

## ■ Technical Data Bulletin 3.08

# **EM Series Electronic Valve**

Introducing a new and smaller Mouse valve! When space is critical, the EM Series Valve provides the best solution.

At just over an inch tall, and less than 3/4" in diameter, the EM Valve uses Clippard's special "spider" design. This reliable and proven design for long life is housed in a miniature body, and incorporates wire leads out the top, allowing body rotation for close-center mounting. In addition, the valve features higher flow; combining fast shifting speed, extremely high cycle life with the design flexibility to make this valve a "small wonder" for demanding applications.

This valve is perfect for air and/or gas control, pilot control, and any application where space is limited, but desired performance is not.

Clippard also provides custom solutions for specific needs, including special configurations, manifolds, and systems.

Valve Type: 2-Way & 3-Way Electronic Valves, Normally-Closed

and Normally-Closed/Normally-Open

Medium: Air or Inert Gases

**Ports:** #10-32 Exhaust (M5 optional)

**Pressure Range:** Standard: 28" Hg Vacuum to 105 psig

(-0.95 to 7 bar)

"L" Option: 28" Hg Vacuum to 50 psig

(-0.95 to 3.5 bar)

"H" Option: 28" Hg Vacuum to 25 psig

(-0.95 to 1.8 bar)

Air Flow: 0.75 scfm @ 100 psig (21 lpm @ 7 bar) Standard:

"L" Option: 0.65 scfm @ 50 psig (18 lpm @ 3.5 bar) (Normally-Closed)

"H" Option: 0.55 scfm @ 25 psig (15 lpm @ 1.8 bar)

**Response Time:** 10 milliseconds at nominal voltage (15 ms N-O)

**Temperature Range:** 32 to 180°F (0 to 82°C) **Mounting:** Manifold (#10-32 stud)

> 1/8" Allen hex wrench. (4-10 in-lbs. Do not over-tighten)

Voltage: 12-Volt DC or 24-Volt DC (custom voltage options

available)

Power Consumption: 1 Watt



Four valves shown on single-sided manifold

### **Features**

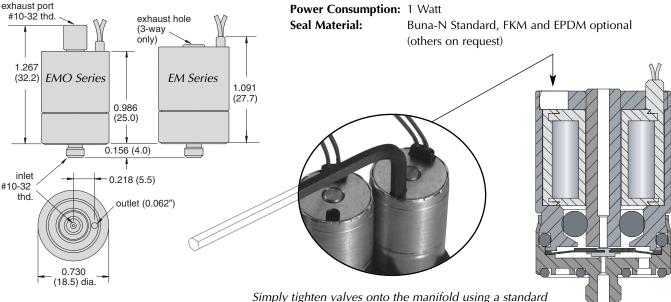
• Unique "Spider" Design for Extremely Long Life

• Small Size—High Flow

Compact Manifold Spacing

(0.740" centers)

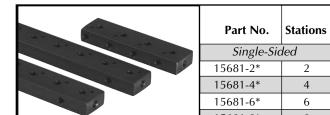
• Low Power, Quiet Operation



### **Order Information**

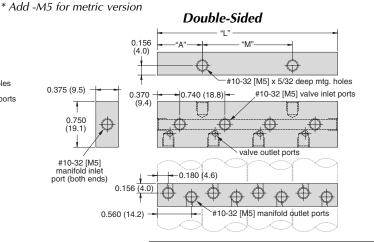
Operation		Туре		Voltage		Orifice		Options			
	Order Code		Order Code		Order Code		Order Code		Order Code		
Normally-Closed	(blank)	2-Way	2	12-Volt DC	12 .	0.025"	(blank)	Buna-N Seals	(blank)		
						0.040#		FKM Seals	V		
Normally-Closed/ Normally-Open	O	3-Way	3	24-Volt DC	24	0.040" L		EPDM Seals	E		
						0.060"	Н	Metric Ports	M5		
Example: EMO-3-12-L											
				_	$\perp$						
		Part <b>E M</b>		-  -		-     -					

### **Manifolds**



Part No.	Stations	Part No.	Stations	Length "L"	Mounting "M"	"A"
Single-Sided		Double-Sided				
15681-2*	2	15682-4*	4	1.480" (37.6)	0.740" (18.8)	0.370" (9.4)
15681-4*	4	15682-8*	8	2.960" (75.2)	1.480" (37.6)	0.740" (18.8)
15681-6*	6	15682-12*	12	4.440" (112.8)	2.960" (75.2)	0.740" (18.8)
15681-8*	8	15682-16*	16	5.920" (150.4)	4.440" (112.8)	0.740" (18.8)

# Single-Sided 0.156 (4.0) #10-32 [M5] x 5/32 deep mtg. holes 0.375 (9.4) #10-32 [M5] x 10-32 [M5] valve inlet ports #10-32 [M5] manifold inlet port (both ends) #10-32 [M5] manifold outlet ports



**Optional Manifolds** 

# **Disclaimer & Limited Warranty**

All information contained in this publication is for reference only. Proper design engineering procedures should be used to assure any compliances. Clippard Instrument Laboratory, Inc. reserves the right to make changes without notice and does not warrant or guarantee the information contained herein.

EM valves also fit on all EV manifolds, including the 15490 series single-valve manifolds and 15481/15482 multi-valve manifolds. See full-line catalog.

Limited Warranty. Clippard Instrument Laboratory, Inc. (seller) warrants its products to be free from defects in material and workmanship for a period of one (1) year from the date of sale. Seller's liability shall be limited at seller's option to repair, replace or refund the purchase price of product found by seller's examination to be defective. All claims under this warranty must be made in writing to seller's factory sales department giving full details, prior to return of product, postpaid, to factory. Seller shall not be responsible for product failure due to normal wear, accident, buyer's misapplication, abuse, neglect or alteration of product. Seller will not be responsible for any consequential damages. Clippard Instrument Laboratory, Inc. makes no other warranty of any kind, expressed or implied. All technical data and operations are average values based on standard production models. Some deviations can be expected and consideration should be given during initial design stages. All operating characteristics are based on new equipment, under normal conditions of use and environments, and a clean air supply.

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