Clippard’s DVP Series proportional solenoid valves are precision-built 2-way control valves, utilizing a unique, patented valving principle. This powerful series was designed as the next generation of the well-known and trusted original EV line of Clippard “Mouse” valves. With a life of over a billion cycles, a solid, compact design, and extremely high flow rates, these valves are suitable for many applications across numerous industries.

The DVP series valve provides air or gas flow control, and varies the output flow based on the current input to the solenoid. The consistent gain (see chart) of this valve provides a high degree of control.

Controllability and overall value are the main features of the DVP series. The valve may be controlled using DC current, open or closed-loop control, and even PWM (Pulse Width Modulation) to cover a large range of applications.

**SPECIFICATIONS**

- **Valve Type**: 2-Way, Proportional
- **Medium**: Air & Compatible Gases (40 micron filter)
- **Pressure Range**: Vac* to 100 psig
- **Max. Hysteresis**: 10% of full current
- **Max. Flow Tolerance**: +10% / -0%
- **Power Consumption**: 1.9 watts at 72°F, 2.5 watts max
- **Temperature Range**: 32 to 120°F
- **Voltage**: 10 or 20 VDC
- **Mounting**: Manifold, #10-32 Male Stud
- **Seal Material**: FKM standard, Nitrile, EPDM, and Silicone optional
- **Wetted Materials**: Stainless Steel, PPS
- **Certifications**: CE, RoHS, REACH

* Vacuum applications are reverse flow

**DVP Flow Capabilities**

![DVP Flow Capabilities Graph](image)

**Typical Performance**

![Typical Performance Graph](image)

- Industry standard for leak-free operation
- Over 1,000,000,000 cycles
- Extremely low hysteresis
- Fast response time
- Large flows in small, sleek design
- Low heat rise/low power
- Robust stainless steel “Spider” flat armature spring

* Call for custom flow and pressure configurations
SINGLE-STATION MANIFOLD
Construction  ENP brass standard. Other materials available.

MULTI-STATION MANIFOLDS
Construction  Black anodized aluminum
Ports  1/8" NPT
Custom manifolds available. Consult factory.

ORDERING INFORMATION

Example Part No.

<table>
<thead>
<tr>
<th>D V - P M -</th>
<th>1 0 -</th>
<th>3 0 0</th>
<th>0 4 0</th>
<th>- V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Style</td>
<td>Voltage</td>
<td>Flow (L/min)</td>
<td>Operating Pressure (psig)</td>
<td>Seals</td>
</tr>
<tr>
<td>DT-PM  Spade Terminals</td>
<td>10 10-Volt</td>
<td>Increments of 1 from 010 to 065</td>
<td>V  FKM (std.)</td>
<td></td>
</tr>
<tr>
<td>DV-PM  Wire Leads (Axial)</td>
<td>20 20-Volt</td>
<td>from 1.0 to 67.8</td>
<td>E  EPDM</td>
<td></td>
</tr>
</tbody>
</table>

Consult Clippard for availability of non-standard voltages and other options

Although voltage is an important issue, the current is somewhat more important. It is crucial to specify and use a calibrated valve that matches your application. Be sure to use a valve set to your operating pressure to assure you have an overall good performing valve for your exact requirements.

Proportional flow is achieved by varying the current input to the valve.

<table>
<thead>
<tr>
<th>Nominal Voltage Range at 72 °F</th>
<th>Input Current Range</th>
<th>Coil Resistance at 72 °F</th>
<th>Max. Voltage Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10 VDC</td>
<td>0 to 0.190 mamps</td>
<td>526 ohms</td>
<td>13 VDC</td>
</tr>
<tr>
<td>0 to 20 VDC</td>
<td>0 to 0.095 mamps</td>
<td>210.5 ohms</td>
<td>26 VDC</td>
</tr>
</tbody>
</table>

Pressure & Flow
In selecting your valve, reference the DVP Flow Capabilities Chart on front and list your Nominal Operating Pressure in a 3-digit format (065 = 65 psig). Next specify your desired Max. Flow Rate for your pressure (500 = 50.0 L/min). Accurately specify your Nominal Operating Pressure and Flow to assure the best performance and resolution for your application.

For Nominal Operating Pressure under 5 psig, use a 005 designator for Pressure. For Vacuum applications use the positive pressure equivalent and reverse the ports.

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