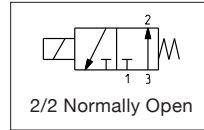
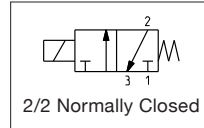


MINIATURE SOLENOID WITH LATCHING COIL GENERAL SERVICE VALVES



- The 188 Series latching coil solenoid valves are designed for use with air and inert gases, and can also be used to pilot other valves or cylinders
- The benefit of the latching coil is that no power consumption is needed to hold the valve in the open position
- Compact architecture and low power consumption of only 1.3 W make them ideal for portable medical devices
- Also available in a 1 W version for increased versatility
- LED visual indicator and electrical protection circuitry are standard features
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - Respiratory Therapy
 - Dental
 - Anesthesia Delivery
 - Industrial Gas Analyzers



| Fluids | Temperature Range | Seal Materials |
|---|---------------------------------|----------------|
| Air or Inert Gas, non-lubricated ¹ | 5 °C to 50 °C (41 °F to 122 °F) | NBR (Nitrile) |
| | | FKM |

¹ filtered at 25µm

| General Valve Information* | |
|----------------------------|--|
| Body | PA (polyamide) MXD6 |
| Seals | NBR (nitrile), FKM (fluoroelastomer) on request |
| Others | Stainless steel, nickel-plated steel, synthetic material, aluminum |
| Response Time | < 10ms |
| Options | Oxygen clean available 300 Series Stainless Steel Body |

* Other materials on request

| Electrical Characteristics | |
|----------------------------|-----------------------------------|
| Standard Voltages* | 5 VDC, 12 VDC, 24 VDC (-15%/+10%) |
| Power Consumption | 1 - 1.3 W |

* Other voltages on request

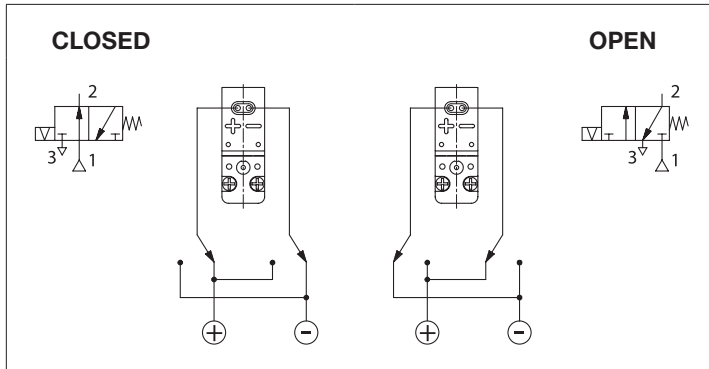
| Insulation Class | Coil Insulation | Protection | Ambient Temperature Range | Electrical Connection |
|------------------|-----------------|------------|---------------------------|---|
| | °C (°F) | | VA | |
| F | 155 (311) | IP40 | 5 to 50 (41 to 122) | Connector with two 0.5mm ² lead wires + built-in LED and electrical protection or lead wires, 0.5m (19.7in) long |

| Specifications | | | | | | | | |
|------------------|-------------|------------------------|------|---------------------------------|------------------------|-------------|--------------------------------|----------------|
| Orifice Size | | Flow Coefficient | | Pressure Differential bar (psi) | | Consumption | Type of Electrical Connection* | Catalog Number |
| mm (inches) | | Kv (m ³ /h) | Cv | min. | max. gases, liquids | | | |
| 1 → 2 | 2 → 3 | | | | | W | | |
| 3/2 NC/NO | | | | | | | | |
| 0.5 (0.020) | 0.7 (0.028) | 0.12 | 0.14 | 0 | 7 (101) | 1.3 | 01 | 18801101 |
| | | | | | | | 02 | 18801102 |
| | | | | | | | 03 | 18801103 |
| | | | | | | | 04 | 18801104 |
| | | | | | | | 05 | 18801105 |
| 0.8 (0.031) | 0.8 (0.031) | 0.15 | 0.17 | 0 | 3 (43.5) | 1.3 | 01 | 18801106 |
| | | | | | | | 02 | 18801107 |
| | | | | | | | 03 | 18801108 |
| | | | | | | | 04 | 18801109 |
| | | | | | | | 05 | 18801110 |
| 1.0 (0.040) | 1.0 (0.040) | 0.18 | 0.21 | 0 | 1 (14.5) | 1.3 | 01 | 18801111 |
| | | | | | | | 02 | 18801112 |
| | | | | | | | 03 | 18801113 |
| | | | | | | | 04 | 18801114 |
| | | | | | | | 05 | 18801115 |

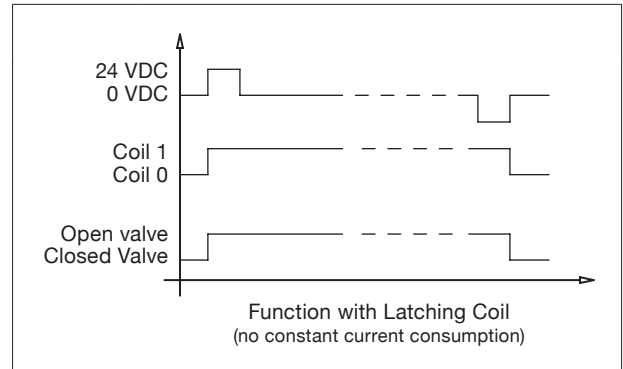
* Type 01, 02, 03, 04 with LED and electrical protection
 01 = horizontal, width 5.08mm (0.2in)
 02 = vertical, width 5.08mm (0.2in)

03 = horizontal, width 2.54mm (0.1in)
 04 = vertical, width 2.54mm (0.1in)
 05 = cable ends 0.5m long (19.7in), 0.25mm²

Wiring Diagram



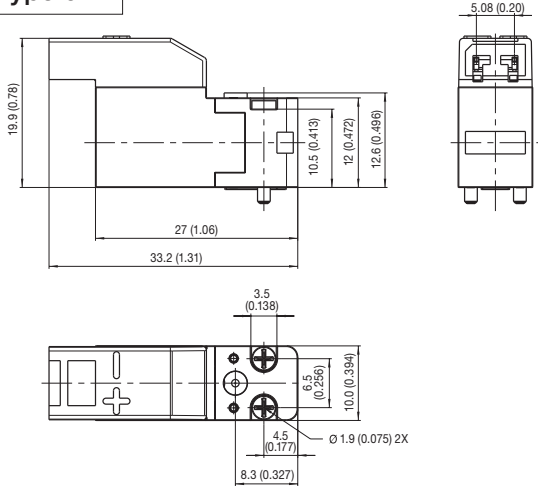
Functional Diagram



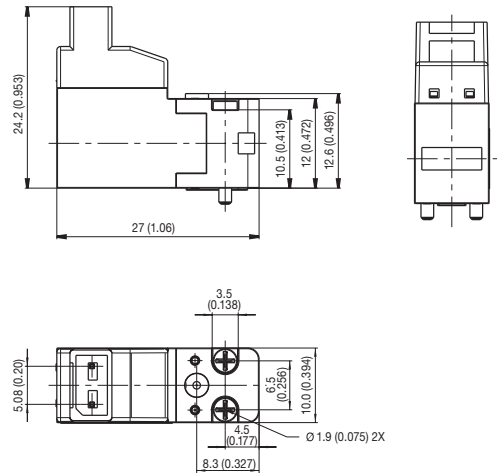
Dimensions: mm (inches)

Dimensional Drawings

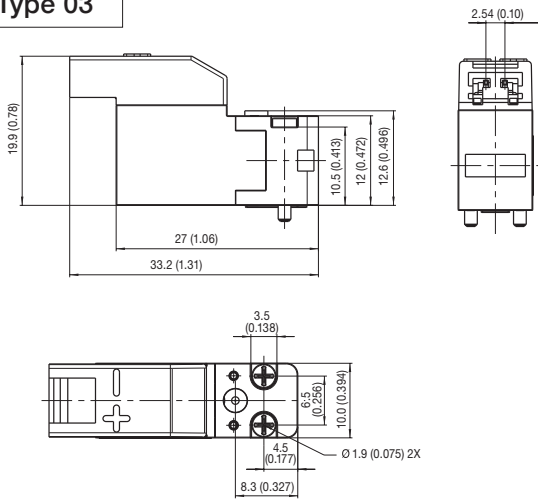
Type 01



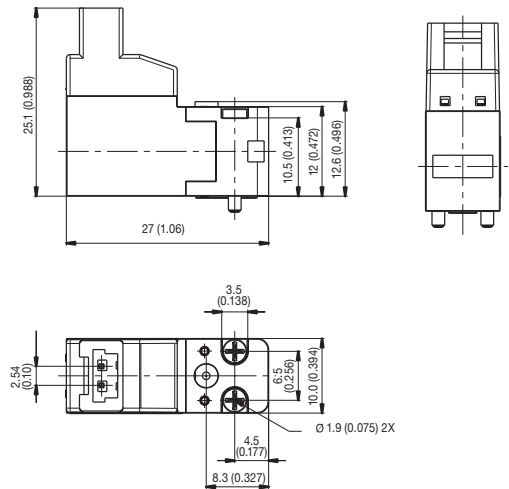
Type 02



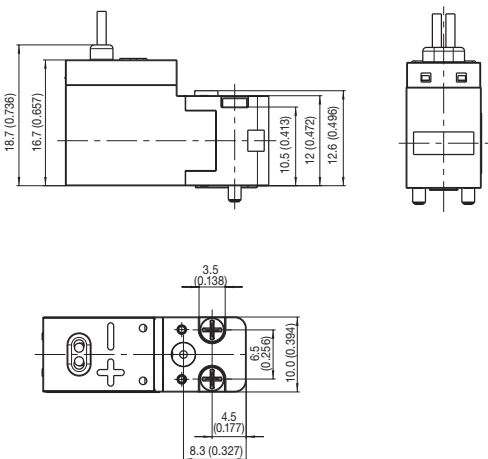
Type 03



Type 04

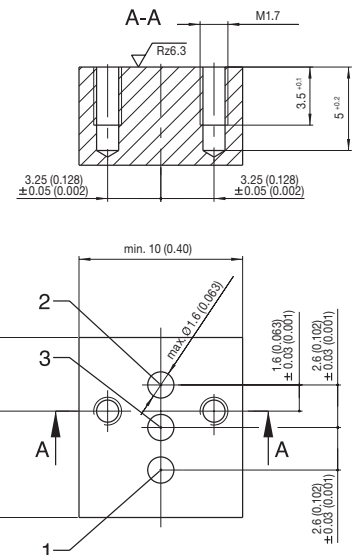


Type 05



Flange Facing

- | |
|---|
| NO |
| 3 = Pressure 2 = Outlet 1 = Exhaust |
| NC |
| 1 = Pressure 2 = Outlet 3 = Exhaust |
| Use in vacuum (NO) |
| 3 = Vacuum pump 2 = Outlet 1 = Atmosphere |
| Use in vacuum (NC) |
| 1 = Vacuum pump 2 = Outlet 3 = Atmosphere |

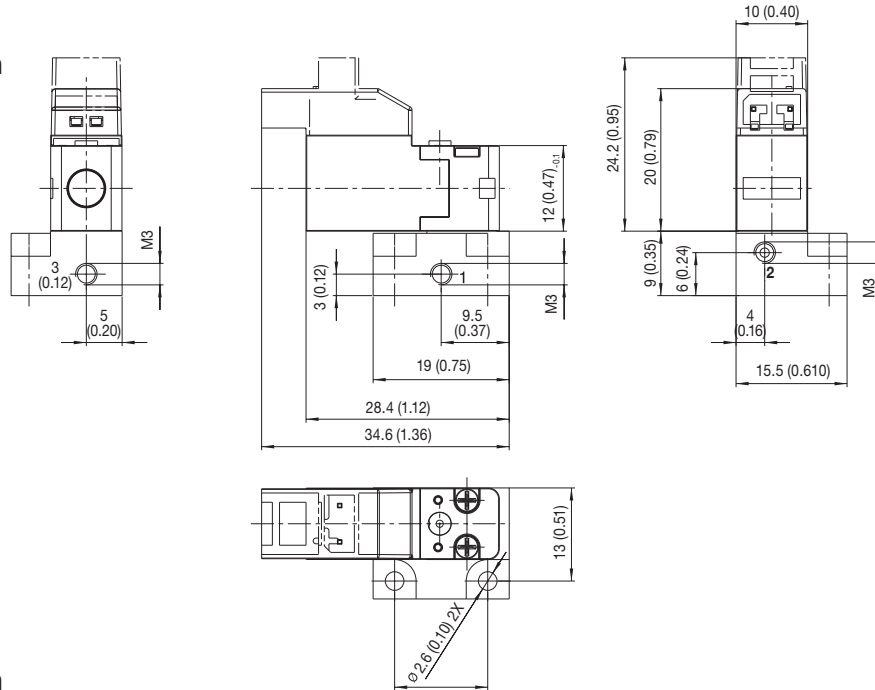


Dimensions: mm (inches)

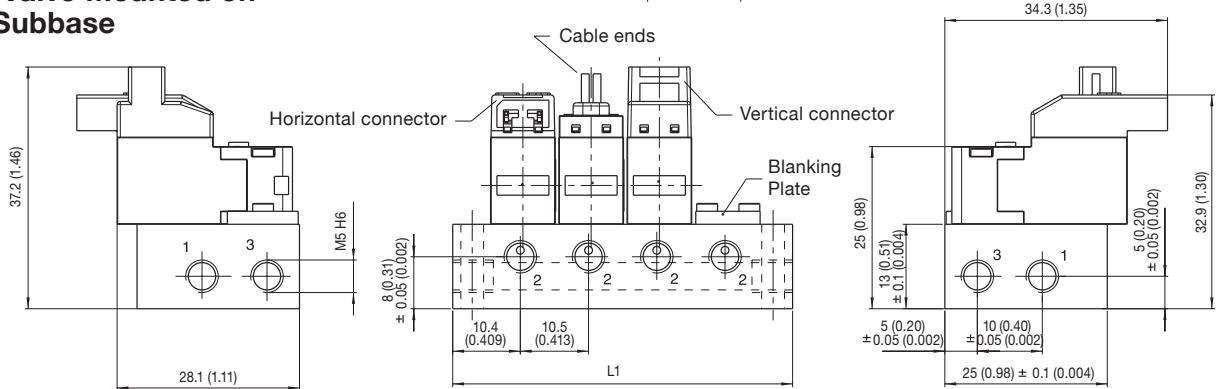
Dimensional Drawings

Solenoid Valve Mounted on Single Subbase

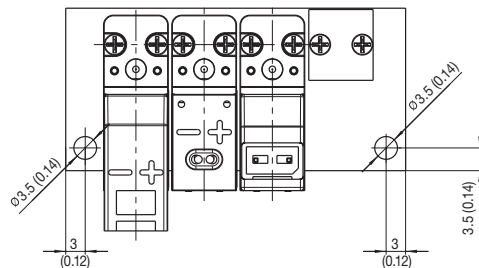
| Number of Valves | Subbase Catalog Number | Weight |
|------------------|------------------------|--------|
| | | kg |
| 1 | 35300101 | 0.015 |



Solenoid Valve Mounted on Multiple Subbase



| Number of Valves | Subbase Catalog Number* | Length | |
|------------------|-------------------------|--------------|--------------|
| | | L1 | L2 |
| 2 | 35300102 | 33.5 (1.32) | 27.5 (1.08) |
| 3 | 35300103 | 44 (1.73) | 38 (1.50) |
| 4 | 35300104 | 54.5 (2.15) | 48.5 (1.91) |
| 5 | 35300105 | 65 (2.56) | 59 (2.32) |
| 6 | 35300106 | 75.5 (2.97) | 69.5 (2.74) |
| 7 | 35300107 | 86 (3.39) | 80 (3.15) |
| 8 | 35300108 | 96.5 (3.80) | 90.5 (3.56) |
| 9 | 35300109 | 107 (4.21) | 101 (3.98) |
| 10 | 35300110 | 117.5 (4.63) | 111.5 (4.39) |



A : Blanking plate, cat. number 88135305

NOTE: The connectors must be ordered separately, please indicate the quantity and one of the following codes:

Connector, 2 wires:

Distance between contacts 5.08mm (0.2in)

- Length 0.5m (19.7in) - cat. no.: **88118801**
- Length 1.5m (59.1in) - cat. no.: **88118802**
- Length 3m (118in) - cat. no.: **88118803**

Distance between contacts 2.54mm (0.1in)

- Length 0.5m (19.7in) - cat. no.: **88118806**
- Length 1.5m (59.1in) - cat. no.: **88118807**
- Length 3m (118in) - cat. no.: **88118808**

