GENERANT

VENT RELIEF VALVE
1/8” – 1/4” NPT
150 – 600 Psig

VRVH SERIES

Description
A compact, highly accurate, direct acting pressure relief valve. Factory preset to desired crack pressure and/or flow specifications. Internal adjustment provides tamper proof safety against inadvertent pressure changes. Available in vent to atmosphere or inline configurations. Valves feature an encapsulated O-ring seal to prevent extrusion at higher differential pressures.



VRVH
Vent to Atmosphere

Features and Benefits
- Accurate and Repeatable Cracking Pressure
- 100% Factory Preset and Tested
- Zero Leakage to 95 – 98% of Set Pressure
- Tamper Proof Adjustment
- Excellent Reseal Performance
- Compact Size



VRVHI
Inline

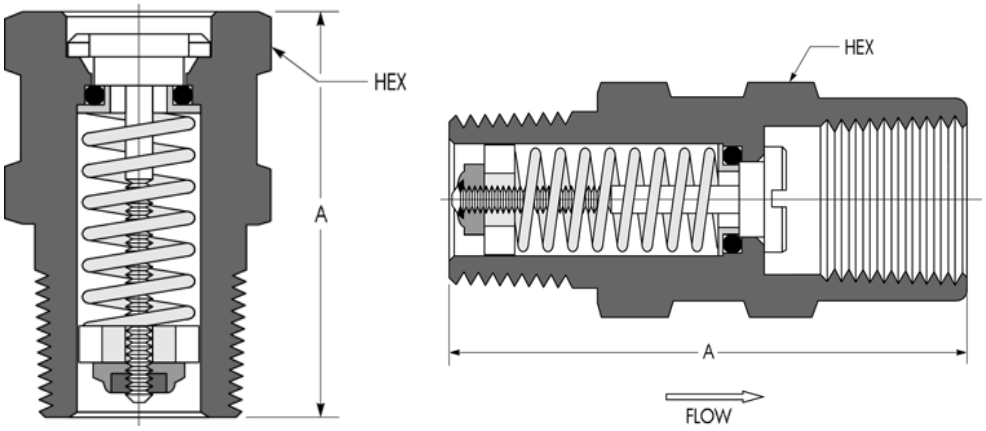
Technical Data
- Set Pressure Range: 150 to 600 Psig (10.3 to 42 bar)
- Inline Valves *(Series VRVHI):*
  Proof Pressure: 750 Psig (52 bar)
  Burst Pressure: >1000 Psig (69 bar)
- Set Pressure Tolerance: Factory preset +/- 5% on increasing pressure:
- Reseal: 90% of Set Pressure for Elastomers Seals
  80% of Set Pressure for PTFE Seals
- Temperature Range:
  -320°F to 350°F (-195°C to 177°C)
  based on seal selection, see ordering information

Materials of Construction

Component	Material
Valve Body, Stem, O-Ring Cup	Brass, ASTM B16
Spring Retainer	316 SS, ASTM A479
Seal[1]	As specified, see ordering information
Spring	302 SS/17-7 PH, ASTM A313
Locknut	18-8 SS

1 Lubricated with Krytox™

SERIES VRVH
VENT RELIEF VALVE



Dimensional Data

Pipe Size NPT	VRVH		VRVHI	
	A	Hex	A	Hex
1/8”	.94	1/2"	1.44	1/2"
1/4"	1.29	5/8”	1.75	3/4"

Dimensional data is stated in inches

Flow Data, Series VRVH (Vent to Atmosphere)

Nominal Spring		150		250		500	
Set Pressure Range (Psig)		125-175		175-350		350-600	
Valve Size	Orifice	Flow (SCFM)	Kd	Flow (SCFM)	Kd	Flow (SCFM)	Kd
1/8" NPT (VRVH-125)	0.156	7.5	0.12	12.5	0.12	33	0.16
1/4" NPT (VRVH-250)	0.293	50	0.22	90	0.24	150	0.21

Flow Data, Series VRVHI (Inline)

Nominal Spring		150		250		500	
Set Pressure Range (Psig)		125-175		175-350		350-600	
Valve Size	Orifice	Flow (SCFM)	Kd	Flow (SCFM)	Kd	Flow (SCFM)	Kd
1/8" NPT (VRVHI-125)	0.156	12	0.18	13.5	0.13	35	0.17
1/4" NPT (VRVHi-250)	0.250	45	0.27	80	0.30	175	0.33

Ordering Information

VRVHI - 250 B - V - 450

SERIES
VRVH - Vent to Atmosphere
VRVHI - Inline Relief (Male x Female)

PIPE SIZE (NPT)
125 - 1/8” Male
250 - 1/4" Male
NPT threads per ANSI/ASME B1.20.1

MATERIAL CODE
B - Brass
For other materials, consult factory

NOMINAL SET PRESSURE
Specify 150-600 Psig
Valves that are not actuated for a period of time may exhibit higher initial crack pressure (first bubble) than subsequent cycles.

SEAL MATERIAL
V - Viton™, -10°F to 375°F (-23°C to 190°C)
B - Buna-N, -40°F to 250°F (-40°C to 121°C)
N - Neoprene, -40°F to 300°F (-40°C to 148°C)
EP - Ethylene Propylene, -65°F to 300°F (-54°C to 148°C)
S - Silicone, -70°F to 450°F (-56°C to 232°C)
T - PTFE, -320°F to 350°F (-195°C to 176°C)
PTFE Seals may not reseal bubble tight.

OPTIONS
Oxygen cleaning, alternative seals and other thread configurations, consult factory.

Note: Viton™ and Krytox™ are trademarks 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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