

# DVP PROPORTIONAL VALVES

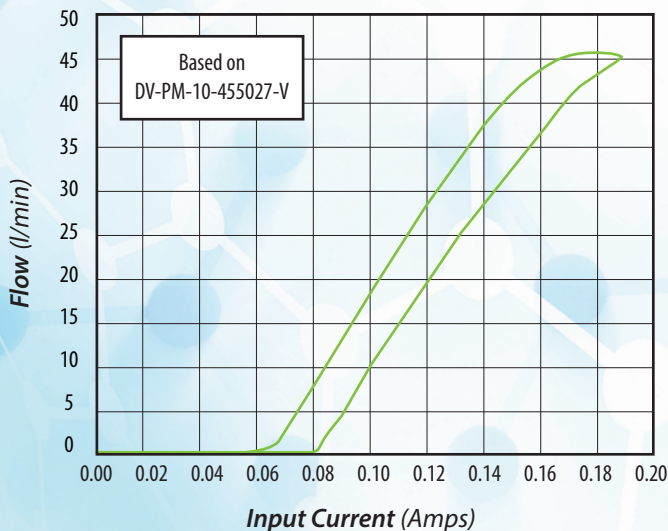


Clippard's DVP series proportional solenoid valves are precision-built 2-way control valves. With its solid, compact design, long life, and exceptionally high flow rates, these valves are suitable for a wide variety of applications across many different industries.

The DVP valve provides air or gas flow control and varies the output flow based on the current input to the solenoid. The valve's consistent gain provides a high degree of control. It may be controlled using DC current, open or closed-loop control, and even pulse width modulation (PWM) to cover a large range of applications.

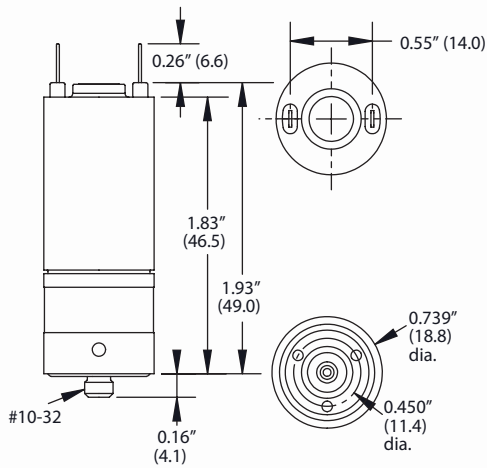
<b>Coil Resistance</b>	52.6, 210.5 $\Omega$ @ 72°F (22°C)
<b>Connection</b>	Terminal spades or 18" (45.7 cm) wire leads
<b>Current</b>	0 to 0.190 A, 0 to 0.095 A
<b>Driver</b>	EVPD (optional)
<b>Filtration</b>	40 micron filter (recommended)
<b>Function</b>	2-way normally-closed proportional
<b>Material, Body</b>	Stainless steel
<b>Material, Seals</b>	FKM, nitrile, EPDM, or silicone
<b>Material, Seat</b>	Stainless steel
<b>Material, Wetted</b>	304 stainless steel, PPS
<b>Max. Flow</b>	+10%, -0%
<b>Medium</b>	Air or compatible gases
<b>Mount</b>	Manifold, #10-32 male stud
<b>Number of Ports</b>	2
<b>Operating Pressure</b>	Vac. to 100 psig (7 bar)
<b>Operating Temp. Range</b>	32 to 120°F (0 to 49°C)
<b>Port, Inlet</b>	Manifold stud
<b>Port, Outlet</b>	Manifold outlet hole
<b>Voltage</b>	10 or 20 VDC nominal
<b>Wattage</b>	1.9 watts @ 72°F (22°C), 2.5 watts max.
<b>More Details</b>	<a href="http://clippard.com/link/dvp-series">clippard.com/link/dvp-series</a>

Typical Performance

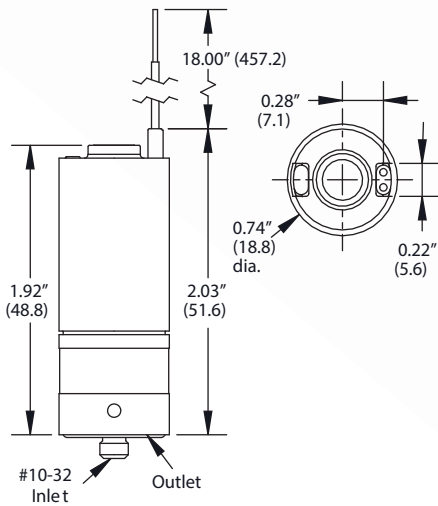


The above flow curve is a typical calibration record for the DVP. All proportional valves have a stored calibration data sheet readily available upon request.

## Spade Terminals



## Wire Leads



## Manifolds

15490-5	Single-Station, ENP Brass
15781-2	2-Station, Black Anodized Aluminum, 1/8" NPT
15781-4	4-Station, Black Anodized Aluminum, 1/8" NPT
15481-6	6-Station, Black Anodized Aluminum, 1/8" NPT



Dimensions shown are in inches (millimeters listed in parentheses).

Visit [clippard.com](http://clippard.com) for more detailed 2D and 3D drawings.

- Extremely low hysteresis
- Low heat rise / low power
- Flow proportional to input current
- Robust stainless steel spring, base, and housing
- Industry standard for leak-free operation

## ORDERING INFORMATION

**D**  - **P** **M** -  -  -  -  -

### Electrical Connection

- T Spade Terminals
- V Wire Leads (Axial)

### Voltage

10 10 VDC  
20 20 VDC

### Flow

In increments of 1, from 010 to 678  
(1.0 l/min to 67.8 l/min)

Example: 300 (300 l/min)

### Operating Pressure

In increments of 1, from 005 to 100  
5 psig (0.4 Bar) to 100 psig (6.9 Bar)

Example: 040 (40 psig, 2.8 bar)

### Seals

- V FKM (standard)
- (blank) Nitrile
- E EPDM<sup>1</sup>
- S Silicone<sup>1</sup>

<sup>1</sup>Min. order quantity required for EPDM or silicone seals

### Example Part Number:

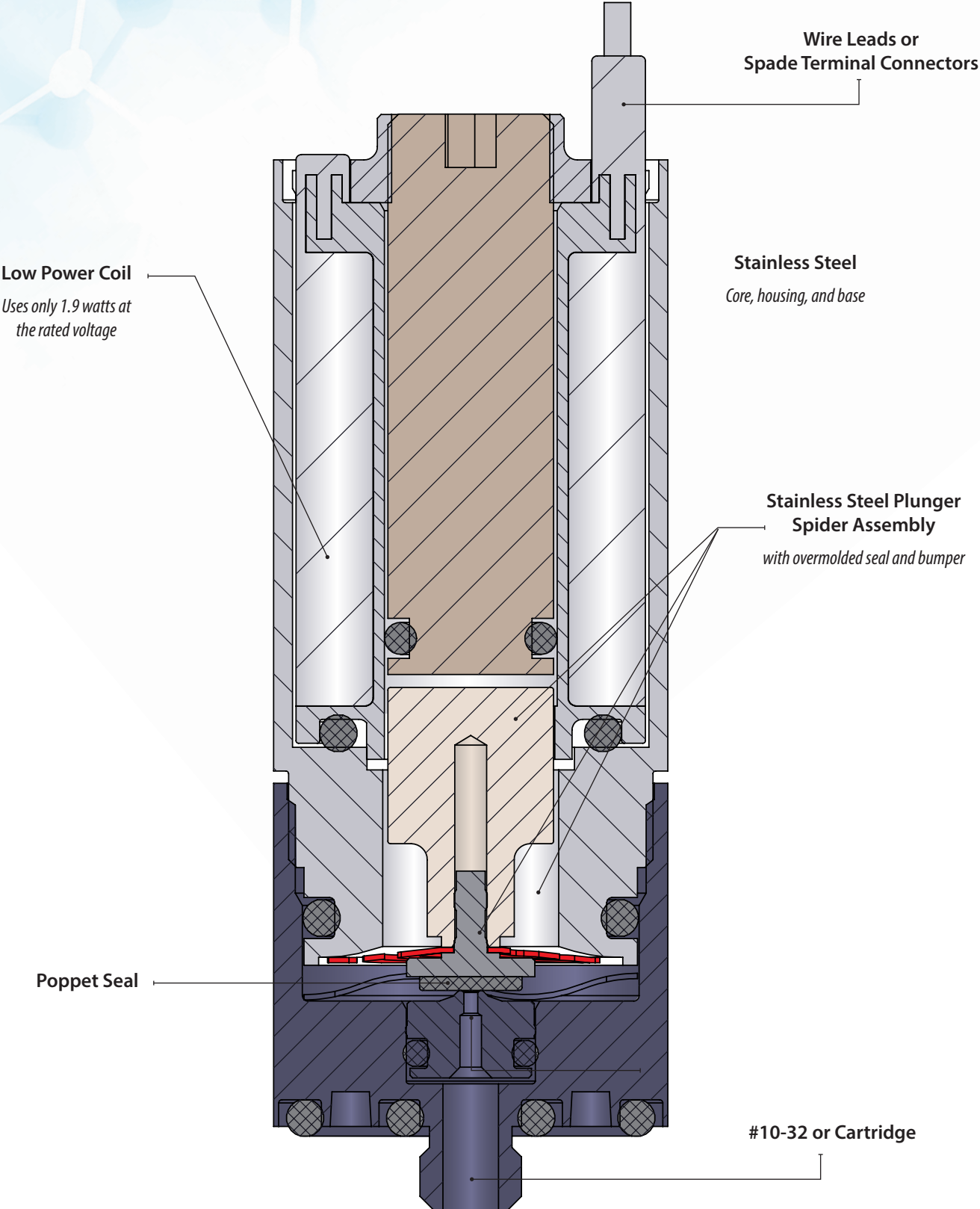
DT-PM-10-300-040-V

For more info, scan the QR code or visit

[clippard.com/link/dvp-series](http://clippard.com/link/dvp-series)



# A Close-Up of the DVP Series



# How to Select Your DVP Proportional Valve

Proportional flow is achieved by varying the current input to the valve. It is crucial to specify and use a calibrated valve that matches your application. To ensure you have a valve that will perform well for your specific requirements, be sure to use a valve set to your operating pressure.

The flow capabilities shown below in green are standard configurable options. The flow capabilities shown in blue are available as a special custom option. Contact Clippard for more details.

To select your valve, reference the flow chart and list your operating pressure in a 3-digit format (065 = 65 psig). Next, specify your desired maximum flow rate for your pressure (500 = 50.0 l/min). Accurately specify your nominal operating pressure and flow to ensure the best performance and resolution for your application.

For nominal operating pressures under 5 psig, use a 005 designator for pressure. For vacuum applications, use the positive pressure equivalent and reverse the ports.

When choosing your valve, there are many variables to consider. To select the best valve for your application, focus on:

- 1 Control Signal
- 2 Operating Pressure

**Please Note:** It is important to specify and use a calibrated valve that matches your application. Be sure to use a valve set to your operating pressure. Otherwise, the required power for opening the valve will be high and the resolution to set your flow proportional will be poor.

## 1 CONTROL SIGNAL

Voltage Range	Input Current Range	Coil Resistance	Max. Voltage Required
0 to 10 VDC @ 72°F	0 to 0.190A	52.6 ohms @ 72°F	13 VDC
0 to 20 VDC @ 72°F	0 to 0.095A	210.5 ohms @ 72°F	26 VDC

Note: Do not exceed input current range

## 2 OPERATING PRESSURE - Flow vs. Operating Pressure

