

Description

The Generant Series Brass IRV, Industrial Relief Valve is a spring reference over pressure protection device. The valve can be ordered with set pressures ranging from 10 to 750 Psig (0.69 to 51.7 Bar) and comes factory preset and permanently locked. Relief pressure cannot be altered or adjusted in the field. Seat and poppet geometry combined with optimized spring ranges provide high flow rates with minimum pressure accumulation. Relief pressure can be discharged to atmosphere or to a downstream connection. For severe service applications and set pressures above 50 Psig (3.45 Bar), specify optional PTFE seals.

Features

- Supplied Factory Preset Set and Permanently Locked for Tamper Proof Service
- 100% Factory Tested for Leakage, Crack and Reseal Performance
- High Flow Capacity and Excellent Reseal Performance
- Discharge to Atmosphere or Inline Piping Configurations
- Optional Deflector Cap available for Diverting Exhausted Gas to Atmosphere
- Available Cleaned and Packaged for Oxygen Service

Technical Data

Set Pressure Range:

FKM and Fluorosilicone: 10 - 750 Psig (0.69 to 51.7 Bar)

PTFE and PCTFE: 50 - 750 Psig (3.45 to 51.7 Bar)

Factory Set Tolerance: +/- 5% of Specified Pressure

Zero Leakage to 95% of Set Pressure

Full Rated Flow @ 110% of Set Pressure, unaffected by up to 10% Back Pressure

Reseal: 90% of Set Pressure

PTFE seals 80% of Set Pressure

Temperature Rating: -320° F to 375° F (-196° C to 190° C)

based on seal material (see how to order)

Lubricant: Krytox®

Materials of Construction

Component	Material
Body, Poppet, Seat Rivet, Spring Retainer, In-Line Adapter*	CDA 360 Brass, ASTM B16
Adjustment Spring	302 or 17-7 PH Stainless Steel, ASTM A313
Seals	FKM, PTFE, PCTFE, Fluorosilicone

*In-line Adapters Utilize FKM O'Ring Seals



Series IRV



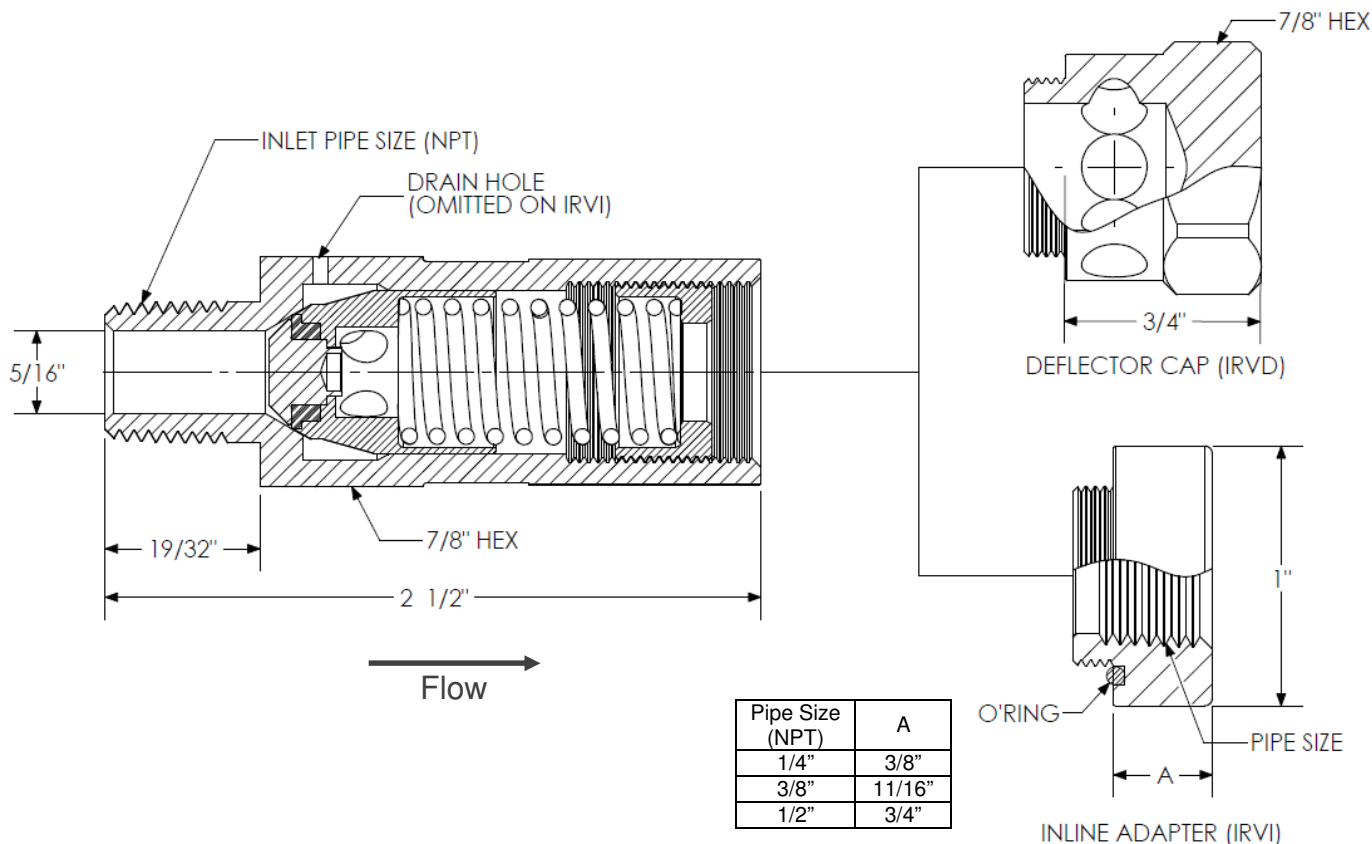
Series IRVI

SERIES

IRV

BRASS

INDUSTRIAL RELIEF VALVE (BRASS)



Pipe Size (NPT)	A
1/4"	3/8"
3/8"	11/16"
1/2"	3/4"

Flow Data*

Set Pressure Range (Psig)		Discharge Coefficient
From	To	Kd
10	28	0.59
29	45	0.59
46	62	0.59
63	89	0.54
90	130	0.42
131	180	0.35
181	275	0.25
275	400	0.12
401	615	0.18
616	750	0.14

*Orifice Diameter 0.312

How To Order

SERIES

IRV Vent to Atmosphere
 IRVI2 1/4" Female NPT In-Line Adapter
 IRVI3 3/8" Female NPT In-Line Adapter
 IRVI4 1/2" Female NPT In-Line Adapter
 IRVD Deflector Cap

INLET PIPE SIZE (NPT)

250B - 1/4" Male
 375B - 3/8" Male
 500B - 1/2" Male

SEAL MATERIAL

V - FKM, -20° F to 375° F (-29° C to 190° C)
 T - PTFE, -60° F to 375° F (-51° C to 190° C)
 K - PCTFE, -320° F to 200° F (-220° C to 93° C)
 FS - Fluorosilicone, -80° F to 350° F (-62° C to 176° C)

Specify Set Pressure

10-750 Psig (0.69 to 51.7 Bar) for Seal Material V or FS
 50-750 Psig (3.45 to 51.7 Bar) for Seal Material T or K

Cleaning Option

X - Clean and Packaged for Oxygen Service

IRV - 250B - V - 300 - X

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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.

