DE-S2A Pilot Operated Poppet, 2 Way Normally Closed

**DESCRIPTION**
10 size, 7/8-14 thread, “Delta” series, solenoid operated, 2 way normally closed, pilot operated poppet valve with reverse flow de-energized.

**OPERATION**
When de-energized the DE-S2A blocks flow from (1) to (2) and allows reverse flow from (2) to (1). When energized the valve allows flow from (1) to (2) and restricts flow from (2) to (1).

**OPERATION OF MANUAL OVERRIDE OPTION:** To override, pull knob out. On the detented version, after pulling knob out twist 180 degrees and release. The valve will remain in that position.

**FEATURES**
- Hardened parts for long life.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Manual override option.
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

**HYDRAULIC SYMBOL**

**PERFORMANCE**
Actual Test Data (Cartridge Only)

**FLOW (GPM)**

<table>
<thead>
<tr>
<th>Flow (GPM)</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Drop (PSI)</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
</tr>
</tbody>
</table>

**FLOW (LPM)**

<table>
<thead>
<tr>
<th>Flow (LPM)</th>
<th>0</th>
<th>25</th>
<th>50</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Drop (BAR)</td>
<td>0</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

**VALVE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Flow</td>
<td>15 GPM (57 LPM)</td>
</tr>
<tr>
<td>Rated Operating Pressure</td>
<td>3500 PSI (241 bar)</td>
</tr>
<tr>
<td>Typical Internal Leakage (150 SSU)</td>
<td>0-5 drops/min</td>
</tr>
<tr>
<td>Viscosity Range</td>
<td>36 to 3000 SSU (3 to 647 cSt)</td>
</tr>
<tr>
<td>Filtration</td>
<td>ISO 18/16/13</td>
</tr>
<tr>
<td>Media Operating Temperature Range</td>
<td>-40° to 250° F (-40° to 120° C)</td>
</tr>
<tr>
<td>Weight</td>
<td>.27 lbs. (.12 kg)</td>
</tr>
<tr>
<td>Operating Fluid Media</td>
<td>General Purpose Hydraulic Fluid</td>
</tr>
<tr>
<td>Cartridge Torque Requirements</td>
<td>30 ft-lbs (40.6 Nm)</td>
</tr>
<tr>
<td>Coil Nut Torque Requirements</td>
<td>4-6 ft-lbs (5.4-8.1 Nm)</td>
</tr>
<tr>
<td>Cavity</td>
<td>DELTA 2W</td>
</tr>
<tr>
<td>Cavity Form Tool (Finishing)</td>
<td>40500000</td>
</tr>
<tr>
<td>Seal Kit</td>
<td>21191200</td>
</tr>
</tbody>
</table>

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DIMENSIONS

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Phone: (815) 397-6628 Fax: (815) 397-2526 E-mail: delta@delta-power.com

ORDERING INFORMATION

DE-S2A

OPTIONS
- Buna Standard 00
- Viton Standard V0
- Buna, Override 0M
- Viton, Override VM
- Buna & Screen A0
- Viton & Screen W0
- Buna, Override, Non-detent B1
- Viton, Override, Non-detent V1
- Buna, Screen, Override, Non-detent B3
- Viton, Screen, Override, Non-detent V3
- Buna, Screen, Override, Detent B4
- Viton, Screen, Override, Detent V4

Note: Use screen only if flow direction is from (1) to (2).

"D" COIL TERMINATION
(All DC Except as Noted)
- Double Lead DL
- Deutsch on Leads DT04-2P DT
- Metri-Pack on Leads ML
- Packard on Leads PL
- Weatherpack on Leads WL
- Single Spade SS
- Double Spade DS
- DIN 43650 (Hirschman) – (AC & DC) HC
- Conduit Lead – (AC Only) CL
- Deutsch – Integral DT04-2P DI

BODIES
- Blank Without Body
- 3/8 NPTF Ports N
- #8 SAE Ports S

VOLTAGE
- 6 VDC B1
- 12 VDC V1
- 24 VDC B3
- 36 VDC B4
- 48 VDC V3
- 120 VAC B1
- 220 VAC V1
- 24 VAC B3
- 36 VAC B4
- 48 VAC V3
- 440 VAC V3

IMMERSION PROOF “D” TYPE
- AMP Superseal - Integral IA
- Deutsch – Integral DT04-2P ID
- AMP Jr. Timer - Integral IJ
- Metri-Pack – Integral IM

Approximate Coil Weight: .74 lbs (.33 kg.)