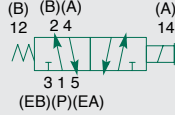


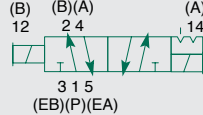


Mark 8 Series

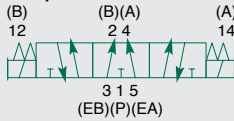
single solenoid 2 position 4-way



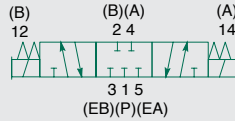
double solenoid 2 position 4-way



double solenoid 3 position 4-way open center



double solenoid 3 position 4-way closed center



5 Ported, 2 and 3 position, 4-way, Spool & Sleeve
Cv: 0.8 - 1.0

- Direct solenoid actuated
- Plug-in solenoid with indicator light
- Unlubricated or lubricated service
- Integral speed control available
- Integral regulators available
- NEMA 4 / IP 65



Technical Data

VALVE DATA	ENGLISH		METRIC	
Cv	1/8 NPTF = 0.80	1/4 NTPF = 1.0	1/8 G Tap = 0.80	1/4 G Tap = 1.0
Flow capacity	37 SCFM Upstream pressure to atmosphere @80 PSIG	46 SCFM	790 NI/m @ 6 bar upstream/5 bar downstream	985 NI/m
Operating Pressure Range	28" Hg. Vacuum to 150 PSIG		Vacuum to 10 Bar	
Temperature Range (ambient)	-10°F to +115°F		-23°C to +46°C	

Operating Data

ALL SOLENOIDS ARE CONTINUOUS DUTY RATED	12 VDC	24 VDC	24 VAC 50 Hz.	24 VAC 60 Hz.	115 VAC 50 Hz.	120 VAC 60 Hz.	230 VAC 50 Hz.	240 VAC 60 Hz.
Power (Watts)	6.0	6.0	N/A	N/A	N/A	N/A	N/A	N/A
Holding Current (Amps.)	.50	0.25	0.84	0.38	0.15	0.09	0.007	0.04
Inrush Current (Amps.)	N/A	N/A	2.25	1.85	0.41	0.38	0.021	0.19
Energize in seconds	2-Position, Single, Spring Return	0.032	0.032	0.011	0.011	0.011	0.011	0.011
	2-Position, Double, Detented	0.028	0.028	0.012	0.012	0.012	0.012	0.012
	3-Position, Spring Centered	0.028	0.028	0.012	0.012	0.012	0.012	0.012
De-energize in seconds	2-Position, Single, Spring Return	0.010	0.010	0.011	0.011	0.011	0.011	0.011
	2-Position, Double, Detented	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3-Position, Spring Centered	0.008	0.008	0.018	0.018	0.018	0.018	0.018



Mark 8 Series

How to Order

Valves

082 SA 4 15 K 0 000 30

Valve Series & Port Size

081* = 1/8
082 = 1/4
*Valve Unit Only

Valve Type

SA = Single Direct Solenoid,
Spring Return
w/Flush Non-locking Override
SS = Double Direct Solenoid w/Flush
Non-locking Override

Function

4 = 2 Position 4-Way (5/2)
5 = 3 Position 4-Way (5/3), Open Center,
Dual Pressure
6 = 3 Position 4-Way (5/3), Blocked Center
0 = Manifold Block, w/o Valve
P = Manifold Block, w/ Blank Station Plate

Mounting

00 = Valve Unit, w/o Mounting
01 = Valve Unit, Speed Control, w/o Mounting
02 = Valve Unit w/Long Screws for use w/ Speed
Control or Regulator, w/o Mounting
15 = Manifold Block, Side & Bottom Cylinder Ports
16 = Manifold Block, Auxiliary Inlet, Side & Bottom
Cylinder Ports
18 = Manifold Block, Alternate Outlet, Auxiliary Inlet,
Side & Bottom Cylinder Ports
1B = Manifold Block, Alternate Outlet, Side & Bottom
Cylinder Ports
25 = Manifold Block, Side & Bottom Cylinder Ports,
Speed Control
31 = Plug-in Base, Common Exhaust, Side Cylinder
Ports
32 = Plug-in Base, Common Exhaust, Side & Bottom
Cylinder Ports
35 = Plug-in Base, Common Exhaust, Side Cylinder
Ports, Speed Control
36 = Plug-in Base, Common Exhaust, Side & Bottom
Cylinder Ports, Speed Control
3A = Plug-in Base, Individual Exhaust, Side Cylinder
Ports
3B = Plug-in Base, Individual Exhaust, Side & Bottom
Cylinder Ports
3C = Plug-in Base, Individual Exhaust, Side Cylinder
Ports, Speed Control
3D = Plug-in Base, Individual Exhaust, Side & Bottom
Cylinder Ports, Speed Control

Voltage

00 = Manifold Block, w/o Valve
20 = 24 VAC, 50-60 Hz
30 = 110-120 VAC, 50-60 Hz
40 = 220-240 VAC, 50-60 Hz
60 = 12 VDC
61 = 24 VDC

Options

000 = No Options
11B = Flush Locking Manual Override
11Y = Extended Non-Locking Manual Override
11Z = Extended Locking Manual Override
12A = Viton Seals on Sleeve Assembly
12B = Lubricant Free Assembly
13A = 4 Foot Leads
15W = 5-Pin Straight Mini Connector in Mounting;
Pin 1=A+(14+), 2=A-(14-), 3=Gnd, 4=B+(12+), 5=B-(12-)
16T = Adds Bottom P (1) Port to Mounting
17N = Surge Suppression (DC Only)
19M = Terminal Block in Mounting
46T = Zinc Plated Solenoid Armature (AC Only)
47J = 5-Pin Straight Mini Connector in Mounting;
Pin 1=B+(12+), 2=A-(14-), 3=Gnd, 4=A+(14+), 5=B-(12-)
56Y = 4 Pin Straight Micro Connector in Mounting;
Pin 1=Not Used, 2=12+(B+), 3=Com, 4=14+(A+)

Combination Options

41W = (11B) Flush Locking Manual Override &
(17N) Surge Suppression (DC Only)
48S = (11B) Flush Locking Manual Override &
(19M) Terminal Block in Mounting
26K = (11B) Flush Locking Manual Override &
(46T) Zinc Plated Solenoid Armature (AC Only)
46Z = (11Z) Extended Locking Manual Override &
(17N) Surge Suppression (DC Only)
26C = (11Z) Extended Locking Manual Override &
(19M) Terminal Block in Mounting
48Q = (11Z) Extended Locking Manual Override &
(46T) Zinc Plated Solenoid Armature (AC Only)
46P = (17N) Surge Suppression (DC Only) &
(19M) Terminal Block in Mounting
54D = (19M) Terminal Block in Mounting & (46T) Zinc
Plated Solenoid Armature (AC Only)

Port Type

0 = NPTF Pressure Ports w/ NPTF Conduit
Ports or Valve Unit w/o Mounting
G = ISO228/1-G Pressure Ports w/ ISO
Metric - 1.5mm Pitch Conduit Ports

Wiring Option

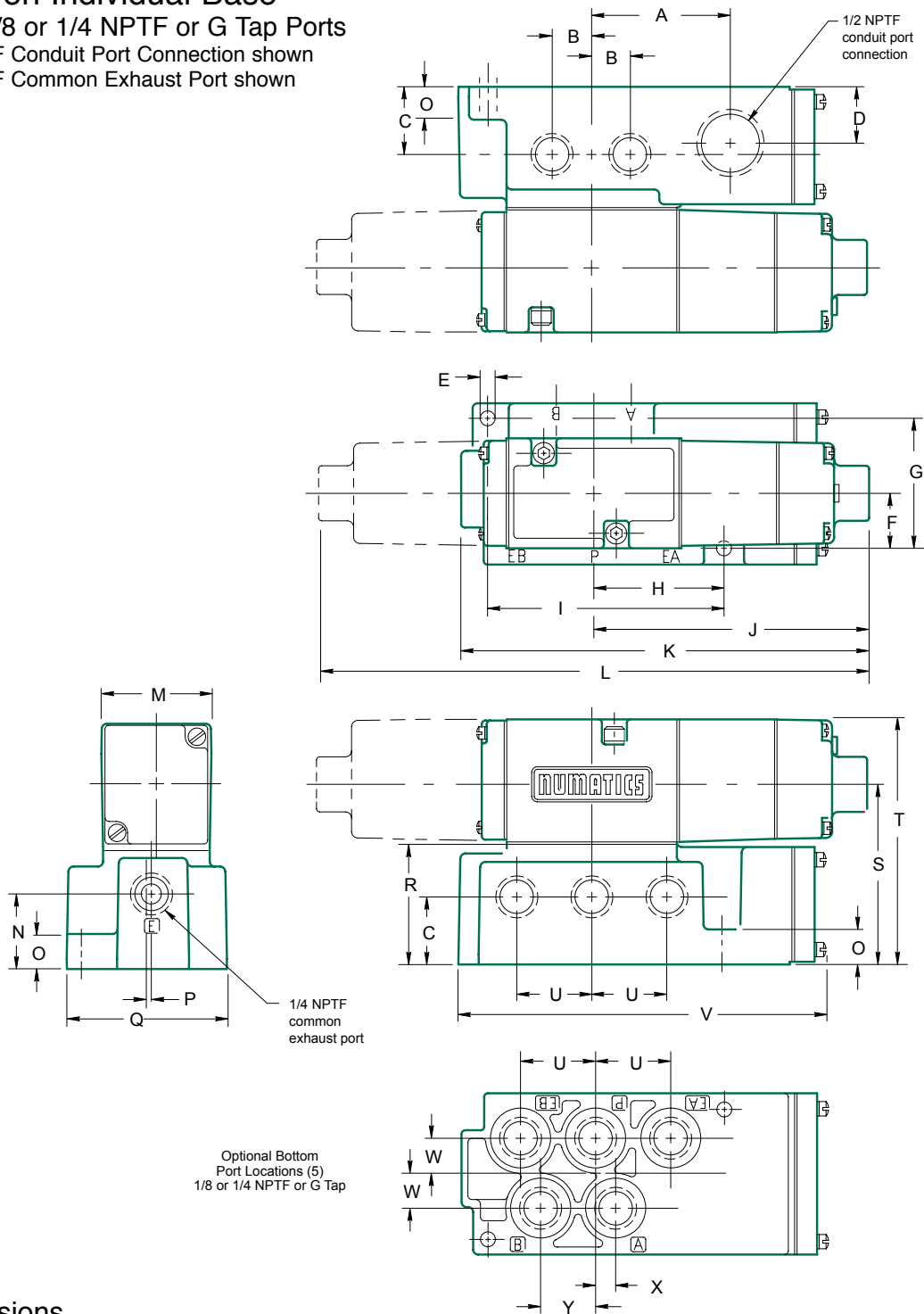
K = Plug-in, w/ Light, VAC
M = Plug-in, w/ Light, VDC
2 = DIN Plug-in Solenoid, VAC
4 = DIN Plug-in Solenoid, VDC
0 = Mounting Only w/ Electrical Receptacle
B = Mounting Only w/o Electrical Receptacle



Mark 8 Series

Valve on Individual Base

Base 1/8 or 1/4 NPTF or G Tap Ports
 1/2 NPTF Conduit Port Connection shown
 1/4 NPTF Common Exhaust Port shown



Dimensions

top dimensions = inches and bottom dimensions (in parenthesis) = millimeters

A	B	C	D	E	F	G	H	I	J (AC)	J (DC)	K (AC)	K (DC)	L (AC)	L (DC)	M	N	O	P
1.75	0.47	0.84	0.69	0.20	0.69	1.63	1.63	2.94	3.44	4.13	5.07	5.75	6.89	8.26	1.37	0.94	0.44	0.06
(44.5)	(11.9)	(21.3)	(17.5)	(5.1)	(17.5)	(41.4)	(41.4)	(74.7)	(87.4)	(104.9)	(128.8)	(146.1)	(175.0)	(209.8)	(34.8)	(23.9)	(11.2)	(1.5)
Q	R	S	T	U	V	W	X	Y										
2.00	1.50	2.23	3.03	0.94	4.57	0.45	0.25	0.69										
(50.8)	(38.1)	(56.6)	(77.0)	(23.9)	(116.1)	(11.4)	(6.4)	(17.5)										