Super flexible vacuum insulated liquid nitrogen transfer hoses are used in a wide variety of applications including tool connections and custom OEM applications. The coaxial bellowed construction allows for optimal flexibility. The use of lightweight stainless steel reduces cool-down loss to an absolute minimum. C-Flex hoses are protected by a stainless steel spiral wrap or a braided outer cover.

Available in various sizes: \( \frac{1}{4} \)" ID, \( \frac{3}{8} \)" ID, and \( \frac{1}{2} \)" ID stocked in standard lengths for immediate availability.

**Features**

- **Custom Manifolds Available** – utilize vacuum insulated tees, elbows, bayonets, and valves to custom tailor the configuration (Consult factory)
- **High Pressure Requirements** – optional inner braid for higher pressure applications (Consult factory)
- **Pre-evacuated and Sealed Vacuum** – no pump maintenance to maintain system vacuum
- **Minimal Cool Down & Steady State Losses** – compared to standard non-insulated transfer hoses
- **Integrated pump out**

**Key Benefits**

- **Minimize Safety Issues** – eliminate many of the hazards associated with non-insulated hoses
- **Easy Installation & Modifications** – bendable, lightweight, and its plug and play approach facilitates easy installation and allows for on-site layout changes
- **Future Expansion** – any bayonet joint can accommodate expansion due to its bendable nature
## C-Flex™ Technical Specifications

<table>
<thead>
<tr>
<th></th>
<th>04S</th>
<th>06S</th>
<th>08S</th>
<th>08B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Diameter (ID)</td>
<td>1/4&quot; (6.3 mm)</td>
<td>3/8&quot; (9.5 mm)</td>
<td>1/2&quot; (12.7 mm)</td>
<td>1/2&quot; (12.7 mm)</td>
</tr>
<tr>
<td>Outer Diameter (OD)</td>
<td>1.25&quot; (31.75 mm)</td>
<td>1.65&quot; (41.91 mm)</td>
<td>1.90&quot; (48.26 mm)</td>
<td>1.80&quot; (45.72 mm)</td>
</tr>
<tr>
<td>Minimum Flexible Bend Radius</td>
<td>7&quot; (177 mm)</td>
<td>8&quot; (203 mm)</td>
<td>10&quot; (254 mm)</td>
<td>10&quot; (254 mm)</td>
</tr>
<tr>
<td>Minimum Static Bend Radius</td>
<td>5&quot; (127 mm)</td>
<td>6&quot; (152 mm)</td>
<td>8&quot; (203 mm)</td>
<td>7&quot; (177 mm)</td>
</tr>
<tr>
<td>Maximum Operating Pressure</td>
<td>150 psi (10.3 bar)</td>
<td>150 psi (10.3 bar)</td>
<td>150 psi (10.3 bar)</td>
<td>150 psi (10.3 bar)</td>
</tr>
</tbody>
</table>

S: Spiral wrap outer covering  B: Braided outer covering
C-Flex hoses are available in standard or custom lengths up to 60 feet.

### Flow Data

22 psi LN₂ Source; 4 psi Pressure Drop (max)

<table>
<thead>
<tr>
<th>Length (in / ft)</th>
<th>48&quot; / 4'</th>
<th>72&quot; / 6'</th>
<th>96&quot; / 8'</th>
<th>120&quot; / 10'</th>
<th>144&quot; / 12'</th>
<th>192&quot; / 16'</th>
<th>240&quot; / 20'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; Inner Diameter (ID)</td>
<td>1.6 gpm</td>
<td>1.4 gpm</td>
<td>1.2 gpm</td>
<td>1.1 gpm</td>
<td>1 gpm</td>
<td>0.8 gpm</td>
<td>0.7 gpm</td>
</tr>
<tr>
<td>3/8&quot; Inner Diameter (ID)</td>
<td>6.0 gpm</td>
<td>4.8 gpm</td>
<td>4.1 gpm</td>
<td>3.6 gpm</td>
<td>3 gpm</td>
<td>2.8 gpm</td>
<td>2.6 gpm</td>
</tr>
<tr>
<td>1/2&quot; Inner Diameter (ID)</td>
<td>11.4 gpm</td>
<td>9.0 gpm</td>
<td>7.6 gpm</td>
<td>6.8 gpm</td>
<td>6 gpm</td>
<td>5.2 gpm</td>
<td>4.4 gpm</td>
</tr>
</tbody>
</table>

### Smart Numbering System

1/2" (ALSO AVAILABLE w/ BAYONET CONNECTIONS)

1/2" SAE 45 Female Flare
4PT = ¼" MPT
6PT = 3/8" MPT
8PT = ½" MPT
8T = ½" Smooth Tube
10PT = 5/8" MPT
20PT = 1¼" MPT
6F = 625 Female Bayonet
6M = 625 Male Bayonet
NONE = NONE