**DESCRIPTION**
A 2-Way, normally open, manually operated, push knob to close, spring-return, screw-in, directional hydraulic cartridge valve, poppet design.

**FEATURES**
Actuator area is isolated from system ports through a 10 Micron sintered filter.

**OPERATION**
Be sure to review the SHIFT FORCE NOTES.
The operator force required to hold the valve closed can be high, depending on the pressures at Port No. 1 and Port No. 2.
For ease of operation, use the No. 1 Port for the lower pressure in your system.

**SHIFT FORCE NOTES:**
Due to the Poppet Return Spring,
10 to 15 Pounds of Force is required to shift the valve poppet with zero pressure on ports 1 and 2.
Any pressure on Port No. 1 will increase the Force Requirement by .030 X PSI.
Any pressure on Port No. 2 will increase the Force Requirement by .003 X PSI.

**RATINGS:**
Working Pressure:
Cavity C-8502, 5,000 PSI
Cavity C-8542, 5,000 PSI Port 1
Cavity C-8542, 3,000 PSI Port 2
Fluid temperature:
-45°F, (42.7°C) to 200°F, (93.3°C)

**PRESSURE DROP CHART**
Valve Orifice Diameter .18", CV = 0.5

<table>
<thead>
<tr>
<th>PSI</th>
<th>GPM</th>
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<tbody>
<tr>
<td>150</td>
<td>2</td>
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<tr>
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<td>2.5</td>
</tr>
<tr>
<td>50</td>
<td>3.5</td>
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</tbody>
</table>

**2PB SERIES**
2 Way Poppet Valve, Manually Operated

**OPERATION DESCRIPTION**
A 2-Way, normally open, spring-return, screw-in, directional hydraulic cartridge valve, poppet design.

**FEATURES**
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**OPERATION**
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