

Features

- Momentary pulse required to energize & to de-energize
- 3-Wire system (15 mm)
- Relay not required to reverse polarity (15 mm)
- 2-Way & 3-Way normally closed
- Fast response time
- 12 & 24 V DC
- 10 mm & 15 mm valves
- Miniature size

Pneumatic Performance Data

Temperature Range		20°F to 120°F (-5°C to 50°C)					
	Orifice/ Function	Operating Pressure	C _v	Flow Rate (scfm)		Fill Time sec/ in ³ 0-90 psi	Exhaust Time sec/ in ³ 100-10 psi
				50 psi	Max. psi		
10 mm	.75 mm NC	0 to 105 psi	.016	0.62	1.22 @ 105psi (7 Bar)	.23	.30
15 mm	1.1 mm NC	0 to 150 psi	.032	1.28	3.38 @ 150 psi (10 bar)	.11	.17
15 mm	1.6 mm NC	0 to 105 psi	.046	1.98	3.93 @ 105 psi (7 bar)	.073	.12

Cv per ANSI / (NFPA) T3.21.3

*Will operate at 1.0 psi

Electrical Performance Data

	Power (Watt)	Voltages	Voltage Tolerance	Response Time Energize	Response Time De-energize	Copper Wire Insulation Class
10 mm	1.6	24 DC	-5 % to 10%	8 ms	10 ms	F 311°F (155°C)
15 mm	4	12 DC, 24 DC	-5 % to 10%	10 ms	12 ms	F 311°F (155°C)

Flying leads wire gauge: 24 AWG

Materials

Copper, Nylon-Glass Filled, Stainless Steel, Buna-N

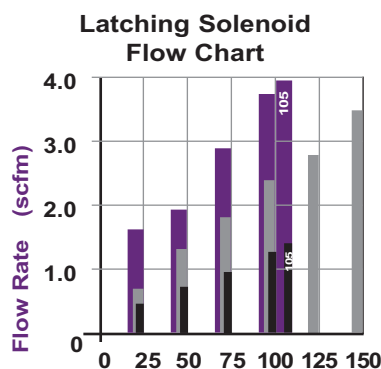
2 & 3-Way Latching Solenoid Valves 10 & 15 mm

Pneumadyne's 10 mm & 15 mm Latching Solenoid Valves are ideal for applications where power is limited or coil heating is unwanted; continuous power is not required to maintain the energized position. An internal magnet holds the valve in the open position when the power supply is removed, saving power consumption. Fast response times allow for a momentary pulse to energize and de-energize the valves. The 15 mm valves need only 10 milliseconds to energize and 12 milliseconds to de-energize.

Life Expectancy

50 million cycles- with standard working conditions-@ 2,700 maximum cycles per minute

**15 mm valves energize
in 10 milliseconds and
de-energize in
12 milliseconds**



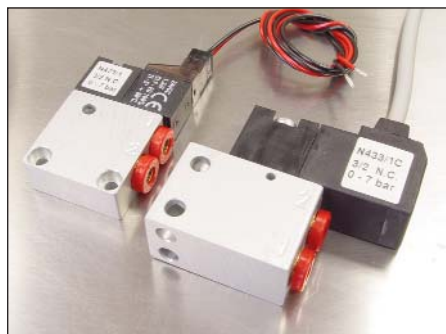
Input Pressure (psi)

- 10 mm Ø .75 mm Orifice, 1.3 W
- 15 mm Ø 1.1 mm Orifice, 4.0 W
- 15 mm Ø 1.6 mm Orifice, 4.0 W

Pneumadyne's Latching Solenoid Valves are recommended for use with our solenoid manifolds & single bases. For mounting convenience, single to 12-station manifolds are available with 10-32 (F) or M5 (F) threads.

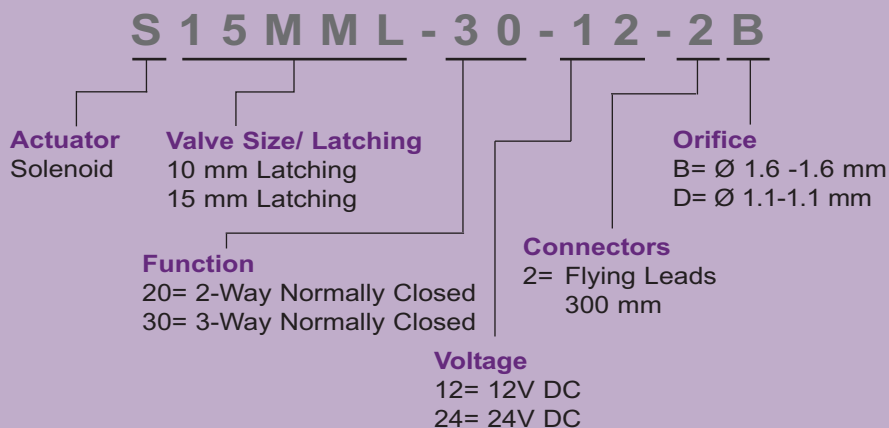


Manifolds are designed for use with specific valves. Be sure to select from the correct product grouping when [ordering manifolds and bases](#) for use with solenoid valves



[Single bases available](#) with a variety of porting options

Product Number Diagram Latching Solenoid Valve



Example: 15 mm, Latching, 3-Way, Normally Closed, 12V DC, Flying Lead Connector, 1.6 mm Ø Orifice

Function: 10 mm Valve

The 10 mm valve features a 2-wire system to reverse polarity. Applying an electrical signal to the Red wire and ground to the Black wire energizes (latches) the valve. An internal magnet holds the valve in the energized (open) position when the power supply is removed. Reversing the wires, ground to Red and electrical signal to Black, de-energizes (unlatches) the valve.

2-Wire System

Power to Red, Ground to Black – Latch / Energize
Ground to Red, Power to Black – Unlatch / De-energize

Function: 15 mm Valve

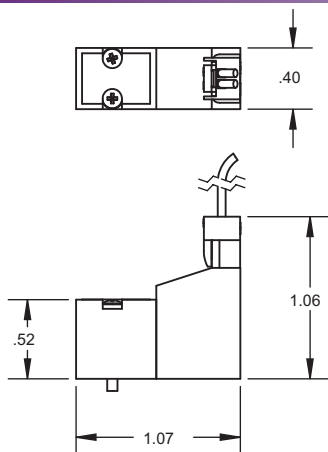
The 15 mm valves feature a 3-wire system to reverse polarity; Relays are not required. Applying an electrical signal to the Brown wire energizes (latches) the valve. The internal magnet holds the valve in the energized (open) position when the power supply is removed. Applying an electrical signal to the Blue wire de-energizes (unlatches) the valve.

3-Wire System

Brown – Latch / Energize / +
Black – Common / -
Blue – Unlatch / De-energize / +

Latching Solenoid Valve

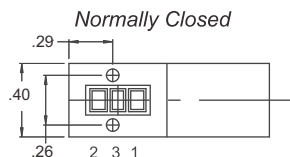
10 mm



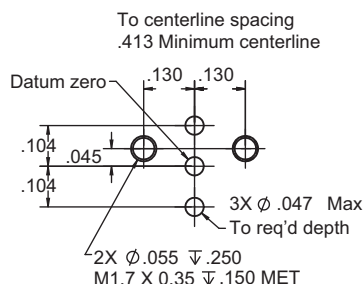
Port designation

1	Input Port
2	Output Port
3	Exhaust Port

Port Designation



Footprint



Product Information

2-Way Normally Closed

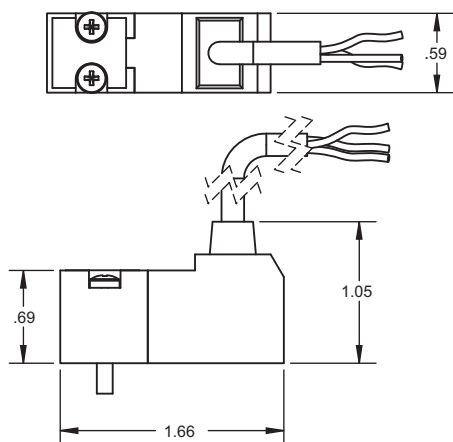
Part Number	Voltage	Orifice
15 mm (4.0 Watt)		
Flying Leads S15MML-20-12-2B	12 DC	1.6 mm
S15MML-20-12-2D	12 DC	1.1 mm
S15MML-20-24-2B	24 DC	1.6 mm
S15MML-20-24-2D	24 DC	1.1 mm

3-Way Normally Closed

Part Number	Voltage	Orifice
10 mm (1.6 Watt) Flying Leads		
S10MML-30-24-2	24 DC	.75 mm
15 mm (4.0 Watt)		
Flying Leads S15MML-30-6-2B	6 DC	1.6 mm
S15MML-30-12-2B	12 DC	1.6 mm
S15MML-30-12-2D	12 DC	1.1 mm
S15MML-30-24-2B	24 DC	1.6 mm
S15MML-30-24-2D	24 DC	1.1 mm

Latching Solenoid Valve

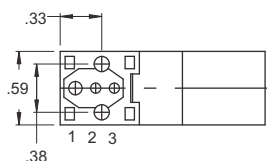
15 mm



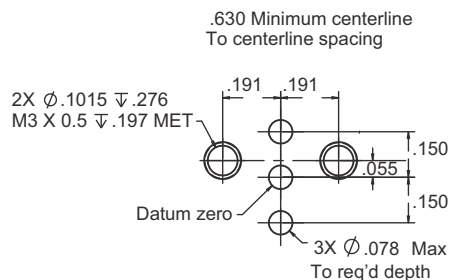
Port designation

1	Input Port
2	Output Port
3	Exhaust Port

Port Designations



Footprint



Ordering Information

- To order standard product refer to Product Information listing.
- Solenoid valve and manifold sold separately.
- Cover Plates available for use with manifolds.
- Mounting screws (2) are provided.

● All measurements in inches, unless otherwise specified. When design makes a dimensions critical- contact factory for confirmation. All dimensions shown subject to change without notice.