ECLIPSE ISOLATION VALVE

Utilizing a robust and powerful miniature linear actuator, the patented stepper-controlled Eclipse proportional isolation valve leads the industry in performance and durability.

Featuring a completely inert wetted area (ceramic) and zero dead volume, the Eclipse is encoder-ready and micro-stepping capable—a soft start proportional isolation valve like no other! It has the ability to slowly introduce media at a controlled ramp rate to eliminate potential damage or turbulence to measuring sensors and/or samples.

Micro-Stepping

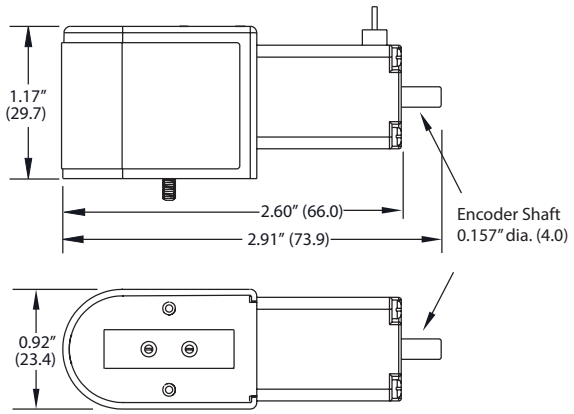
Air: 0.000487 l/min (487.5 µl) per 1/16 step
Water: 0.0002 l/min (200 µl) per 1/16 step

The Eclipse proportional isolation 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.

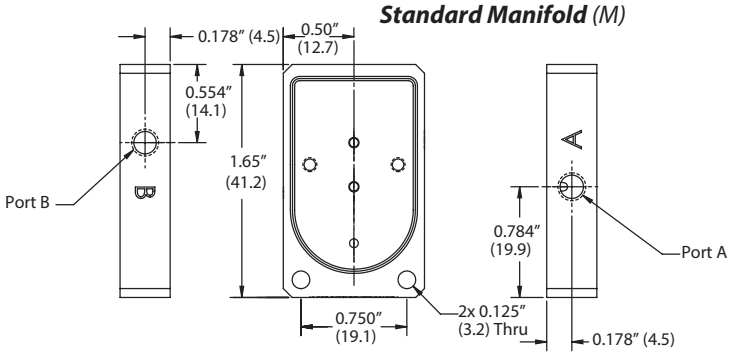
- **For fluid and air applications**
- **Excellent linearity, <4% of full-scale**
- **Fast response, <2 ms reaction time**
- **Cycle life of typically >1 million cycles**
- **Repeatability <5% of full travel**
- **Bi-directional**

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:** 0.007 l/min max. **Water:** 0.190 ml/min max. *@ 30 psig (2 bar) per full step, depending on pressure*
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 *(zero dead volume fitting)*
Port, Outlet	Manifold or ZDVF *(zero dead volume fitting)*
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 *(only during adjustment, zero power consumption to maintain position)*
More Details	**clippard.com/link/eclipse-valve**

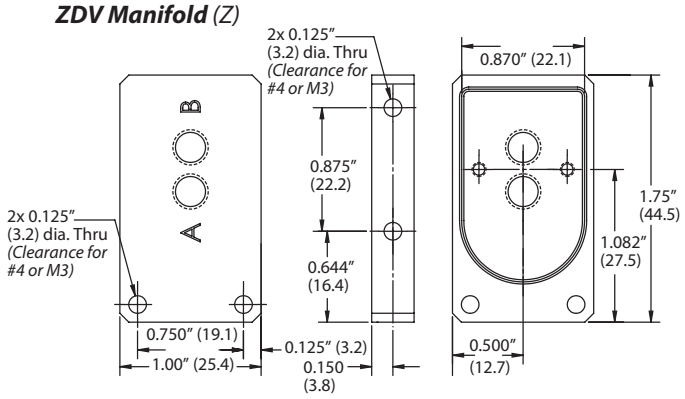
This product is highly modifiable for OEM applications, including alternate body materials, flow profiles, and more. Call **877-245-6247 to discuss your needs.*



Standard Manifold (M)

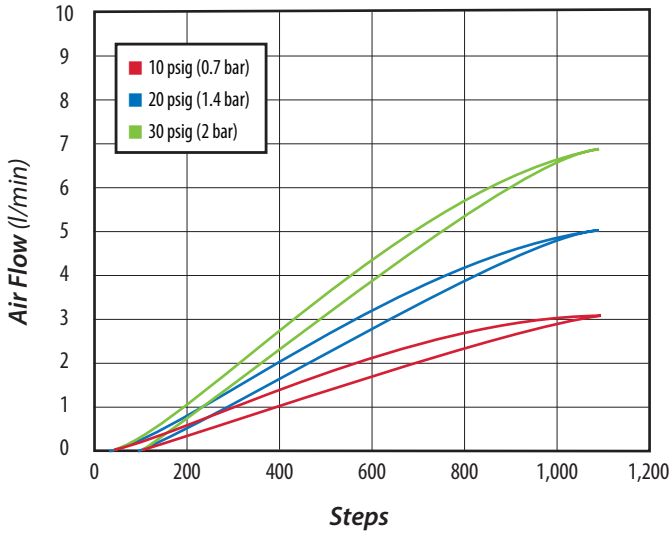


ZDV Manifold (Z)

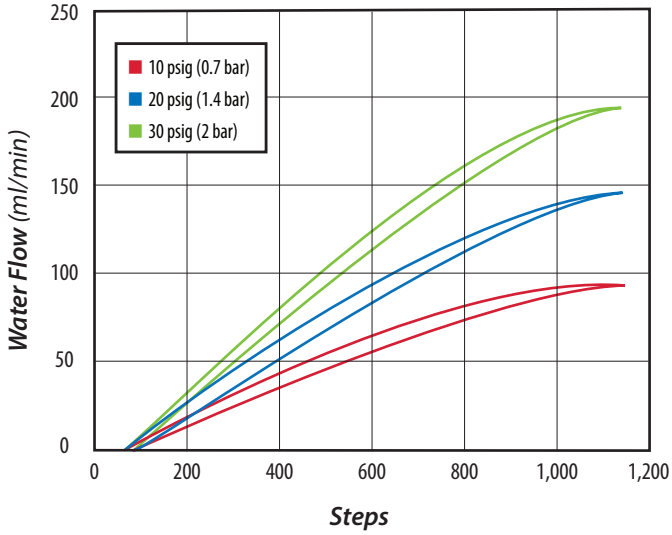


Dimensions shown are in inches (millimeters listed in parentheses).
Visit clippard.com for more detailed 2D and 3D drawings.

Typical Flow Curves for Air



Typical Flow Curves for Water



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