

APRV SERIES

Description

The Generant Series APRV, Absolute Pressure Relief Valve, is a spring reference over pressure protection device for applications requiring constant set pressure independent of changes in ambient pressure (altitude). The valve was developed primarily for use with liquid helium dewars and the valve has been extensively tested to verify that the valve can withstand the extreme cold environment (FS Seals). Valves are constructed primarily of brass, with the seal and stainless steel spring being the only non-brass components. Valves come factory preset with set pressures ranging from 15.0 to 24.0 PSIA (1.02 to 1.65 Bar). Relief pressure can be discharged to atmosphere or to a downstream connection.

Features

- Supplied Factory Preset
- 100% Factory Tested for Leakage, Crack and Reseat Performance
- Minimal Set Pressure Drift due to change in ambient pressure
- Qualified for Extreme Low Temperature applications
- High Flow Capacity and Excellent Reseat Performance
- Discharge to Atmosphere or Inline Piping Configurations

Technical Data

Set Pressure Range: 15.0 to 24.0 PSIA (1.02 to 1.65 Bar)
 Factory Set Tolerance: ± 0.5 PSI
 Reseat: 92% of Set Pressure in PSIA
 Temperature Rating: -80° F to 350° F (-62° C to 176° C)

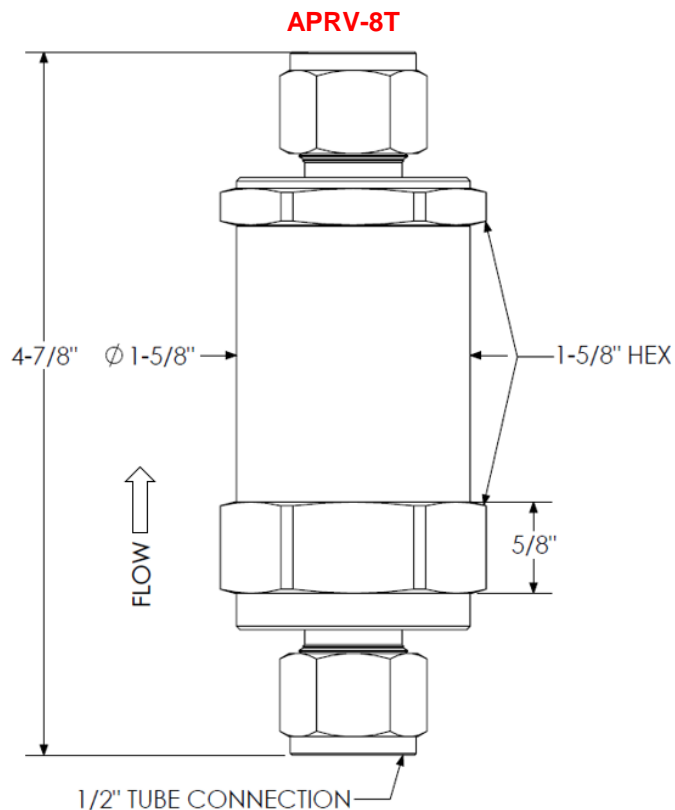
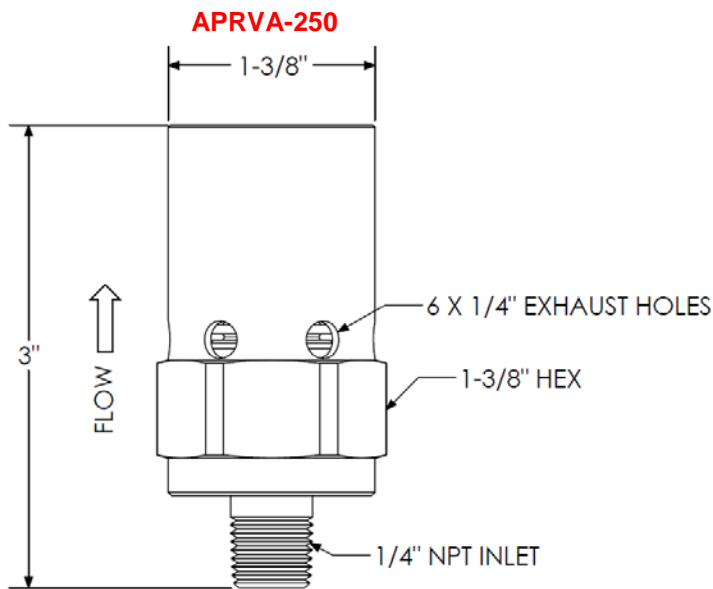
Materials of Construction

Component	Material
Body, End Cap*	Nickel Plated CDA 360 Brass, ASTM B16
Poppet, Adjustment Screw, Nuts, Ferrules	CDA 360 Brass, ASTM B16
Bellows	Brass and 300 Series Stainless Steel
Seals	Fluorosilicone

NOTE: Seals lubricated with Krytox ®
 *applicable only for inline versions (APRV)



ABSOLUTE PRESSURE RELIEF VALVE



Flow Data

Set Pressure (PSIA)	Flow at 110% of Set Pressure in PSIA (SCFM N2)
16.0	1.52
18.0	1.90

For other set pressures, consult factory.

NOTE: to convert flow from SCFM N2 to SCFM He, multiply by 2.64

How To Order

APRVA-250 - FS - 15.2

SERIES AND CONFIGURATION

APRVA-250 - Absolute Pressure Relief Valve, Vent to Atmosphere, 1/4" NPT Inlet Port

APRV-8T - Absolute Pressure Relief Valve, Inline, 1/2" Bi-Lok Dual Ferrule Tube Inlet and Outlet Ports

SET PRESSURE

Specify set pressure in PSIA (15.0 - 24.0 PSIA)

SEAL MATERIAL

FS - Fluorosilicone, -80°F to 350°F (-62°C to 176°C)

NOTE: For other port configurations and seal materials, consult factory.

Krytox® is a registered trademark of DuPont.

PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

GENERANT

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