

M Series – Subminiature

- ▶ MOPD: 100 PSI (6.9 Bar)
- ▶ C_v Range: 0.018 to 0.070 (K_v Range: 0.017 to 0.032)
- ▶ As Low as 0.5 Watts

The M Series implements efficient power conservation in a solenoid valve that is specifically designed for sub-miniature two- and three-way pneumatic and select liquid applications. Field proven to exceed performance requirements in battery-powered applications, the M Series can be designed for extreme low wattage conditions. With a compact size, consistent high-speed response time, and reliable operation over 200 million cycles, the M Series delivers extended performance and precision flow control in a small lightweight environment.

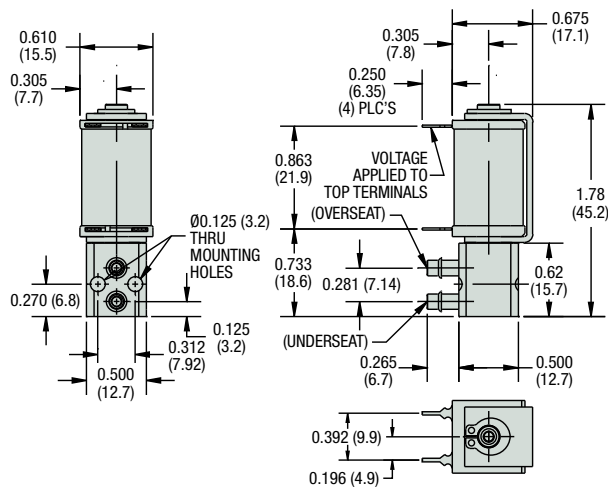
Typical Applications

Ideal for inline PCB interfacing and manifold assemblies:

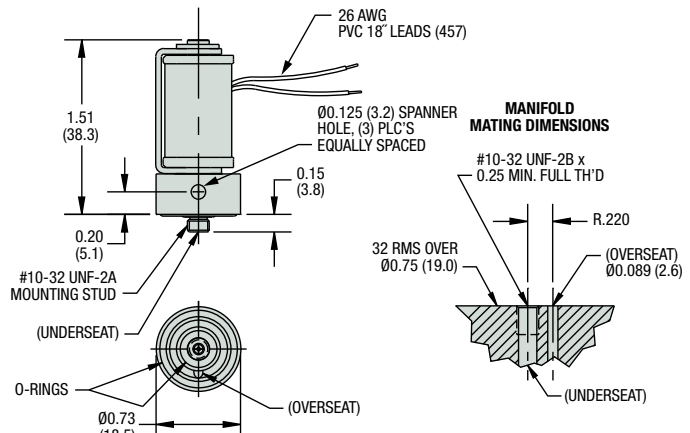
- Medical and Therapeutic Healthcare
- Clinical Chemistry and Analysis Equipment
- Drop-on-Demand Printing
- Environmental Instrumentation

Dimensions

Barbed Port Body
(PCB 4-pin shown)



Manifold Mount Body
(Lead wires shown)



How To Order

Valve Part Numbers are built from a series product codes. Use the **Bold** product codes from the choices listed on the following page to construct a complete Part Number.

M	B	20	29	-	03	8B	-	V	-	P1	-	204
Series	Power Rating	Function	MOPD		Body Material	Body Port		Seal Material		Coil Construction		Supply Voltage

Product Description from Example Shown Above:

MB2029-038B-V-P1-204

MB2029 = M Series with 1 Watt Power Rating, 2-Way Normally Closed Valve Function; 50 MOPD

-038B = Brass Body Material; 1/8" Barb Body Port

-V = Viton® Seal Material

-P1 = Tape-Wrapped (Class B) PCB 4-pin Coil Construction

-204 = 24 VDC Supply Voltage



M Series – Part Number Build

Build a Valve Part Number by filling in the boxes below using the related code numbers on this page.

M				-			-		-			-		
Series	1	2	3		4	5		6		7			8	

1 + 2 + 3 Power Rating, Valve Function, & Maximum Operating Pressure Differential

Valve Function	Code	Power Rating	MOPD		C _v	K _v	Orifice	
			psig	bar			Body	
							inches	mm
2-WAY Normally Closed	A2034	0.5W	25	1.7	0.018	0.015	1/32	0.787
	A2037		10	0.7	0.037	0.032	0.052	1.321
	B2029	1W	50	3.4	0.018	0.015	0.031	0.787
	B2034		25	1.7	0.037	0.032	0.052	1.321
	H2022	2W	100	6.9	0.018	0.015	0.031	0.787
	H2029		50	3.4	0.037	0.032	0.052	1.321

4 Body Material

- 03 Brass
- 18 Aluminum

6 Seal Material

- B Nitrile
- E EPR
- V Viton®

8 Supply Voltages

- 201 5 VDC
- 203 12 VDC
- 204 24 VDC

5 Body Port

- FM Face Mount
- 6B 5/64" (2.0mm) barb
- 8B 1/8" (3.2mm) barb
- MM Manifold Mount (#10-32 Threaded Stud)

7 Coil Construction

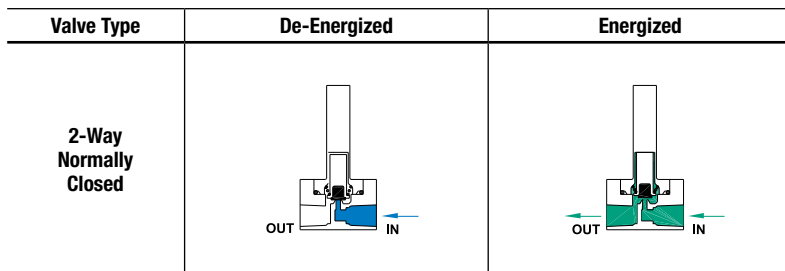
- Y1 Tape-Wrapped (Class B) Lead Wires
- P1 Tape-Wrapped (Class B) PCB 4-pin

M Series – Additional Component Details & Dimensions

2 Valve Function

Flow Schematic

Flow Key	
	Blocked Flow
	Free Flow
	O/S = Over Seat
	U/S = Under Seat



SOLENOID VALVES