

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.

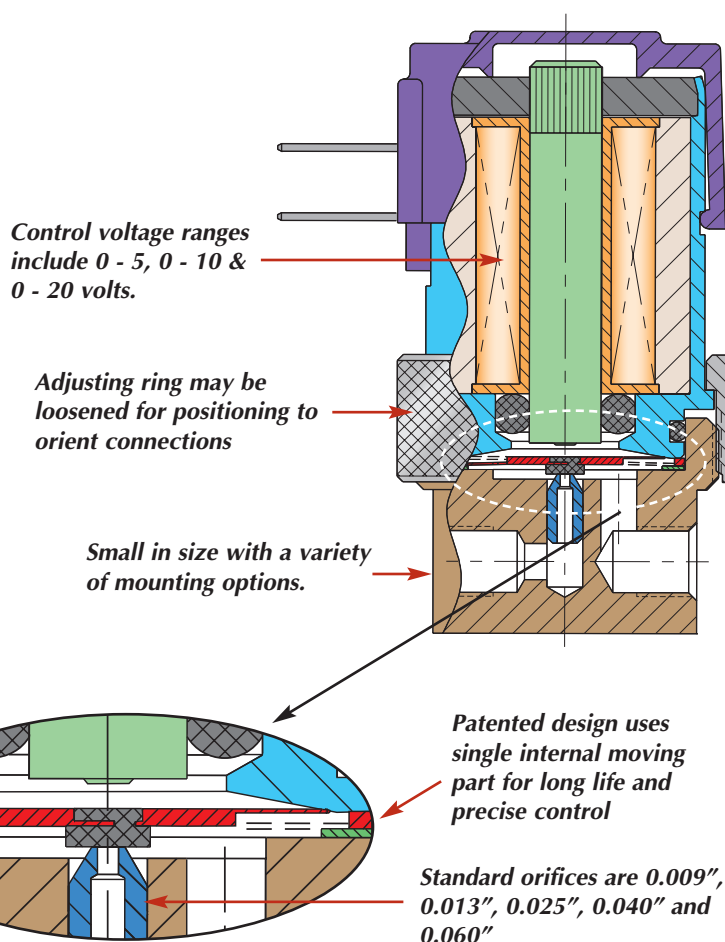
Controllability and overall value are the main features of the EVP Proportional Valve series. The valve may be controlled using DC current, open- or closed-loop control, and even PWM (pulse width modulation) to cover a broad range of applications.

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!



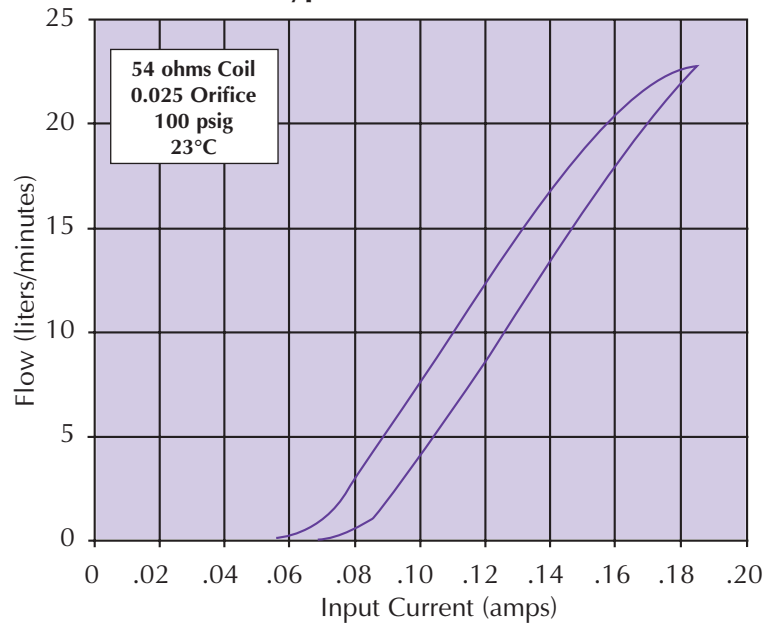
Specifications

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

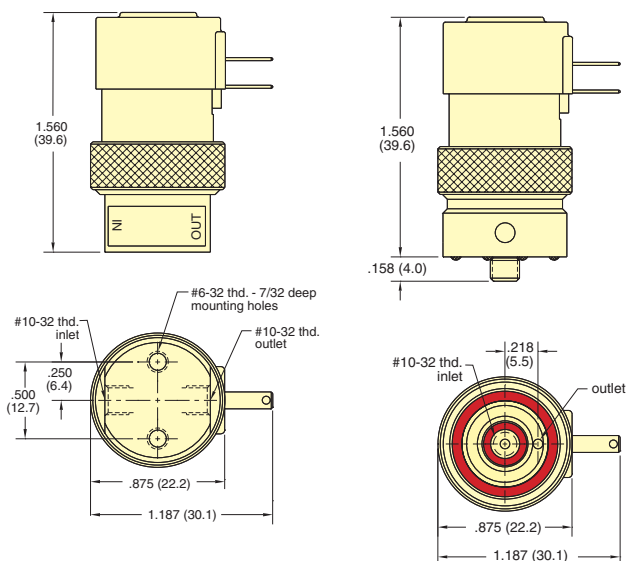
Nominal Voltage Range at 23°C	Input Current Range	Coil Resistance at 23°C	Max. Voltage Required
0 - 5 vdc	0 - 0.370 amps	13.5 ohms	6.2 vdc
0 - 10 vdc	0 - 0.185 amps	54 ohms	12.4 vdc
0 - 20 vdc	0 - 0.092 amps	218 ohms	24.8 vdc

Typical Performance

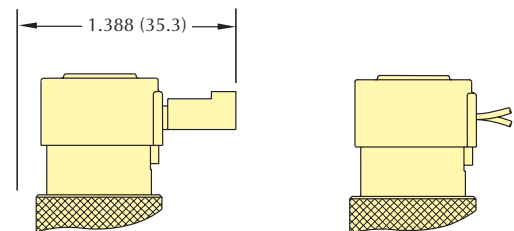


Dimensions

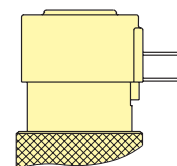
Standard & Manifold Mount Models



Coil Styles



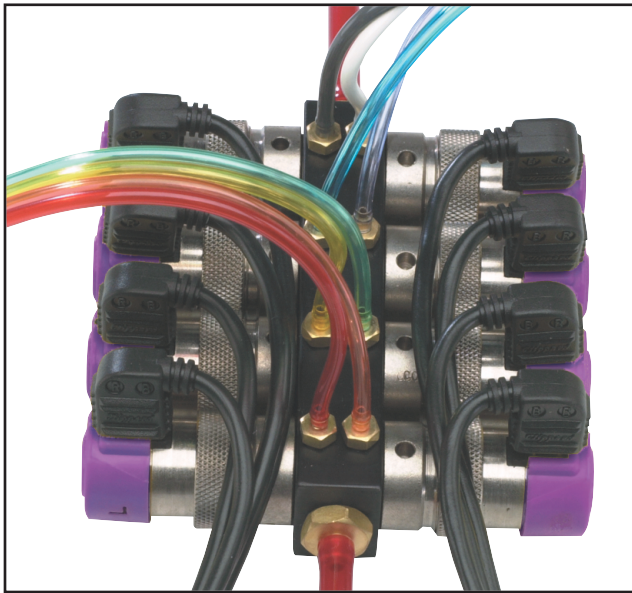
EC 0.025" Pin Connector EV 18" Wire Leads, 26 Gauge



ET 0.110" x 0.020" Space Connector

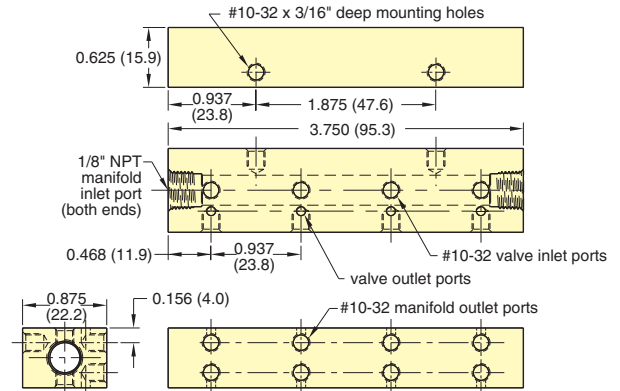
All dimensions are stated in inches (millimeters)

Multi-Valve Manifolds



8 Valves Mounted on #15482-8

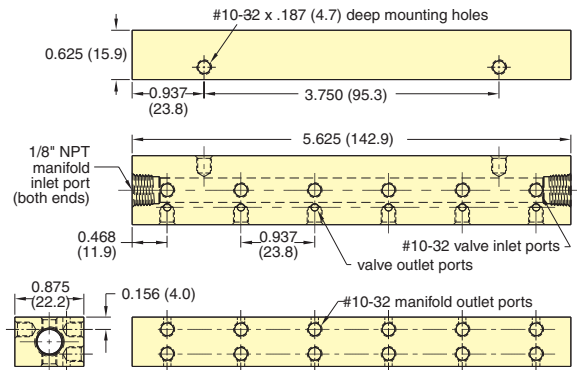
Models 15481-4 and 15482-8



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

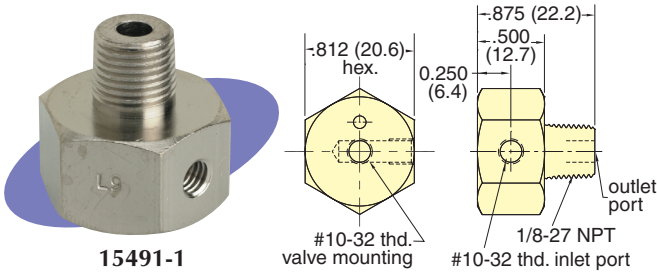


15481-6 Mounts Six Valves on One Side Only

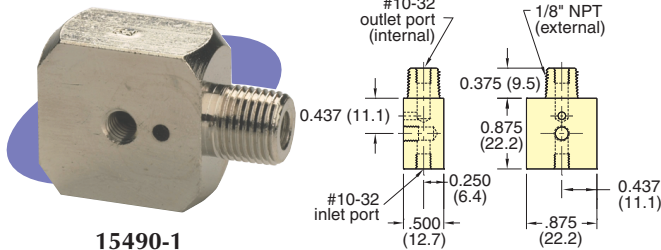
15482-12 Mounts 12 Valves, Six Each on Opposite Sides

Specialized Manifolds

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

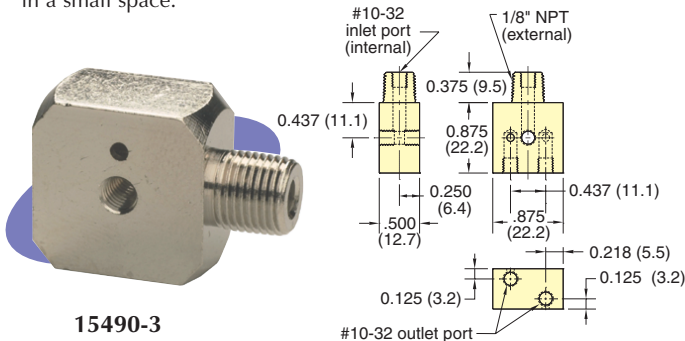


15491-1



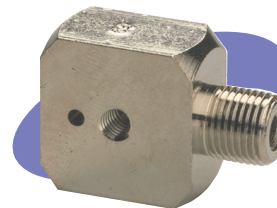
15490-1

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

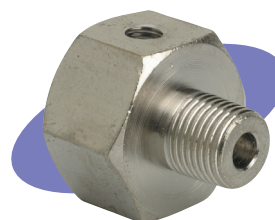
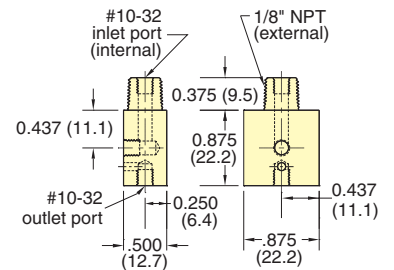


15490-3

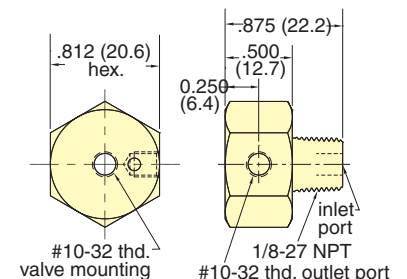
Single Supply Manifolds use a 1/8" NPT male inlet to allow for secure mounting. #10-32 port outlet.



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.

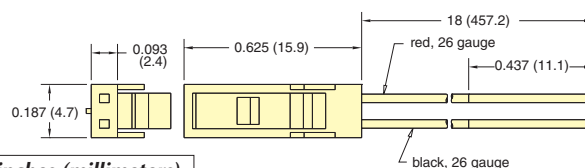
3831

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.	*see note	Order No.		Order No.
Connector	C	Base	(blank)	0 to 5 vdc	05	0.009" dia.	09	25 psig	25	Buna-N	(blank)
Terminal	T	Mount		0 to 10 vdc	10			50 psig	50	EPDM	E
Spades		Manifold	M	0 to 20 vdc	20			100 psig	A0	Viton®	V
Wire Leads	V	Mount				0.013" dia.	13	25 psig	25		
								50 psig	50		
								100 psig	A0		
						0.025" dia.	25	25 psig	25		
								50 psig	50		
								100 psig	A0		
						0.040" dia.	40	25 psig	25		
								50 psig	50		
						0.060" dia.	60	25 psig	25		
Part Number	E	- P		-		-				-	

* 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

All information contained in this publication is for reference only. Proper design engineering procedures should be used to assure any compliances. Clippard Instrument Laboratory, Inc. reserves the right to make changes without notice and does not warrant or guarantee the information contained herein.

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