Description
The Series LCV Liquid Cylinder Pressure Control/Relief Valve is designed exclusively for use on DOT 4L Cryogenic Liquid Cylinders. The LCV dramatically reduces the noise associated with traditional cylinder relief device discharge. Under normal operating conditions, the LCV optimizes cylinder performance by venting only what is required to maintain cylinder pressure in a tight band. In the event that circumstances demand, the LCV has adequate flow capacity to ensure safety, meeting all industry and regulatory requirements.

Features
- Designed exclusively for use on DOT 4L Liquid Cylinders
- Eliminates disruptive “pop” historically associated with traditional cylinder relief devices
- Incorporates the customer proven “Dirt Guard” poppet
- Accurately maintains and controls cylinder pressure minimizing product loss
- Exceeds industry and regulatory flow capacity requirements
- Complies with OSHA sound level regulations
- Extensively field qualified
- OEM approved and endorsed
- Cleaned and Packaged for Oxygen Service

Technical Data
Nominal Set Pressure Range: 22 - 500 Psig (1.5 to 34.5 Bar)
Factory Set Tolerance*: Set Pressure ≥ 72.5 PSI, ± 3%  
Set Pressure < 72.5 PSI, ± 2.175 PSI
*tolerance specifications per EN ISO 4126-1.
Zero Leakage to 95% of Set Pressure
Reset: 90% of set pressure
Temperature Rating: -320º to 350º F (-196º C to 176º 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>Valve, Body, Poppet, Spring Retainer, and Screen</td>
<td>Brass, ASTM B16</td>
</tr>
<tr>
<td>Spring</td>
<td>302 (ASTM A313) or 17-4PH (ASTM A564)</td>
</tr>
<tr>
<td>Seal</td>
<td>Fluorosilicone 22 to 49 Psig (1.5 to 3.4 Bar) or PCTFE 50 to 500 Psig (3.5 to 34.5 Bar)</td>
</tr>
<tr>
<td>Label</td>
<td>.004 Thick Mylar</td>
</tr>
</tbody>
</table>

SA.SL.LCV001.D.2234
LIQUID CYLINDER VALVE

Flow Data

<table>
<thead>
<tr>
<th>Set Pressure (PSIG)</th>
<th>110% Set Pressure</th>
<th>120% Set Pressure</th>
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</thead>
<tbody>
<tr>
<td>22</td>
<td>11.8</td>
<td>12.4</td>
</tr>
<tr>
<td>100</td>
<td>21.8</td>
<td>31.0</td>
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<tr>
<td>230</td>
<td>43.9</td>
<td>64.7</td>
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<tr>
<td>350</td>
<td>61.2</td>
<td>85.3</td>
</tr>
<tr>
<td>500</td>
<td>77.1</td>
<td>111.4</td>
</tr>
</tbody>
</table>

How To Order

LCV - 250B - K - 230

SERIES
LCV - Vent to Atmosphere

PIPE SIZE
250B - 1/4" Male NPT (Brass)

NOMINAL SET PRESSURE
22-500 Psig (1.5 - 34.5 Bar)

SEAL MATERIAL
FS - Fluorosilicone for 22-49 Psig (-85° to 350° F (-65° to 176°C))
K - PCTFE for Above 50 Psig (-320° to 165° F (-196° to 74° C))

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.