BiS offer a comprehensive range of stainless steel directional control valves for use on a wide range of operating media, from 2 position 3 port and 2 position 4 port balanced spool valves to 3 position 4 port rotary control shear style valves.

The balanced spool valves are unique in design. They are completely bi-directional with the same CV value in all directions. The actuation of these valves is completely independent from the main line pressures, ensuring switching is consistent and very low levels of leakage are maintained.

The rotary shear style valves are lever operated and can be configured as 2 position 4 port or 3 position 4 port valves. The valves are lever operated offering 90° manual actuation, with a range of centre conditions. The shear style design ensures the valves offer excellent leakage performance with good contamination resistance.
### Directional Valves

#### Rotary Shear Style Valves

- 2 position 4 way and 3 position 4 way variants available
- Shear style design for excellent contamination resistance
- Various flow pattern options available
- Excellent leakage performance
- Tungsten carbide internals available for the ultimate hard wearing performance
- Subsea and block-before-bleed variants available
- Square drive and position locking variants
- Various port options and manifold mounted solutions

#### Balanced Spool Valves

- 2 position 3 way and 2 position 4 way directional valves
- Field proven designs offering very low leakage
- Subsea and block-before-bleed variants available
- Vent chamber prevents mixing of main line and pilot fluids
- Variants available for liquid and gas duty
- Various actuation methods available, including hydraulic and pneumatic pilot, cam and lever operators

---

### Nominal Size

<table>
<thead>
<tr>
<th>Nominal Size</th>
<th>Max Pressure</th>
<th>Media</th>
<th>Valve Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 Port Directional Valves</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>690 bar (10,000 psi)</td>
<td>Liquids</td>
<td>3B25</td>
</tr>
<tr>
<td>1/4”</td>
<td>414 bar (6,000 psi)*</td>
<td>Liquids &amp; Gases</td>
<td>3B25-G</td>
</tr>
<tr>
<td>3/8”</td>
<td>690 bar (10,000 psi)</td>
<td>Liquids</td>
<td>3B37</td>
</tr>
<tr>
<td>3/8”</td>
<td>414 bar (6,000 psi)*</td>
<td>Liquids &amp; Gases</td>
<td>3B37-G</td>
</tr>
<tr>
<td>1/2”</td>
<td>414 bar (6,000 psi)*</td>
<td>Liquids &amp; Gases</td>
<td>3B37-G</td>
</tr>
<tr>
<td>1/4”</td>
<td>241 bar (3,500 psi)</td>
<td>Liquids</td>
<td>3B50</td>
</tr>
<tr>
<td>1/2”</td>
<td>241 bar (3,500 psi)</td>
<td>Liquids</td>
<td>3B50-G</td>
</tr>
<tr>
<td>1”</td>
<td>690 bar (10,000 psi)</td>
<td>Liquids &amp; Gases</td>
<td>3BF100</td>
</tr>
<tr>
<td>1”</td>
<td>690 bar (10,000 psi)</td>
<td>Liquids &amp; Gases</td>
<td>3BF100-G</td>
</tr>
</tbody>
</table>

*NOTE - Pressure rating is reduced with gases

---

### Additional Information

- 2 position 4 way and 3 position 4 way directional valves
- Shear style design for excellent contamination resistance
- Various flow pattern options available
- Excellent leakage performance
- Tungsten carbide internals available for the ultimate hard wearing performance
- Subsea and block-before-bleed variants available
- Square drive and position locking variants
- Various port options and manifold mounted solutions

---

**www.bisvalves.co.uk**