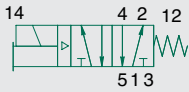


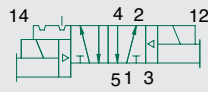


2005 Series

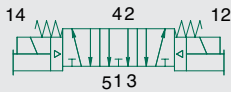
single solenoid air pilot
2 position 4-way



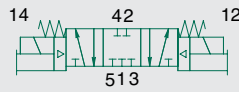
double solenoid air pilot
2 position 4-way



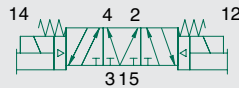
double solenoid air pilot
3 position 4-way
open center



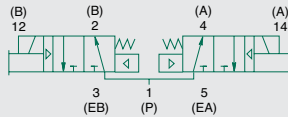
double solenoid air pilot
3 position 4-way
closed center



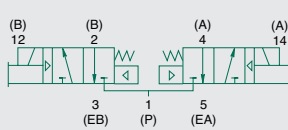
double solenoid air pilot
3 position 4-way
pressure center



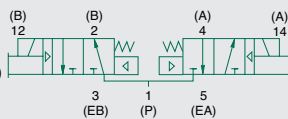
double solenoid
2 position dual 3-way
"14(A)" & "12(B)" NO



double solenoid
2 position dual 3-way
"14(A)" & "12(B)" NC



double solenoid
2 position dual 3-way
"14(A)" NC, "12(B)" NO



5 Ported, 2 and 3 position, 4-way, Spool & Sleeve
Cv: 0.56

Dual 3-Way Pack Spool Cv:0.56

- Solenoid air pilot actuated
- Low wattage plug-in - 1.0 watt for DC application
- DC solenoids polarity insensitive with surge suppression
- Plug together circuit boards eliminate internal wiring
- Integral recessed gaskets
- Interchangeable Push-in fittings to accommodate various tube sizes
- Simple conversion from internal to external pilot supply
- Modular plug-together Fieldbus electronics
- NEMA 4/IP65



Technical Data

VALVE DATA	ENGLISH	METRIC
Cv	0.56	0.56
Flow Capacity	26 SCFM @ 80 PSIG upstream pressure to atmosphere	552 NI/m @ 6 bar upstream to 5 bar downstream
Operating Pressure Range	28" Hg. Vacuum to 150 PSIG	Vacuum to 10 bar
Operating Pressure Range – 3 Way	22" Hg. Vacuum to 100 PSIG	Vacuum to 7 bar
Pilot Pressure Range	26 to 120 PSIG	1.8 to 8.2 bar
Pilot Pressure Range – 3 Way	26 to 100 PSIG	1.8 to 7 bar
Pilot Pressure Vacuum	50 to 100 PSIG	3.5 to 7 bar
Temperature Range (Ambient)	-10°F to +115°F	-23°C to +46°C

Operating Data

ALL SOLENOIDS ARE CONTINUOUS DUTY RATED	24 VDC	110-120 VAC / 50/60 Hz.		
Power (Watts)	1.35	4.2		
Holding Current (Amps)	0.04	0.04		
RESPONSE TIME IN SECONDS	ENERGIZE	DE-ENERGIZE	ENERGIZE	DE-ENERGIZE
2 - Position, Single, Spring Return	0.014	0.016	0.014	0.016
2 - Position, Double, Detented	0.013	N/A	0.013	N/A
3 - Position, Spring Centered	0.014	0.016	0.014	0.016
Dual 3 Way	0.014	0.016	0.014	0.016



How to Order

Valves

051 BB 4 Z6 M N 000 61

Valve Series & Port Size
 051* = 1/8 (Threaded only)
 052 = 1/4 (Push-in only)
 05F = 6mm
 05H = 8mm
 *Use for valve unit only (Mounting = 00)

Valve Type
 BA = Single Solenoid Pilot, (Spring Return) w/flush Non-Locking Override
 BB = Double Solenoid Pilot w/Flush non-locking Override
 00 = Blank Station

Function
 4 = 2 Position, 4-way
 5 = 3 Position, 4-way Open Center
 6 = 3 Position, 4-way Closed Center
 7 = 3 Position, 4 way Pressure Center
 A = Dual 3-way, A Normally Open - B Normally Open
 B = Dual 3-way, Vacuum Service, A Normally Open - B Normally Open
 D = Dual 3-way, A Normally Closed - B Normally Closed
 E = Dual 3-way, Vacuum Service, A Normally Closed - B Normally Closed
 0 = Manifold Block, w/o Valve
 P = Indicates Blank Station

Mounting
 00 = Valve Unit only
 Z1 = Manifold Block w/Side and Bottom Ports, Single Solenoid Internal Circuit Board
 Z2 = Manifold Block w/Side and Bottom Ports, Double Solenoid Internal Circuit Board
 Z5 = Z1 w/Speed Control
 Z6 = Z2 w/Speed Control
 R1 = Z1 w/ Ribbon Cable Connector
 R2 = Z2 w/ Ribbon Cable Connector
 R5 = Z5 w/ Ribbon Cable Connector
 R6 = Z6 w/ Ribbon Cable Connector
 3A = Individual Base, Side Ports, Individual Exhaust
 3C = 3A w/ Speed Control

Voltage
 20 = 24/50-60 VAC
 30 = 110-120/50-60 VAC
 60 = 12 VDC
 61 = 24 VDC

Options
 11B = Flush Locking Override
 11M = No Override

Port Type
 L = Push-In Fitting
 N = NPTF (1/8 only)
 G = G Tap (1/8 only)
 0 = Valve Unit only

Wiring Option
 K = Plug-In AC w/Light
 M = Plug-In DC w/Light
 0 = Blank Station Plate

NOTE:

Manifold assembly kit ordering information for:

- Electrical interface options *see page 42.*
- Fieldbus electronics see Electronics section.

Regulators

051 RS 1 Z1 J L 000 00

Valve Series & Port Size
 051* = 1/8
 052 = 1/4 (Push-in only)
 05F = 6mm
 05H = 8mm
 *Use for regulator unit only (Mounting = 00)

Regulator Type
 RS = Single Pressure to Port 1(P)
 RD = Dual Pressure to Ports 3 (EB) & 5 (EA)
 RE = Dual Pressure to Ports 4 (A) & 2 (B)
 RT = 2 Pressure Selector
 *For metric gauge replace R with E in 4th Digit.

Pressure Range
 1 = 10-130 PSIG (0.7-9 bar)
 3 = 3-30 PSIG (0.2-2 bar)
 4 = 5-60 PSIG (0.5-4 bar)

Mounting
 00 = Regulator Unit Only
 R1 = Z1 W/ Ribbon Cable Connector
 R2 = Z2 W/ Ribbon Cable Connector
 R5 = Z5 W/ Ribbon Cable Connector
 R6 = Z6 W/ Ribbon Cable Connector
 Z0 = Manifold Block w/Side and Bottom Ports, Transfer Board, Used w/RE Regulators RE only (no Z-board)
 Z1 = Manifold Block w/Side & Bottom Ports, Single Solenoid Internal Circuit Board
 Z2 = Manifold Block W/Side & Bottom Ports, Double Solenoid Internal Circuit Board
 Z5 = Z1 W/Speed Control
 Z6 = Z2 W/Speed Control
 3A = Individual Base, Side Ports, Individual Exhaust
 3C = 3A w/ Speed Control

Options
 12H = Less Gauge
 16N = Jumper on 14 (A) End
 16P = Jumper on 12 (B) End
 16W = Top Facing Gauge
 61Y = Extended Gauge
 63D = 16W + 61Y Extended Top Facing Gauge

Port Type
 L = Push-In
 N = NPTF (1/8 only)
 G = G Tap (1/8 only)

Wiring Option
 J = Plug-In Receptacle Ass'y

See Note Below

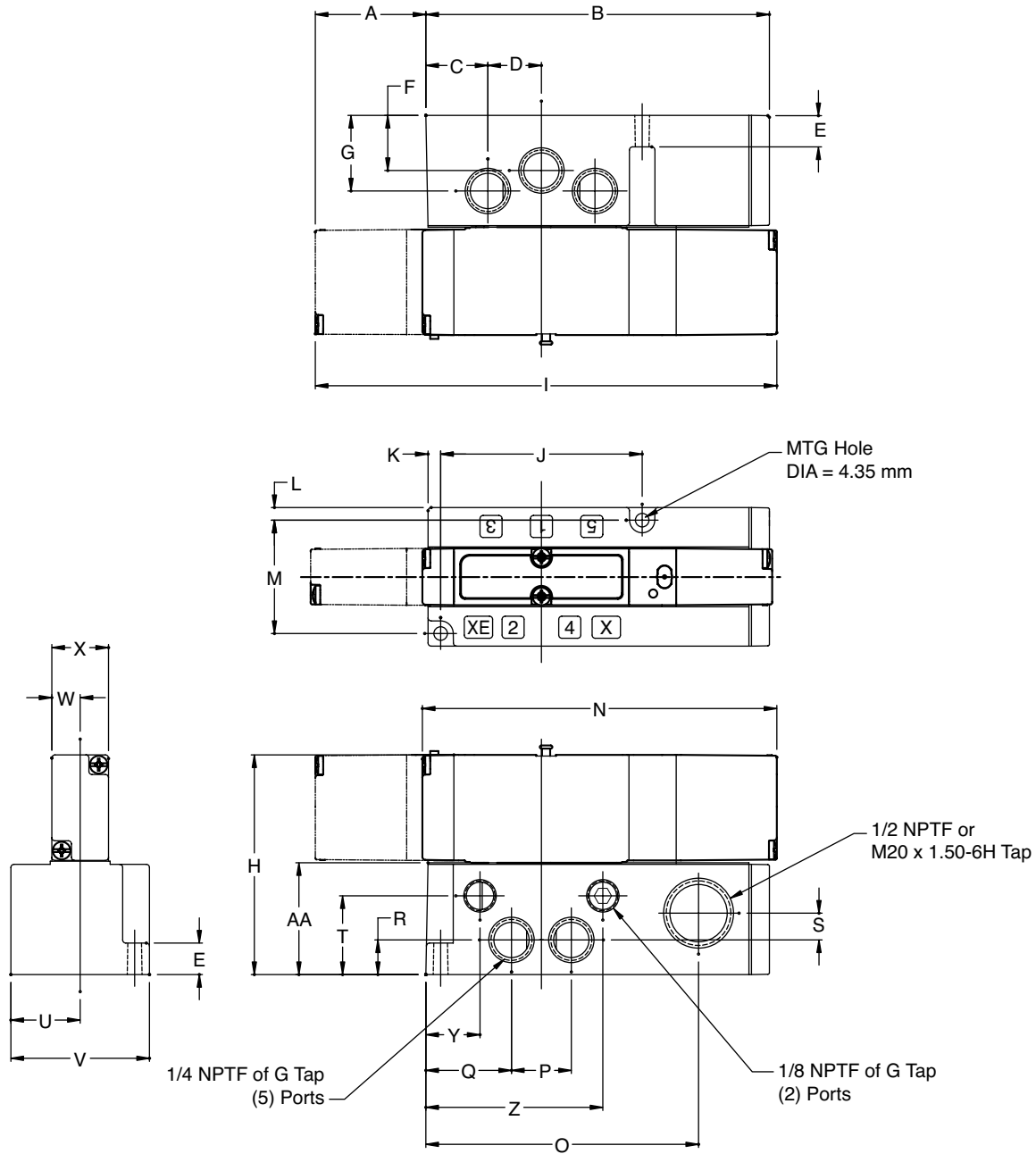


NOTE: Regulator gauges must be offset on alternating stations to prevent interference (see photo)

- * Odd numbered stations will use either standard (no option) or top facing ("16W" option) gauges.
- * Even numbered stations will use either extended standard ("61Y" option) or extended top facing ("63D" option) gauges.



Valve on Individual Base



Dimensions

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

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1.38 (35.1)	4.01 (101.9)	0.77 (19.7)	0.67 (17.0)	0.39 (10.0)	0.68 (17.5)	0.94 (24.0)	2.75 (69.75)	5.77 (146.56)	2.52 (64.0)	0.16 (4.0)	2.52 (4.0)	1.42 (36.0)	4.43 (112.56)	3.41 (86.6)	0.75 (19.0)
Q	R	S	T	U	V	W	X	Y	Z	AA					
1.07 (27.2)	0.43 (11.0)	0.33 (8.5)	0.98 (25.0)	0.87 (22.0)	1.73 (44.0)	0.35 (9.0)	0.71 (18.0)	0.68 (17.2)	2.21 (56.2)	1.42 (36.0)					