

# ECLIPSE PROPORTIONAL ISOLATION VALVE



The Eclipse is a proportional isolation valve like no other. Utilizing patented slide technology, it achieves exceptional proportional flow resolution that far exceeds the competition. Designed for precision, its flow path is fully flushable and composed entirely of inert ceramic, ensuring compatibility with a wide range of media. In addition, the Eclipse features a unique soft start capability that gradually introduces media at a controlled ramp rate to prevent damage or turbulence.

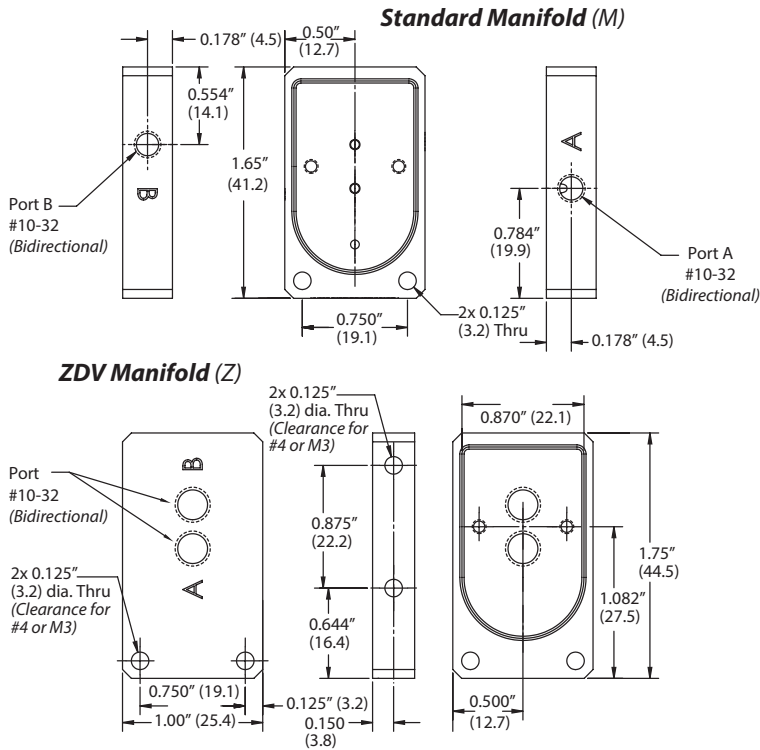
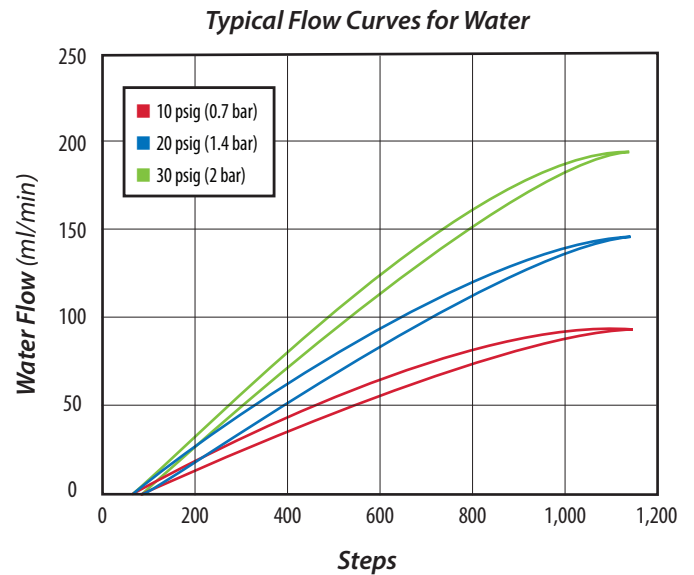
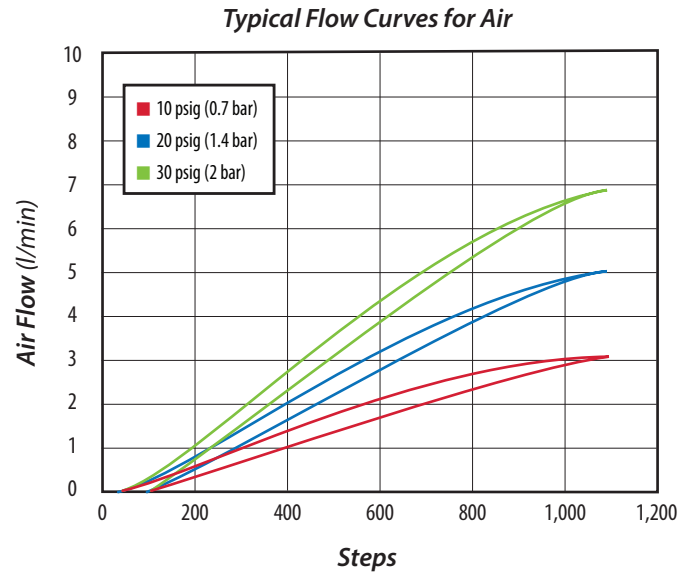
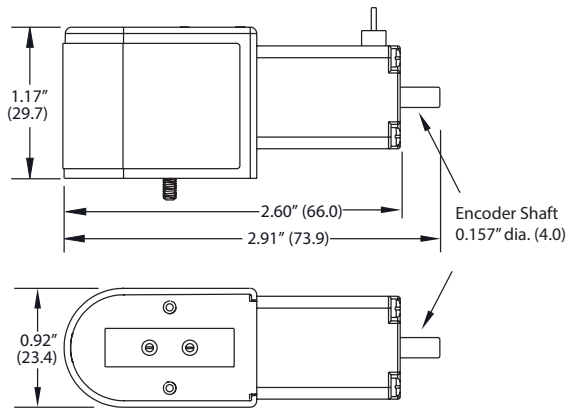
Utilizing a robust and powerful miniature linear actuator, the Eclipse is stepper-controlled, micro-stepping capable, encoder-ready, and its unique design allows for custom flow profiles.

For applications that demand exceptional liquid and gas control, Clippard's Eclipse offers outstanding precision and unrivaled proportional flow resolution.

- **Unrivaled resolution**
- **Inert flow path** (*all wetted areas ceramic*)
- **Soft start prevents damage or turbulence**
- **Zero dead volume** (*fully flushable, <0.0009 in<sup>3</sup>*)
- **Excellent linearity** (*<4% of full-scale*)
- **Fast response** (*<2 ms reaction time*)
- **Cycle life of typically >1 million cycles**
- **Repeatability <5% of full travel**
- **Bi-directional**

<b>Current</b>	0.49A per phase
<b>Cycle Life</b>	Typically >1 million
<b>Driver</b>	Bipolar chopper drive required
<b>Flow Range</b>	<b>Air:</b> 0 to 7 l/min <b>Water:</b> 0 to 190 l/min -0 / +10% @ 30 psig (2 bar)
<b>Flow Resolution</b>	<b>Air:</b> 0.000487 l/min (487.5 µl) @ 30 psig (2 bar) <b>Water:</b> 0.0002 l/min (200 µl) @ 30 psig (2 bar)
<b>Linearity</b>	<4% of full-scale
<b>Material, Body</b>	Ceramic
<b>Material, Seals</b>	FKM standard, EPDM and others available
<b>Material, Wetted</b>	Ceramic (others depending on porting option)
<b>Max. Flow</b>	<b>Air:</b> 0 to 7 l/min -0 /+10% <b>Water:</b> 0 to 190 ml/min -0 /+10% @ 30 psig (2 bar)
<b>Max. psig</b>	30 psig (2 bar)
<b>Medium</b>	Liquids and gases
<b>Mount</b>	Manifold or flat bottom (ZDVF)
<b>Number of Ports</b>	2
<b>Operating Pressure</b>	Vac. to 30 psig (2 bar)
<b>Operating Temp. Range</b>	32 to 180°F (0 to 82°C)
<b>Port, Exhaust</b>	None
<b>Port, Inlet</b>	#10-32, Manifold or ZDVF ( <i>zero dead volume fitting</i> )
<b>Port, Outlet</b>	#10-32, Manifold or ZDVF ( <i>zero dead volume fitting</i> )
<b>Position Resolution</b>	0.00006" (0.0015 mm)
<b>Power Requirement</b>	20 VDC supply to motor @ 30 psig (2 bar)
<b>Proof Pressure</b>	50 psig (3.4 bar)
<b>Response Time</b>	<2 ms
<b>Wattage</b>	2.5 watts nominal ( <i>only during adjustment, zero power consumption to maintain position</i> )
<b>More Details</b>	<a href="http://clippard.com/link/eclipse-valve">clippard.com/link/eclipse-valve</a>

*\*This product is highly modifiable for OEM applications, including alternate body materials, flow profiles, and more. Call 877-245-6247 to discuss your needs.*



Dimensions shown are in inches (millimeters listed in parentheses).  
 Visit [clippard.com](http://clippard.com) for more detailed 2D and 3D drawings.

## ORDERING INFORMATION

**E I V U**

Porting

M Manifold  
 Z Zero Dead Volume Manifold

Seals

(blank) ZDVF porting  
 -V FKM

Encoder Shaft

-ENS Encoder shaft (standard)  
 (blank) No encoder shaft

### 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" (3.2 mm) OD (IDEX p/n XP-348)

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

**Example Part Number:**  
**EIVU-M-V-ENS**

For more info, scan the QR code or visit

[clippard.com/link/eclipse-valve](http://clippard.com/link/eclipse-valve)

