

# ECLIPSE

## 2/2 STEPPER-CONTROLLED PROPORTIONAL ISOLATION VALVES



Utilizing the industry's most robust and powerful miniature linear actuator, the patent pending stepper-controlled proportional valve leads the industry in performance and durability.

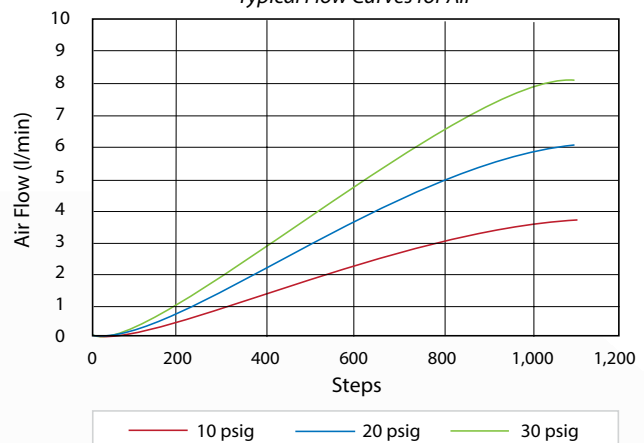
This valve is ideal in critical applications for liquid and gas delivery, medical, analytical, and industrial automation requiring high resolution and excellent repeatability. In addition, the unique design allows for custom flow profiles.

<b>Medium</b>	Liquids and gases
<b>Typical Cycle Time for Full Travel</b>	1.1 seconds at 1,000 steps per second
<b>Wetted Material</b>	Ceramic (others depending on porting option)
<b>Pressure Range</b>	Vac to 2.1 bar*
<b>Flow Range*</b>	Air: 0 to 8 l/min -0/+10% @ 2.1 bar Water: 0 to 210 ml/min -0/+10% @ 2.1 bar
<b>Flow Resolution</b>	0.19 ml/min water and 0.007 l/min air max at 2.1 bar per full step
<b>Position Resolution</b>	0.0015 mm per step
<b>Temperature Range</b>	0 to 82°C
<b>Driver</b>	Bipolar chopper drive required
<b>Supply Voltage to Motor</b>	20 VDC @ 2.1 bar
<b>Mounting</b>	Manifold or flat bottom (ZDVF)
<b>Power Consumption</b>	2.5 watts nominal only during adjustment. Zero power consumption to maintain position.
<b>Seals</b>	Valve: None Port: FKM, EPDM and others upon request
<b>More Details</b>	<a href="http://clippard.com/link/eiv">clippard.com/link/eiv</a>

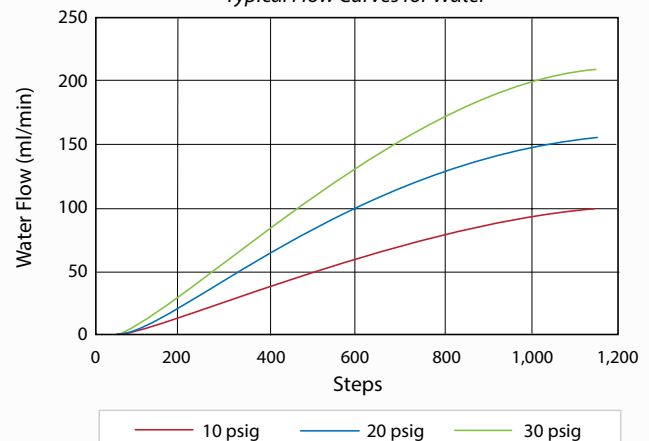
\* This product is highly modifiable for OEM applications including alternate body materials, flow profiles, pressure ranges, manifold mounting, etc. Please consult Clippard.

- Leak free (<0.05 sccm)
- Excellent Linearity (<4% of full-scale)
- Fast Response (<2 ms reaction time)
- Cycle Life of Typically >1 million
- Repeatability: <0.5% of Full Travel

Typical Flow Curves for Air



Typical Flow Curves for Water



Design World 2020  
Leadership in Engineering  
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Winner

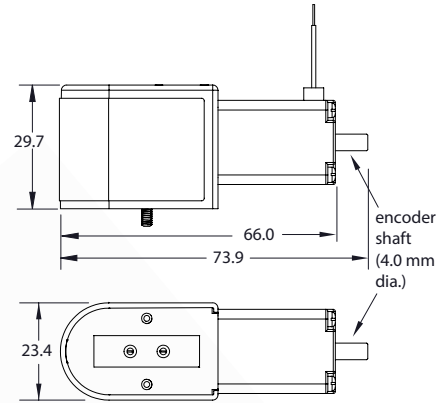
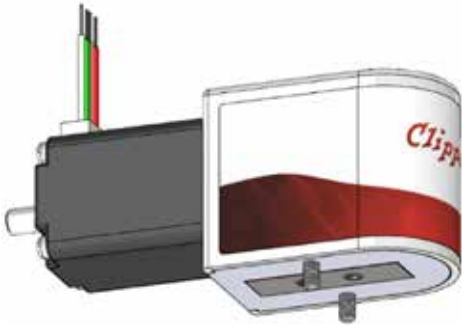
# Clippard

## ORDERING INFORMATION

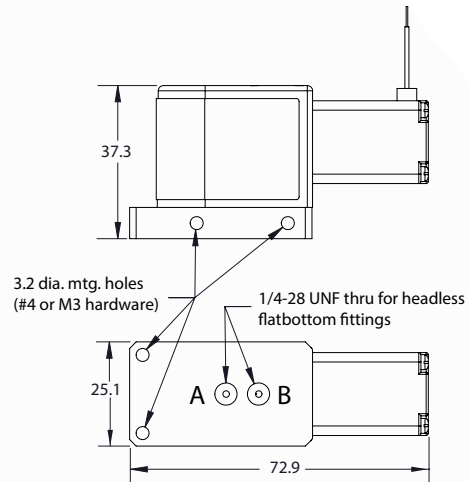
Series	Model	Porting	Seals	Encoder Shaft
<b>EIV</b> Eclipse Valve	<b>U-</b>	<b>M</b> Manifold <b>Z</b> Zero Dead Volume Fitting (ZDVF)	<b>(blank)</b> ZDVF Porting <b>-V</b> FKM	<b>-ENS</b> Encoder Shaft
<b>Example Part No.</b>	EIVU-M-V-ENS			

### EIVU-M | Manifold Mount Series

(shown with -ENS Encoder)



### EIVU-Z | ZDVF Series



#### Clippard Accessories

- EUM-01** Single-Station Manifold, #10-32
- M-EUM-01** Single-Station Manifold, M5x0.8
- SCPVD-1** Bipolar Chopper Driver
- ZDVF-18** Headless 1/4-28 Flatbottom Fitting, 1/8" OD (IDEX p/n XP-348)

#### Other Recommended Accessory

- Miniature optical encoder from US Digital for 4 mm bore with metric screws (p/n E4T)



#### Manifold Layout

