

SOLENOID VALVES

4707 Massachusetts Ave. - P.O. Box 18128
 Indianapolis, Indiana 46218-0128
 Ph: 1-800-63 GOULD Fx: (317) 547-5234
 Web: <http://www.gouldvalve.com>
 E-mail: sales@gouldvalve.com

1/8"-2" NPT TYPE M & M-1 Series

2-WAY - CAST BRONZE BODIES - PACKLESS
 VELVETROL® INTERNAL PISTON PILOT OPERATED
 GENERAL PURPOSE SOLENOID VALVES
 NORMALLY CLOSED WHEN DE-ENERGIZED



- ☆ FOR GENERAL SERVICE: AIR-WATER-LIGHT OIL-STEAM
- ☆ PRESSURES: 5 PSI MINIMUM TO 250 PSI (125 PSI FOR STEAM) MAXIMUM • FULL PORT
- ☆ TEMPERATURE: -40°F TO 356°F. CLASS H COILS
- ☆ MOUNTING: INSTALL IN HORIZONTAL LINE WITH COIL UPRIGHT AND ON TOP

SIZES 1/8" - 2" NPT FULL PORT

☆ **SERVICE RATINGS** Complete Pricing, Service & Electrical Ratings are shown on the List Price Schedule. Valves will be furnished for 5-125 PSI and 120 VAC Unless Otherwise Specified.

--- NORMALLY CLOSED ONLY ---

M-3B, M-3V



GENERAL PURPOSE - AIR - WATER
 5-125, 10-250 PSI; 220°F. Max. Fluid, Class H
 24, 120, 240, 480, 120/240 VAC (50/60 Hz), 26 Watts Max.

**M4-3B
 M4-3V**

GENERAL PURPOSE - AIR - WATER - INERT GASES
 SELECTED LIQUIDS (Consult Factory)
 5-125, 10-250 PSI; 250°F. Max. Fluid, Class H
 12, 24, 120, 240, 480, 120/240 VAC (50/60 Hz), 26 Watts Max.
 12, 24, 48, 115, 230 VDC, 24 Watts Max.

M-1-3T, M-1-3EP



STEAM
 5-125 PSI; 356°F (-3EP is 5-50 PSI; 298°F) Max. Fluid, Class H
 24, 120, 240, 480 VAC (50/60 Hz), 26 Watts Max.

M4-1-3T, M4-1-3EP

STEAM - HOT WATER
 5-125 PSI (-3EP is 5-50 PSI)
 SELECTED LIQUIDS (Consult Factory)
 5-125, 10-250 PSI; 356°F (-3EP is 298°F) Max. Fluid, Class H
 12, 24, 120, 240, 480, 120/240 VAC (50/60 Hz), 26 Watts Max.
 12, 24, 48, 115, 230 VDC, 24 Watts Max.

☆ **CONSTRUCTION:**

CLASS H COILS are **NEMA 4X**, Fungus proof, Molded of Filled Polyester with 18" Leads and 1/2" Conduit Connector
 BODIES are rated to 400 psi and Cast in Bronze.
 PLUNGER TUBES are Stainless Steel silver soldered to the Brass BONNET.
 PISTON ASSEMBLIES are Brass with Filled Teflon™ PISTON RINGS, Stainless Steel EXPANDERS, and Buna, EP, Fluorocarbon (® Viton), or Teflon™ SEAT DISCS.
 SEAT SCREW seats are Buna (-3B), EP (-3EP), Fluorocarbon (® Viton) (-3V), and Teflon™ (-3T).
 PILOT VALVES are 430FR Stainless Steel. PISTON SPRINGS are Stainless Steel.

☆ **SPECIALS:** Factory settings for Slow Close (-81) or Quick Close (-84) available at no charge.
 Spring loaded Pilot (-76) for mounting in vertical pipe available. Limitations apply. Consult factory.
 Teflon™ Coated Pistons & other Special Assemblies Available. Non-Standard Coils Available with Voltage, Wattage, and Lead Wire Length to your specifications.

™Teflon is a DuPont Company trademark. ®Viton is a registered trademark of DuPont Dow Elastomers.

See Price Schedule for "Terms and Conditions of Sale"

PERFORMANCE, ORDERING AND INSTALLATION GUIDE

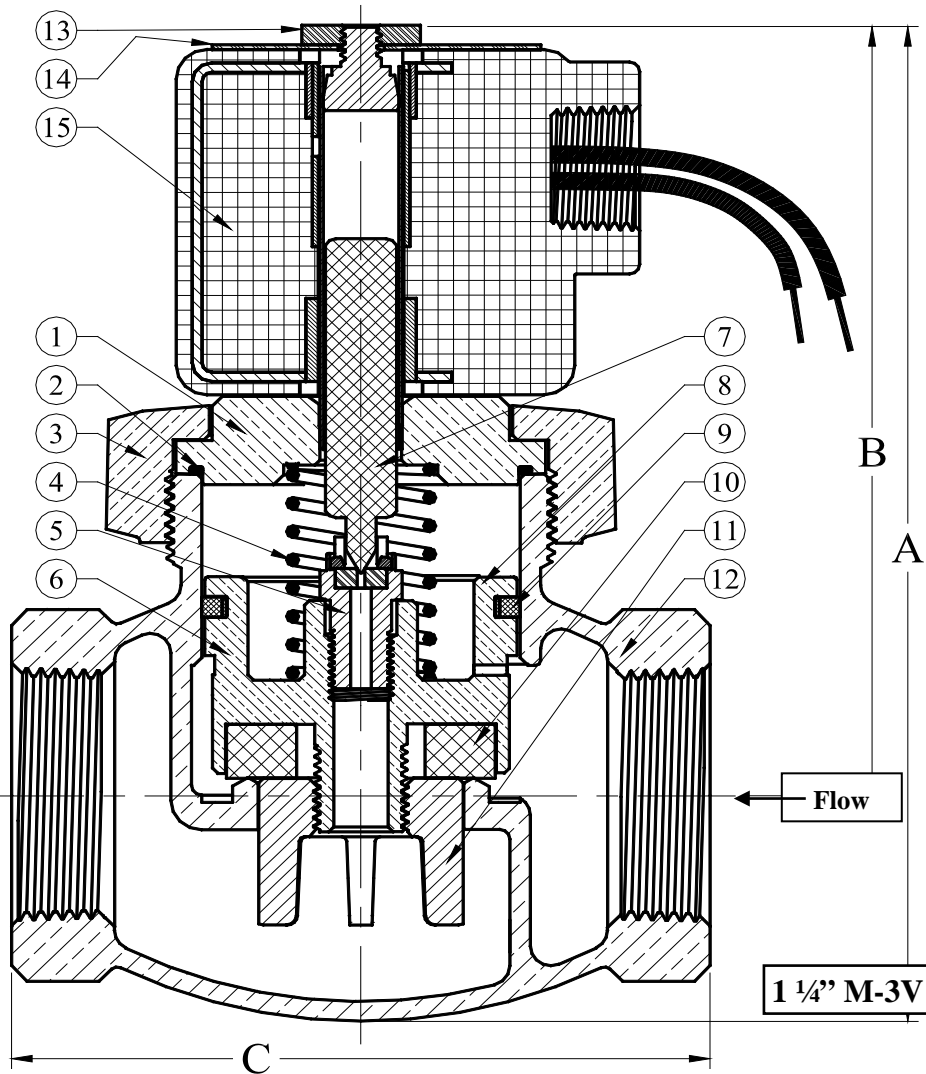
ORDERING DATA--SPECIFY PIPE SIZE, TYPE, FLUID, OPERATING PRESSURE, TEMPERATURE RANGE, ELECTRICAL SPECIFICATIONS, BACKPRESSURE, (if any).

FLOW CHARACTERISTICS--SEE FLOW CURVES IN BULLETIN 5-FL, or Cv FACTORS LISTED BELOW or on BULLETIN CP-1.

OPERATION--PISTON PILOT OPERATED. MINIMUM PRESSURE DROP OF 5 PSI OR 10 PSI (ΔP), DEPENDING ON PRESSURE RATING, IS REQUIRED ACROSS VALVE FOR OPERATION.

MOUNTING--MOUNT IN HORIZONTAL LINE WITH COIL VERTICAL ($\pm 7^\circ$) and ON TOP. INSTALL 40 MESH STRAINER (NOT LARGER) AHEAD OF THE VALVE. CHECK FOR PROPER COIL VOLTAGE. MAKE SURE THAT THE FLOW ARROW ON VALVE BODY IS POINTING IN THE DIRECTION OF FLOW.

SERVICING--SOLENOID VALVES SHOULD BE FREQUENTLY CHECKED FOR OPERATION, CLEANLINESS, & INTERNAL WEAR – REPAIR KITS ARE FACTORY AVAILABLE -BE SURE TO SPECIFY SIZE, TYPE, SERIAL NUMBER OR OPERATING DATA, VOLTAGE, PRESSURE, ETC.)



* Also -3B, and -3EP

Physical Dimensions					
Size	Cv	Weight	A	B	C
1/8"	1.3	3 lbs	5.13	4.25	2.75
1/4"	2.1	3 lbs	5.13	4.25	2.75
3/8"	2.3	3 lbs	5.13	4.25	2.75
1/2"	3.9	3 lbs	5.13	4.25	2.75
3/4"	5.1	4 lbs	5.50	4.50	3.25
1"	11.6	5 lbs	5.75	4.56	3.81
1 1/4"	12.1	7 lbs	6.50	5.06	4.25
1 1/2"	26	9 lbs	7.06	5.38	4.88
2"	48	14 lbs	8.00	5.88	5.88

Size	1	2	2	3	4	5	5	6	6	7	8	9	10	10	11	12	13	14	15
	Bonnet Assembly	M-3V* Bonnet O-Ring	M-1-3T Bonnet O-Ring	Bonnet Ring	Piston Spring	M-3V* Seat Screw	M-1-3T Seat Screw	M-3V* Piston Assembly	M-1-3T Piston Assembly	Pilot Valve	Piston Only	Piston Ring & Expander	M-3V* Seat Disc	M-1-3T Seat Disc	Guide Nut	Body	Coil Nut	Name Plate	Coil
1/8"	403-1	2-121	2-121V	N/A	37-14	415-31V	415-31T	407-3V	407-T-3T	486FR	402	57	36-12	36-12T	406	400-8	6-15	44-1	Consult Factory, Bulletin CP-1
1/4"	403-1	2-121	2-121V	N/A	37-14	415-31V	415-31T	407-3V	407-T-3T	486FR	402	57	36-12	36-12T	406	400-4	6-15	44-1	
3/8"	403-1	2-121	2-121V	N/A	37-14	415-31V	415-31T	407-3V	407-T-3T	486FR	402	57	36-12	36-12T	406	400-1	6-15	44-1	
1/2"	403-1	2-121	2-121V	N/A	37-14	415-31V	415-31T	407-3V	407-T-3T	486FR	402	57	36-12	36-12T	406	400-2	6-15	44-1	
3/4"	413-1	2-125	2-125V	N/A	37-3	415-3V	415-3T	417-3V	417-T-3T	486FR	412	159	36-34	36-34T	416	410	6-15	44-1	OR List Price Schedule
1"	423-1	N/A	N/A	428	37-3	415-31V	415-31T	427-3V	427-T-3T	486FR	422	58	36-1	36-1T	429	420	6-15	44-1	
1 1/4"	433-1	N/A	N/A	438	37-2	415-31V	415-31T	437-3V	437-T-3T	486FR	432	434	36-114	36-114T	439	430	6-15	44-1	
1 1/2"	443-1	N/A	N/A	448	37-2	415-31V	415-31T	447-3V	447-T-3T	486FR	442	93	36-112	36-112T	449	440	6-15	44-1	
2"	453-1	2-40	2-40V	458	37-2	415-31V	415-31T	457-3V	457-T-3T	486FR	452	176	36-2	36-2T	459	450	6-15	44-1	