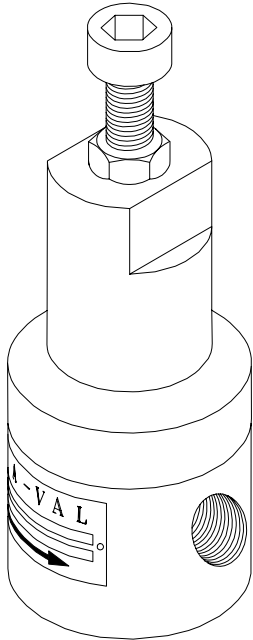


## Model RVI-20 LOW-PRESSURE RELIEF VALVE IN-LINE, LOW-PRESSURE DIAPHRAGM



- Stainless steel, Teflon, Hastelloy, titanium, Monel, PVDF (Kynar), PVC, or brass body
- 1/4"-1" NPT THD
- Adjustable relief pressures from 0.50 PSI (0.03 Bar) to 75 PSI (5 Bar) in multiple spring ranges

### Low-Pressure Relief Valve Features

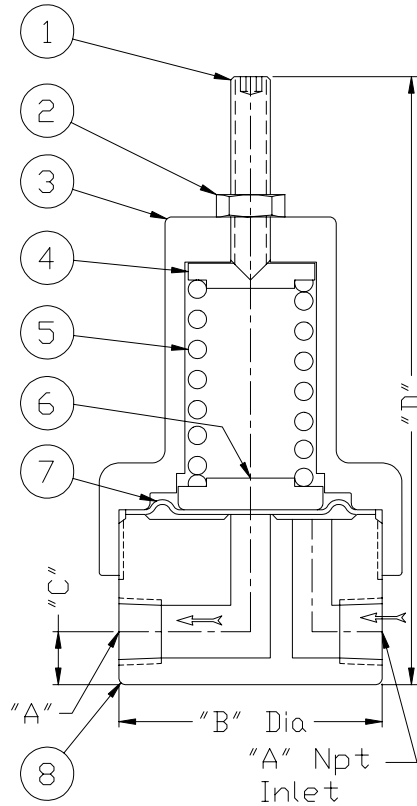
- **Low-pressure valve body:** Available in a wide variety of special alloys and high-performance engineered plastics (see above).
- **Elastomeric diaphragm:** Choice of different low-pressure valve diaphragm elastomers includes reinforced Teflon, Viton, Buna, and EPDM.
- **Spring chamber:** Safety relief valve standard construction is carbon steel as it is non-wetted. Alternates: stainless steel, aluminum, etc.
- **In-line valve porting** is standard. For right-angle valve porting (side inlet, bottom outlet) see model RVL-20. Special threads, flanges, and sanitary connections are also available.

### Applications

Safety relief valve can be used for relieving pressures and maintaining upstream line pressures to a specific set pressure. Pressure relief valve can also be used for bypassing fluids or gases. Only strained or filtered liquids are recommended. When liquids contain debris or other solid matter which might cause the valve seat not to close properly with this type of pressure relief valve, a low-pressure strainer with a fine wire mesh should be installed before the inlet of the valve. Simplex basket strainers or low-pressure filters can be purchased from Stra-Val. This is a diaphragm low-pressure valve which is used where accurate set pressures must be maintained. The large diaphragm area compared to a piston pressure relief valve produces much more accurate pressure control with very low hysteresis between opening and closing pressures. See available orifice sizes and flow Cv below.

## Principle of Operation

This is a diaphragm and spring type relief valve where the spring constantly opposes the pressure acting against the diaphragm which seals off the inlet port from the outlet port at the valve seat. The desired relief or bypass pressure is achieved by compressing the spring until the spring force is adequate to balance the pressure force acting against the diaphragm. When the inlet pressure exceeds the set pressure, the diaphragm will open to relieve and bypass the excess pressure.



## Material List and Specification

1.	Adjusting screw	Steel
2.	Lock nut	Steel
3.	Spring chamber	Steel
4.	Spring pusher	Steel
5.	Spring	Steel
6.	Spring carrier	Steel
7.	Diaphragm	Teflon / Viton
8.	* Body	Stainless steel

\* Body also available in brass, PVC, Teflon, Monel, and Hastelloy

Dimensions (inches)				Flow data	
A	B	C	D	Orifice max	Cv
1/4	2	.44	5.56	.125	.279
3/8	2.50	.50	5.59	.375	2.52
1/2	2.50	.63	5.62	.500	4.47
3/4	3	.75	6.17	.438	3.42
3/4	4	.75	8.75	.625	6.99
1	4	1.00	9.25	.875	13.7

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

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