

B Series

2- and 3-Way Modular Design

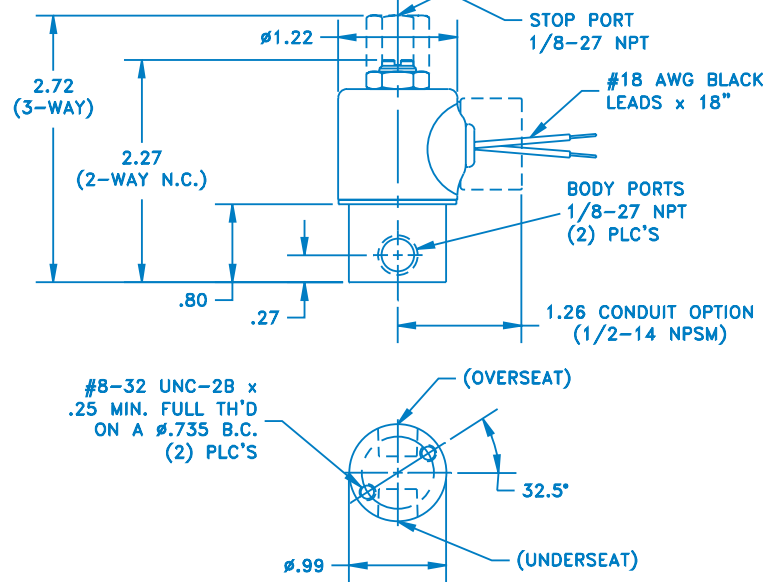


The B Series is a direct acting solenoid valve, available in 2- or 3-way functionality. Like all of our valves, the B Series has bubble tight plunger construction and is designed to last for millions of cycles in general purpose liquid, gas, and vacuum applications. The B Series is available in various orifice sizes, a variety of body materials, wattages, and coil constructions for the utmost adaptability to your application requirements. The B Series is an excellent choice for most general-purpose application requiring a C_v of .018 to .430.

An excellent choice for:

- Printing
- HVAC
- Semiconductor Equipment
- Medical Equipment

Dimensions



Configure Your B Series Part Number: Example Below

B3023-W36-SB5-PF-PFO-12VDC-G5

Prefix From Spec. Chart

36" Lead -Wires

PFE Plunger Seal

316 Stainless Steel Body

PFE O-Ring

1-Piece 316 Stainless Steel Guide Assembly

12 Volt DC



B Series: 7 Watts

Valve Options

Coil Construction

- *Tape-wrapped, Class-B, with 18" lead-wires
- W_ _ Tape-wrapped coil, lead-wires, non-standard length (specify in inches)
- 1 Encapsulated coil, Class-B, lead-wires
- 3 Encapsulated coil, Class-H, lead-wires
- 4 Encapsulated coil, Class-B, 1/4" spade terminals (3/16" spade optional)
- 10 Externally rectified coil (lead-wires only)
- 11 Tape-wrapped coil, Class-H, lead-wires
- HC Molded coil, Class-F, EN175301-803 Style B, Industrial, 11mm, 2+1 poles (2-way N.C. only)
- HC2 Encapsulated coil, Class-B, EN175301-803 Style C, Industrial, 9.4mm, 2+1 poles
- TK Higher efficiency coil (2-way N.C. only)

Body Material

- B_ _1_ *303 Stainless Steel (grommet housing)
- B_ _2_ *303 Stainless Steel (1/2" conduit housing)
- BB Brass
- SB 304 Stainless Steel
- SB5 316 Stainless Steel
- SBF 430F Stainless Steel

Plunger Seal Material

- *Nitrile
- E EPDM
- GV Gasoline Viton (2-way N.C. only)
- N Neoprene
- NS Nitrile (NSF/FDA material)
- PF Perfluoroelastomer
- R Rulon (2-way N.C. only)
- T Teflon
- V Viton

O-Ring Material

- *Nitrile
- EO EPDM
- NO Neoprene
- NSO Nitrile (NSF/FDA material)
- PFO Perfluoroelastomer
- TO Teflon
- VO Viton

Body Port Configuration

- *1/8-27 NPT female thread
- LB 1/4-18 NPT female thread
- BD #10-32 female straight thread (max. orifice = 1/8")
- LT 1/8-28 BSPT female thread
- LU 1/4-19 BSPT female thread (2-way N.C. only)
- MM Manifold mount (1/4-28 UNF-2A mounting stud)
- MM3 Manifold mount (5/16-24 UNF-2A mounting stud)
- OB Omit body (operator style)
- MB Bottom metering (2-way N.C. only)
- BI Bottom over-seat port, female thread (max. orifice = 1/8")
- BIM Bottom over-seat port, 1/8-27 NPT male thread (max. orifice = 1/8", brass body only)
- BO Bottom under-seat port, female thread
- BOM Bottom under-seat port, 1/8-27 NPT male thread (max. orifice = 1/8", brass body only)
- RL 90° porting - left hand
- RR 90° porting - right hand
- BS Stop port, #10-32 female straight thread

Voltage

- __ _VDC DC (specify voltage)
- __ _VAC AC (specify voltage; copper shading ring or rectified w/out shading ring)

Additional Options

- Y Yoke (2-way N.C. only)
- WM Mounting bracket
- TP Teflon coated plunger
- QO Quiet operation (2-way N.C. only)
- S Silver shading ring
- OC Cleaned for oxygen use
- VAC Vacuum application (0 to 29.5" Hg)
- G1 One-piece 303 Stainless Steel guide assembly (standard on 2-way normally open and all 3-way valves)

- G5 One piece 316 Stainless Steel guide assembly
- SH 1" Diameter housing, grommet
- SC 1" Diameter housing, conduit

* B Series will be built with these options unless otherwise indicated. The option number is dropped in the final part number when using these materials..

Performance Specifications

Part # Prefix	ORIFICE		MOPD (psig)	C _v	
	BODY	STOP		BODY	STOP
2-WAY Normally Closed					
B20_1	1/16		400	0.065	
B20_2	5/64		300	0.090	
B20_3	3/32		250	0.155	
B20_4	7/64		200	0.200	
B20_5	1/8		150	0.240	
B20_6	5/32		100	0.300	
B20_7	3/16		50	0.430	
2-WAY Normally Opened					
B22_1		1/32	400		0.019
B22_2		3/64	300		0.040
B22_3		1/16	200		0.075
B22_4		5/64	150		0.090
3-WAY Normally Closed, Free Vent/Line Connection					
B3_ _1	1/32	1/32	250	0.018	0.018
B3_ _2	3/64	3/64	175	0.040	0.040
B3_ _3	1/16	1/16	125	0.065	0.070
B3_ _4	5/64	5/64	100	0.090	0.090
B3_ _5	3/32	5/64	75	0.155	0.090
B3_ _6	1/8	5/64	50	0.240	0.090
B3_ _7	5/32	5/64	15	0.300	0.090
3-WAY Normally Open					
B32_1	1/32	1/32	200	0.018	0.018
B32_2	3/64	3/64	150	0.040	0.040
B32_3	1/16	1/16	125	0.065	0.070
B32_4	5/64	5/64	100	0.090	0.090
B32_5	3/32	5/64	75	0.155	0.090
B32_6	1/8	5/64	50	0.240	0.090
B32_7	5/32	5/64	15	0.300	0.090
3-WAY Multi Purpose					
B33_1	1/32	1/32	175	0.018	0.018
B33_2	3/64	3/64	125	0.040	0.040
B33_3	1/16	1/16	100	0.065	0.070
B33_4	5/64	5/64	75	0.090	0.090
B33_5	3/32	5/64	50	0.155	0.090
B33_6	1/8	5/64	25	0.240	0.090
B33_7	5/32	5/64	15	0.300	0.090
3-WAY Directional Control					
B34_1	1/32	1/32	275	0.018	0.018
B34_2	3/64	3/64	200	0.040	0.040
B34_3	1/16	1/16	150	0.065	0.070
B34_4	5/64	5/64	100	0.090	0.090
B34_5	3/32	5/64	75	0.155	0.090
B34_6	1/8	5/64	50	0.240	0.090
B34_7	5/32	5/64	25	0.300	0.090