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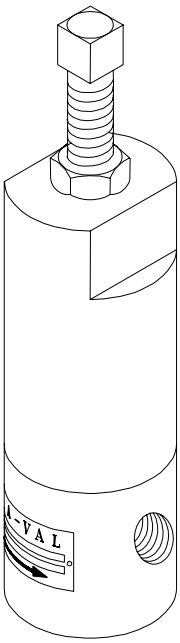
Model BPH-05 THD BACK PRESSURE-REGULATING VALVE



- Piston operated
- 1/8"-1/2" NPT THD
- Control pressures to 5000 PSI (340 Bar) (see table below)
- Stainless steel valve, brass valve, and exotic alloy valves

Pressure Regulating Valve Features

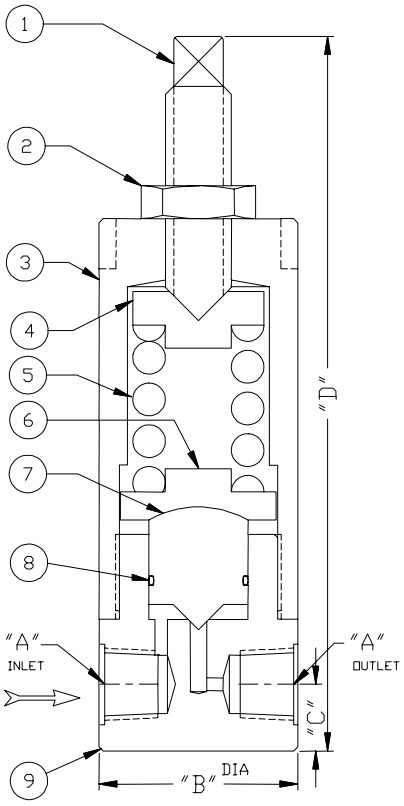
- **Pressure-containing parts** made from solid bar stock materials — unlike castings which have wall thickness variations.
- **Body:** A stainless steel valve is our standard and is available in type 303 and 316SS. Special alloys are available to make a Monel valve, titanium valve, brass valve, and Hastelloy valve.
- **Piston Valve/Poppet:** Type 303 or 316 stainless steel is standard. For very high pressures, hardened stainless steel is used.
- **Seal:** Standard elastomers are Viton, Buna, and EPDM. Other elastomers are also available.
- **In-line porting** is the standard piping arrangement.

Pressure Control Valve Applications

This pressure control valve is used for very high back pressure control applications such as maintaining constant pump discharge pressures, bypassing excessive pressures from various types of process equipment, and wherever a constant pressure must be maintained in a process or piping system. This stainless steel valve can also be used for non-corrosive or mildly corrosive fluids, depending on the materials selected. When liquids or gases contain debris or other solid matter that might cause internal clogging or improper operation of the stainless steel valve, a filter or strainer with a fine wire mesh should be installed before the inlet of the back pressure valve. High-pressure in-line strainer fittings, basket strainers, and filters can be purchased from Stra-Val.

Principle of Operation

This is a direct-acting back pressure valve with an adjustable spring operating against a piston subjected to the inlet pressure of the valve. Increasing the spring compression will increase the system or line pressure to be maintained. Reducing the spring compression will reduce this pressure. An increase in system pressure beyond the set point will cause the poppet to open and relieve the excess pressure through the outlet port of the back pressure 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.	Spring carrier	Steel
7.	Poppet	Stainless steel, brass, Teflon
8. *	Seal	Viton, Buna, EPDM, Teflon, etc.
9.	Body	Stainless steel

* Teflon used only for low pressures

Dimensions

A	B	C	D	Max inlet PSI (Bar)
1/8	1.50	.50	5.62	5000 (340)
1/4	3.00	.75	10.12	3600 (245)
3/8	3.00	.75	10.38	3600 (245)
1/2	3.00	.88	10.62	3600 (245)

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