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: -320º F to 375º F (-196º C to 190º C) based on seal material (see how to order)
Lubricant: Krytox®

Materials of Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body, Poppet, Seat, Rivet, Spring Retainer, In-Line Adapter*</td>
<td>CDA 360 Brass, ASTM B16</td>
</tr>
<tr>
<td>Adjustment Spring</td>
<td>302 or 17-7 PH Stainless Steel, ASTM A313</td>
</tr>
<tr>
<td>Seals</td>
<td>FKM, PTFE, PCTFE, Fluorosilicone</td>
</tr>
</tbody>
</table>

*In-line Adapters Utilize FKM O’Ring Seals
Flow Data

<table>
<thead>
<tr>
<th>Set Pressure Range (Psig)</th>
<th>Discharge Coefficient (Kd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From To</td>
<td></td>
</tr>
<tr>
<td>10 to 28</td>
<td>0.59</td>
</tr>
<tr>
<td>29 to 45</td>
<td>0.59</td>
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<tr>
<td>46 to 62</td>
<td>0.59</td>
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<tr>
<td>63 to 89</td>
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<tr>
<td>90 to 130</td>
<td>0.42</td>
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<td>131 to 180</td>
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<td>181 to 275</td>
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<td>275 to 400</td>
<td>0.12</td>
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<tr>
<td>401 to 615</td>
<td>0.18</td>
</tr>
<tr>
<td>616 to 750</td>
<td>0.14</td>
</tr>
</tbody>
</table>

How To Order

IRV - 250B - V - 300 - X

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

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.