Pressure Reducing Pilot Valve

With Integral Needle Valve

This pilot integrates all principal functions of a 2-Way control circuit in a single assembly. It is a direct acting valve, actuated by a pressure responsive diaphragm, which tends to reach equilibrium with the set spring force. When used in a pressure reducing circuit, the pilot modulates closed as downstream pressure rises above set point. An integral needle valve acts as an upstream flow restrictor as well as a closing speed control.

Features

- Integral needle valve
- Internal or external pressure sensing
- Differential pressure sensing
- Direct pressure gauge installation

Typical Applications

- Pressure Reducing Valves sizes 6-14" (Standard model #2)
- Flow Control Valves sizes 6-14" (Modified to differential sensing #2-DR)
- Surge Anticipating Valves sizes 1½-4" as low pressure pilot (Modified to external pressure sensing #2-R)
- Surge control closing (additional feature 49) for sizes 6-14" (Modified to external pressure sensing #2-R)

Technical Data

Pressure Rating: 40 bar (600 psi)
Working Temperature: Water up to 80°C (180°F)
Flow Factor: Kv 1.0 (Cv 1.2)
Standard Materials:
Body & cover: Brass
Elastomers: NBR
Internals: Stainless Steel & Brass
Spring: Galvanized Steel
Optional Materials:
Metal Parts: Stainless Steel, Nickel Aluminum Bronze, Hastalloy
Elastomers: FPM (Viton®)

Adjustment Range

<table>
<thead>
<tr>
<th>Spring</th>
<th>Pressure bar</th>
<th>psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1-16</td>
<td>15-230</td>
</tr>
<tr>
<td>10</td>
<td>0.8-10</td>
<td>11-150</td>
</tr>
<tr>
<td>16*</td>
<td>2-30</td>
<td>30-430</td>
</tr>
<tr>
<td>16*</td>
<td>2-45</td>
<td>30-650</td>
</tr>
</tbody>
</table>

* With high pressure setting kit

Connections

Z - Upstream  A - Valve control chamber  C - Downstream
F/D - External sensing/pressure gauge

Weight: 2.7 Kg / 6 lbs.
* High pressure setting kit add 15 mm (5/8") to pilot height.