

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.

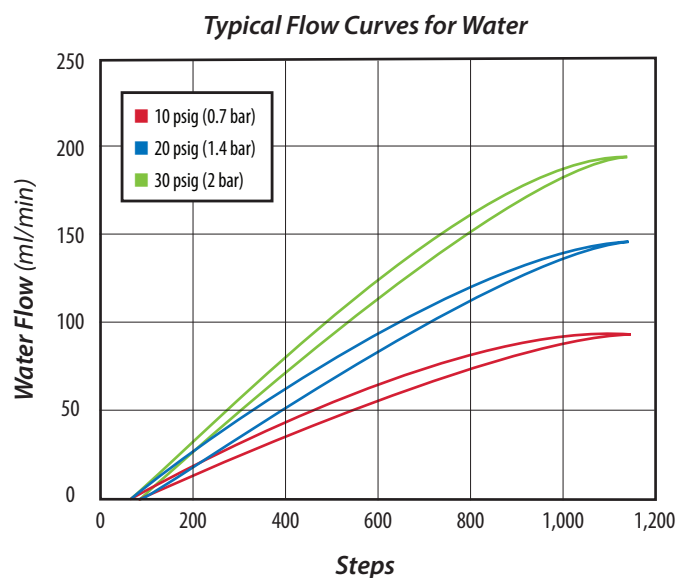
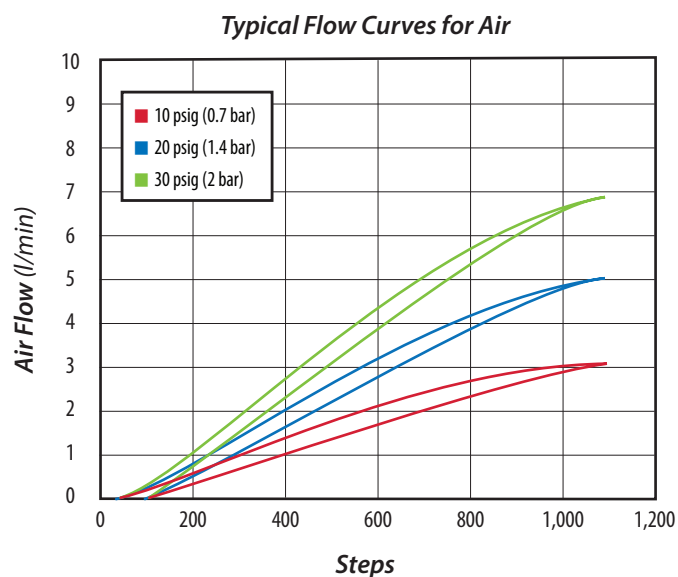
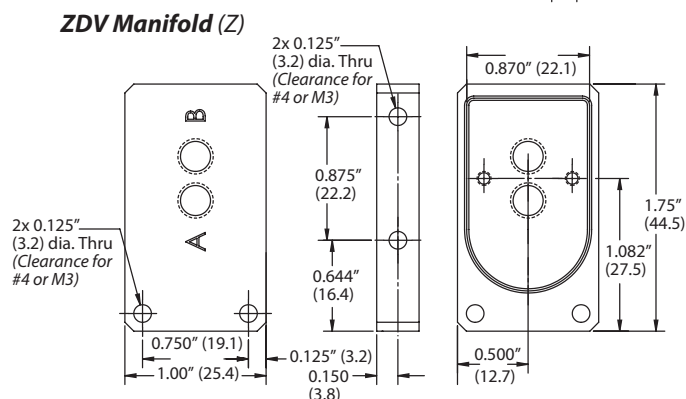
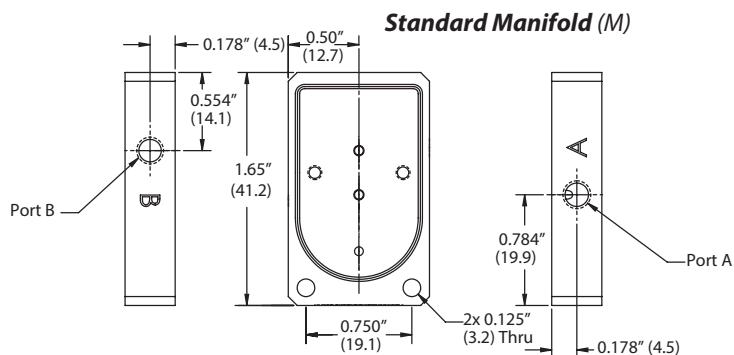
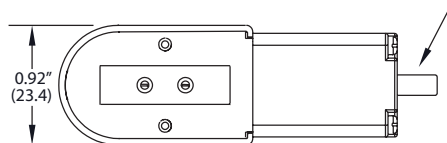
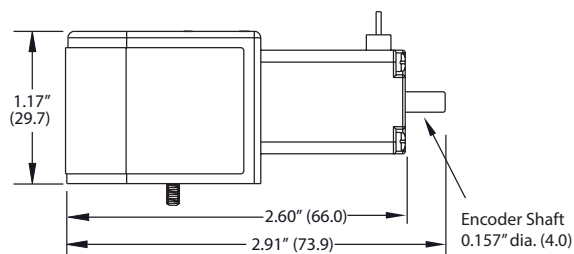
Utilizing a robust and powerful miniature linear actuator, the Eclipse is stepper-controlled, micro-stepping capable, encoder-ready, and its unique design allows for custom flow profiles.

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 in³*)
- **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**

Current	0.49A per phase
Cycle Life	Typically >1 million
Driver	Bipolar chopper drive required
Flow Range	Air: 0 to 7 l/min Water: 0 to 190 l/min -0 / +10% @ 30 psig (2 bar)
Flow Resolution	Air: 0.000487 l/min (487.5 µl) @ 30 psig (2 bar) Water: 0.0002 l/min (200 µl) @ 30 psig (2 bar)
Linearity	<4% of full-scale
Material, Body	Ceramic
Material, Seals	FKM standard, EPDM and others available
Material, Wetted	Ceramic (others depending on porting option)
Max. Flow	Air: 0 to 7 l/min -0 /+10% Water: 0 to 190 ml/min -0 /+10% @ 30 psig (2 bar)
Max. psig	30 psig (2 bar)
Medium	Liquids and gases
Mount	Manifold or flat bottom (ZDVF)
Number of Ports	2
Operating Pressure	Vac. to 30 psig (2 bar)
Operating Temp. Range	32 to 180°F (0 to 82°C)
Port, Exhaust	None
Port, Inlet	Manifold or ZDVF (<i>zero dead volume fitting</i>)
Port, Outlet	Manifold or ZDVF (<i>zero dead volume fitting</i>)
Position Resolution	0.00006" (0.0015 mm)
Power Requirement	20 VDC supply to motor @ 30 psig (2 bar)
Proof Pressure	50 psig (3.4 bar)
Response Time	1.1 secs @ 1,000 steps per sec
Wattage	2.5 watts nominal (<i>only during adjustment, zero power consumption to maintain position</i>)
More Details	clippard.com/link/eclipse-valve

**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 for more detailed 2D and 3D drawings.

ORDERING INFORMATION

E I V U

Porting

M Manifold
Z Zero Dead Volume Fitting

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-ENS

For more info, scan the QR code or visit

clippard.com/link/eclipse-valve

