



# EVP SERIES PROPORTIONAL CONTROL VALVES

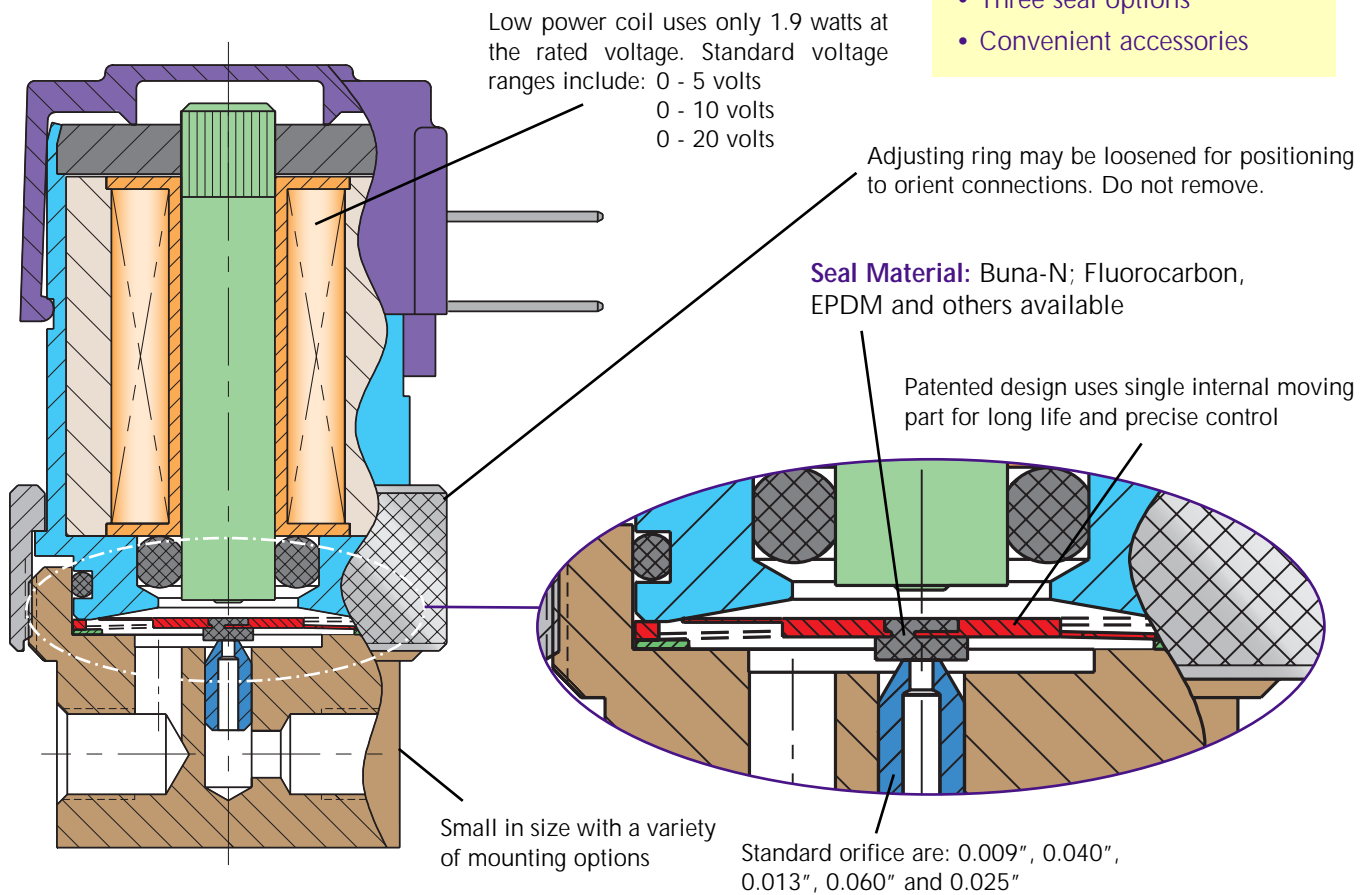
The EVP series Proportional Control Valves combine the features of the existing EV series valve - long life, low power, and Clippard's reputation for high quality components - with the additional capability for proportional control.

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 chart) 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

- 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
- Blood pressure monitoring
- Precise pressure control
- Dialysis
- Automotive
- Gas Controllers
- Mass Flow Control
- Patient Simulators
- Gas Chromatography
- Respirators / Ventilators
- Semiconductor - CMP and many more...

# EVP SERIES PROPORTIONAL CONTROL VALVES



Based on Clippard's original spider design from 1973, the EVP's armature is the heart of the valve which provides precise flow control.



An introductory CD is available which highlights the features and specifications of the award-winning EVP Proportional Control Valves. Call and request one today!



**Type:** 2-Way, Proportional

**Medium:** Air, Inert Gases

**Temperature Range:** 32° to 120° F (0° to 50° C)

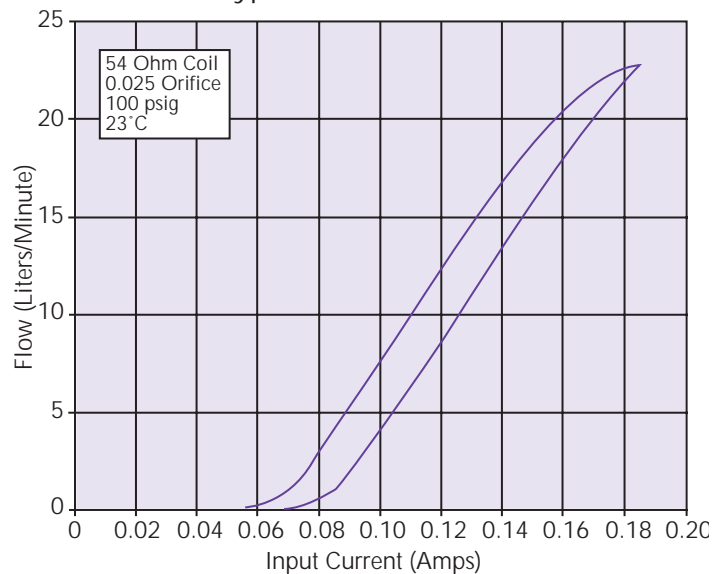
**Power Consumption:** 1.9 watts at 23°C 2.3 watts max.

**Mounting:** In-line or Manifold

**Ports:** #10-32 Female (In-line)  
#10-32 Male Stud (Manifold)

**Seal Material:** Buna-N; Fluorocarbon and EPDM. 186

Typical Performance



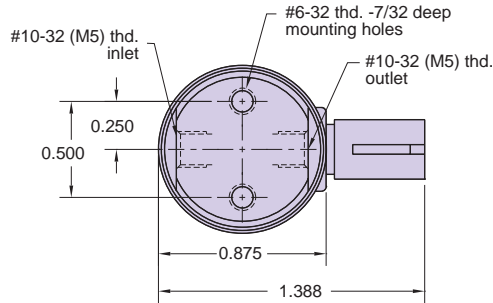
Orifice Diameter	Rated Pressure	Flow at Max. Current ( $\pm 10\%$ )
0.009"	100 psig	2.7 slpm / 5.7 scfh
0.013"	100 psig	6.7 slpm / 14.2 scfh
0.025"	100 psig	23.5 slpm / 50.0 scfh
0.040"	50 psig	19.0 slpm / 40.0 scfh
0.060"	25 psig	14.0 slpm / 30.0 scfh



# EVP SERIES PROPORTIONAL CONTROL VALVES

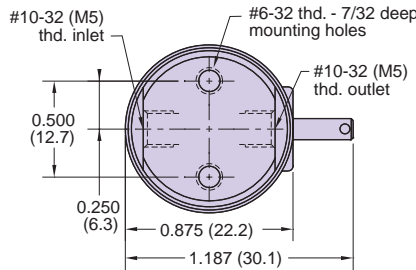
## IN-LINE MOUNT

EC - P - □ - □□ - □

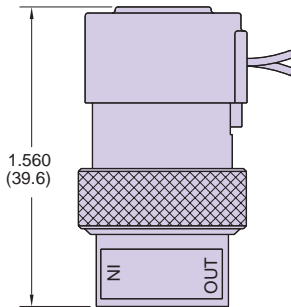


**Type:** 2-Way, Proportional  
**Medium:** Air, Inert Gases  
**Temperature Range:** 32° to 120° F  
**Power Consumption:** 1.9 watts at 23°C 2.3 watts max.  
**Mounting:** In-line  
**Ports:** #10-32 (M5) Female

ET - P - □ - □□ - □



EV - P - □ - □□□ - □



Orifice Diameter (in.)	Rated Pressure (psig)	Flow at Max. Current (scfh)
0.009	100	5.7±10%
0.013	100	14.2±10%
0.025	100	50.0±10%
0.040	50	40.0±10%
0.060	25	30.0±10%

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

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.

### NUMBERING SYSTEM

E □ - P - □ - □ - □ - □

C - Connector  
 T - Terminal Spades  
 V - Wire Leads

**Voltages: \***  
 05 - 0-5 VDC  
 10 - 0-10 VDC  
 20 - 0-20 VDC

**Orifice Options: §**  
 09 - 0.009 dia.  
 13 - 0.013 dia.  
 25 - 0.025 dia.  
 40 - 0.040 dia.  
 60 - 0.060 dia.

**Maximum Pressure: §**  
 25 - 25 psig  
 50 - 50 psig  
 A0 - 100 psig  
 25 - 25 psig  
 50 - 50 psig  
 25 - 25 psig

**Options:**  
 Blank - none  
 E - EPDM  
 V - FKM seals

**Ports:**  
 Blank - #10-32  
 M5 - Metric

\* Consult factory for availability of non-standard voltages and other options

§ Standard Orifice Configurations  
 09A0 13A0 25A0  
 4050 6025

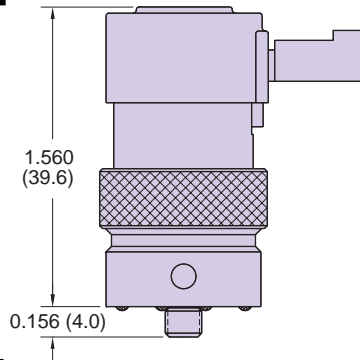
Sample part number:  
 EC-P-10-25A0

For Cable and Connectors, see Page 187.

# EVP SERIES PROPORTIONAL CONTROL VALVES MANIFOLD MOUNT

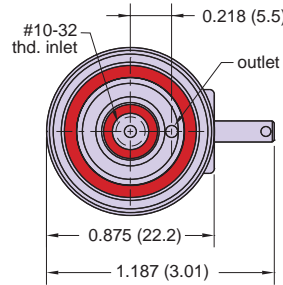


## EC - PM - □ - □□ - □



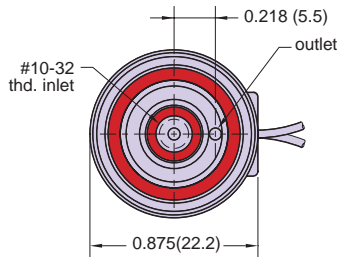
**Type:** 2-Way, Proportional  
**Medium:** Air, Inert Gases  
**Temperature Range:** 32° to 120°F  
**Power Consumption:** 1.9 watts at 23°C 2.3 watts max.  
**Mounting:** Manifold  
**Ports:** #10-32 male stud

## ET - PM - □ - □□□ - □



Orifice Diameter (in.)	Rated Pressure (psig)	Flow at Max. Current (scfh)
0.009	100	5.7±10%
0.013	100	14.2±10%
0.025	100	50.0±10%
0.040	50	40.0±10%
0.060	25	30.0±10%

## EV - PM - □ - □□□ - □



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

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.

### NUMBERING SYSTEM

E □ - P M - □ - □□ - □□ - □□ - □□

C - Connector  
 T - Terminal Spades  
 V - Wire Leads

**Voltages: \***  
 05 - 0-5 VDC  
 10 - 0-10 VDC  
 20 - 0-20 VDC

**Orifice Options: §**  
 09 - 0.009 dia.  
 13 - 0.013 dia.  
 25 - 0.025 dia.  
 40 - 0.040 dia.  
 60 - 0.060 dia.

**Maximum Pressure: §**  
 25 - 25 psig  
 50 - 50 psig  
 A0 - 100 psig  
 25 - 25 psig  
 50 - 50 psig  
 25 - 25 psig

**Options:**  
 Blank - none  
 E - EPDM  
 V - FKM seals

**Ports:**  
 Blank - #10-32  
 M5 - Metric

\* Consult factory for availability of non-standard voltages and other options

§ Standard Orifice Configurations  
 09A0 13A0 25A0  
 4050 6025

Sample part number:  
 EC-PM-10-25A0

For Cable and Connectors, see Page 187.



# EV, ET, EC SERIES MANIFOLDS

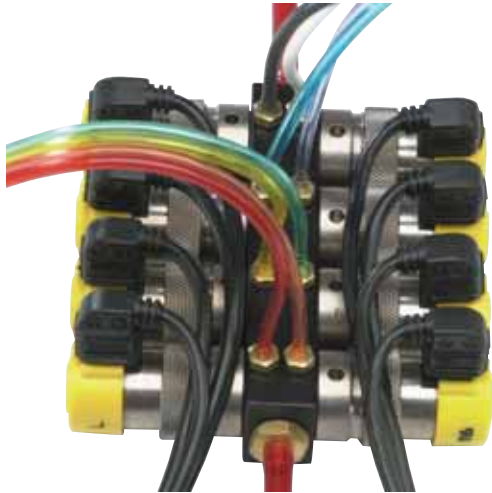
## 1548 □ - □

Multi-Valve Manifolds

Construction: Black anodized aluminum



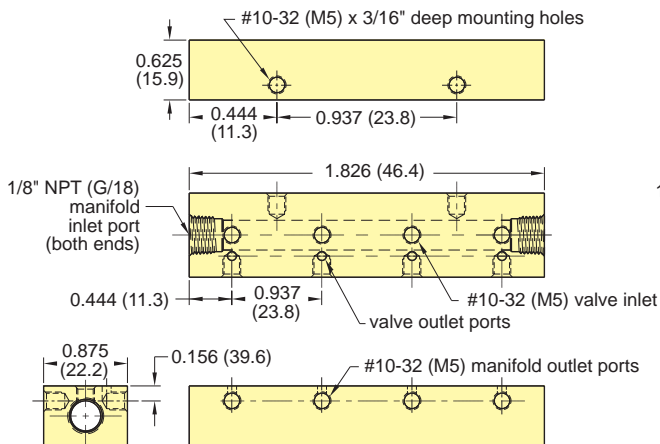
Order No.	# of Valves	"A"	"B"
15481-4	4	1.875"	3.750"
15481-4-M5	4	42.6 mm	95.3 mm
15481-6	6	3.750"	5.625"
15481-6-M5	6	95.3 mm	142.9 mm



Eight ET valves mounted on a 15482-8

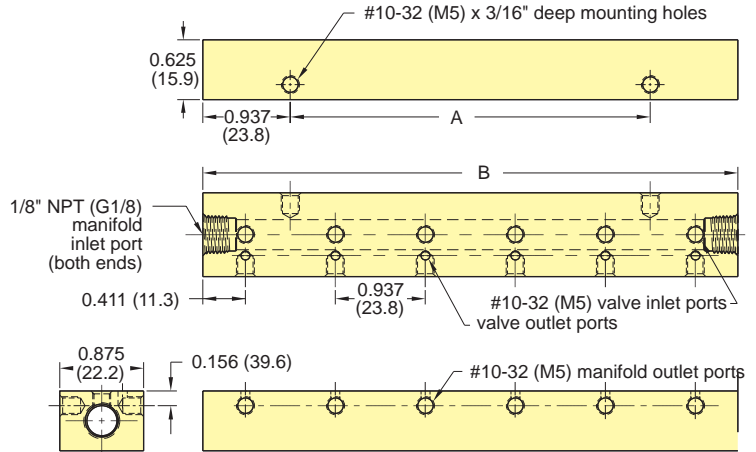
### 15481-2 & 15481-2-M5 (Metric)

Mounts two valves on one side only



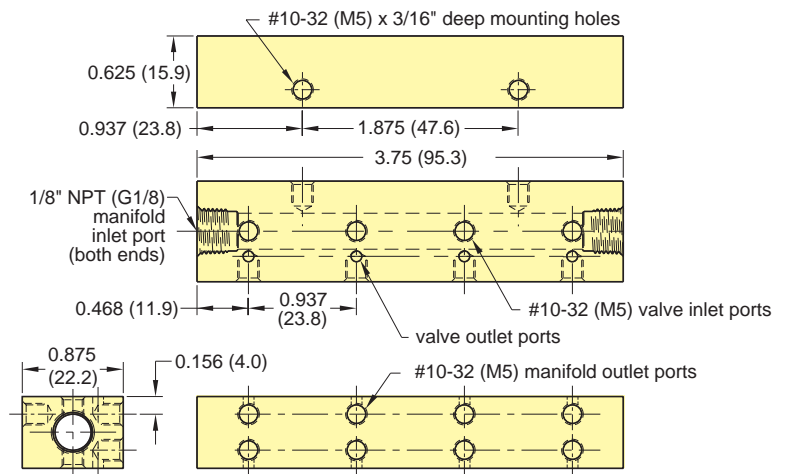
### 15481-4 & 15481-4-M5 (Metric) 15481-6 & 15481-6-M5 (Metric)

Mounts six valves on one side only



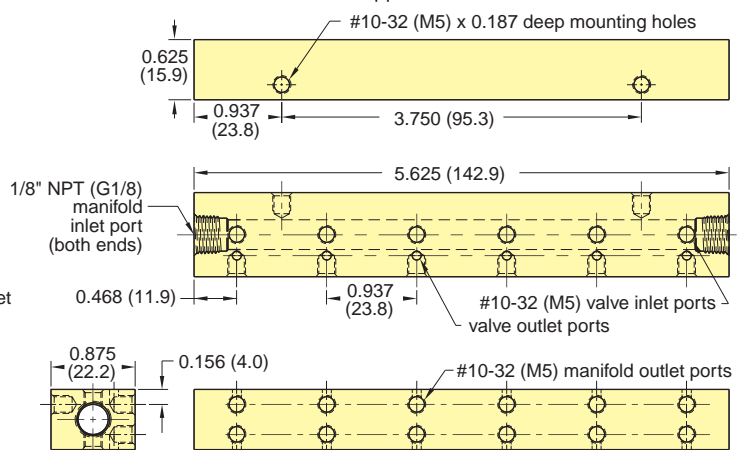
### 15482-8 & 15482-8-M5 (Metric)

Mounts eight valves, four each on opposite sides



### 15482-12 & 15482-12-M5 (Metric)

Mounts twelve valves, six each on opposite sides





# EV, ET, EC SERIES ACCESSORIES



## 2020/2021

### High Flow EC, EV and ET Piloted 3-Way Valves

Designed to be piloted by a Clippard EC, EV and ET manifold mount electronic valve. Output from the EC, EV and ET actuates the valve to produce outputs up to 22 scfm at 100 psig. Combines low wattage, long life and cool running of the EC, EV and ET valves with quick response and high flow of Clippard "Fluidamp" type valves. The 2020 and 2021 are identical in all respects except one. The 2020 has an external #10-32 port for the pressure supply to the EC, EV, and ET electronic pilot valve.

**Type:** 3-Way Normally Closed, Pressure Piloted Valve

**Medium:** Air

**Input Pressure:** 30 to 100 psig; 2.1 to 6.9 bar

**Pilot Pressure:** (2020) 60% of supply pressure, minimum

**Air Flow:** 22 scfm at 100 psig/620 l/min @ 6 bar

**Response:** Approximately 20 milliseconds

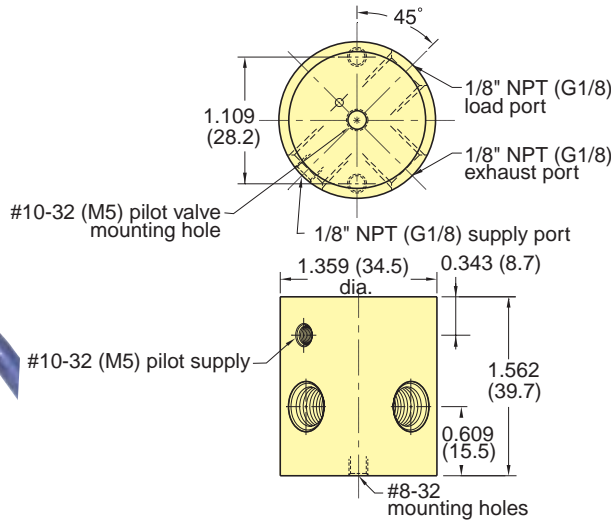
**Mounting:** Mounting holes provided

**Ports:** Inlet and outlet, exhaust 1/8" NPT Pilot supply on 2020 is #10-32 female

**Materials:** Anodized Aluminum, Stainless Steel and Buna-N

**Additional Note** Use only normally closed 3-way pilot valves in conjunction with 2020/2021

**Option:** Add -MG for Metric Version



### Specialized Manifolds



**Material:** Nickel plated brass

**Use:** Mount EC, EV and ET valves to any 1/8" NPT supply port

**15490-1 and 15490-1-MR (metric).**  
#10-32 (M5) Inlet  
1/8" NPT (R1/8) Outlet

**15490-2 and 15490-2-MR (metric).**  
1/8" NPT (R1/8) Inlet  
#10-32 (M5) Outlet

**15490-3 and 15490-3-MR (metric) Dual Supply.**  
1/8" NPT (R1/8) Inlet  
#10-32 (M5) Outlet

**15491-1 and 15491-1-MR (metric).**  
#10-32 (M5) Inlet  
1/8" NPT (R1/8) Outlet

**15491-2 and 15491-1-MR (metric).**  
1/8" NPT (R1/8) Inlet  
#10-32 (M5) Outlet

