

10 MM & 15 MM MINIATURE VALVES



All of the benefits of Clippard quality and reliability are now available in these 10 mm and 15 mm valves. Offered in both Normally-Open or Normally-Closed models, these 2-way and 3-way valves are perfect for small areas where compact electronically-controlled pneumatics are needed.

This series has a high strength, engineered light-weight glass filled nylon body, along with stainless steel, copper and Buna-N, making it suitable for a broad range of applications. With exceptional life and reliability this is the perfect sub-miniature valve for tomorrow's needs in a wide variety of industries.



10 mm Standard Series

Direct operating valves well-suited for single- or multiple-valve mounting in small spaces.

[See pages 202 - 204.](#)



10 mm Latching Series

A short pulse of current shifts this valve which "latches" indefinitely; another pulse returns the valve.

[See page 205.](#)



NEW! 10 mm High Flow 2-Way Series

Specialty series for high flow applications.

[See page 206.](#)



NEW! 10 mm ISO 15218 Series

Conforms to ISO standard for mounting and port locations.

[See page 207.](#)



15 mm Standard Series

Direct operating valves well-suited for single- or multiple-valve mounting in small spaces.

[See pages 209 - 211.](#)



15 mm Latching Series

A short pulse of current shifts this valve which "latches" indefinitely; another pulse returns the valve.

[See page 212.](#)



NEW! 15 mm High Flow 2-Way Series

Specialty series for high flow applications.

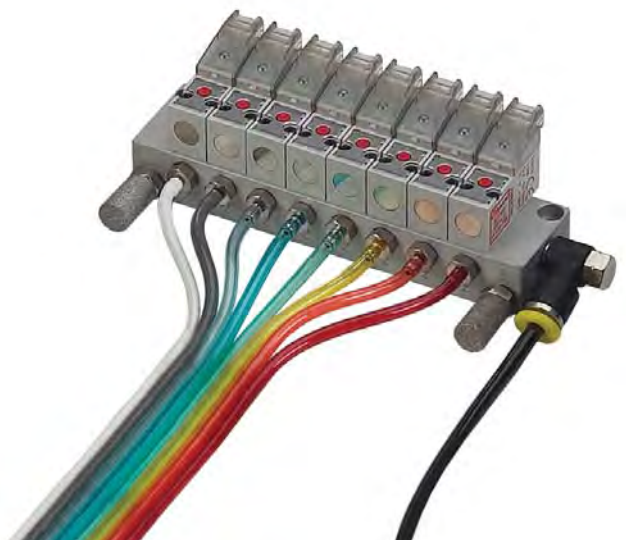
[See page 213.](#)

All 10 mm and 15 mm valves are RoHS compliant.

Valve Material: Glass filled Nylon, Stainless Steel, Buna-N or Fluorocarbon Elastomer

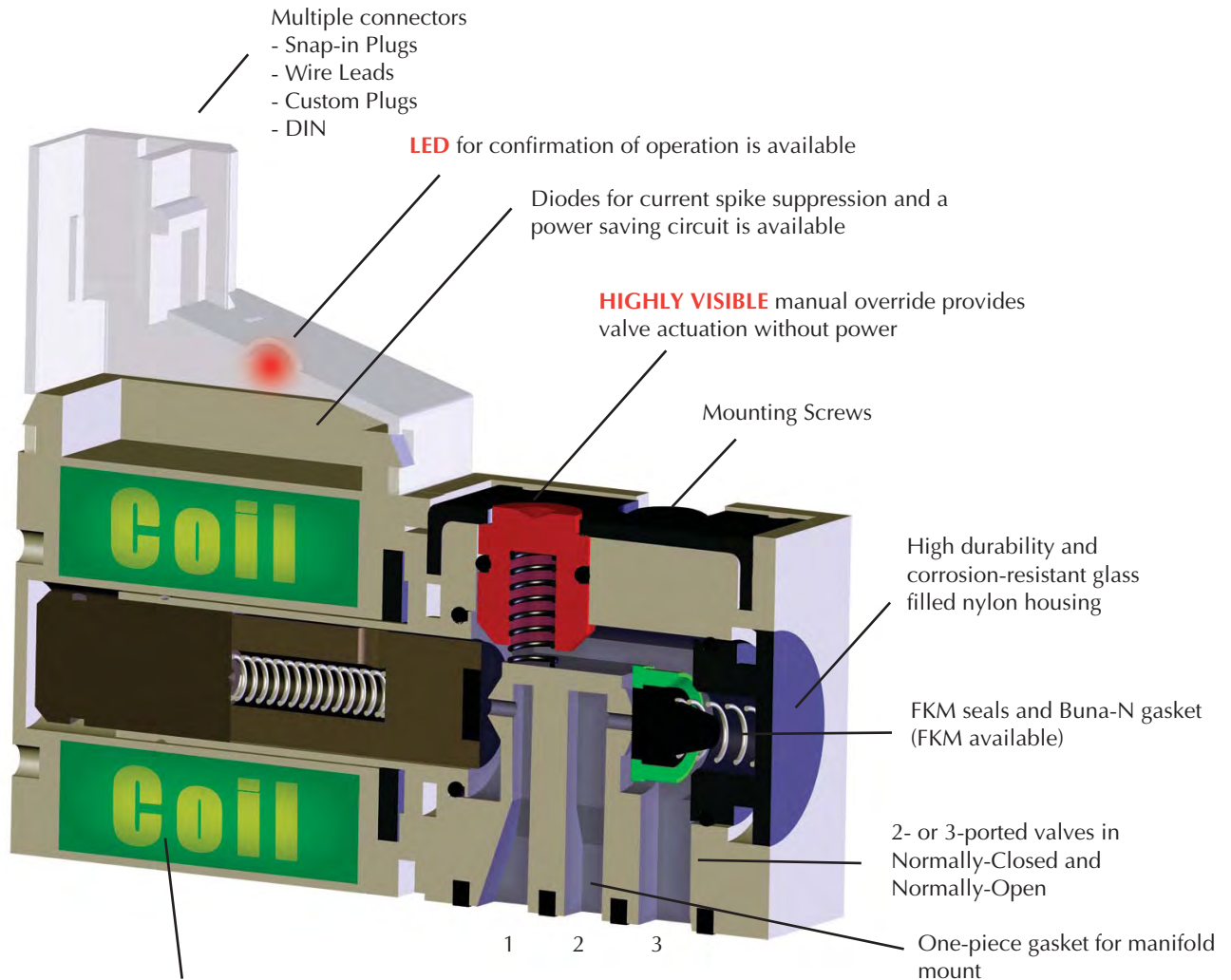
Electrical: The coil is constructed of copper wire and is insulated according to the class "F" standard. All circuitry and connections are protected from corrosion.

Weight: 10 mm Series: 0.4 oz.; 15 mm Series: 1.3 oz.





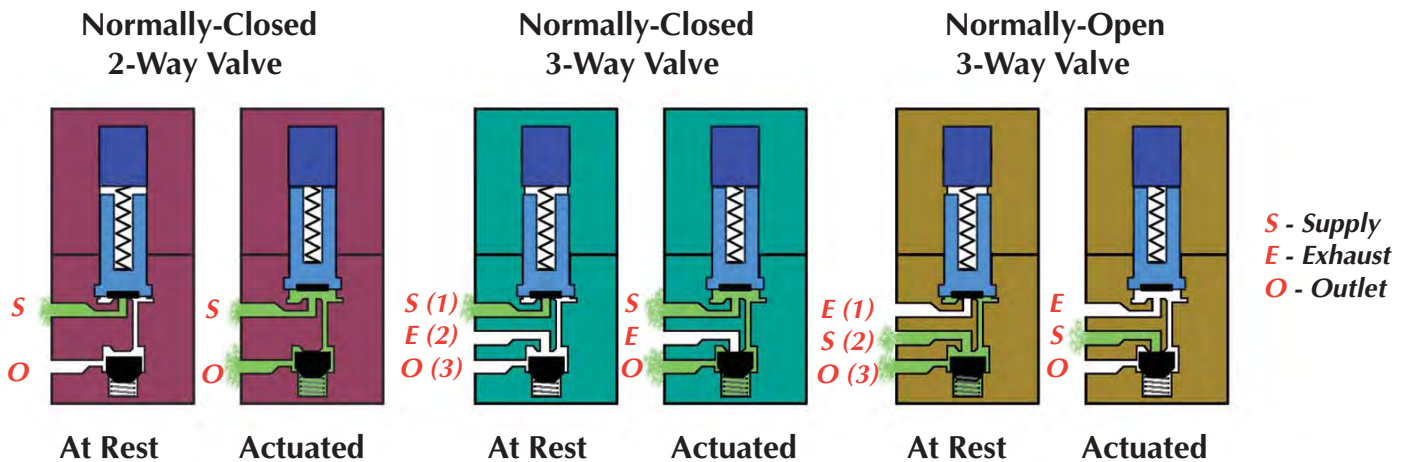
10 MM MINIATURE VALVES



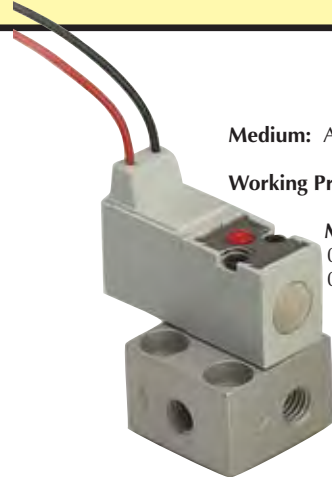
Encapsulated low wattage coils. Available in 12 VDC or 24 VDC. Special voltages available for OEMs.

| Config. | 1 | 2 | 3 |
|---------|---------|---------|--------|
| N.C. | supply | exhaust | outlet |
| N.O. | exhaust | supply | outlet |

Functional Schematics



Specifications



Medium: Air, Gas or other Compatible Fluids

Working Pressure: See Chart below

Max. Flow Rate:

0.020" (0.50 mm) Orifice: 14 l/min (0.5 scfm)
 0.030" (0.75 mm) Orifice: 31.2 l/min (1.1 scfm)

Exhaust Flow:

0.020" (0.50 mm) Orifice: 22.7 l/min (0.8 scfm)
 0.030" (0.75 mm) Orifice: 34 l/min (1.2 scfm)

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

Electrical: 12 VDC or 24 VDC

Voltage Tolerance: -5% to 10%

Power Consumption: 0.6 or 1.3 watts dependent on orifice size and pressure

Material: Stainless steel core and springs, nylon body, FKM dynamic seals, and Buna-N gasket and static seals. FKM gasket and static seals available, consult factory.

Coil Insulation Class: F 311°F (155°C)

Temperature Range: 23 to 122°F (-5 to 50°C). When below 32°F (0°C), must use clean, dry air

Order Information

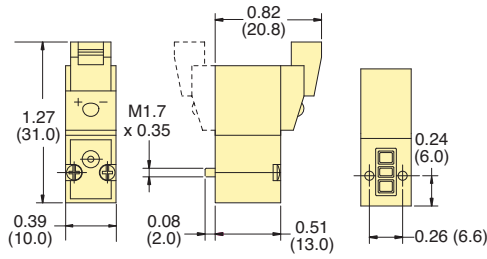
| Type | Base No. | Connector | Orifice | Wattage | Working Pressure |
|--------------------------------|----------------------------|----------------------------|---------|--------------------------|--------------------------|
| 2/2 Normally-Closed | <u>E210A-1E*</u> | 90° Connector | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E210C-2E*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E210A-1L*</u> | 90° Connector with LED | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E210C-2L*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E210A-1F*</u> | In-Line Connector | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E210C-2F*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E210A-1C*</u> | In-Line Connector with LED | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| <u>E210C-2C*</u> | 0.030" | | 1.3 | 0 to 110 psig/7.6 bar | |
| <u>E210A-1W*</u> | Wire Leads, 11.8" (300 mm) | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar | |
| <u>E210C-2W*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar | |
| 3/2 Normally-Closed | <u>E310A-1E*</u> | 90° Connector | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E310C-2E*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E310A-1L*</u> | 90° Connector with LED | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E310C-2L*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E310A-1F*</u> | In-Line Connector | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| | <u>E310C-2F*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E310A-1C*</u> | In-Line Connector with LED | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar |
| <u>E310C-2C*</u> | 0.030" | | 1.3 | 0 to 110 psig/7.6 bar | |
| <u>E310A-1W*</u> | Wire Leads, 11.8" (300 mm) | 0.020" | 0.6 | 14.7 to 110 psig/7.6 bar | |
| <u>E310C-2W*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar | |
| 3/2 Normally-Open | <u>E3010A-1E*</u> | 90° Connector | 0.020" | 0.6 | 14.7 to 70 psig/4.8 bar |
| | <u>E3010C-2E*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E3010A-1L*</u> | 90° Connector with LED | 0.020" | 0.6 | 14.7 to 70 psig/4.8 bar |
| | <u>E3010C-2L*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E3010A-1F*</u> | In-Line Connector | 0.020" | 0.6 | 14.7 to 70 psig/4.8 bar |
| | <u>E3010C-2F*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar |
| | <u>E3010A-1C*</u> | In-Line Connector with LED | 0.020" | 0.6 | 14.7 to 70 psig/4.8 bar |
| <u>E3010C-2C*</u> | 0.030" | | 1.3 | 0 to 110 psig/7.6 bar | |
| <u>E3010A-1W*</u> | Wire Leads, 11.8" (300 mm) | 0.020" | 0.6 | 14.7 to 70 psig/4.8 bar | |
| <u>E3010C-2W*</u> | | 0.030" | 1.3 | 0 to 110 psig/7.6 bar | |

* Add Voltage Choice to the end of each Base Part Number. "012" (12 VDC) or "024" (24 VDC).
 Example: E210A-1C012

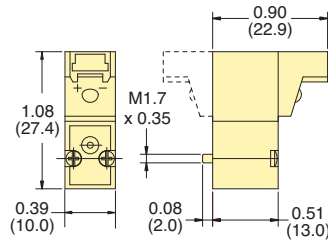


10 MM MINIATURE VALVES

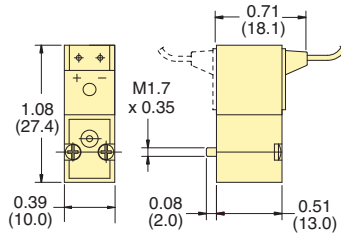
In-Line Connector with LED



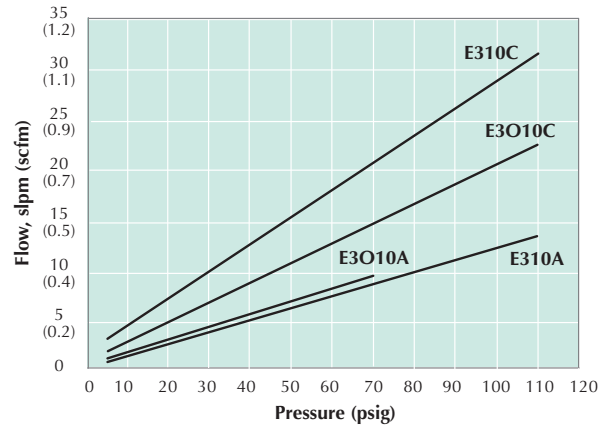
90° Connector with LED



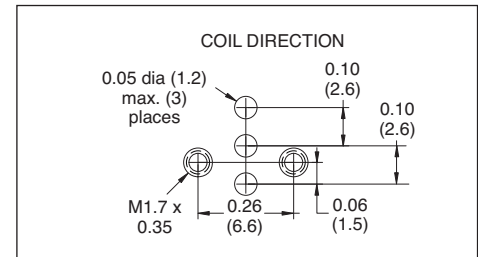
Wire Leads



Typical Air Flow



Mounting Interface



Connectors

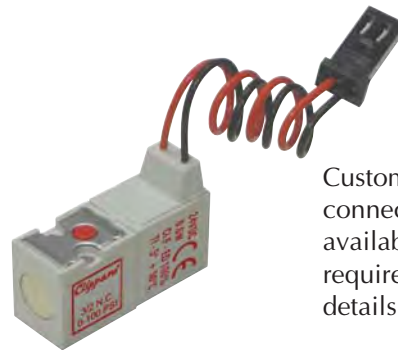
Wire Connector must be ordered separately. 24 AWG. Stranding 7/32.



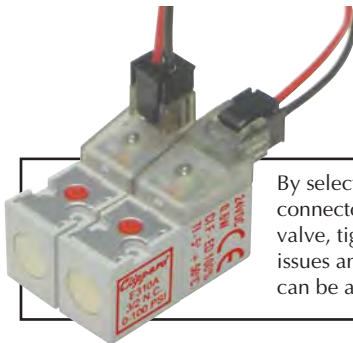
Part No.

- C2A-RB300 Connector with Cable, 11.8" (300 mm)
- C2A-RB500 Connector with Cable, 19.69" (500 mm)
- C2A-RB1000 Connector with Cable, 39.37" (1,000 mm)

Molex terminal insert #050013-8000, #28139 plug and 24 AWG wire.



Custom plugs, wire lengths, connectors and flavors are available for your specific requirements. Call for details.



By selecting the appropriate connector type for your 10 mm valve, tight spaces, orientation issues and electrical requirements can be accommodated easily.

Another feature of the Clippard 10 mm valve is the ability to detach the coil and connector from the valve body. This can be useful for the purpose of orientating the coil by 180°, or exchanging connector types or voltages.

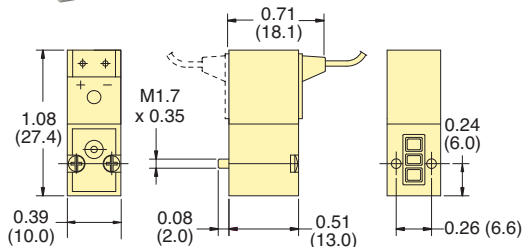


LATCHING 10 MM MINIATURE VALVES



- 2-Way & 3-Way Normally-Closed configurations
- Pulse-actuated (on or off)
- Polarity reverse required
- Stable latch

Clippard's 10 mm Latching Valves have many of the same features as the popular 10 mm valve line including small, compact design, exceptional life and reliability, light-weight design and more. A careful balance of forces—through the precise placement of a permanent magnet in the valve core—produces a bi-stable valve. A short pulse of current opens the valve, which “latches” open indefinitely after the current stops. A subsequent pulse of current in the opposite direction closes the valve. The valve consumes less energy and produces less heat than a standard solenoid valve when used in extended duty cycle applications, since the coil is energized for only a small fraction of the total duty cycle.



Copper Wire Isolation Class: F 311°F (155°C)

Material: Stainless steel core and springs, nylon body, FKM dynamic seals, and Buna-N gasket and static seals. FKM gasket available, consult factory.

Temperature Range: 23 to 122°F (-5 to 50°C). When below 32°F (0°C), must use clean, dry air

Medium: Air, Gas or other Compatible Fluids

Max. Flow Rate: 31.2 l/min (1.1 scfm)

Working Pressure: 0 to 110 psig/7.6 bar

Orifice: 0.030" (0.75 mm)

Electrical Connection: 2-Wire Reverse Polarity, 300 mm, 24 AWG

Electrical: 12 VDC (“-012”) or 24 VDC (“-024”). 6 VDC also available. Call for further information.

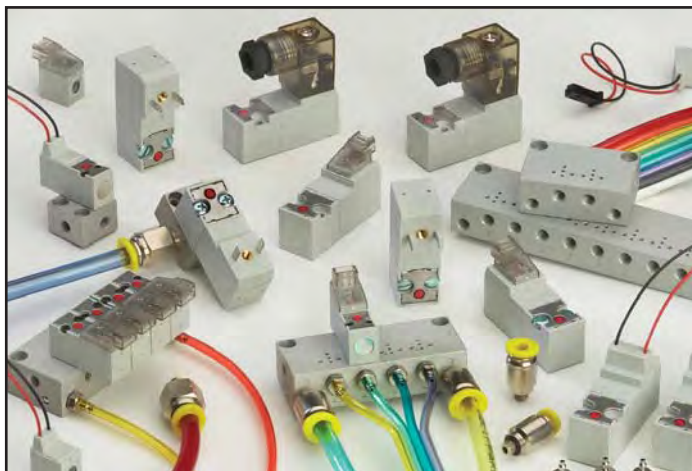
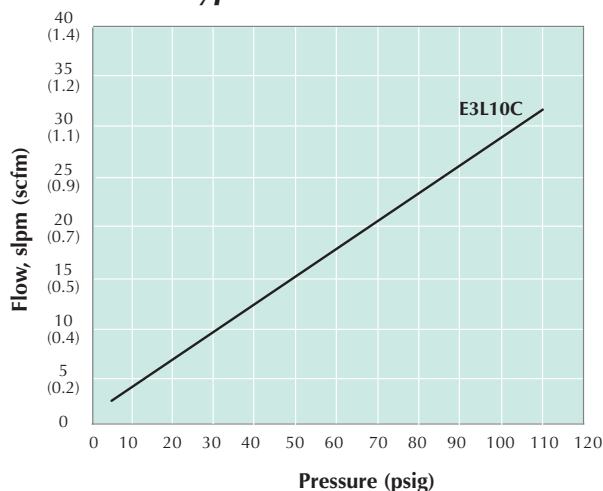
Electrical Tolerance: -5 to 10%

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

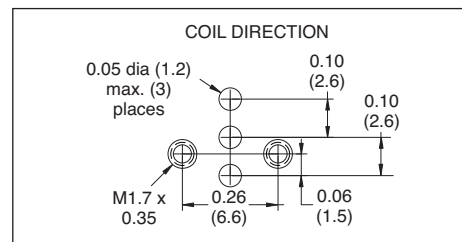
Connector: Wire Leads

| Type | Part No. | Voltage | Wattage |
|-------|------------------------------|---------|---------|
| 2-Way | E2L10C-7W012 | 12 VDC | 2.0 |
| | E2L10C-6W024 | 24 VDC | 1.7 |
| 3-Way | E3L10C-7W012 | 12 VDC | 2.0 |
| | E3L10C-6W024 | 24 VDC | 1.7 |

Typical Air Flow



Mounting Interface



See [pages 204 & 208](#) for connectors and manifolds



NEW! HIGH FLOW 2-WAY 10 MM MINIATURE VALVES

Specifications

Medium: Air, Gas or other Compatible Fluids

Working Pressure: 0 to 30 psig/2.0 bar

Max. Flow Rate: 28 lpm (1.0 scfm)

Orifice: 0.055" (1.4 mm)

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

Electrical: 12 VDC or 24 VDC

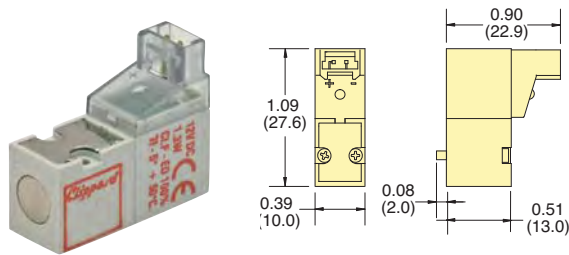
Power Consumption: 3.5 watts in rush phase; 15 ms/0.35 watts in maintenance phase

Voltage Tolerance: -5% to 10%

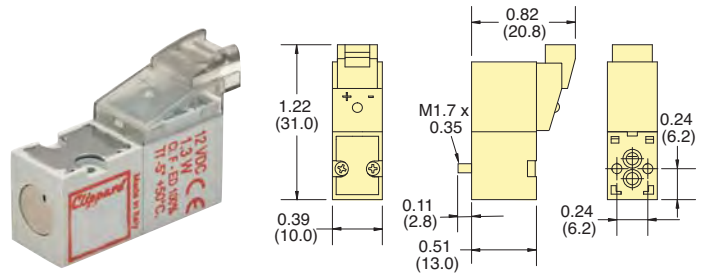
Material: Stainless steel core and springs, nylon body, FKM dynamic seals, and Buna-N gasket and static seals. FKM gasket and static seals available, consult factory.

Temperature Range: 23 to 122°F (-5 to 50°C). When below 32°F (0°C), must use clean, dry air

90° Connector with LED

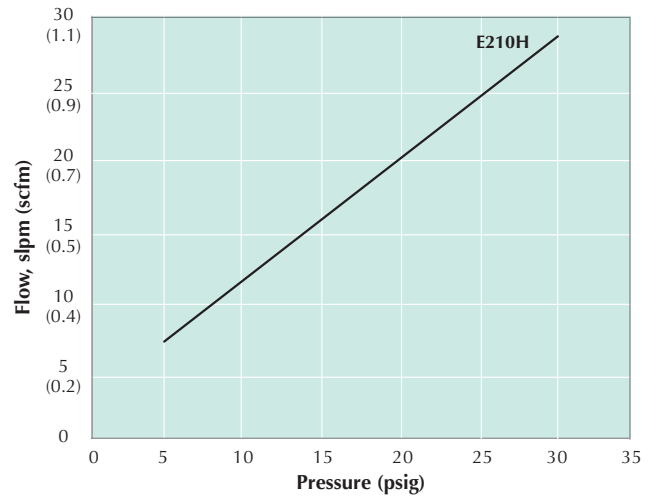


In-Line Connector with LED

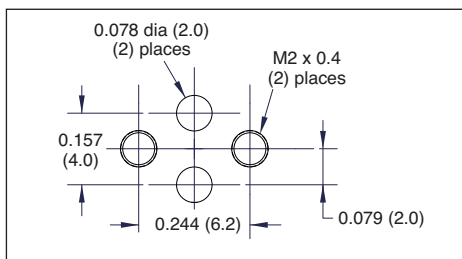


| Part No. | Connector | Voltage |
|-----------------------------|-------------------|---------|
| E210H-3L012 | 90° Connector | 12 VDC |
| E210H-3L024 | with LED | 24 VDC |
| E210H-3C012 | In-Line Connector | 12 VDC |
| E210H-3C024 | with LED | 24 VDC |

Typical Air Flow

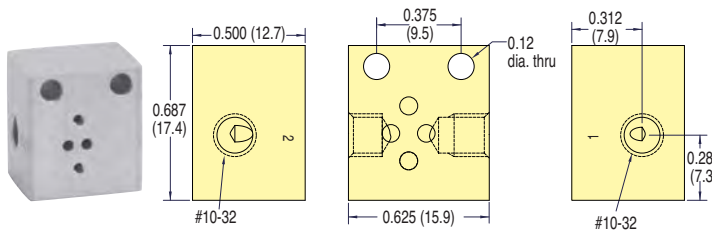


Mounting Interface



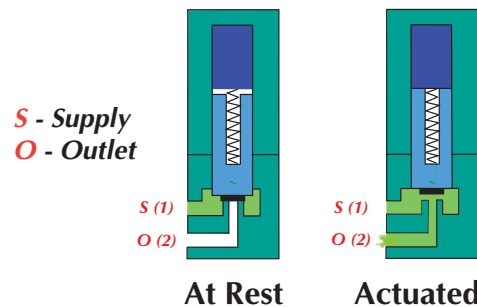
10 mm High Flow Single-Station Manifold

Spare hardware and closing plates available. Add -M5 for metric ports.



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

Functional Schematics



Specifications

Medium: Air, Gas, or other Compatible Fluids

Working Pressure: 0 to 102 psig/7.0 bar

Maximum Flow Rate: 42 l/min (1.5 scfm)

Exhaust Flow: 49 l/min (1.7 scfm)

Orifice: 0.043" (1.1 mm)

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

Material: Stainless steel core and springs, nylon body, FKM seals, and Buna-N gasket. FKM gasket available, consult factory

Voltage: 12-volt DC or 24-volt DC

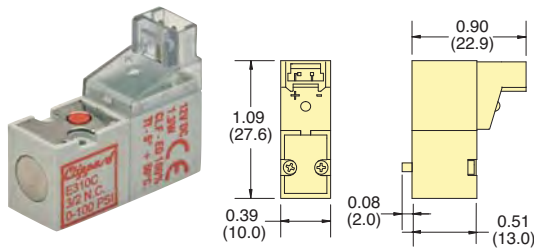
Voltage Tolerance: -5% to 10%

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

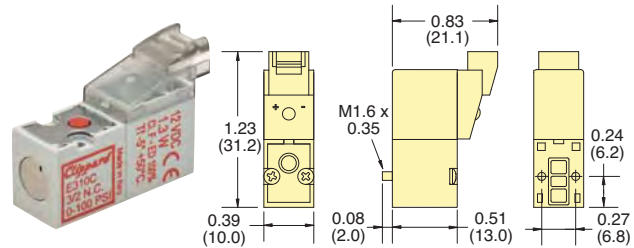
Coil Insulation Class: F 311°F (155°C)

Temperature Range: 23 to 122°F (-5 to 50°C)

90° Connector with LED

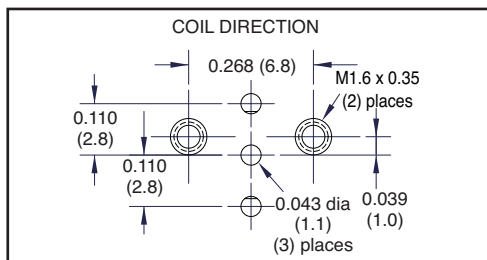


In-Line Connector with LED

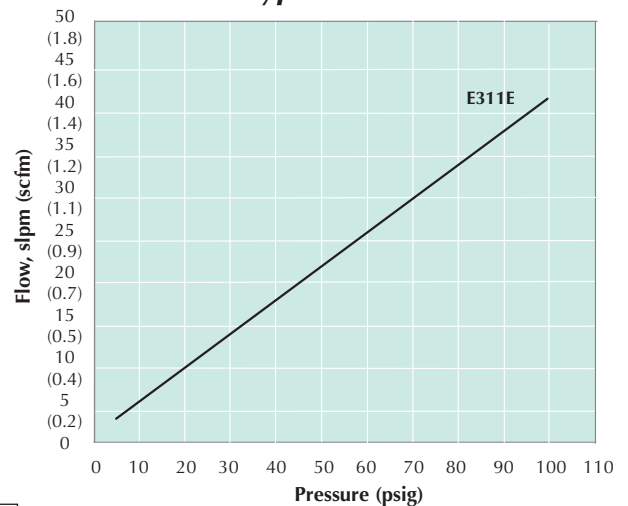


| Part No. | Connector | Voltage |
|-----------------------------|-------------------|---------|
| E311E-3L012 | 90° Connector | 12 VDC |
| E311E-3L024 | with LED | 24 VDC |
| E311E-3C012 | In-Line Connector | 12 VDC |
| E311E-3C024 | with LED | 24 VDC |

Mounting Interface

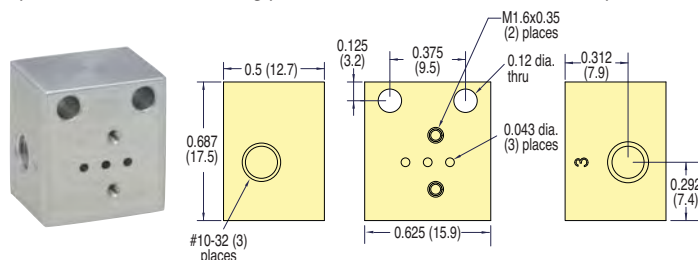


Typical Air Flow



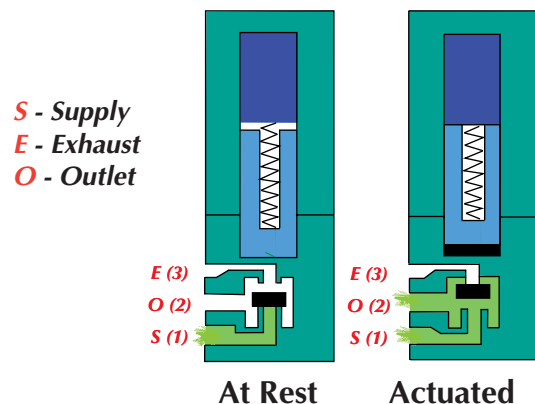
ISO 15218 10 mm High Flow Single-Station Manifold

Spare hardware and closing plates available. Add -M5 for metric ports.



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

Functional Schematics

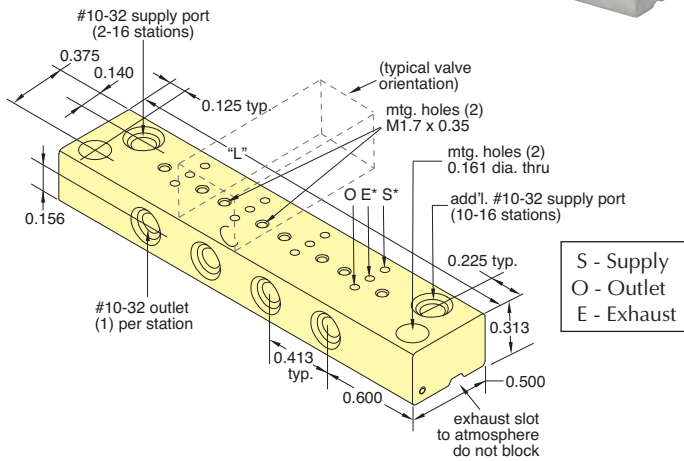




10 MM MINIATURE VALVE ACCESSORIES

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.



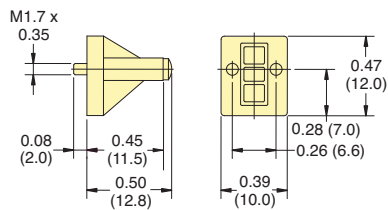
* For Normally-Open valves, supply to "E" and "S" becomes exhaust.

| Stations | Supply Ports | Part No. | Length "L" |
|----------|--------------|--------------------------|--------------|
| 2 | 1 | E10SM-02 | 1.61 (40.9) |
| 4 | 1 | E10SM-04 | 2.44 (62.0) |
| 6 | 1 | E10SM-06 | 3.27 (82.8) |
| 8 | 1 | E10SM-08 | 4.09 (103.8) |
| 10 | 2 | E10SM-10 | 4.92 (125.0) |
| 12 | 2 | E10SM-12 | 5.74 (145.8) |
| 14 | 2 | E10SM-14 | 6.57 (166.9) |
| 16 | 2 | E10SM-16 | 7.40 (187.7) |

Cover Plate

Manifold Cover Plate includes plate, gasket and two screws.

Part No.
[E10M-CP](#) 10 mm Cover Plate



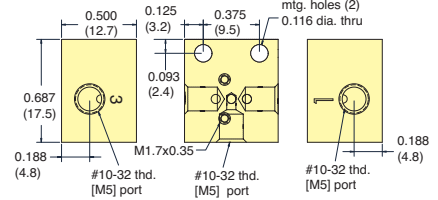
Standard Manifolds

Standard manifolds are available for one to 12 valves with ported exhaust. Spare hardware and closing plates available. Add -M5 for metric ports.

Part No.

[E10M-01](#)

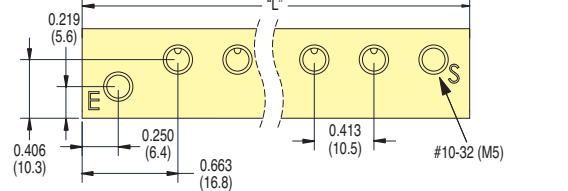
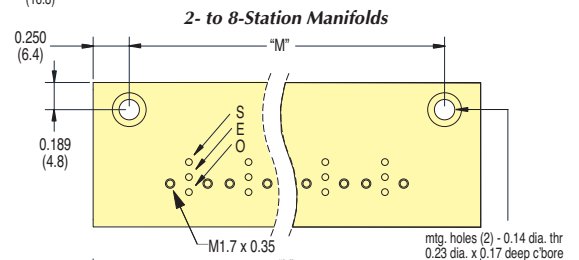
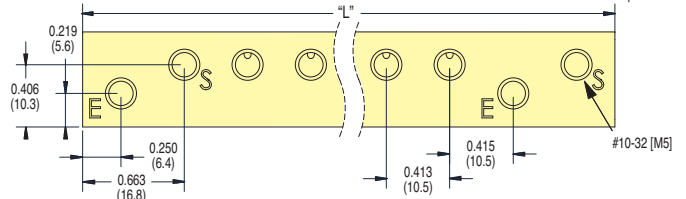
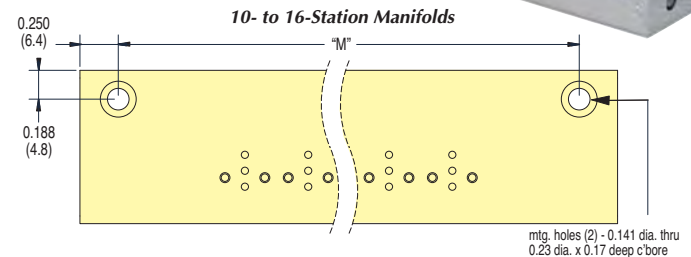
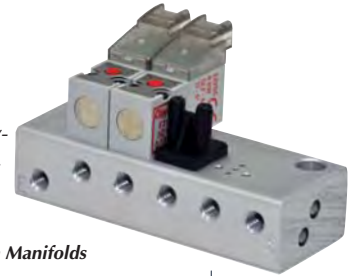
Single-Station Manifold



Multi-Station Manifolds

When using these manifolds with Normally-Open valve configurations:

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



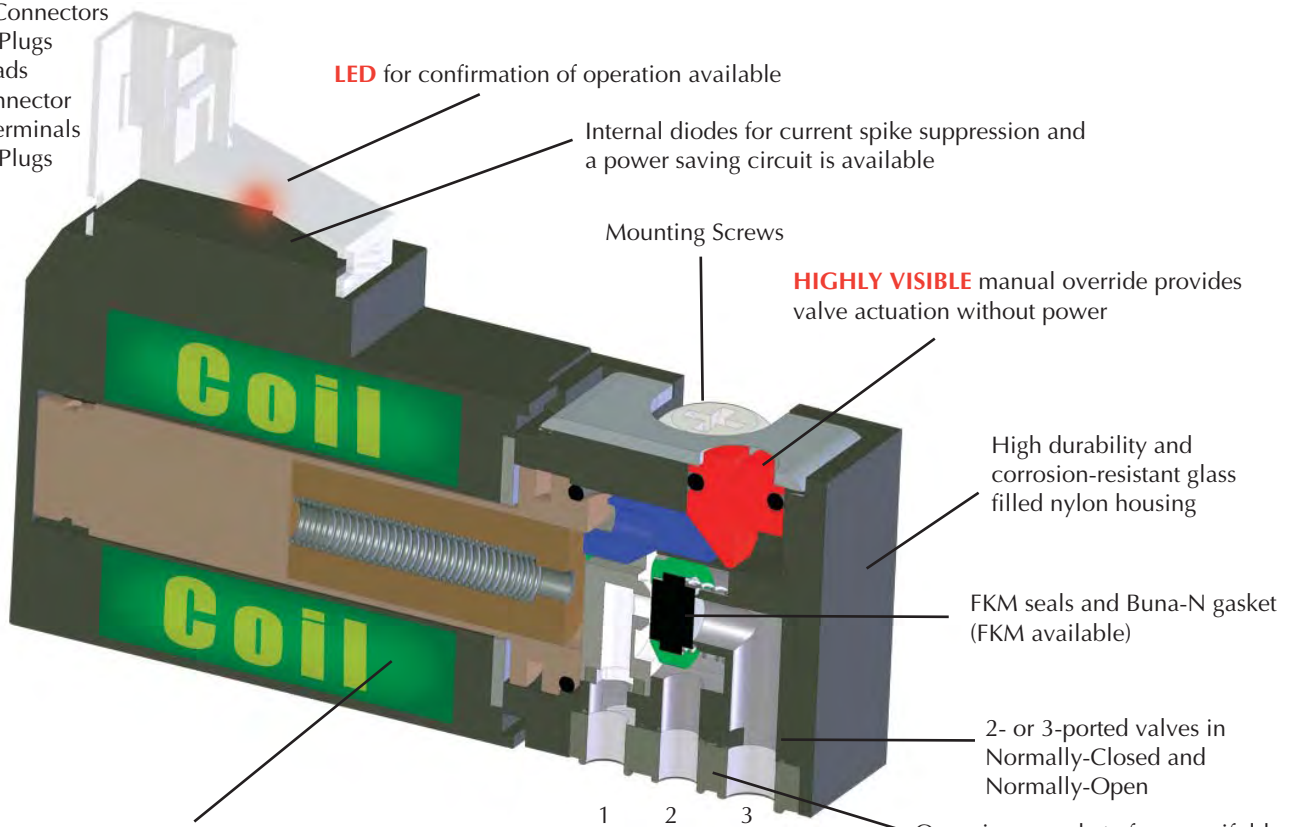
| Part No. | Stations | Length "L" | Length "M" |
|-------------------------|----------|--------------|--------------|
| E10M-02 | 2 | 1.74 (44.2) | 1.24 (31.5) |
| E10M-04 | 4 | 2.57 (65.2) | 2.07 (52.5) |
| E10M-06 | 6 | 3.39 (86.1) | 2.89 (73.4) |
| E10M-08 | 8 | 4.22 (107.2) | 3.72 (94.5) |
| E10M-10 | 10 | 5.87 (149.1) | 5.37 (136.4) |
| E10M-12 | 12 | 6.70 (170.2) | 6.20 (157.5) |
| E10M-14 | 14 | 7.52 (191.0) | 7.02 (178.3) |
| E10M-16 | 16 | 8.35 (212.1) | 7.85 (199.4) |

15 MM MINIATURE VALVES



Multiple Connectors

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



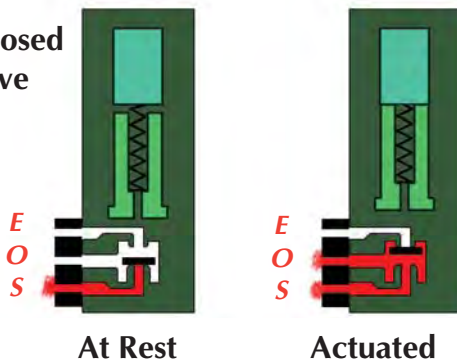
Encapsulated low wattage coils. Available in: 12 VDC, 24 VDC, 24 VAC, 110 VAC or 220 VAC. Special voltages available for OEMs.

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

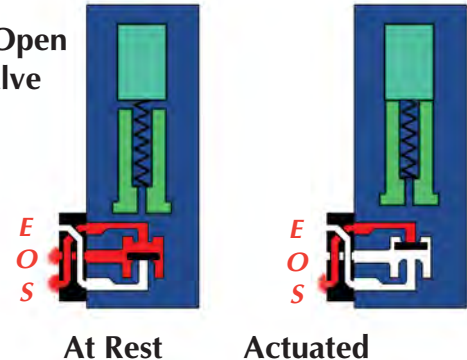
Functional Schematics

Normally-Closed 3-Way Valve

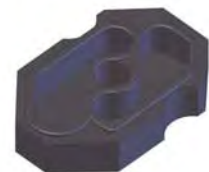
S - Supply
E - Exhaust
O - Outlet



Normally-Open 3-Way Valve



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" (0.8 mm) Orifice: 45 l/min (1.6 scfm)
 0.043" (1.1 mm) Orifice: 70 l/min (2.6 scfm)
 0.063" (1.6 mm) Orifice: 91 l/min (3.2 scfm)

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



Material: Stainless steel core and springs, springs, nylon body, FKM seals, and Buna-N gasket. FKM gasket available, consult factory

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

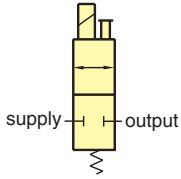
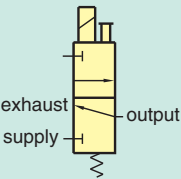
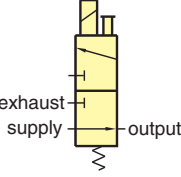
Voltage Tolerance: -5% to 10%

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

Coil Insulation Class: F 311°F (155°C)

Temperature Range: 23 to 122°F (-5 to 50°C)

Order Information

| Type | Base No. | Connector | | | | | | Orifice | Wattage | Working Pressure |
|---|----------------------------|----------------------------|--------|--------|--------|---------|---------|---------|------------------------|------------------------|
| | | | 12 VDC | 24 VDC | 24 VAC | 110 VAC | 220 VAC | | | |
| 2/2 Normally-Closed  | E215D-1T* | Terminal | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E215E-2T* | | • | • | • | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E215F-2T* | | • | • | • | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E215D-1D* | DIN Connector | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E215E-2D* | | • | • | • | • | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E215F-2D* | | • | • | • | • | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E215D-1W* | Wire Leads, 11.8" (300 mm) | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E215E-2W* | | • | • | • | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E215F-2W* | | • | • | • | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E215D-1L* | 90° Connector with LED | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E215E-2L* | | • | • | | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E215F-2L* | | • | • | | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| E215D-1C* | In-Line Connector with LED | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar | |
| E215E-2C* | | • | • | | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar | |
| E215F-2C* | | • | • | | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar | |
| 3/2 Normally-Closed  | E315D-1T* | Terminal | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E315E-2T* | | • | • | • | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E315F-2T* | | • | • | • | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E315D-1D* | DIN Connector | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E315E-2D* | | • | • | • | • | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E315F-2D* | | • | • | • | • | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E315D-1W* | Wire Leads, 11.8" (300 mm) | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E315E-2W* | | • | • | • | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E315F-2W* | | • | • | • | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| | E315D-1L* | 90° Connector with LED | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar |
| | E315E-2L* | | • | • | | | | 0.043" | 2.5 | 0 to 150 psig/10.3 bar |
| | E315F-2L* | | • | • | | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar |
| E315D-1C* | In-Line Connector with LED | • | • | | | | 0.032" | 1.0 | 0 to 150 psig/10.3 bar | |
| E315E-2C* | | • | • | | | | 0.063" | 2.5 | 0 to 150 psig/10.3 bar | |
| E315F-2C* | | • | • | | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar | |
| 3/2 Normally-Open (110 psig max.)  | E3O15E-2T* | Terminal | • | • | • | | | 0.043" | 2.5 | 0 to 110 psig/7.6 bar |
| | E3O15F-2T* | | • | • | • | | | 0.063" | 2.5 | 0 to 75 psig/5.2 bar |
| | E3O15E-2D* | DIN Connector | • | • | • | • | • | 0.043" | 2.5 | 0 to 110 psig/7.6 bar |
| | E3O15F-2D* | | • | • | • | • | • | 0.063" | 2.5 | 0 to 75 psig/5.2 bar |
| | E3O15E-2W* | Wire Leads, 11.8" (300 mm) | • | • | • | | | 0.043" | 2.5 | 0 to 110 psig/7.6 bar |
| | E3O15F-2W* | | • | • | • | | | 0.063" | 2.5 | 0 to 75 psig/5.2 bar |
| | E3O15E-2L* | 90° Connector with LED | • | • | | | | 0.043" | 2.5 | 0 to 110 psig/7.6 bar |
| | E3O15F-2L* | | • | • | | | | 0.063" | 2.5 | 0 to 75 psig/5.2 bar |
| E3O15E-2C* | In-Line Connector with LED | • | • | | | | 0.063" | 2.5 | 0 to 110 psig/7.6 bar | |
| E3O15F-2C* | | • | • | | | | 0.063" | 2.5 | 0 to 75 psig/5.2 bar | |

• 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**

15 MM MINIATURE VALVES



Terminal Connector



Industrial Form C Connector ordered separately below.

DIN Connector



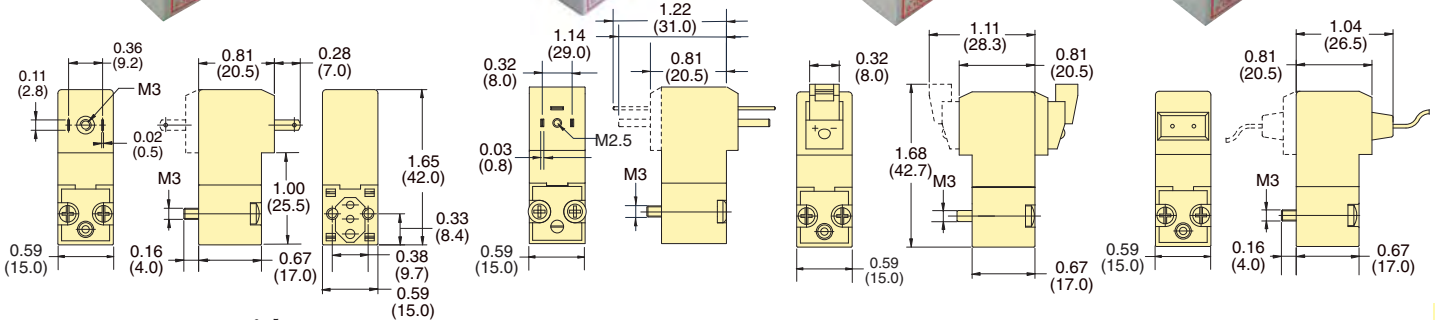
In-Line Connector with LED



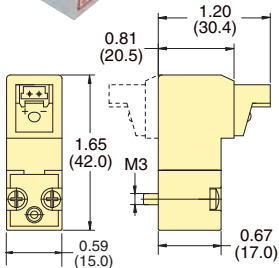
Wire Leads



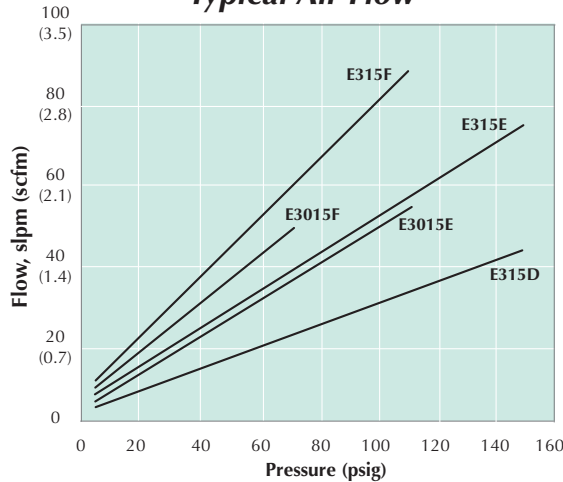
DIN Connector ordered separately below.



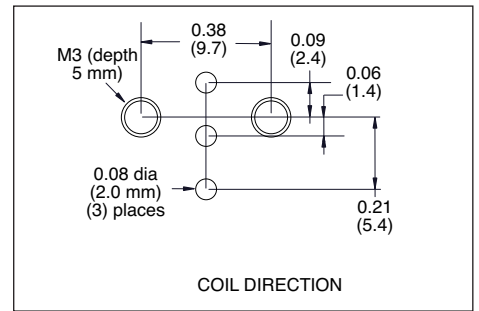
90° Connector with LED



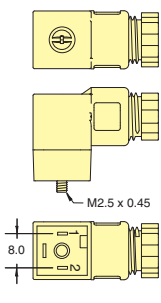
Typical Air Flow



Mounting Interface

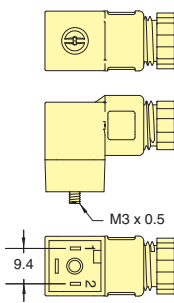


Form C



Used with "DIN Connector"

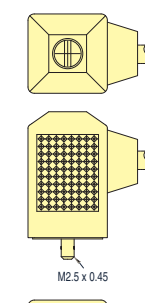
Industrial Form



Used with "Terminal Connector"

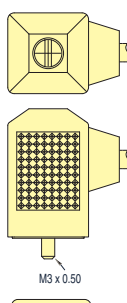
Molded 3-Wire Cord Set

Form C



Used with "DIN Connector"

Industrial Form



Used with "Terminal Connector"

DIN Connectors

For Use with 15 mm Valves Only

DIN 43650 Form C Connectors with 8 mm spade center spacing mate with the 15 mm DIN connector coil. Industrial Form Connectors with 9.4 mm spade center spacing are designed to connect to 15 mm terminal coils. Both are available with or without surge suppression, and 152 or 381 mm PVC molded three-wire cord set.

| Form C Part No. | Industrial Form Part No. | Volts | LED | Cord |
|-----------------|--------------------------|--------|-----|------|
| CC-C | CC-I | 6-240 | no | - |
| CC-C-P6 | CC-I-P6 | 6-240 | no | 6' |
| CC-C-P15 | CC-I-P15 | 6-240 | no | 15' |
| CC-CLL | CC-ILL | 6-24 | yes | - |
| CC-CLL-P6 | CC-ILL-P6 | 6-24 | yes | 6' |
| CC-CLL-P15 | CC-ILL-P15 | 6-24 | yes | 15' |
| CC-CLM | CC-ILM | 48-110 | yes | - |
| CC-CLM-P6 | CC-ILM-P6 | 48-110 | yes | 6' |
| CC-CLM-P15 | CC-ILM-P15 | 48-110 | yes | 15' |

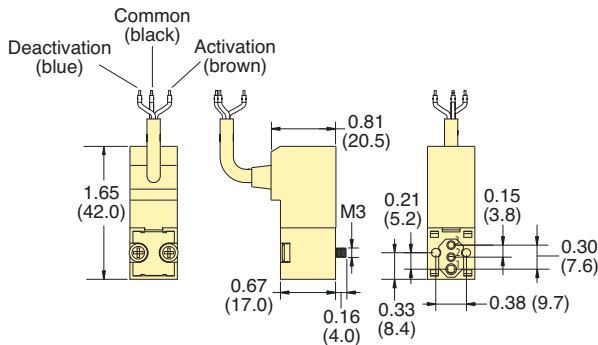




LATCHING 15 MM MINIATURE VALVES



- 2-Way & 3-Way Normally-Closed configurations
- Pulse-actuated (on or off)
- 3-wire coil. No polarity reverse required
- Stable latch



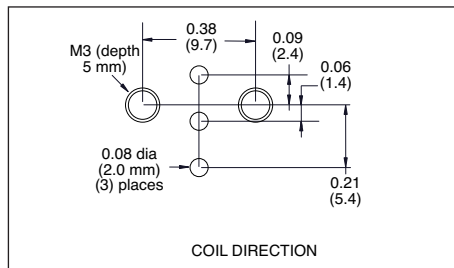
Response Time: 10 ms when energized; 12 ms when de-energized

Copper Wire Isolation Class: F 311°F (155°C)

Material: Stainless steel core and springs, nylon body, FKM dynamic seals, and Buna-N gasket and static seals. FKM gasket available, consult factory.

Temperature Range: 23 to 122°F (-5 to 50°C). When below 32°F (0°C), must use clean, dry air

Mounting Interface



Clippard's 15 mm Latching Valves have many of the same features as the popular 15 mm standard valve line including small, compact design, exceptional life and reliability, light-weight design and more. A careful balance of forces—through the precise placement of a permanent magnet in the valve core—produces a bi-stable valve. A short pulse of current opens the valve, which “latches” open indefinitely after the current stops. A subsequent pulse of current in the opposite direction closes the valve. The valve consumes less energy and produces less heat than a standard solenoid valve when used in extended duty cycle applications, since the coil is energized for only a small fraction of the total duty cycle.

Medium: Air, Gas or other Compatible Fluids

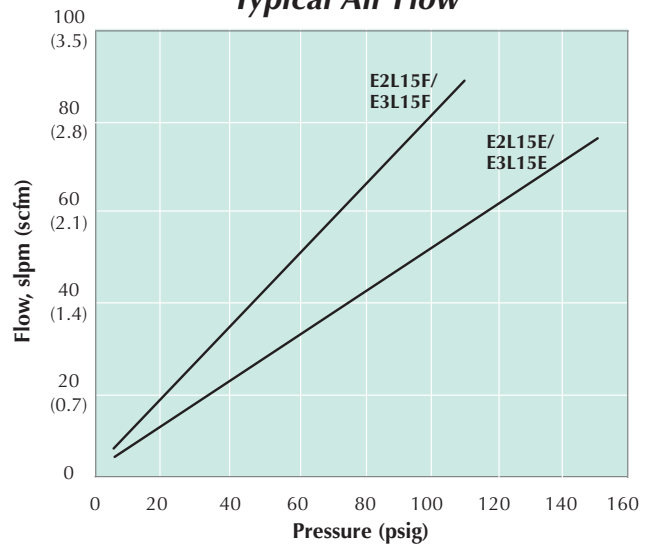
Max. Flow Rate: 0.043" (1.1 mm) Orifice: 59 l/min (2.1 scfm)
0.063" (1.6 mm) Orifice: 84 l/min (3.0 scfm)

Electrical Connection: 3-Wire Molded Cord, 300 mm, 24 AWG 4.5 mm external jacket; tinned copper wires; silicone jacket and conductor insulation)

Electrical: 12 VDC ("-012") or 24 VDC ("-024"). 6 VDC also available. Call for further information.

Electrical Tolerance: -5 to 10%

Typical Air Flow



| Type | Part No. | Connector | Orifice | Voltage | Wattage | Pressure Range |
|-------|------------------------------|-------------------------------|-----------------|---------|---------|------------------------|
| 2-Way | E2L15E-4W012 | 3-Wire Molded Cord, 300 mm | 0.043" (1.1 mm) | 12 VDC | 4.0 | 0 to 150 psig/10.3 bar |
| | E2L15E-4W024 | | 0.043" (1.1 mm) | 24 VDC | | 0 to 150 psig/10.3 bar |
| | E2L15F-4W012 | | 0.063" (1.6 mm) | 12 VDC | | 0 to 110 psig/7.6 bar |
| | E2L15F-4W024 | | 0.063" (1.6 mm) | 24 VDC | | 0 to 110 psig/7.6 bar |
| 3-Way | E3L15E-4W012 | 3-Wire Molded Cord, 300 mm | 0.043" (1.1 mm) | 12 VDC | 4.0 | 0 to 150 psig/10.3 bar |
| | E3L15E-4W024 | | 0.043" (1.1 mm) | 24 VDC | | 0 to 150 psig/10.3 bar |
| | E3L15F-4W012 | | 0.063" (1.6 mm) | 12 VDC | | 0 to 110 psig/7.6 bar |
| | E3L15F-4W024 | | 0.063" (1.6 mm) | 24 VDC | | 0 to 110 psig/7.6 bar |

See [page 214](#) for connectors and manifolds

Specifications

Medium: Air, Gas, or other Compatible Fluids

Working Pressure: 0 to 43 psig/3.0 bar

Maximum Flow Rate: 120 l/min (4.3 scfm)

Orifice: 0.118" (3.0 mm)

Material: Stainless steel core and springs, nylon body, FKM seals, and Buna-N gasket. FKM gasket available, consult factory

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

Voltage: 12-volt DC or 24-volt DC

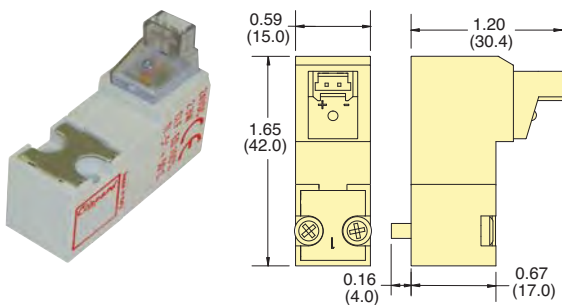
Voltage Tolerance: -5% to 10%

Power Consumption: 4.0 watts

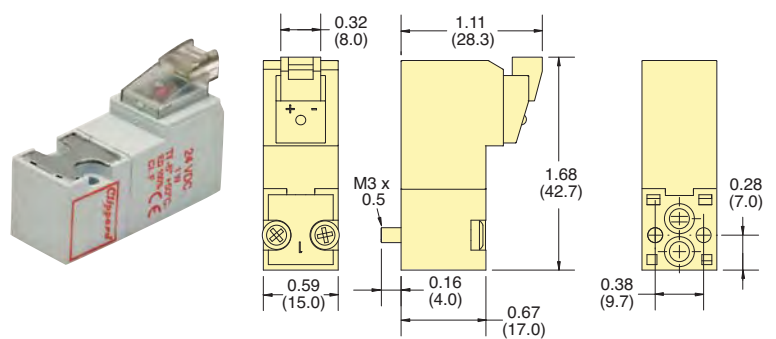
Coil Insulation Class: F 311°F (155°C)

Temperature Range: 23 to 122°F (-5 to 50°C)

90° Connector with LED

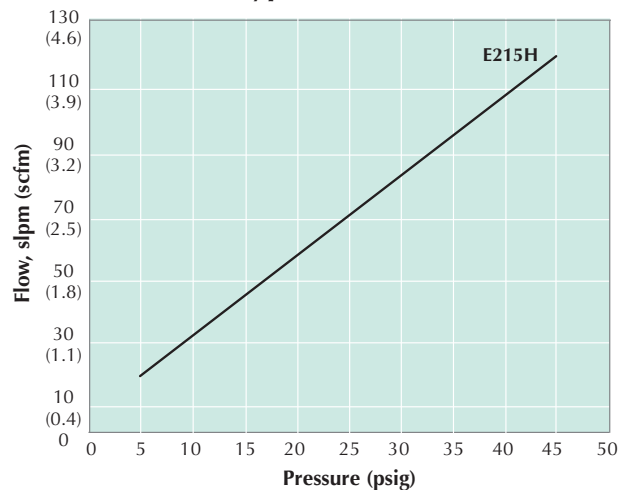


In-Line Connector with LED

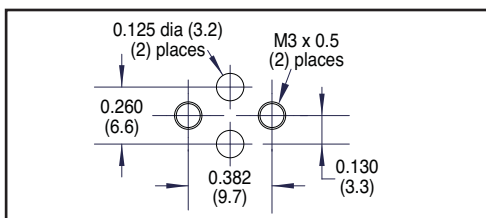


| Part No. | Connector | Voltage |
|-----------------------------|-------------------|---------|
| E215H-3L012 | 90° Connector | 12 VDC |
| E215H-3L024 | with LED | 24 VDC |
| E215H-3C012 | In-Line Connector | 12 VDC |
| E215H-3C024 | with LED | 24 VDC |

Typical Air Flow

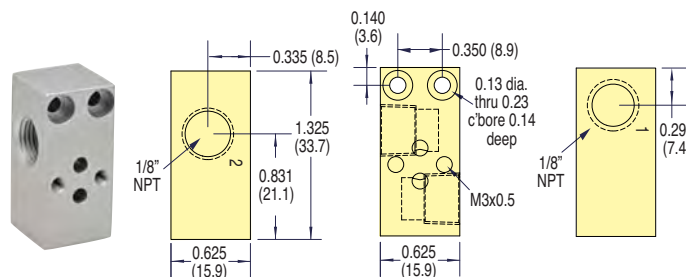


Mounting Interface



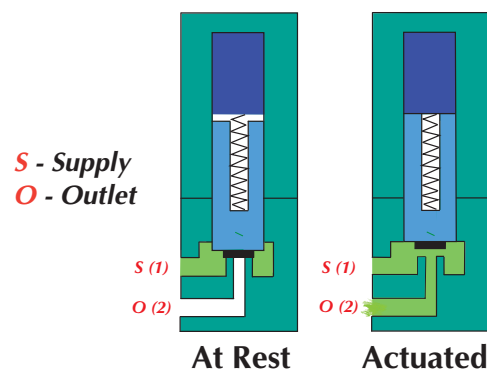
15 mm High Flow Single-Station Manifold

Spare hardware and closing plates available. Add -M5 for metric ports.



Part No.
[E15HM-01](#) 15 mm Single-Station Manifold

Functional Schematics

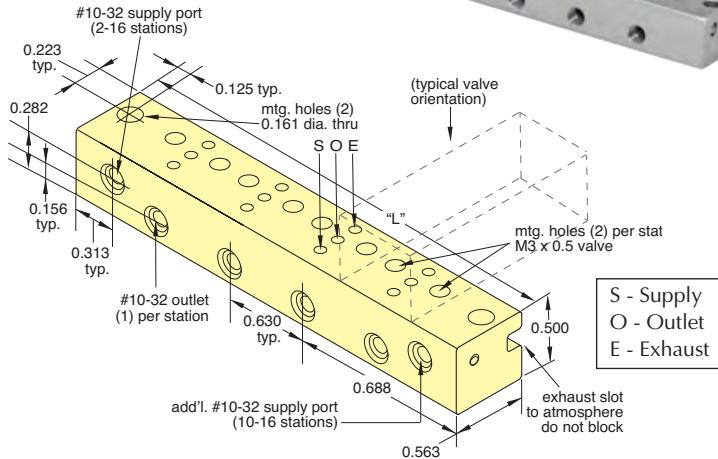
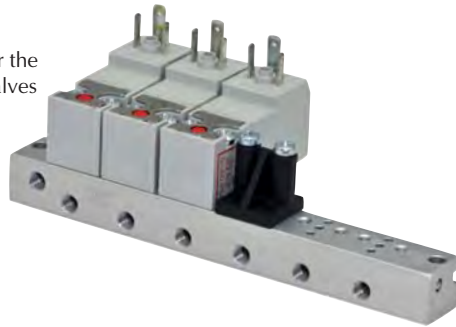




15 MM VALVE ACCESSORIES

Sub-Miniature Manifolds

Small, compact manifolds offer the efficient grouping of 15 mm valves along with fast installation. Each manifold features a common inlet, individually ported outlets, and exhaust to atmosphere.



| Stations | Supply Ports | Part No. | Length "L" |
|----------|--------------|--------------------------|---------------|
| 2 | 1 | E15SM-2 | 2.01 (51.1) |
| 4 | 1 | E15SM-4 | 3.27 (83.1) |
| 6 | 1 | E15SM-6 | 4.53 (115.1) |
| 8 | 1 | E15SM-8 | 5.79 (147.1) |
| 10 | 2 | E15SM-10 | 7.05 (179.1) |
| 12 | 2 | E15SM-12 | 8.31 (211.1) |
| 14 | 2 | E15SM-14 | 9.57 (243.1) |
| 16 | 2 | E15SM-16 | 10.82 (274.8) |



Connectors

Wire Connector must be ordered separately. 24 AWG. Stranding 7/32.

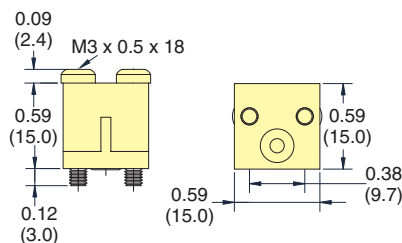
Part No.

- [C2A-RB300](#) Connector with Cable, 11.8" (300 mm)
- [C2A-RB500](#) Connector with Cable, 19.69" (500 mm)
- [C2A-RB1000](#) Connector with Cable, 39.37" (1,000 mm)

Molex terminal insert #050013-8000, #28139 plug and 24 AWG wire.

Cover Plate

Manifold Cover Plate includes plate, gasket and two screws.

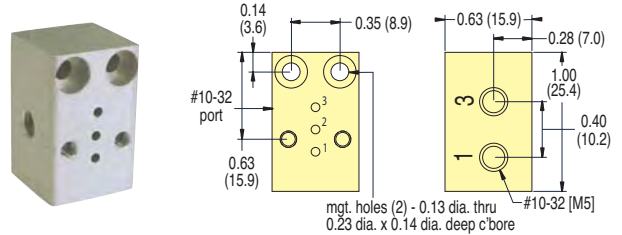


Part No.

- [E15M-CP](#) 15 mm Cover Plate

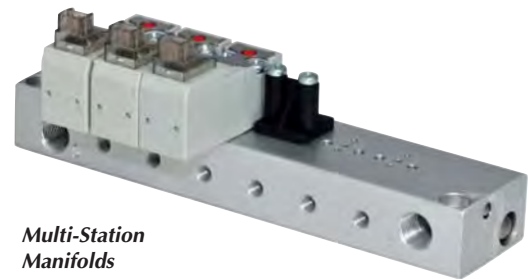
Standard Manifolds

Standard manifolds are available for one to 16 valves with ported exhaust. Spare hardware and closing plates also available. Add -M5 for metric ports.



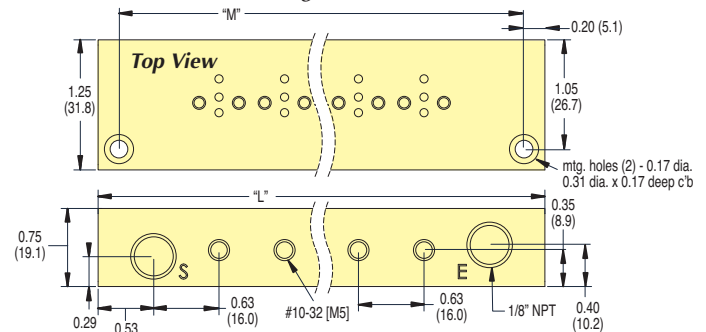
Part No.

- [E15M-01](#) Single-Station Manifold

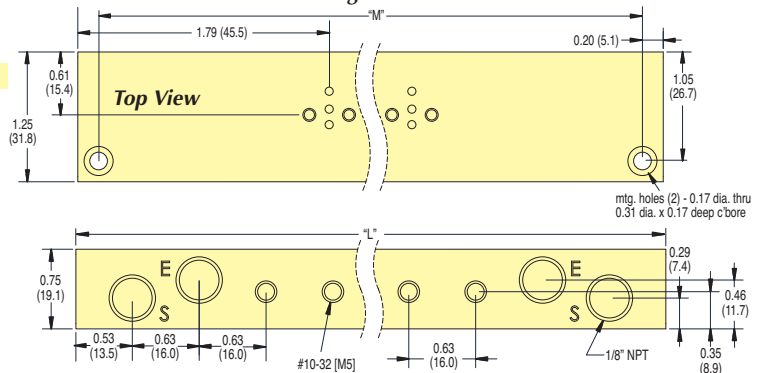


Multi-Station Manifolds

2- through 8-Station



10- through 16-Station



| Stations | Part No. | Length "L" | Length "M" |
|----------|-------------------------|---------------|--------------|
| 2 | E15M-02 | 2.95 (74.2) | 2.55 (64.8) |
| 4 | E15M-04 | 4.21 (106.9) | 3.81 (96.8) |
| 6 | E15M-06 | 5.47 (138.9) | 5.07 (128.8) |
| 8 | E15M-08 | 6.73 (170.9) | 6.33 (160.8) |
| 10 | E15M-10 | 9.25 (235.0) | 8.85 (224.8) |
| 12 | E15M-12 | 10.51 (277.0) | 10.1 (256.8) |
| 14 | E15M-14 | 11.77 (299.0) | 11.4 (288.8) |
| 16 | E15M-16 | 13.03 (331.0) | 12.6 (320.0) |