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
INDUSTRIAL RELIEF VALVE (BRASS)

Flow Data

<table>
<thead>
<tr>
<th>Set Pressure Range (Psig)</th>
<th>Discharge Coefficient (Kd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
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<tr>
<td>10</td>
<td>28</td>
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<td>29</td>
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<td>401</td>
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<tr>
<td>616</td>
<td>750</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 400° 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.

www.generant.com
1865 Route 23 South PO Box 768 Butler, New Jersey 07405  973.838.6500  Fax 973.838.4888
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