



Pressure Relief Valve

Adjustable 0.5 ~ 2 PSI Pressure Range

Reusable, elastomer seal design, with high-flow pressure relief slots

Pressure adjustment mechanism... screw and lock-nut



Conflat® CF and ISO NW KF flange configurations available

Pressure Relief Valve

Since vacuum systems are designed to operate under external (atmospheric) pressure only, Accu-Glass' pressure relief valves offer the means to protect vacuum vessels against internal over-pressurization. There are many scenarios in which rapid pressure buildup inside a vacuum vessel may occur, such as a runaway gas backfill operation. Besides protecting delicate instruments and equipment, PRVs also minimize risk of injury to system operators and personnel.

How does our PRV work? Pressure buildup inside a vacuum vessel pushes on a spring loaded, elastomer sealed, piston. Once the relief valve's calibrated pressure limit is reached, the piston begins to move breaking (disengaging) its seal and providing instant pressure relief in the vessel. Unlike single use 'burst disc' devices, a PRV's unique design allows it to be used over and over—indefinitely. For systems operating in high vacuum pressure regimes, PRVs are the economical alternative to single use burst disc solutions.

Unless otherwise requested, standard PR valves are factory calibrated for a 2 PSI relief pressure. However, Accu-Glass Products PRV can be adjusted to as low as 0.5 PSI relief pressure, if required. Please contact an Accu-Glass Products sales-engineer for more information on this and other custom pressure relief solutions.

Features

- Precise pressure adjustment
- 0.5 ~ 2 PSI pressure range calibration
- Reusable elastomer seal design
- High vacuum service applications
- Conflat® and ISO NW compatible mounts
- Stainless steel / Aluminum construction
- Custom solutions on request

Specifications

Material	
Body, Stainless Steel	304
Housing, Aluminum	6061

Pressure Range ¹	
Adjustable	0.5 ~ 2.0 PSIG

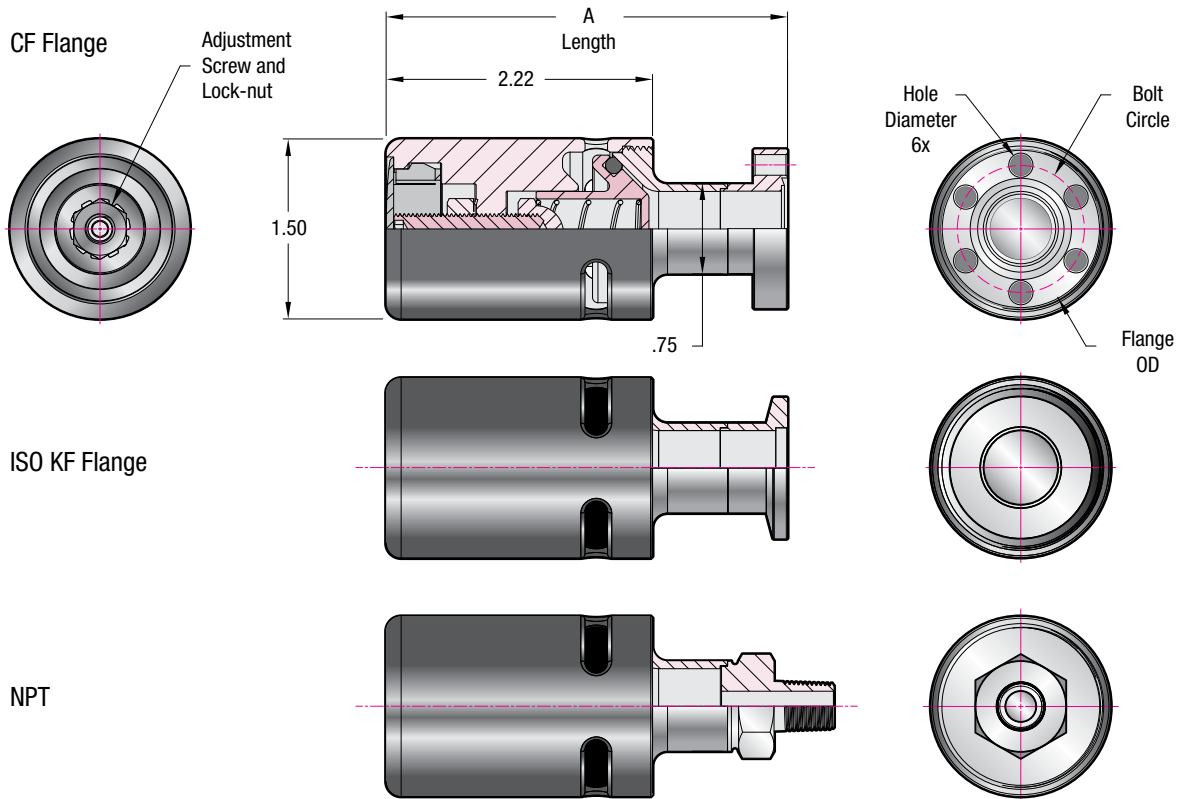
Vacuum Range ²	
HV, High vacuum	1x10 ⁻⁸ Torr

Temperature Range ³	
PRV Main Seal, Viton®	150°C
Conflat® Flange Mount	450°C
ISO Flange Mount	150°C
NPT Pipe Thread Mount	150°C

Notes

1. Standard PR valves are calibrated, stocked and shipped with a 2.0 PSI pressure setting. Custom PRVs calibrated to pressures as low as 0.5 PSI are available on request.
2. Leak tested to 5x10⁻¹⁰ Standard cc/sec of He.
3. Overall assembly ratings must be adjusted to that of its lowest rated component.

§ Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.



CF Flange¹ — 150°C / HV to 1x10⁻⁸ Torr

Mount Type	Flange OD	Bolt Circle	Hole Diameter	A Length	Calibrated Pressure PSIG	Model Number	Part Number	Unit Price \$
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PRV — 0.5 ~ 2.0 PSI Adjustable Relief Pressure

133 CF	1.33	1.062	0.17	3.35	2	PRV-133	113145	285
275 CF	2.73	2.312	0.26	2.90	2	PRV-275	113150	295

1. Compatible with Conflat® flanges

ISO KF Flange¹ — 150°C / HV to 1x10⁻⁸ Torr

Mount Type	Flange OD	A Length	Calibrated Pressure PSIG	Model Number	Part Number	Unit Price \$
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PRV — 0.5 ~ 2.0 PSI Adjustable Relief Pressure

NW16 KF	1.18	3.35	2	PRV-K16	113155	285
NW40 KF	2.16	2.85	2	PRV-K40	113160	295

1. Compatible with ISO 2861/1 flange specifications

NPT Pipe Thread Fitting — 150°C / HV to 1x10⁻⁸ Torr

Mount Type	Flange OD	A Length	Calibrated Pressure PSIG	Model Number	Part Number	Unit Price \$
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PRV — 0.5 ~ 2.0 PSI Adjustable Relief Pressure

1/8	3/4 Hex	3.73	2	PRV-1/8NPT	113262	295
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113145 / PRV
mounted on 1.33 CF Flange



113155 / PRV
mounted on NW16 ISO Flange