**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>Installation Torque (lb. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5 GPM</td>
<td>RSBC – LAN</td>
<td>T - 16A</td>
<td>A 100 - 3000 psi</td>
<td>N Buna-N</td>
<td>25/30</td>
<td></td>
</tr>
<tr>
<td>15 GPM</td>
<td>RSDC – LAN</td>
<td>T - 11A</td>
<td>A 50 - 1500 psi</td>
<td>W Viton</td>
<td>45/50</td>
<td></td>
</tr>
<tr>
<td>30 GPM</td>
<td>RSFC – LAN</td>
<td>T - 2A</td>
<td>A 150 - 6000 psi</td>
<td>W Viton</td>
<td>60 - 800 psi</td>
<td></td>
</tr>
<tr>
<td>60 GPM</td>
<td>RSJC – LAN</td>
<td>T - 17A</td>
<td>A 300 - 1500 psi</td>
<td>W Viton</td>
<td>150/160</td>
<td></td>
</tr>
<tr>
<td>120 GPM</td>
<td>RSJC – LAN</td>
<td>T - 17A</td>
<td>A 200 - 800 psi</td>
<td>W Viton</td>
<td>350/375</td>
<td></td>
</tr>
</tbody>
</table>

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### DIRECT ACTING

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<th>Installation Torque (lb. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 GPM</td>
<td>SXCA – LAN</td>
<td>T - 11A</td>
<td>A 500 - 3000 psi</td>
<td>N Buna-N</td>
<td>30/35</td>
<td></td>
</tr>
<tr>
<td>30 GPM</td>
<td>SXEA – LAN</td>
<td>T - 2A</td>
<td>A 300 - 1500 psi</td>
<td>W Viton</td>
<td>45/50</td>
<td></td>
</tr>
</tbody>
</table>

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**OPTION ORDERING INFORMATION**

## PILOT OPERATED

### Sequence

- **RS**
- **C**
- **✱✱✱**

### Control Options

- **A** Standard Screw
- **B** Tamper Resistant
- **C** Handknob

### Seals

- **N** Buna-N
- **V** Viton

### Adjustment Range Options

- A, B, and C are standard set at 1000 psi.
- N Option is standard set at 400 psi.
- **Q** Option is standard set at 200 psi.

- **D** Option is standard set at 400 psi.

- Minimum setting 75 psi on all ranges.

- Customer may specify pressure setting.

---

## DIRECT ACTING

### Sequence

- **SX**
- **A**
- **✱✱✱**

### Control Options

- **C** Standard Screw
- **E** Tamper Resistant

### Seals

- **N** Buna-N
- **V** Viton

### Adjustment Range Options

- A, B, and C are standard set at 1000 psi.
- C Option is standard set at 2000 psi.
- **D** Option is standard set at 400 psi.

- Customer may specify pressure setting.

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**Cartridge Dimensions**

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Capacity</th>
<th>Inlet</th>
<th>Drain</th>
<th>Locating Shoulder</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCK</td>
<td>7.5 GPM</td>
<td>2.55</td>
<td>2.63</td>
<td>2.77</td>
</tr>
<tr>
<td>RSDC</td>
<td>15 GPM</td>
<td>2.50</td>
<td>2.56</td>
<td>2.75</td>
</tr>
<tr>
<td>RSFC</td>
<td>30 GPM</td>
<td>2.81</td>
<td>2.88</td>
<td>3.06</td>
</tr>
<tr>
<td>RSJC</td>
<td>60 GPM</td>
<td>3.28</td>
<td>3.31</td>
<td>3.53</td>
</tr>
<tr>
<td>RSJC</td>
<td>120 GPM</td>
<td>3.94</td>
<td>4.09</td>
<td>4.19</td>
</tr>
<tr>
<td>SXCA</td>
<td>15 GPM</td>
<td>3.09</td>
<td>3.15</td>
<td>3.15</td>
</tr>
<tr>
<td>SXEA</td>
<td>30 GPM</td>
<td>3.47</td>
<td>3.53</td>
<td>4.50</td>
</tr>
</tbody>
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<td>3.15</td>
<td>3.15</td>
</tr>
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<td>30 GPM</td>
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<td>3.53</td>
<td>4.50</td>
</tr>
</tbody>
</table>
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: 2 to 5 in.$^3$/min./1000 psi 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 150 in.$^3$/min.

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.
- Reseat 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.

General Application Requirements
- Operating Temperature Range: Buna-N seals -50°F to 200°F, Viton seals 0°F to 250°F.
- Viscosity Range: 60-3000 SUS.
- Fluid Contamination Level: ISO 4406 18/15 or better; Recommend $\beta_{10} \geq 75$ to achieve ISO 18/15 or better in most systems.
- Factory Pressure Setting for cartridge is established at a 4 GPM flow rate.