Air piloted proportional pressure control valve
Fully user adjustable for a wide range of applications
High speed
Lower power consumption
High flow capacity
Optional manifold mount utilizes the ISO Size 2 subbase

Technical data

**Medium:**
Compressed air, filtered to 5 micron, non-lubricated

**Operation:**
Proportional, direct acting air piloted spool

**Output Pressure:**
See website

**Supply Pressure:**
200 psig (14 bar) max

**Supply Sensitivity:**
Better than 0.75% span output change per bar supply pressure change

**Flow Capacity:**
Up to 50 scfm (1400 Nl/min)

**Response Time:**
< 80 mS (from 10-90% of output pressure into a 0.1 litre load)

**Air Consumption:**
< .177 scfm (5 l/min)

**Port Size:**
1/4 PTF (G1/4)

**Total Error:**
Max. error < ±1% of span (independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability)

**Degree of protection:**
NEMA 4 (IP65) in normal operation

**Vibration Immunity:**
< 3% output shift for 3g 10-2000Hz

**Mounting Position:**
Any screw mounting or manifold mount

**Material of Construction:**
Aluminium body, zinc diecast lid and end cover

**Weight:**
1.76 lbs. (800g) approx

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Part Number*</th>
<th>Pressure Range and Input Signal Options</th>
<th>Port size</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP5010PK111H00</td>
<td>0-10V</td>
<td>0-145 (0-10)</td>
<td>1/4” PTF</td>
</tr>
<tr>
<td>VP5010PK411H00</td>
<td>4-20mA</td>
<td>0-145 (0-10)</td>
<td>1/4” PTF</td>
</tr>
<tr>
<td>VP5006PK111H00</td>
<td>0-10V</td>
<td>0-90 (0-6)</td>
<td>1/4” PTF</td>
</tr>
<tr>
<td>VP5006PK411H00</td>
<td>4-20mA</td>
<td>0-90 (0-6)</td>
<td>1/4” PTF</td>
</tr>
<tr>
<td>VP5002PK111H00</td>
<td>0-10V</td>
<td>0-30 (0-2)</td>
<td>1/4” PTF</td>
</tr>
<tr>
<td>VP5002PK411H00</td>
<td>4-20mA</td>
<td>0-30 (0-2)</td>
<td>1/4” PTF</td>
</tr>
</tbody>
</table>

* To specify regulator calibration in BAR use “B” in the 7th position For 1/4" ISO G ports use “J” in the 8th position.

To order the VP50 with interface for manifold mounting, indicate an “X” in the 8th position of the part number. Also requires a manifold mounting kit, see Accessories.

All units shipped with M12 five pin electrical connector

Electromagnetic Compatibility
CE marked: conforms to E.C. requirements
EN 50081-2 (1994) and EN 50082-2 (1995)

Electrical Input Signal
4-20mA or 0-10V factory set

Electrical Power Input
24V dc ±25% (power consumption < 1W)

Output Pressure Feedback Signal
0-10V full range

Connections
DIN 43650 or Brad Harrison connection for feedback output

Electrical Information

For further information www.norgren.com
VP50
Proportional Pressure Control Valve

Characteristic Curves

Forward Flow Characteristics
Supply Pressure 160 psig (11 bar)

Outlet Pressure in psig (bar)

Flow in SCFM (Nl/min)

Relief Flow Characteristics
Supply Pressure 131 psig (9 bar)

Outlet Pressure in psig (bar)

Flow SCFM (Nl/min)

Accessories

<table>
<thead>
<tr>
<th>Designation</th>
<th>Specification</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors with cable</td>
<td>M12 x 1.5 pin; 16 ft (5m) 5 x 0.34 mm2</td>
<td>0250081000000000</td>
</tr>
<tr>
<td></td>
<td>M12 x 1.5 pin; 30 ft (10 m) 5 x 0.34 mm2</td>
<td>0250472000000000</td>
</tr>
<tr>
<td>Manifold Mounting Kit</td>
<td>Interface plate, gasket, mounting screws</td>
<td>ZZ5M00</td>
</tr>
</tbody>
</table>

NOTE: Refer to website to select an ISO 2 size base and accessories.