

# EVP Series Proportional Control Valves



Clippard is pleased to add the EVP series proportional control valve to our Electronic Valve product line. This product combines the features of the existing EV series valve—long life, low power, and Clippard's reputation for high quality components—with the additional capability of proportional control.

The EVP 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 graph) of this valve provides a high degree of control for many applications.

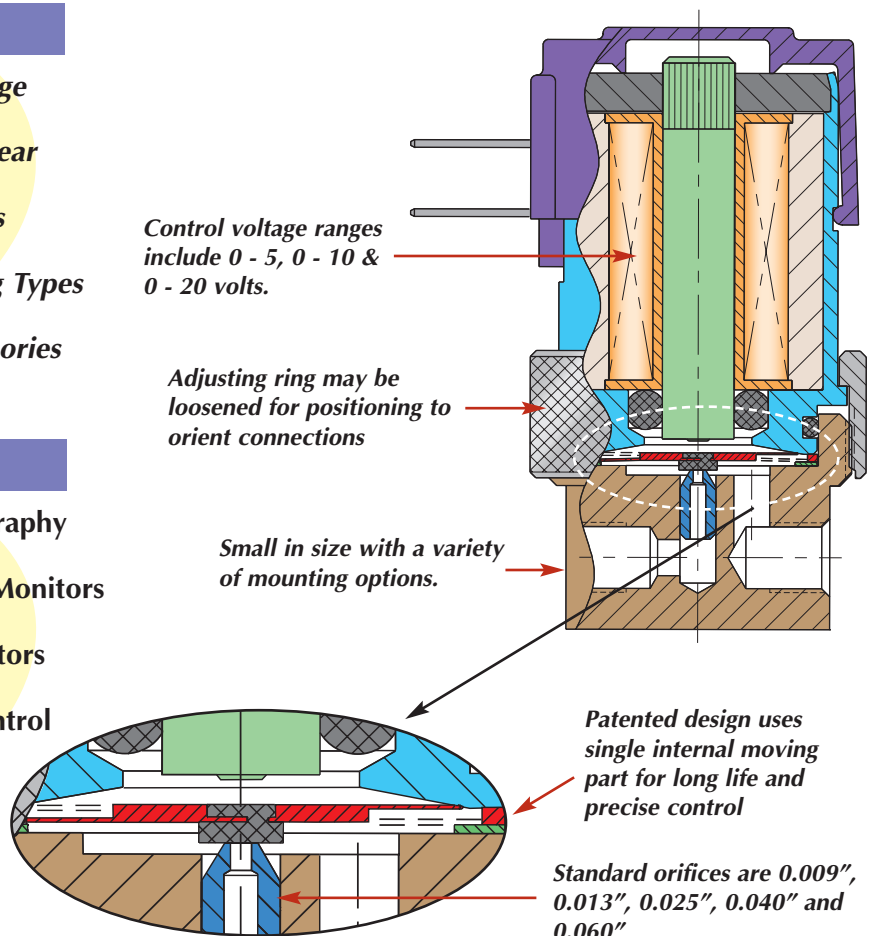
Controllability and overall value are the main features of the EVP Proportional Valve series. The valve may be controlled using DC current, open- or closed-loop control, and even PWM (pulse width modulation) to cover a broad range of applications.

## FEATURES & BENEFITS

- Fast Response • Long Life • Small Package*
- Single Moving Part—Low Friction and Wear*
- Five Orifice Sizes • Three Voltage Ranges*
- Three Connection Styles • Two Mounting Types*
- Three Seal Options • Convenient Accessories*

## DESIGNED FOR

- Analytical Instruments • Gas Chromatography*
- Automotive • Dialysis • Blood Pressure Monitors*
- Mass Flow Control • Respirators/Ventilators*
- Patient Simulators • Precise Pressure Control*
- Semiconductor-CMP • Gas Controllers*
- Many more!*

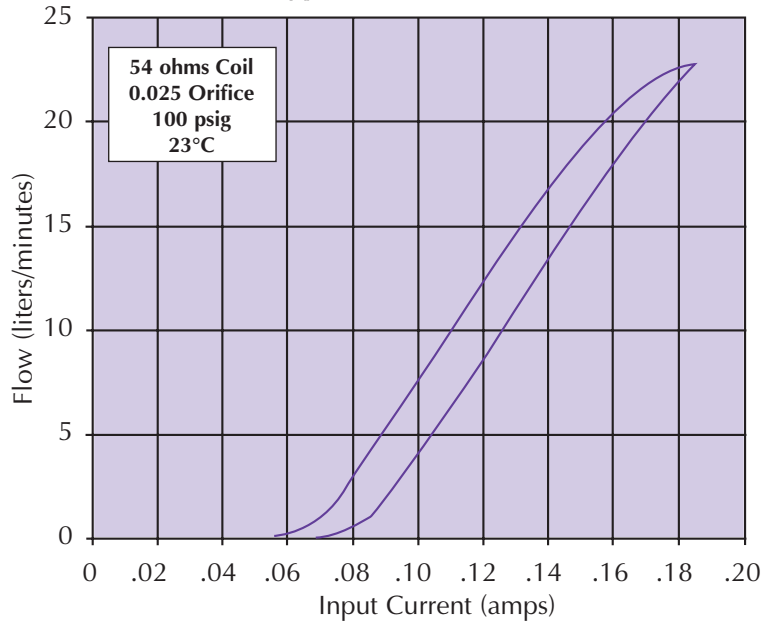


# Specifications

<b>Valve Type:</b>	2-Way, Proportional
<b>Medium:</b>	Air, Gases
<b>Temperature Range:</b>	32° to 120°F (0° to 50°C)
<b>Power Consumption:</b>	1.9 watts at 23°C 2.3 watts max.
<b>Mounting:</b>	In-line or Manifold
<b>Ports:</b>	#10-32 Female (In-line) #10-32 Male Stud (Manifold)
<b>Seal Material:</b>	Buna-N Standard; Viton®, EPDM and others available
<b>Maximum Hysteresis:</b>	10% of full current

Orifice Diameter	Rated Pressure	Flow at Maximum Current (±10%)	
<i>Inches</i>	<i>psig</i>	<i>slpm</i>	<i>scfh</i>
0.009	100	2.7	5.7
0.013	100	6.7	14.2
0.025	100	23.5	50.0
0.040	50	19.0	40.0
0.060	25	14.0	30.0

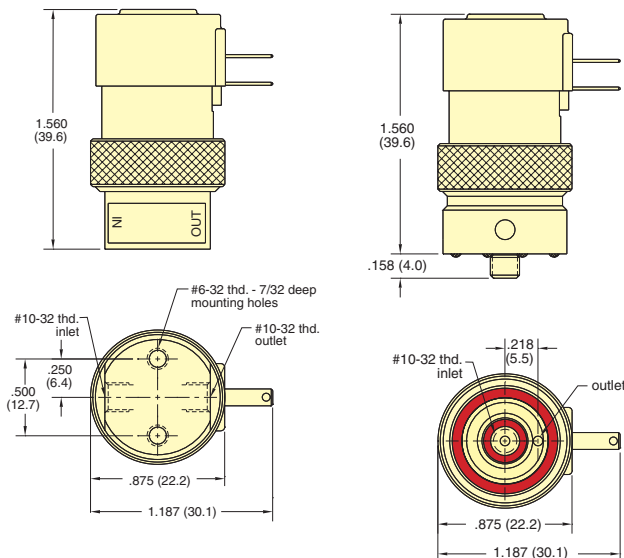
## Typical Performance



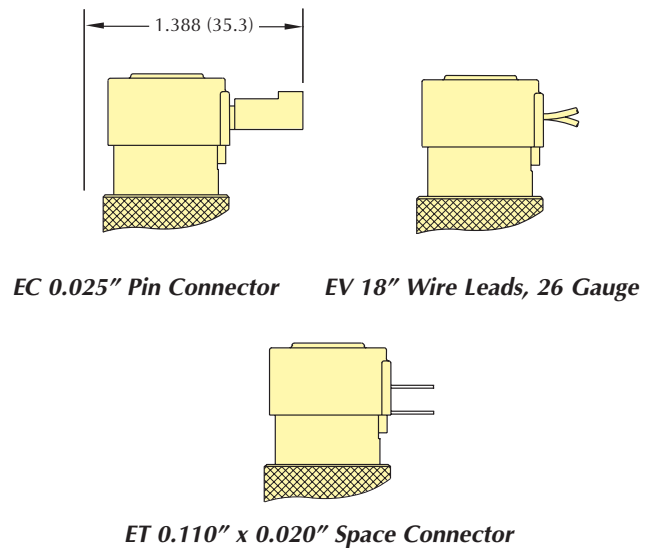
Nominal Voltage Range at 23°C	Input Current Range	Coil Resistance at 23°C	Max. Voltage Required
0 - 5 vdc	0 - 0.370 amps	13.5 ohms	6.2 vdc
0 - 10 vdc	0 - 0.185 amps	54 ohms	12.4 vdc
0 - 20 vdc	0 - 0.092 amps	218 ohms	24.8 vdc

# Dimensions

## Standard & Manifold Mount Models

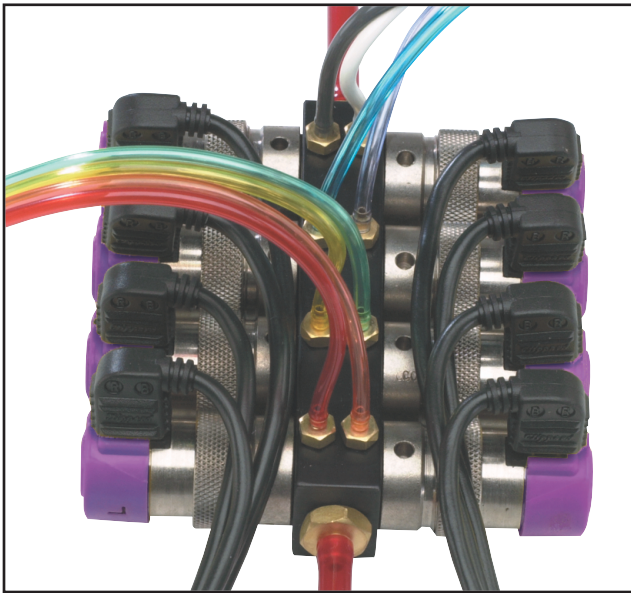


## Coil Styles



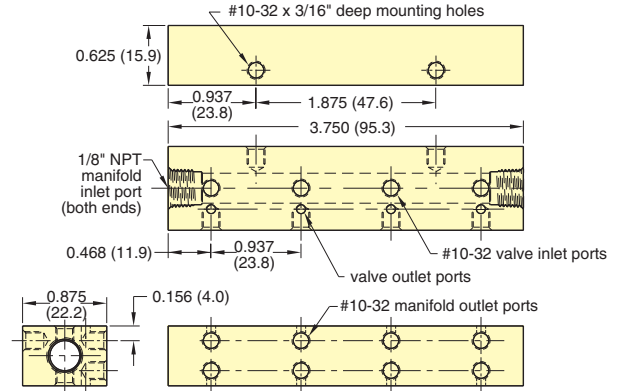
All dimensions are stated in inches (millimeters)

# Multi-Valve Manifolds



8 Valves Mounted on #15482-8

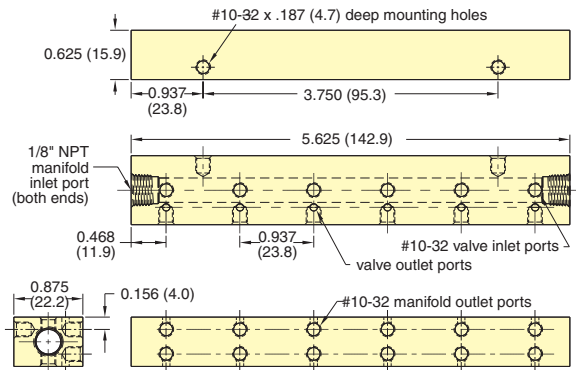
## Models 15481-4 and 15482-8



15481-4 Mounts Four Valves on One Side Only

15482-8 Mounts Eight Valves, Four Each on Opposite Sides

## Models 15481-6 and 15482-12

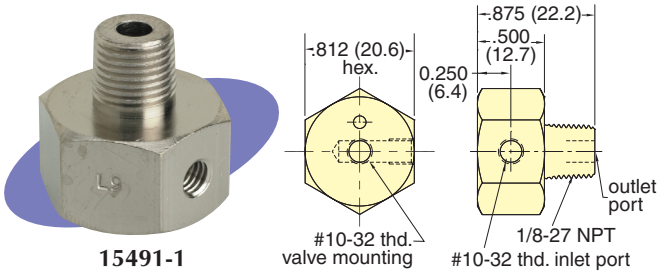


15481-6 Mounts Six Valves on One Side Only

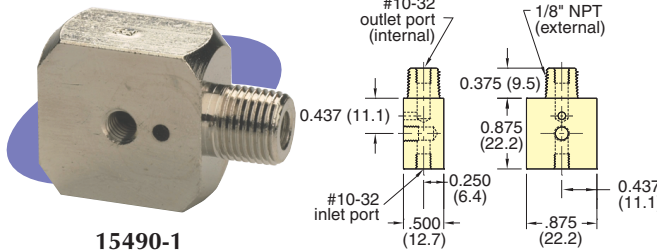
15482-12 Mounts 12 Valves, Six Each on Opposite Sides

## Specialized Manifolds

**Pilot Manifolds** allow proportional valve to be easily adapted to any air-piloted device using a 1/8" NPT connection.

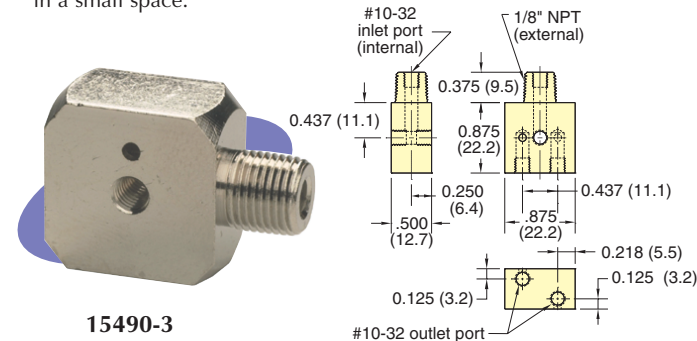


15491-1



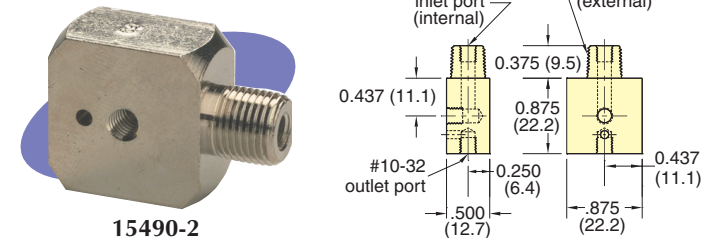
15490-1

**Dual Supply Manifold** allows two EC, EV or ET valves to be mounted in a small space.

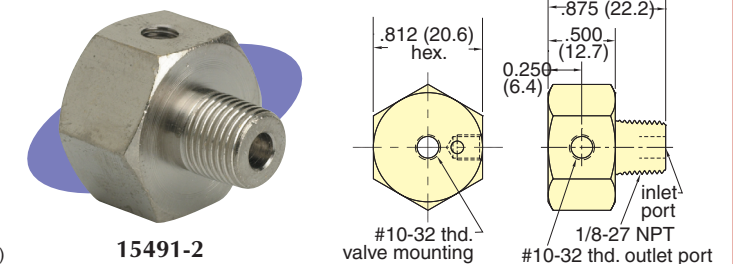


15490-3

**Single Supply Manifolds** use a 1/8" NPT male inlet to allow for secure mounting. #10-32 port outlet.



15490-2



15491-2

All dimensions are stated in inches (millimeters)

## Connectors



### ET-C48 ET-C120

Black molded lug connectors are available for easy push on connection. ET-C48 is 48" in length, ET-C120 is 120" in length.

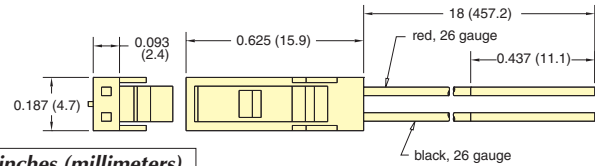
### 3831

Insulated lug connectors are available for wiring up leads to connect electronic circuit to ET style valves. Accepts #22, #24 or #26 wire.



### C2-RB18

AMP connector #103959-1 with 18" wire leads for EC valves.



All dimensions are stated in inches (millimeters)

## Order Information

Electrical Connection	Mounting		Voltage		Orifice Options		Maximum Pressure		Seal			
	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.			
Connector	<b>C</b>	Base Mount	(blank)	0 to 5 vdc	<b>05</b>	0.009" dia.	<b>09</b>	*see note	25 psig	<b>25</b>	Buna-N	(blank)
Terminal Spades	<b>T</b>	Manifold Mount	<b>M</b>	0 to 10 vdc	<b>10</b>	0.013" dia.	<b>13</b>	50 psig	<b>50</b>	EPDM	<b>E</b>	
Wire Leads	<b>V</b>	Manifold Mount	<b>M</b>	0 to 20 vdc	<b>20</b>			100 psig	<b>A0</b>			25 psig
						0.025" dia.	<b>25</b>	50 psig	<b>50</b>			
						0.040" dia.	<b>40</b>	100 psig	<b>A0</b>			
						0.060" dia.	<b>60</b>	25 psig	<b>25</b>			
Part Number	<b>E</b>	<b>- P</b>		<b>-</b>		<b>-</b>				<b>-</b>		

\* Note: The EVP Proportional Valve can be calibrated for pressures less than the maximum shown here. Lower pressures may be substituted, and will be used for calibration. The pressures shown above are standard options. For pressures less than 10 psig, please consult factory.

## Disclaimer & Limited Warranty

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## Distributed By:



### Clippard Instrument Laboratory, Inc.

7390 Colerain Avenue • Cincinnati, Ohio 45239-5396

Phone 513-521-4261 • Fax 513-521-4464

www.clippard.com