**PV08-30 Proportional Flow Control Cartridge,**

**DESCRIPTION**
A solenoid-operated, electrically-variable, three-port, pressure-compensated, spool-type, normally closed when de-energized, proportional flow control valve. It can be used as a priority-type flow regulator with pressure-compensated, regulated and by-pass flow. It can also be used as a restrictive-type 2-way, pressure-compensated flow regulator when the bypass line (port 2) is blocked.

**OPERATION**
With inlet flow at Port 1 the PV08-30 will regulate priority flow out of port 3 regardless of system working pressure, with the flow rate proportional to current applied to the solenoid. The excessive flow will bypass out of port 2. The bypass flow can be used for auxiliary function control. **Note:** Avoid dead-heading of priority line by external valving to prevent blocking of bypass line. In restrictive mode applications bypass port 2 must be blocked. Flow rate out of port 3 remains proportional to current applied to the solenoid regardless of load (pressure) applied to port 3.

**FEATURES**
- Choice of two regulated flow ranges.
- Manual override options.
- Hardened spool and cage for long life.
- Optional coil voltages and terminations.
- Excellent linearity and hysteresis characteristics.

**RATINGS**
*Operating Pressure:* Inlet: 240 bar (3500 psi); Ports 2 and 3: 207 bar (3000 psi)

<table>
<thead>
<tr>
<th>Operating Pressure</th>
<th>Flow Range A (lpm/gpm)</th>
<th>Flow Range B (lpm/gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulated</td>
<td>11.4/3.0</td>
<td>5.7/1.5</td>
</tr>
<tr>
<td>Nominal</td>
<td>--</td>
<td>7.6/2.0</td>
</tr>
<tr>
<td>Maximum</td>
<td>--</td>
<td>22.8/6.0</td>
</tr>
</tbody>
</table>

**Maximum Internal Leakage:** 197 ml/min (12 cu. in./min.) at port 3 with 207 bar (3000 psi) at 0 current

**Electrical Parameters:** (With EHPR08 E-Series and D-Series Coils)

<table>
<thead>
<tr>
<th>Coil Voltage Rating (VDC)</th>
<th>Threshold Current (mA)</th>
<th>Max Control Current (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>400 ± 100</td>
<td>1400 ± 150</td>
</tr>
<tr>
<td>24</td>
<td>200 ± 50</td>
<td>700 ± 75</td>
</tr>
</tbody>
</table>

**PERFORMANCE**

**Nominal Flow vs. Current**
207 bar/3000 psi; 12V Coil; 100 Hz PWM 32 cSt/150 sus oil at 40°C (104°F)

**Regulated Flow vs. Pressure Drop**
2-Ported; Flow Range A
240 bar/3500 psi inlet 12V Coil; 100 Hz PWM
32 cSt/150 sus oil at 40°C (104°F)

**External Valving:** See page 9.010.1
**Filtration:** See page 9.020.1.

**Seal Kit:** SK08-3X-MM; See page 8.650.1 for seal kit options and appropriate seals based on application temperature range.
**Cartridge:** Weight: 0.13 kg. (0.28 lbs.)

**Standard Ported Body:** Weight: 0.27 kg. (0.60 lbs.) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.008.1

**EPR Series Coil:** Weight: 0.32 kg. (0.7 lbs.) Unitized thermoplastic encapsulated, Class H high temperature magnet-wire. See page 3.200.1

**MATERIALS**

Recommended Electronic Controllers:
See page 2.001.1 or our Electronics catalog.

**DIMENSIONS**

Recommended Electronic Controllers:
See page 2.001.1 or our Electronics catalog.

**TO ORDER**

**PV08-30**

- **Flow Range**
  - (Required. See Performance Curves)
  - A
  - B

- **Option**
  - None (Blank)
  - M
  - G

- **Porting**
  - Cartridge Only 0
  - SAE 6 6T
  - 3/8 in. BSP* 3B

- **Seals**
  - Buna N (Std.) N
  - Fluorocarbon V

- **Terminations**
  - DS Dual Spades
  - DG DIN 43650
  - DL Leadwires (2)
  - DL/W Leads w/Weatherpak® Connectors

- **Voltage**
  - 0 Less Coil
  - 12 12 VDC
  - 24 24 VDC

*BSD Body: U.K. Mfr. Only

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2.370.2