Sequence Valves

PILOT OPERATED

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Typical Cartridge Model Code</th>
<th>Cavity</th>
<th>Control**</th>
<th>Adjustment Range</th>
<th>Seal</th>
<th>Cartridge Dimensions</th>
<th>Installation Torque (Nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 L/min.</td>
<td>RSBC – LAN</td>
<td>T - 163A</td>
<td>L</td>
<td>7 - 210 bar</td>
<td>N</td>
<td>Buna-N</td>
<td>35/40</td>
</tr>
<tr>
<td>60 L/min.</td>
<td>RSDC – LAN</td>
<td>T - 11A</td>
<td>L</td>
<td>10 - 315 bar</td>
<td>V</td>
<td>Viton</td>
<td></td>
</tr>
<tr>
<td>120 L/min.</td>
<td>RSFC – LAN</td>
<td>T - 2A</td>
<td>K</td>
<td>3.5 - 105 bar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>240 L/min.</td>
<td>RSCH – LAN</td>
<td>T - 17A</td>
<td>W</td>
<td>10 - 420 bar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>480 L/min.</td>
<td>RSJC – LAN</td>
<td>T - 19A</td>
<td>A</td>
<td>4 - 55 bar</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Nominal Control and Adjustment Range Options:
- B, D, F, and H are standard set at 70 bar.
- C Option is standard set at 140 bar.
- N Option is standard set at 25 bar.
- Q Option is standard set at 14 bar.

** See page 244 for information on Control Options.

OPTION ORDERING INFORMATION

DIRECT ACTING

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Typical Cartridge Model Code</th>
<th>Cavity</th>
<th>Control**</th>
<th>Adjustment Range</th>
<th>Seal</th>
<th>Cartridge Dimensions</th>
<th>Installation Torque (Nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 L/min.</td>
<td>SXCA – LAN</td>
<td>T - 11A</td>
<td>L</td>
<td>35 - 210 bar</td>
<td>N</td>
<td>Buna-N</td>
<td>40/50</td>
</tr>
<tr>
<td>120 L/min.</td>
<td>SXEA – LAN</td>
<td>T - 2A</td>
<td>C</td>
<td>55 - 315 bar</td>
<td>V</td>
<td>Viton</td>
<td></td>
</tr>
</tbody>
</table>

** Nominal Capacity and Adjustment Range Options:
- A, B, C, and W are standard set at 70 bar.
- N Option is standard set at 25 bar.
- Q Option is standard set at 14 bar.
- Customer may specify pressure setting.

OPTION ORDERING INFORMATION
Sequence Valves, Pilot Operated

Applications
- Pilot operated sequence cartridges are similar to relief valves, but with an additional third port, to drain the spring chamber.
- May be used to regulate pressure more accurately than relief valve, as pressure is regulated on an absolute basis.
- To control the sequence of two or more cylinders or motors while maintaining the pressure on the actuator that moves first.

Design Concepts and Features
- Exceptionally flat pressure control over a wide range of settings.
- Low hysteresis and spool leakage: 50 to 115 cc/min./100 bar dependent on frame size.
- Wide selection of spring ranges to optimize adjustment sensitivity.
- Pilot flow will continue to increase when pilot section opens as pressure at port 1 increases above setting. Maximum Pilot Flow May be 1 L/min.

Performance Curves

Sequence Valves, Direct Acting

Applications
The direct acting sequence cartridges are interchangeable with the pilot operated models and may be used as an alternative to the pilot operated version.

Design Concepts and Features
- Low hysteresis and low leakage on closing. Valve reseats with leakage less than 5 drops./min.
- Reset at 85% of cracking pressure.
- Direct acting design provides fast opening and closing.
- Zero pilot flow (however, the spring chamber drain must not be plugged). See Note.

Note: For both types of sequence cartridge, any pressure at port 3 is directly additive to the valve setting.

Performance Curves

General Application Requirements
- Operating Temperature Range: Buna-N seals -45°C to 90°C, Viton seals -15°C to 120°C.
- Viscosity Range: 10-600 centistokes.
- Fluid Contamination Level: ISO 4406 18/15 or better; Recommend β10 ≥ 75 to achieve ISO 18/15 or better in most systems.
- Factory Pressure Setting for cartridge is established at a 15 L/min. flow rate.