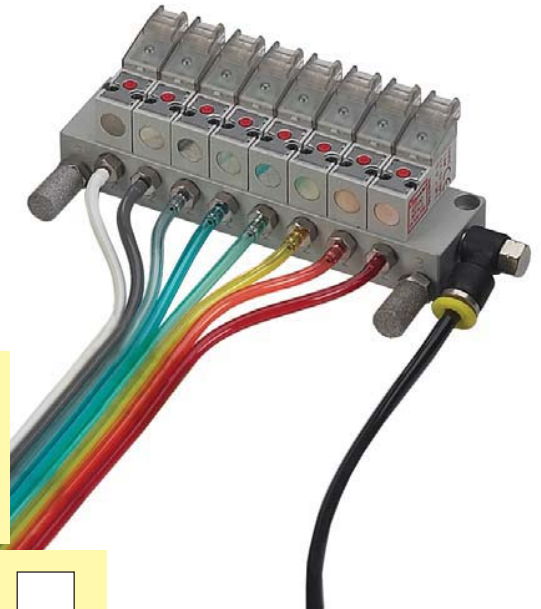




10 MM MINIATURE VALVES

Part Numbering System

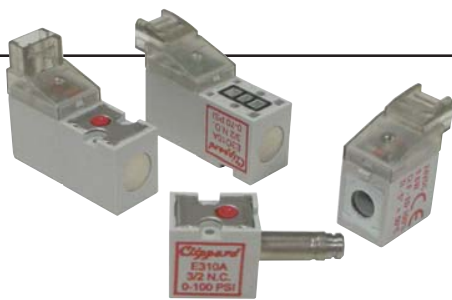
| | | |
|-----------------------------|---------------|--------------------------|
| Valve Type | Choose | <input type="checkbox"/> |
| 2-Way Normally-Closed | E210 | |
| 3-Way Normally-Closed | E310 | |
| 3-Way Normally-Open | E3O10 | |
| Orifice Size | Choose | <input type="checkbox"/> |
| 0.020" (0.5 mm) | A | |
| 0.030" (0.75 mm) | C | |
| Power | Choose | <input type="checkbox"/> |
| 0.6 Watts | 1 | |
| 1.3 Watts | 2 | |
| Electrical Connector | Choose | <input type="checkbox"/> |
| In-Line Connector | F | |
| In-Line Connector with LED | C | |
| 90° Connector | E | |
| 90° Connector with LED | L | |
| Wire Leads, 11.8" (300 mm) | W | |
| Voltage | Choose | <input type="checkbox"/> |
| 12-Volt DC | 012 | |
| 24-Volt DC | 024 | |



This numbering schematic is shown for illustration purposes only. All possible configurations are not available. For standard models, see the products illustrated in this catalog.



Example: **E210A** - **1C012**

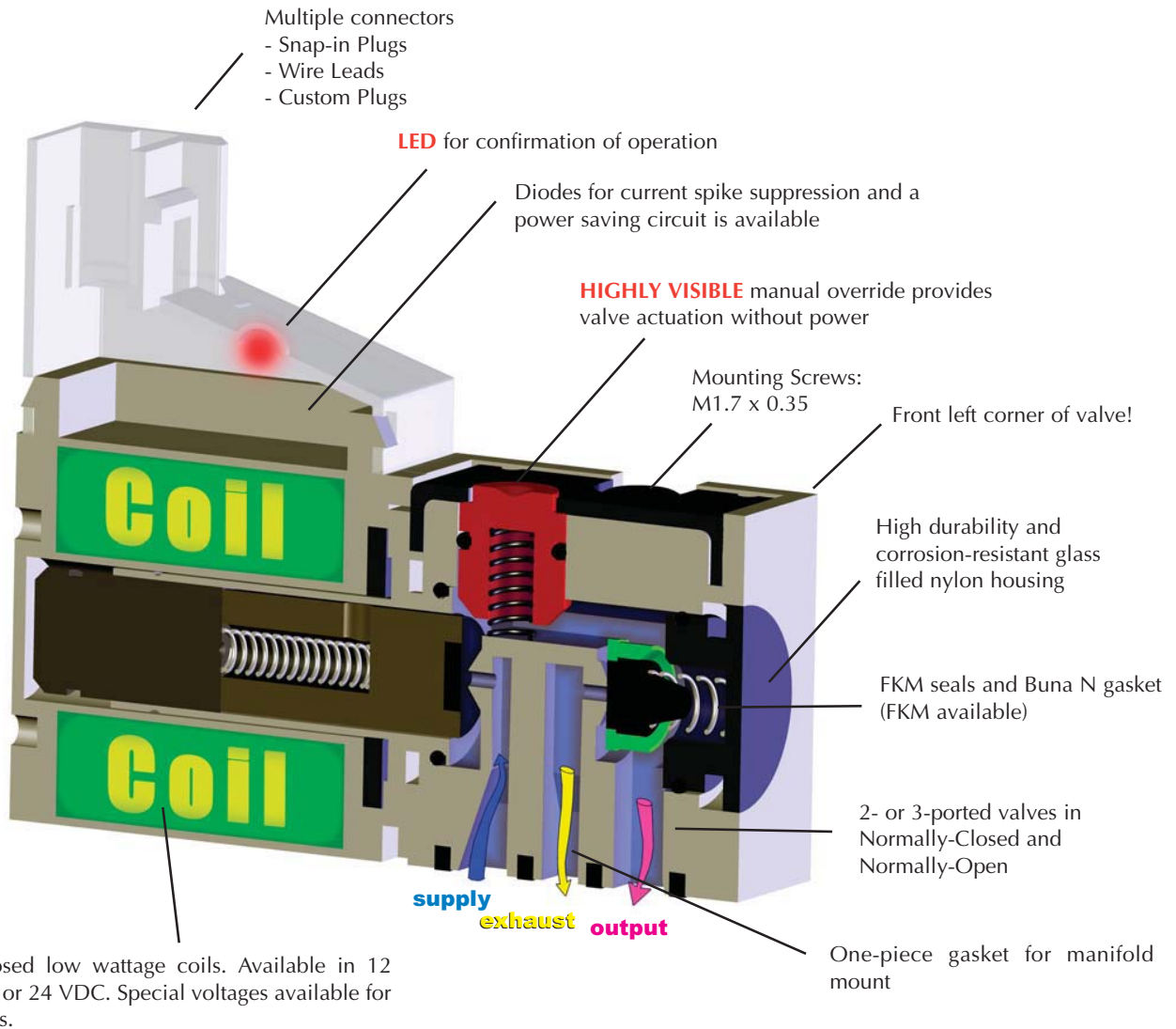


Another feature of the Clippard 10 mm valve is the ability to detach the coil and connector from the valve body. This can be useful for the purpose of orientating the coil by 180°, or exchanging connector types or voltages.

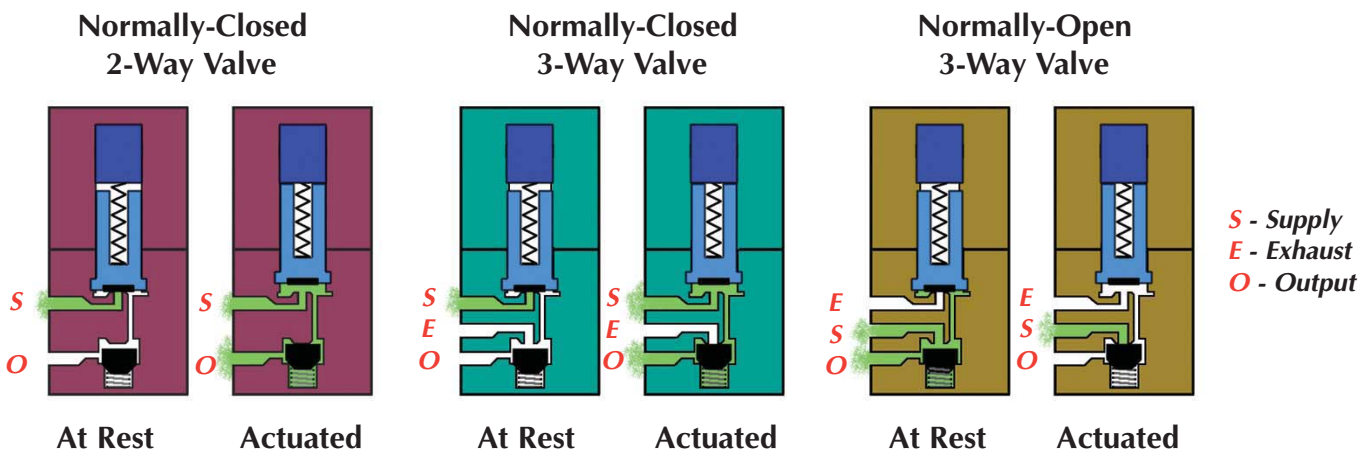
| | |
|------------------------|---------------|
| Normally-Closed | Silver |
| Normally-Open | Black |

Clippard also helps you identify the valve you have by color coding the top plate. If it is silver, the valve is a Normally-Closed version—if it is black, the valve is Normally-Open.





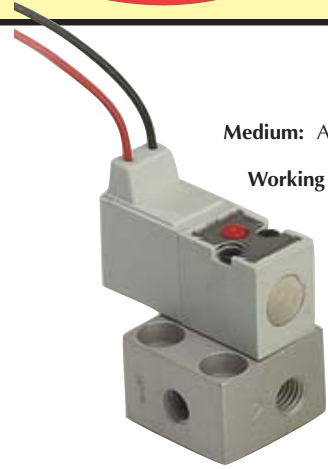
Functional Schematics





10 MM MINIATURE VALVES

Specifications



Medium: Air, Gas or other Compatible Fluids

Working Pressure: Vacuum to 110 psig/7.6 bar max.
See Chart below

Max. Flow Rate: Standard: 0.5 scfm (14 l/min);
High Flow: 0.8 scfm (23 l/min)

Exhaust Flow: 0.8 scfm (23 l/min)

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

Electrical: 12 VDC or 24 VDC

Power Consumption: 0.5 or 1.3 watts dependent on orifice size and pressure

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

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

tested to over
100 million
cycles!

Order Information

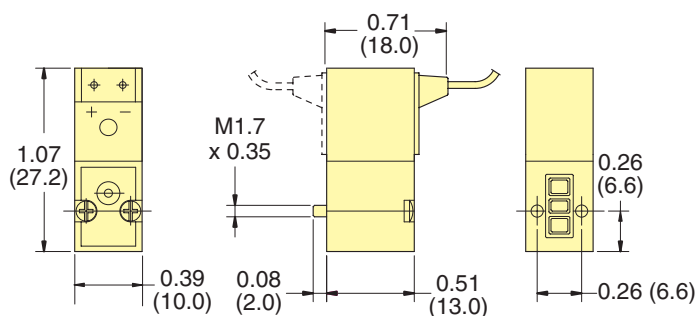
| Type | Base No. | Connector | Orifice | Wattage | Working Pressure |
|--|----------------------------|----------------------------|---------|------------------------|------------------------|
| 2/2 Normally Closed | E210A-1E* | 90° Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E210C-2E* | 90° Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E210A-1L* | 90° Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E210C-2L* | 90° Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E210A-1F* | In-Line Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E210C-2F* | In-Line Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E210A-1C* | In-Line Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E210C-2C* | In-Line Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| 3/2 Normally Closed | E310A-1E* | 90° Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E310C-2E* | 90° Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E310A-1L* | 90° Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E310C-2L* | 90° Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E310A-1F* | In-Line Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E310C-2F* | In-Line Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E310A-1C* | In-Line Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E310C-2C* | In-Line Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| 3/2 Normally Open | E3O10A-1E* | 90° Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E3O10C-2E* | 90° Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E3O10A-1L* | 90° Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E3O10C-2L* | 90° Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E3O10A-1F* | In-Line Connector | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E3O10C-2F* | In-Line Connector | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| | E3O10A-1C* | In-Line Connector with LED | 0.020" | 0.6 | Vac - 110 psig/7.6 bar |
| | E3O10C-2C* | In-Line Connector with LED | 0.030" | 1.3 | Vac - 110 psig/7.6 bar |
| E3O10A-1W* | Wire Leads, 11.8" (300 mm) | 0.020" | 0.6 | Vac - 110 psig/7.6 bar | |
| E3O10C-2W* | Wire Leads, 11.8" (300 mm) | 0.030" | 1.3 | Vac - 110 psig/7.6 bar | |

*Add Voltage Choice to the end of each Base Part Number. Example: **E210A-1C012**

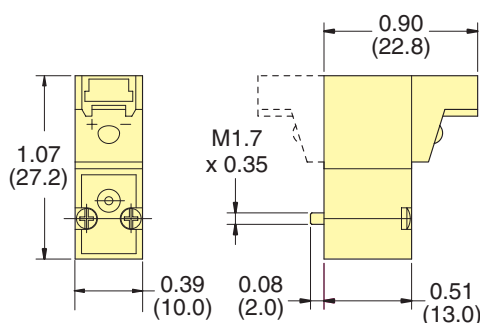
10 MM MINIATURE VALVES



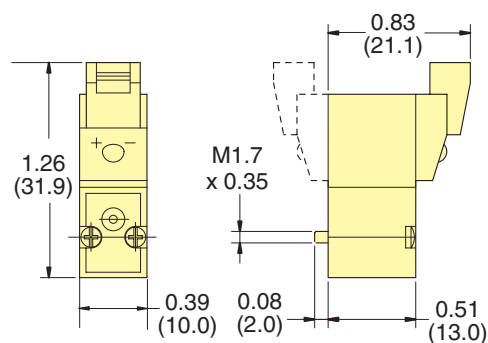
Wire Leads



90° Connector



In-Line Connector



Electrical Specifications

| Power (Wattage) | Voltage | Voltage Tolerance | Response Time (Energized) | Response Time (De-Energized) | Copper Wire Insulation Class |
|-----------------|------------------|-------------------|---------------------------|------------------------------|------------------------------|
| 0.5 | 12 VDC 24 VDC | -10% to 10% | 8 ms | 10 ms | F 311°F (155°C) |
| 1.3 | 12 VDC 24 VDC | -10% to 10% | 8 ms | 10 ms | F 311°F (155°C) |