Series 4
1/8" & 1/4" Mechanically Operated Sensor Valves

Cv = 0.68 - 1.31

3-way/2-position and 5-way/2-position
Ports 1/8", 1/4" NPTF

In order to facilitate the use of limit switch valves in applications where very low actuating forces and high flowrates are required, Series 4 valves are equipped with new mechanical devices designed for this purpose. The 4 Series includes one or two minivalves depending on the function which the valve must perform.*

The mini valves reduce the actuation force required to operate the main valve.

The functions available are as follows:
- 5-way/2-position (monostable) - spring-return
- 5-way/2-position (bistable) - double-pilot detented

*The mini-valves utilize a poppet valve to pilot-pressure the main spool plunger.

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**GENERAL DATA**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Spool-type (servocontrolled); internal pilot-pressure spool plunger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve Function</td>
<td>3-way/2-position, 5-way/2-position</td>
</tr>
<tr>
<td>Materials</td>
<td>Anodized body, stainless steel spool, NBR seals</td>
</tr>
<tr>
<td>Ports</td>
<td>1/8&quot;, 1/4&quot; NPTF</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>32° - 175°F (dry air necessary down to -4°F)</td>
</tr>
</tbody>
</table>

**PNEUMATIC DATA**

<table>
<thead>
<tr>
<th>Operating pressure</th>
<th>2.5 - 8 bar (36 - 116 psi) for single-pilot models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 - 8 bar (29 - 116 psi) for double-pilot models</td>
</tr>
<tr>
<td>Nominal Flow</td>
<td>Qn: 1/4&quot; = 1250 NL/min. (44.1 SCFM) Cv = 1.31</td>
</tr>
<tr>
<td></td>
<td>1/8&quot; = 650 NL/min. (22.95 SCFM) Cv = 0.68</td>
</tr>
</tbody>
</table>
### CODING

<table>
<thead>
<tr>
<th>3</th>
<th>3</th>
<th>8</th>
<th>-</th>
<th>D15</th>
<th>-</th>
<th>9A5</th>
<th>TF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERIES:</strong></td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FUNCTION:</strong></td>
<td>3 = 3/2-way NC 4 = 3/2-way NO 5 = 5/2-way</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>PORTS:</strong></td>
<td>8 = 1/8 NPTF 4 = 1/4 NPTF</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>D15</strong></td>
<td>D15 = pressure drop/spring 015 = pressure/spring 011 = pressure/pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9A5</strong></td>
<td>9A5 = lever sensor, spring return 914 = plunger sensor, spring return 924 = plunger sensor, bistable 915 = lever/roller, spring return 925 = lever/roller, bistable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TF</strong></td>
<td>TF = NPTF ports blank = BSP ports</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Valves operate by internal pilot pressure against plunger when manual/mechanical poppet valves are actuated.

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**Valves Mod. 458-015-194TF**

- Operating pressure: 2.5 - 8 bar (36 - 116 psi)
- Flow rate: 650 NL/min. (22.95 SCFM)
- Actuating force at 6 bar: 6 N (1.35 lbf)

**Valves Mod. 458-011-294TF**

- Operating pressure: 2 - 8 bar (29 - 116 psi)
- Flow rate: 650 NL/min. (22.95 SCFM)
- Actuating force at 6 bar: 6 N (1.35 lbf)
Valves Mod. 454-015-194TF  
**Cv = 1.31**

Operating pressure = 2.5 - 8 bar (36 - 116 psi)  
Flow rate = 1250 Nl/min. (44.1 SCFM)  
Actuating force at 6 bar = 6 N (1.35 lbf)

Valves Mod. 454-011-294TF  
**Cv = 1.31**

Operating pressure = 2 - 8 bar (29 - 116 psi)  
Flow rate = 1250 Nl/min. (44.1 SCFM)  
Actuating force at 6 bar = 6 N (1.35 lbf)

Valves Mod. 458-015-195TF  
**Cv = 0.68**

Operating pressure = 2.5 - 8 bar (36 - 116 psi)  
Flow rate = 650 Nl/min. (22.95 SCFM)  
Actuating force at 6 bar = 4 N (0.9 lbf)

Valves Mod. 458-011-295TF  
**Cv = 0.68**

Operating pressure = 2 - 8 bar (29 - 116 psi)  
Flow rate = 650 Nl/min. (22.95 SCFM)  
Actuating force at 6 bar = 4 N (0.9 lbf)

These products are designed for industrial applications and are not suitable for sale to the general public.

The company reserves the right to vary models and dimensions without notice.

Dimensions in millimeters (mm)
The company reserves the right to vary models and dimensions without notice. These products are designed for industrial applications and are not suitable for sale to the general public.

Valves Mod. 454-015-195TF

- Operating pressure: 2.5 - 8 bar (36 - 116 psi)
- Flow rate: 1250 Nl/min. (44.1 SCFM)
- Actuating force at 6 bar: 4 N (.9 lbf)

Valves Mod. 454-011-295TF

- Operating pressure: 2 - 8 bar (29 - 116 psi)
- Flow rate: 1250 Nl/min. (44.1 SCFM)
- Actuating force at 6 bar: 4 N (.9 lbf)

Dimensions in millimeters (mm)