LOW-COST, ELECTRONICALLY CONTROLLED PROPORTIONAL VALVES USING SOLENOID TECHNOLOGY

PV100 Series

All Models

$445

☑ Low Power Consumption
☑ 100 ms Response Time at Maximum Pressure
☑ Stainless Steel Wetted Parts with FKM Seals
☑ 12 to 24 Vdc Power
☑ For Clean, Dry, Non-Corrosive Gases Only

The OMEGA® PV100 Series comprises economical proportional valves for use with gases. They combine a solenoid valve with an electronics package that digitally modulates the control signal to provide analog proportional control without the expense or complexity of stepper motors, servo valves, or other proportioning devices. The PV100 Series can be used in open- or closed-loop systems to control flow, pressure, temperature, speed, or position parameters of gases.

SPECIFICATIONS

Valve Type: 2-way normally closed
Wetted Parts: Stainless steel with FKM seals
Power: 12 to 24 Vdc
Power Consumption: 7 W maximum
Control Signals: 0 to 5 Vdc, 0 to 10 Vdc or 4 to 20 mA DC (specify when ordering)
Ambient Temperature Range: -10 to 50°C (14 to 122°F) media temperature
Range: -18 to 82°C (0 to 180°F)
Linear Control Range: 15 to 85% of full flow
Response Time for Complete Cycle (Off—Fully Open—Off): 40 ms @ 0 pressure; 100 ms @ max pressure

Repeatability: ±5% when in operating linear control range

Electrical Connection: 0.4 m (18") color-coded lead wires

Wiring:
- Red: DC power supply
- Gray: Control signal (+)
- Black: Common (to power and control)

Pressure Connections: ½ FNPT
Enclosure: General purpose, NEMA 11

MOST POPULAR MODELS HIGHLIGHTED!

PV100 Series

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>PRICE</th>
<th>ORIFICE</th>
<th>CV</th>
<th>MAX PRESS</th>
<th>AT MAX PRESS</th>
<th>AT 0.7 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV101-(*)</td>
<td>$445</td>
<td>⅛&quot;</td>
<td>0.02</td>
<td>13.8 bar</td>
<td>0 to 50,000</td>
<td>0 to 8000</td>
</tr>
<tr>
<td>PV102-(*)</td>
<td>445</td>
<td>⅛&quot;</td>
<td>0.045</td>
<td>7 bar</td>
<td>0 to 65,000</td>
<td>0 to 17,000</td>
</tr>
<tr>
<td>PV103-(*)</td>
<td>445</td>
<td>⅛&quot;</td>
<td>0.08</td>
<td>4 bar</td>
<td>0 to 75,000</td>
<td>0 to 30,000</td>
</tr>
<tr>
<td>PV104-(*)</td>
<td>445</td>
<td>⅛&quot;</td>
<td>0.12</td>
<td>2.7 bar</td>
<td>0 to 80,000</td>
<td>0 to 45,000</td>
</tr>
</tbody>
</table>

(*) Specify input control signal: “-MA” for 4 to 20 mA DC, “-5V” for 0 to 5 Vdc and “-10V” for 0 to 10 Vdc.

Comes complete with operator’s manual.

Ordering Example: PV103-MA, proportional valve with ⅛" orifice, 4 bar (60 psi) max pressure and 4 to 20 mA DC input control signal, $445.
More than 100,000 Products Available!

- **Temperature**

- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**
  Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

- **Heaters**