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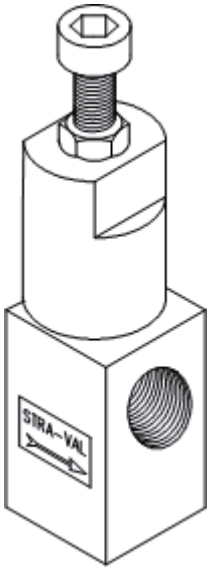
21 Columbus Avenue
Garfield, NJ 07026

Model RVC-04

1/2" Npt ADJUSTABLE PRESSURE RELIEF VALVE-Discontinued



- Brass (no longer in stock), for 303 stainless steel see model RVC05
- 1/2" NPT THD Replaced by RVC05
- Adjustable relief pressures from 25 psi (1.7 barg) to 500 psi (34 Bar) for SS, 300 psi (20 barg) for brass

Features

- **Pressure-containing parts** made from solid bar stock materials, unlike castings which have wall thickness variations.
- **Body:** Standard material is brass. Other alloys (e.g.Stainless steel, Monel, titanium, and Hastelloy) are available only in model RVC05.
- **Poppet:** 303 series stainless steel and brass are standard. Teflon is available for low pressure service (<150 PSI) and where required for corrosion resistance.
- **Elastomeric seal:** Standard elastomers are Viton, Buna, Epdm and Teflon (PTFE). Choice of elastomer determines final temperature limitation.
- **Spring chamber:** Standard construction is aluminum or carbon steel depending on relief pressures and can also be supplied in stainless steel for corrosive environments.This part is non-wetted
- **Right-angle porting:** Standard construction is bottom inlet, side outlet. For special threads see model RVC05.

Applications

This model is now replaced by model RVC05. Note Spares are still available for this model.

Use these valves for emergency relief where pressures must be relieved quickly to reduce damage that could result from overpressure in a system. Where the overpressure needs to be controlled more gradually ,such as in back pressure or pump bypass applications, use our Backpressure/Bypass valves which will reduce the probability of pressure spikes that often occur when relief valves are selected for pressure control applications.
This adjustable relief valve should only be used for non-corrosive fluids, or where the materials selected are compatible with the fluid and will not cause corrosive buildup that could keep the poppet from opening. When liquids contain debris or other solid matter that might cause internal clogging or improper operation of the stainless steel 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. The seat diameter for this relief valve is 0.625 with a **Cv of 5.5.**

Avoid locating the valve where freezing can occur, and if unavoidable, take precautions to insulate or heat wrap valve and piping to keep from freezing.

These valves do not carry the Canadian CRN or ASME approval stamp and should not be applied where this requirement must be met. However, the valves generally meet or exceed ASME design criteria with wall thicknesses that are much heavier than the minimums required. For an additional charge, valves can be ordered with material certs and with a certified hydro-test certificate and other tests to meet special documentation and acceptance requirements.
Standard metal seated valves meet ANSI/FCI Class IV seat leakage standards (0.01% of rated valve capacity, not bubble tight).

For other sizes and higher pressures, see model RVC05

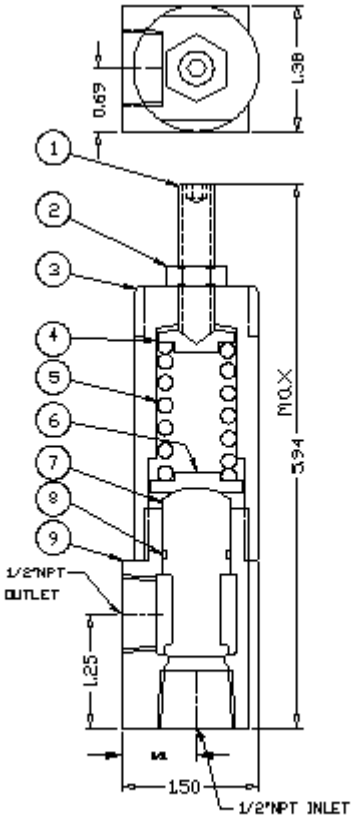
Options

This product is no longer available. See model RVC05 that has more options and material choices

Principle of Operation

This is a poppet and spring type relief valve where the spring constantly opposes the pressure acting against the poppet which seals off the inlet port from the outlet port at the valve seat. The desired set pressure or relief is achieved by compressing the spring until the spring force is adequate to balance the pressure force acting against the poppet. When the inlet pressure exceeds the set pressure, the poppet will open to relieve the excess pressure. Reseat pressure will depend on the piston seal material used. Typically, the Buna, Viton or Epdm seal will reseat within 5% of the set pressure and 10% with a PTFE seal that is harder.

These valves are not equipped with a manual lever release. However, manual override is accomplished by first unlocking the spring lock nut to the adjusting screw and backing it out enough to open the poppet to release pressure, and then repositioning it to its original preset locked condition without losing the original set pressure. This procedure is recommended periodically to flush the seat and to check for proper opening of the valve piston.



RVC0405T (obsolete)
Replaced by Model RVC05

RVC-04 replaced by RVC05

Material List and Specification

1.		Adjusting screw	Steel or SS
2.		Lock nut	Steel or SS
3.	*	Spring chamber	Aluminum, steel or SS
4.		Spring pusher	Steel or SS
5.		Adjusting spring	Steel or SS
6.		Spring Carrier	Steel or SS
7.	†	Poppet	303 SS, brass, or PTFE
8.	‡	Piston Seal	Buna, EPDM, Viton PTFE
9.	†	Body	Brass only

* Aluminum used for low pressures

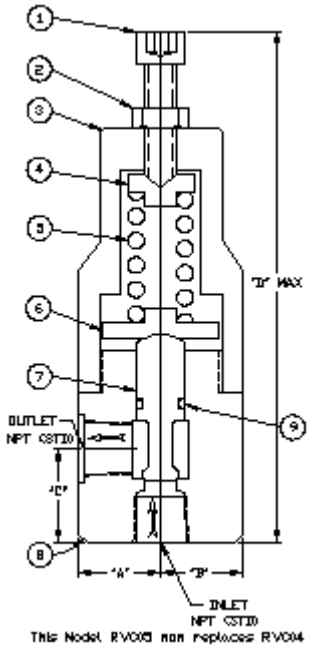
† Stainless steel standard or when required at higher temperatures

‡ Alternate elastomers available

Dimensions

Size	A	B	C	D
1/2	1-1/2	1-3/8	1-1/4	6

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



RVC05 replaces RVC04