

Pneumatic Directional Control Solenoid Valves – BVS Series



BVS Series Solenoid with Leads **BVS Series Solenoid with DIN 43650 Form C**

NITRA™ pneumatic BVS series modular solenoid valves are body ported 3-port (3-way) poppet valves available in 2-position, normally open or normally closed configurations. Most models have removable flying leads that can be used with BVM series manifolds. Two models are available with an 8 mm Micro DIN connector. Units are only DIN rail mountable when used with BVM series manifolds.

Features

- Body ported, 3-port (3-way) poppet valves
- 5/32" (4 mm) push-to-connect ports
- Flow coefficients (Cv) from 0.02 to 0.05
- 2-position, single solenoid spring return
- Normally open or normally closed
- 12 VDC, 24 VDC or 120 VAC solenoid coils with LED status indication & surge suppression diode
- Flying leads or 8 mm DIN connection
- Pushbutton manual operator
- 2-year warranty

Valve Symbols

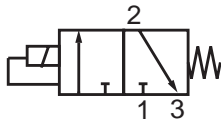


Diagram A 3/2 NC

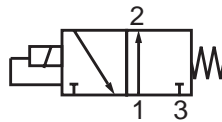
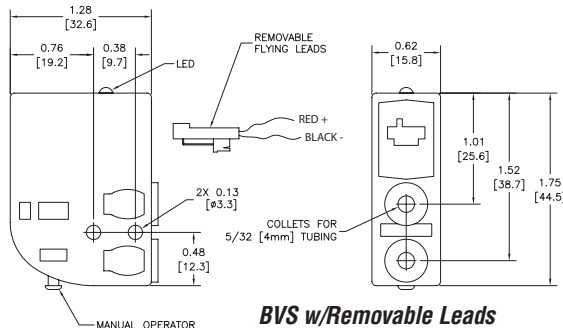


Diagram B 3/2 NO

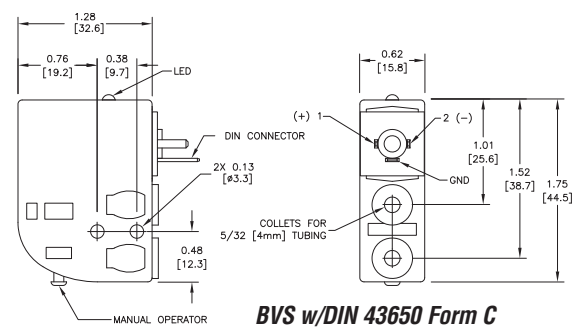
BVS (3-port, 2-position) Series Specifications									
Model	BVS-32C1-12D	BVS-32A1-24D	BVS-32C1-24D	BVS-32C1-120A	BVS-32C2-12D	BVS-32C2-24D	BVS-33C1-12D	BVS-33C1-24D	
Valve Type	Normally Closed	Normally Open	Normally Closed	Normally Closed	Normally Closed	Normally Closed	Normally Closed	Normally Closed	
Acting Diagram	Direct Solenoid Poppet								
Port Size	5/32" (4 mm) Push-to-Connect								
Orifice Size	0.9 mm (Cv=0.02)						1.4 mm (Cv=0.05)		
Fluid	Air or Inert Gas (to be filtered by 40µ filter element)								
Min. / Max. Pressure	0 - max 120 psi (8.3 bar)		0 - max 90 psi (6.2 bar)		0 - max 120 psi (8.3 bar)			0 - max 30 psi (2.1 bar)	
Vacuum	28 in. Hg								
Body	Glass Reinforced Thermoplastic								
Voltage	12 VDC	24 VDC	24 VDC	120 VAC	12 VDC	24 VDC	12 VDC	24 VDC	
Inrush Power	1.6 W	1.4 W	1.4 W	1.7 W	1.6 W	1.4 W	1.6 W	1.4 W	
Continuous ON Power	1.3 W	1.2 W	1.2 W	1.5 W	1.3 W	1.2 W	1.3 W	1.2 W	
Expected Life	50,000,000 cycles at max 3 cycles/second		10,000,000 cycles at max 3 cycles/second		50,000,000 cycles at max 3 cycles/second				
Wiring	Removable 18" Flying Leads				DIN 43650 Form C		Removable 18" Flying Leads		
Response Time	0.01 sec								
Temperature - Operation and Storage	0-120°F (-18-49°C)								
Lubrication	Not Required								
Protection	n/a					IP 65		n/a	
Price	<--->	<--->	<--->	<--->	<--->	<--->	<--->	<--->	
Weight (lbs)	0.1								

Valve Dimensions

Dimensions inches [mm]



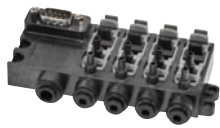
BVS w/Removable Leads



BVS w/DIN 43650 Form C



Manifolds for Modular Solenoid Valves – BVM Series



BVM - 4-Station



BVM - 8-Station

NITRA™ pneumatic BVM series modular manifolds simplify the mounting and wiring of BVS series solenoid valves*. Made of sturdy glass reinforced thermoplastic with DIN rail mounting clips included, they are available in 4- and 8-station models. Push-to-connect inlet and out connections and a 9-pin D-sub connector allow quick and easy tubing and wiring.

Features

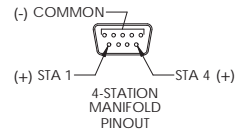
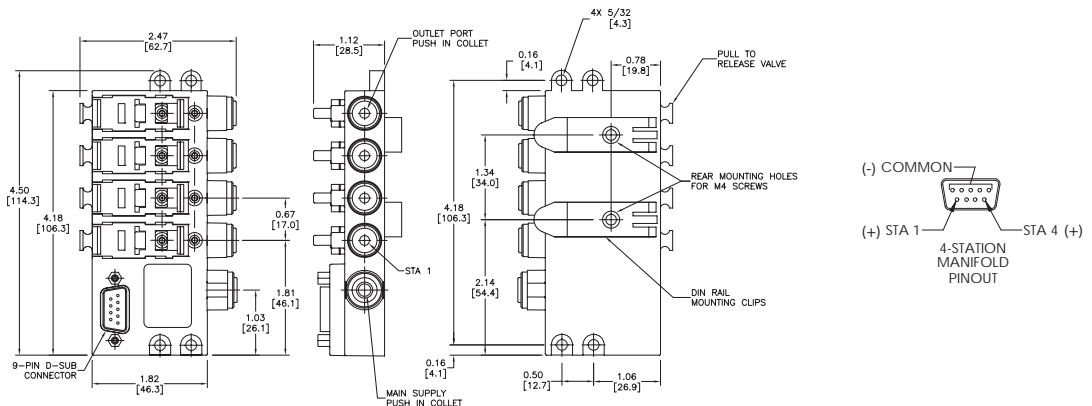
- No tools required to install/remove valves
- 4- or 8-station manifolds available
- 6 mm or 1/4" tube inlets
- 35 mm DIN rail mounting clips included
- 9-pin D-sub connector for easy wiring
- 2-year warranty

BVM Series Manifolds						
Part No.	Stations	Inlet	Outlet	Connection	Price	Weight (lbs)
BVM-3425	4	1/4"	5/32"	9-pin D-sub	<-->	0.3
BVM-346M	4	6 mm	4 mm		<-->	0.3
BVM-3825	8	1/4"	5/32"		<-->	0.5
BVM-386M	8	6 mm	4 mm		<-->	0.5

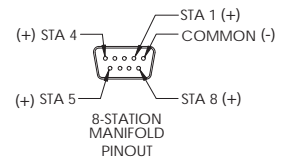
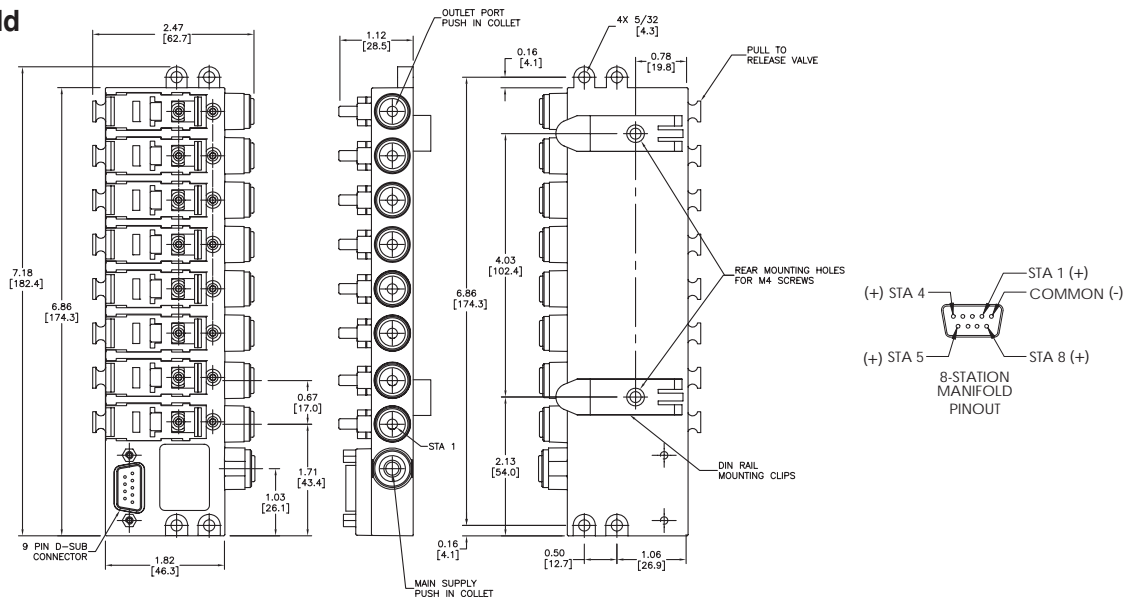
* Works with BVS series valves with flying leads ONLY. Does not accept DIN connector valves

Dimensions inches [mm]

4-Station Manifold



8-Station Manifold





Pneumatic Directional Control Solenoid Valves – BVS Series - Accessories

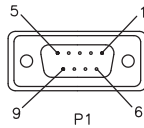
Accessories

BVM Series Manifold Accessories			
Part No.	Description	Price	Weight (lbs)
BVM-3BP	Blanking plug, modular manifold	<--->	0.1
ZL-DB9F-CBL-2P	ZIPLink pigtail cable with 9-pin D-sub female connector, 28 AWG, 2.0 meter (6.6 ft) length	<--->	0.3
ZL-DB9F-CBL-5P	ZIPLink pigtail cable with 9-pin D-sub female connector, 28 AWG, 5.0 meter (16.4 ft) length	<--->	0.5



BVM-3BP

ZL-DB9F-CBL-xP Pinout



PIN OUT	
P1	P2
1	BLACK
2	BROWN
3	RED
4	ORANGE
5	YELLOW
6	GREEN
7	BLUE
8	VIOLET
9	GREY



ZL-DB9F-CBL-xP



Above photo shows an assembled BVM Series manifold with BVS Series Solenoids and BVM blanking plug

Note: Manifold must have a BVS valve (flying leads ONLY) or BVM-3BP blanking plug installed in each station for proper operation.



See solenoid valve cables and connectors section