

Relief Valve

Pressures to 75,000 psi (5171 bar)

RVP Metal Seat Relief Valves

Series RVP relief valves provide reliable venting of gases or liquids for set pressures from 3,000 psi (206.8 bar) minimum to 75,000 psi (5171 bar). The standard temperature range for all models is -423° to 400° (-252° to 204°C). A high temperature option to 750°F (399°C) is also available.

These precision valves are designed for pressure gas systems, cryogenic systems, petrochemical applications and other special systems. Capable of handling air, gases, steam, vapor and liquids, they are however, **not recommended for steam boiler applications nor are they ASME code stampable.**

RVS Soft Seat Relief Valves

Series RVS relief valves utilize a soft seat design for reliable venting of gases at set pressures from 1,500 psi (103 bar) to 20,000 psi (1378 bar). The operating temperature range is 32°F (0°C) to 400°F (204°C).

The soft seat design provides bubble tight sealing, repeatable pop-off, and reseal. Additionally, soft seat valves provide a higher cycle life than metal seat relief valves.

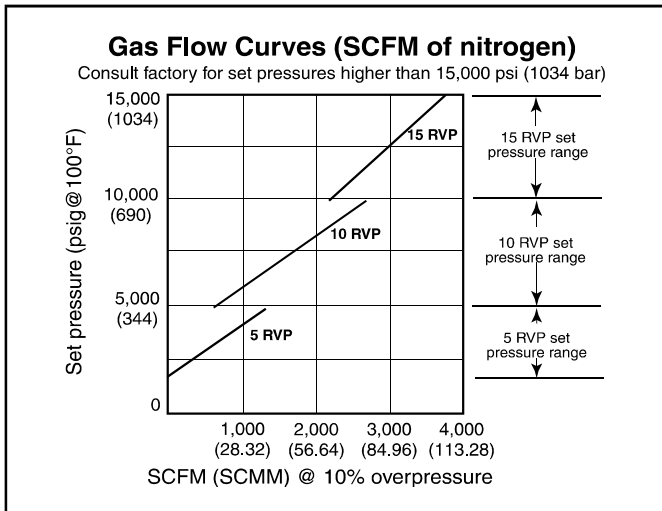
These precision valves are designed for pressure gas systems, where zero leakage is critical. They are not recommended for liquid nitrogen or liquid carbon dioxide, which produce gas at cryogenic temperatures upon relief.

Relief valves are designed to open proportionally to increasing pressure. Therefore, they are not recommended for applications requiring immediate full valve flow at set pressure (such as decompositions, polymerizations, etc.). Full flow of relief valve is defined at 10% over set pressure.



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Relief Valves - RVP Metal Seat Relief Valves



All RVP models are designed primarily for thermal expansion or low volume relief applications at high pressures where flow is not critical. Thus, liquid curves for these models are not shown.

Note: Curves on this page are based on capacities of valves only and do not take tubing into account.

Caution should be exercised in proper selection of medium pressure tubing based on actual operating conditions. Two series available: 15,000 (1034.20 bar) and 20,000 (1380 bar).

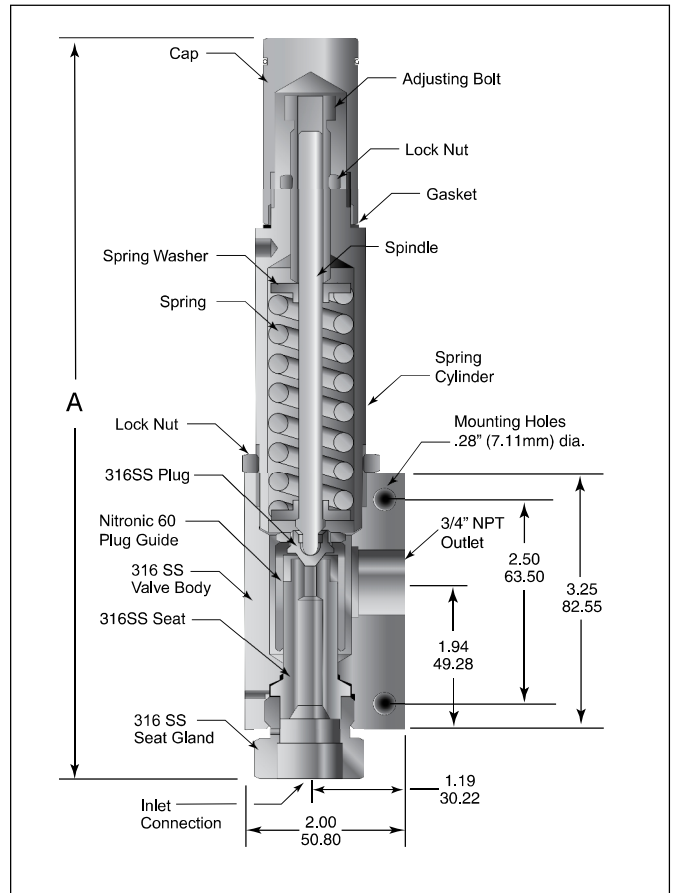


Figure 1 - RVP Series

Note: See back cover for options and ordering information.

Ordering Table and Specifications

RVP Series - See Figure 1

Catalog* Number	Connection Size and Type		Orifice Diameter inches (mm)	Pressure Rating psi (bar) @100°F (38°C)*			Dimension Inches (mm) A
	Inlet Connection	Outlet Connection NPT		Minimum Setting	Maximum Setting	Maximum Back Pressure	
5RVP9072	SF562CX	3/4	0.312 (7.92)	3,000 (206.84)	5,000 (344.73)	500 (34.47)	9.40 (238.76)
10RVP9072	SF562CX	3/4	0.250 (6.35)	5,000 (344.73)	10,000 (689.46)	500 (34.47)	9.40 (238.76)
15RVP9072	SF562CX	3/4	0.188 (4.78)	10,000 (689.46)	15,000 (1034.20)	500 (34.47)	9.40 (238.76)
20RVP9072	SF562CX	3/4	0.156 (3.96)	15,000 (1034.20)	20,000 (1378.93)	500 (34.47)	9.40 (238.76)
30RVP6072	F375C	3/4	0.125 (3.18)	20,000 (1378.93)	30,000 (2068.39)	500 (34.47)	9.52 (241.81)
45RVP9072	F562C	3/4	0.093 (2.36)	25,000 (1723.66)	45,000 (3102.59)	500 (34.47)	9.52 (241.81)
60RVP6072	F375C	3/4	0.078 (1.98)	30,000 (2068.39)	60,000 (4136.79)	500 (34.47)	9.52 (241.81)
75RVP5072	F312C150	3/4	0.062 (1.57)	37,000 (2551.02)	75,000 (5170.99)	500 (34.47)	9.83 (249.68)

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower.

For prompt service, Parker Autoclave Engineers stocks select products. Consult factory.

Note: For pressure rating see selection chart.