



HIGH FLOW 2-WAY 10 MM MINIATURE VALVES

Specifications

Medium: Air, Gas or other Compatible Fluids

Working Pressure: 0 to 30 psig

Max. Flow Rate: 28 lpm

Orifice: 0.055"

Response Time: 8 ms when energized; 10 ms when de-energized

Electrical: 12 VDC or 24 VDC

Power Consumption: 3.5 watts in rush phase; 15 ms/0.35 watts in maintenance phase

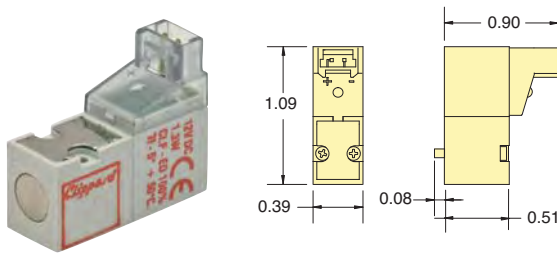
Voltage Tolerance: -5% to +10%

Material: Stainless steel core and springs, nylon body, FKM dynamic seals, and Nitrile gasket and static seals.

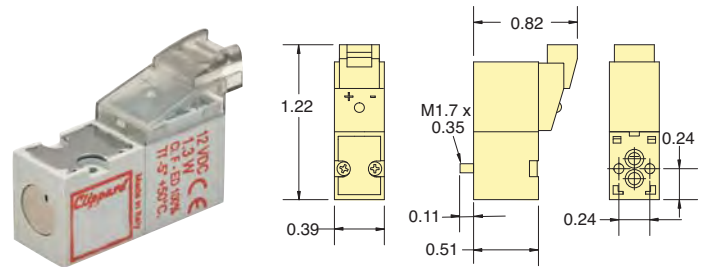
Temperature Range: 23 to 122°F. When below 32°F, must use clean, dry air



90° Connector with LED

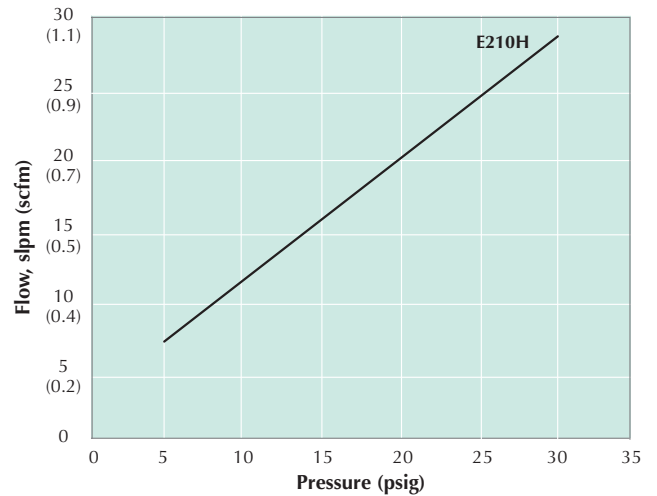


In-Line Connector with LED

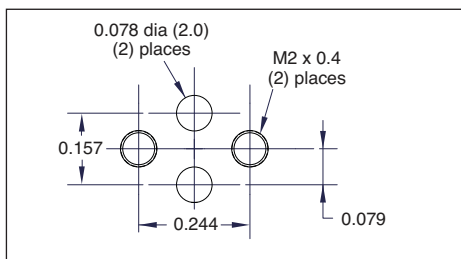


Part No.	Connector	Voltage
E210H-3L012	90° Connector	12 VDC
E210H-3L024	with LED	24 VDC
E210H-3C012	In-Line Connector	12 VDC
E210H-3C024	with LED	24 VDC

Typical Air Flow

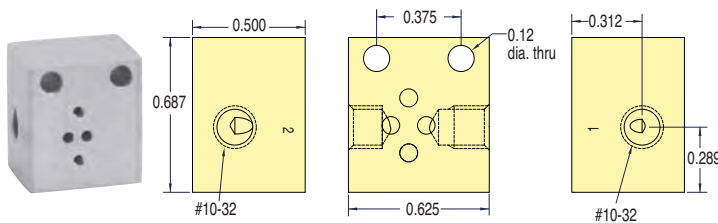


Mounting Interface



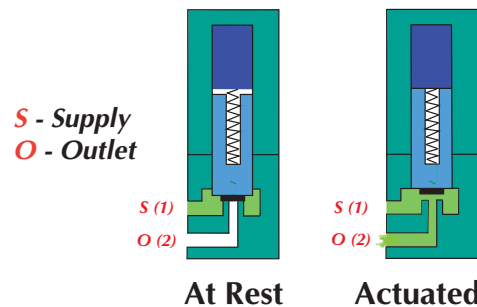
10 mm High Flow Single-Station Manifold

Spare hardware and closing plates available.



Part No.
E10HM-01 10 mm Single-Station Manifold

Functional Schematics



Specifications

Medium: Air, Gas, or other Compatible Fluids

Working Pressure: 0 to 102 psig

Maximum Flow Rate: 42 l/min

Exhaust Flow: 49 l/min

Orifice: 0.043"

Response Time: 8 ms when energized; 10 ms when de-energized

Material: Stainless steel core and springs, nylon body, FKM seals, and Nitrile gasket.

Voltage: 12-volt DC or 24-volt DC

Voltage Tolerance: -5% to +10%

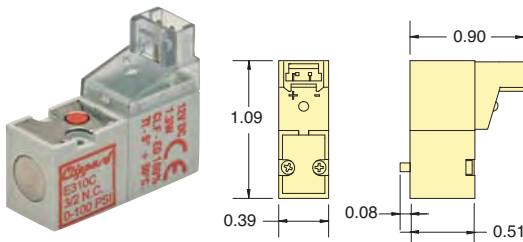
Power Consumption: 3.5 watts in rush phase; 15 ms/0.35 watts in maintenance phase

Coil Insulation Class: F 311°F

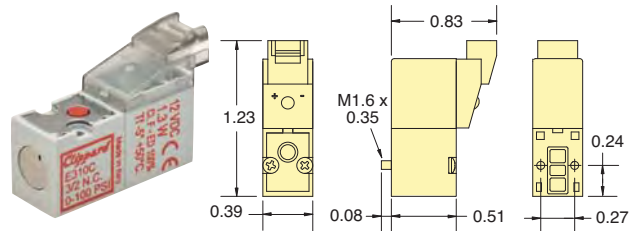
Temperature Range: 23 to 122°F



90° Connector with LED

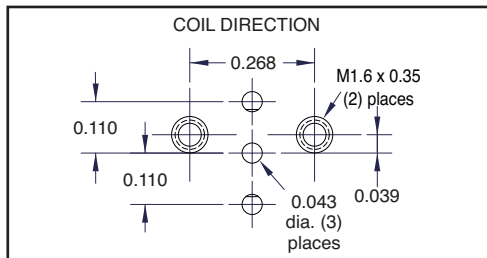


In-Line Connector with LED

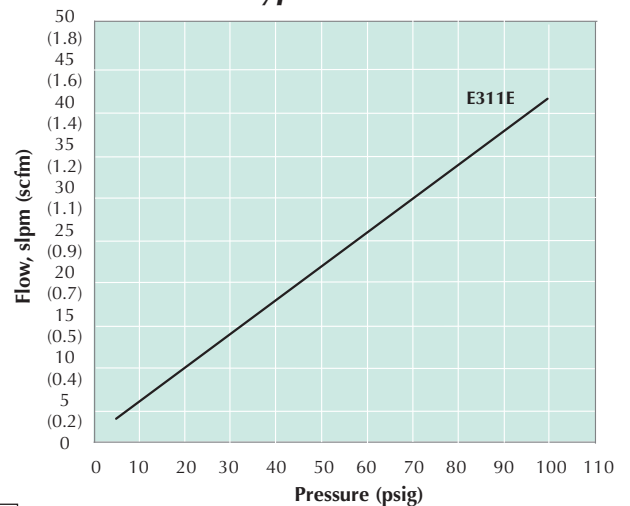


Part No.	Connector	Voltage
E311E-3L012	90° Connector	12 VDC
E311E-3L024	with LED	24 VDC
E311E-3C012	In-Line Connector	12 VDC
E311E-3C024	with LED	24 VDC

Mounting Interface

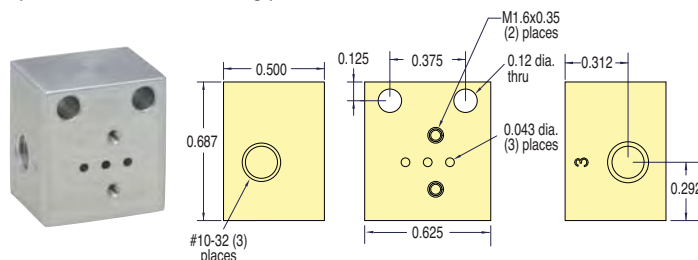


Typical Air Flow



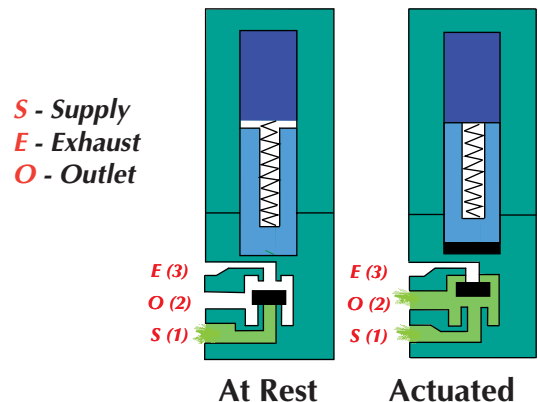
ISO 15218 10 mm High Flow Single-Station Manifold

Spare hardware and closing plates available.



Part No.	ISO 10 mm Single-Station Manifold
E10LM-01	

Functional Schematics

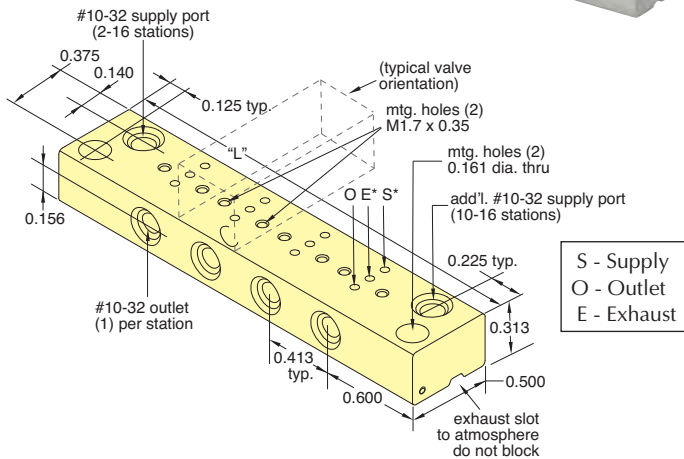




10 MM MINIATURE VALVE ACCESSORIES

Sub-Miniature Manifolds

Small, compact manifolds offer the efficient grouping of 10 mm valves along with fast installation. Easy manifold features a common inlet, individually-ported outlets, and exhaust to atmosphere.



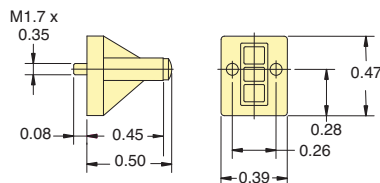
* For Normally-Open valves, supply to "E" and "S" becomes exhaust.

Stations	Supply Ports	Part No.	Length "L"
2	1	E10SM-02	1.61
4	1	E10SM-04	2.44
6	1	E10SM-06	3.27
8	1	E10SM-08	4.09
10	2	E10SM-10	4.92
12	2	E10SM-12	5.74
14	2	E10SM-14	6.57
16	2	E10SM-16	7.40

Cover Plate

Manifold Cover Plate includes plate, gasket and two screws.

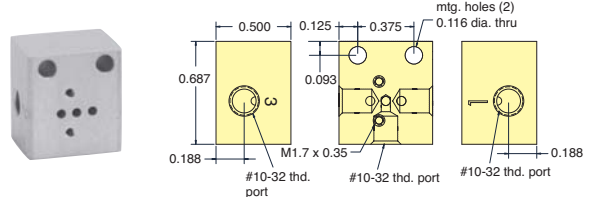
Part No.
E10M-CP 10 mm Cover Plate



Standard Manifolds

Standard manifolds are available for one to 12 valves with ported exhaust. Spare hardware and closing plates available.

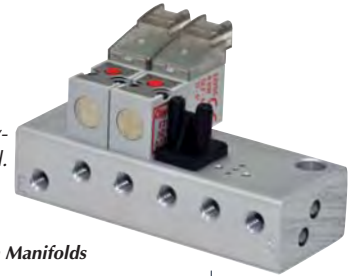
Part No.
E10M-01 Single-Station Manifold



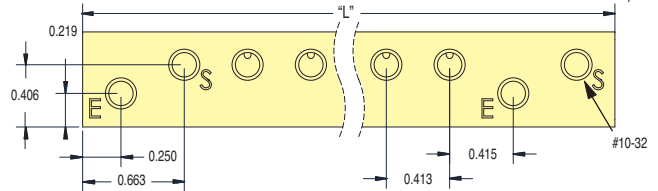
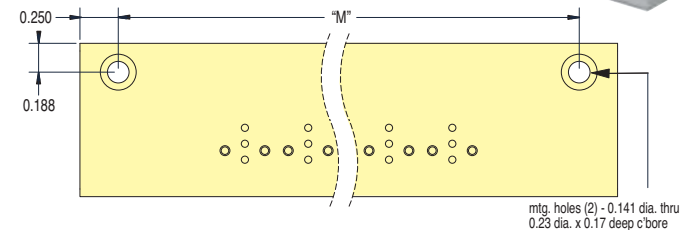
Multi-Station Manifolds

When using these manifolds with Normally-Closed valve configurations:

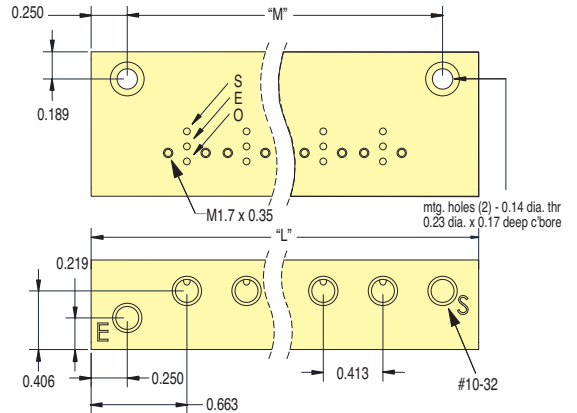
1. They cannot be used with Normally-Closed valves on the same manifold.
2. "E" becomes Supply, and "S" becomes Exhaust.



10- to 16-Station Manifolds



2- to 8-Station Manifolds



Part No.	Stations	Length "L"	Length "M"
E10M-02	2	1.74	1.24
E10M-04	4	2.57	2.07
E10M-06	6	3.39	2.89
E10M-08	8	4.22	3.72
E10M-10	10	5.87	5.37
E10M-12	12	6.70	6.20
E10M-14	14	7.52	7.02
E10M-16	16	8.35	7.85

15 MM MINIATURE VALVES



Multiple Connectors

- Snap-in Plugs
- Wire Leads
- DIN Connector
- Spade Terminals
- Custom Plugs

LED for confirmation of operation available

Internal diodes for current spike suppression and a power saving circuit is available



Mounting Screws

HIGHLY VISIBLE manual override provides valve actuation without power

High durability and corrosion-resistant glass filled nylon housing

FKM seals and Nitrile gasket

2- or 3-ported valves in Normally-Closed and Normally-Open

One-piece gasket for manifold mount and supply/exhaust port reversed for same manifold mounting of N.O. or N.C. valve



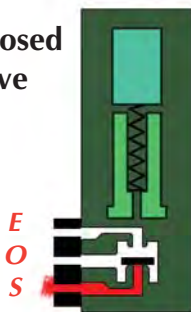
Encapsulated low wattage coils. Available in: 12 VDC, 24 VDC, 24 VAC, 110 VAC or 220 VAC. Special voltages available for OEMs.

Configuration	1	2	3
N.C. & N.O.	exhaust	outlet	supply

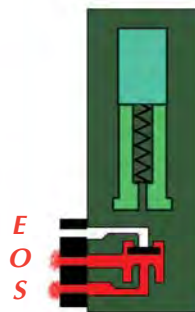
Functional Schematics

Normally-Closed 3-Way Valve

S - Supply
E - Exhaust
O - Outlet

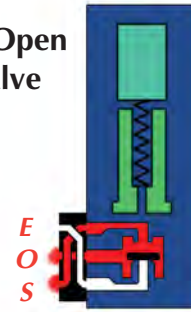


At Rest

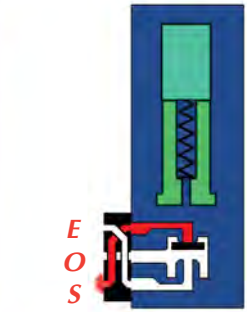


Actuated

Normally-Open 3-Way Valve



At Rest

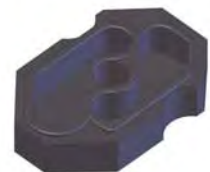


Actuated



Porting Gasket

The Normally-Open and Normally-Closed configurations allow both models to be mounted on the same manifold.





15 MM MINIATURE VALVES

Specifications

Medium: Air, Gas, or other Compatible Fluids

Working Pressure: See Chart below.

Maximum Flow Rate:
 0.032" Orifice: 45 l/min
 0.043" Orifice: 70 l/min
 0.063" Orifice: 91 l/min

Response Time: 10 ms when energized; 12 ms when de-energized



Material: Stainless steel core and springs, springs, nylon body, FKM seals, and Nitrile gasket.

Voltage: 12-volt DC, 24-volt DC or 24-volt AC. 110-volt AC and 220-volt AC only available with DIN Connectors.

Voltage Tolerance: -5% to +10%

Power Consumption: 1.0 or 2.5 watts dependent on orifice size and pressure

Coil Insulation Class: F 311°F

Temperature Range: 23 to 122°F



Order Information

Type	Base No.	Connector	12	24	24	110	220	Orifice	Wattage	Working Pressure
			VDC	VDC	VAC	VAC	VAC			
2/2 Normally-Closed 	E215D-1T*	Terminal	•	•				0.032"	1.0	0 to 150 psig
	E215E-2T*		•	•	•			0.043"	2.5	0 to 150 psig
	E215F-2T*		•	•	•			0.063"	2.5	0 to 110 psig
	E215D-1D*	DIN Connector	•	•				0.032"	1.0	0 to 150 psig
	E215E-2D*		•	•	•	•	•	0.043"	2.5	0 to 150 psig
	E215F-2D*		•	•	•	•	•	0.063"	2.5	0 to 110 psig
	E215D-1W*	Wire Leads, 11.8"	•	•				0.032"	1.0	0 to 150 psig
	E215E-2W*		•	•	•			0.043"	2.5	0 to 150 psig
	E215F-2W*		•	•	•			0.063"	2.5	0 to 110 psig
	E215D-1L*	90° Connector with LED	•	•				0.032"	1.0	0 to 150 psig
	E215E-2L*		•	•				0.043"	2.5	0 to 150 psig
	E215F-2L*		•	•				0.063"	2.5	0 to 110 psig
E215D-1C*	In-Line Connector with LED	•	•				0.032"	1.0	0 to 150 psig	
E215E-2C*		•	•				0.043"	2.5	0 to 150 psig	
E215F-2C*		•	•				0.063"	2.5	0 to 110 psig	
3/2 Normally-Closed 	E315D-1T*	Terminal	•	•				0.032"	1.0	0 to 150 psig
	E315E-2T*		•	•	•			0.043"	2.5	0 to 150 psig
	E315F-2T*		•	•	•			0.063"	2.5	0 to 110 psig
	E315D-1D*	DIN Connector	•	•				0.032"	1.0	0 to 150 psig
	E315E-2D*		•	•	•	•	•	0.043"	2.5	0 to 150 psig
	E315F-2D*		•	•	•	•	•	0.063"	2.5	0 to 110 psig
	E315D-1W*	Wire Leads, 11.8"	•	•				0.032"	1.0	0 to 150 psig
	E315E-2W*		•	•	•			0.043"	2.5	0 to 150 psig
	E315F-2W*		•	•	•			0.063"	2.5	0 to 110 psig
	E315D-1L*	90° Connector with LED	•	•				0.032"	1.0	0 to 150 psig
	E315E-2L*		•	•				0.043"	2.5	0 to 150 psig
	E315F-2L*		•	•				0.063"	2.5	0 to 110 psig
E315D-1C*	In-Line Connector with LED	•	•				0.032"	1.0	0 to 150 psig	
E315E-2C*		•	•				0.063"	2.5	0 to 150 psig	
E315F-2C*		•	•				0.063"	2.5	0 to 110 psig	
3/2 Normally-Open (110 psig max.) 	E3O15E-2T*	Terminal	•	•	•			0.043"	2.5	0 to 110 psig
	E3O15F-2T*		•	•	•			0.063"	2.5	0 to 75 psig
	E3O15E-2D*	DIN Connector	•	•	•	•	•	0.043"	2.5	0 to 110 psig
	E3O15F-2D*		•	•	•	•	•	0.063"	2.5	0 to 75 psig
	E3O15E-2W*	Wire Leads, 11.8"	•	•	•			0.043"	2.5	0 to 110 psig
	E3O15F-2W*		•	•	•			0.063"	2.5	0 to 75 psig
	E3O15E-2L*	90° Connector with LED	•	•				0.043"	2.5	0 to 110 psig
	E3O15F-2L*		•	•				0.063"	2.5	0 to 75 psig
E3O15E-2C*	In-Line Connector with LED	•	•				0.063"	2.5	0 to 110 psig	
E3O15F-2C*		•	•				0.063"	2.5	0 to 75 psig	

• Indicates standard items

* Add Voltage Choice to the end of each Base Part Number. "012" (12 VDC), "024" (24 VDC) "24A" (24 VAC), "110" (110 VAC) or "220" (220 VAC). Example: **E315D-1C012**