjected to the reduced outlet pressure of the valve. With the spring completely uncompressed and adjusting screw backed out, the inlet pressure will close the main valve and keep it shut. This will shut off flow and reduce the outlet pressure to zero if the valve seat is sealing effectively.



For steam, gas water, and oil service

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.	Spring carrier	Steel
7.	Diaphragm	Stainless steel
8.	Seat	Stainless steel
9.	Main valve	Stainless steel
10.	Body	Stainless steel
11.	Spring	Stainless steel

Dimensions

A (NPT)	B	C	D
1/8	3	3-3/8	7-1/4
1/4	3	3-3/8	7-1/4
3/8	3	3-3/8	7-1/4
1/2	3	3-3/8	7-1/2
3/4	3	3-3/8	7-5/8
1	4	4-3/8	8-7/8

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