

## B Series – Modular

- ▶ MOPD: 400 PSI
- ▶ C<sub>v</sub> Range: 0.018 to 0.430
- ▶ 7 Watts

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<sub>v</sub> of 0.018 to 0.430.

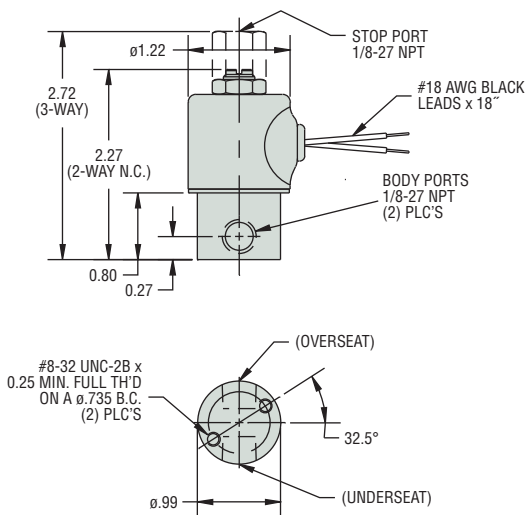


### Typical Applications

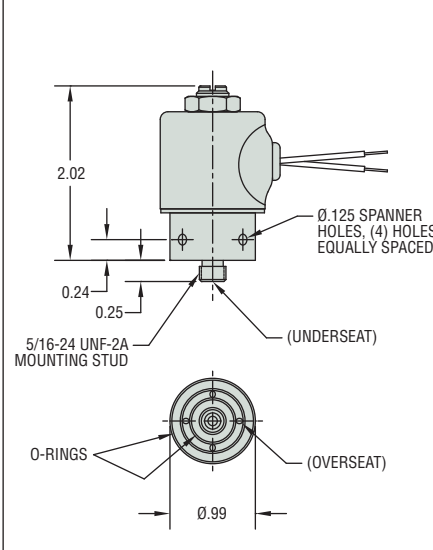
- Printing
- HVAC
- Semiconductor Equipment
- Medical Equipment

### Dimensions

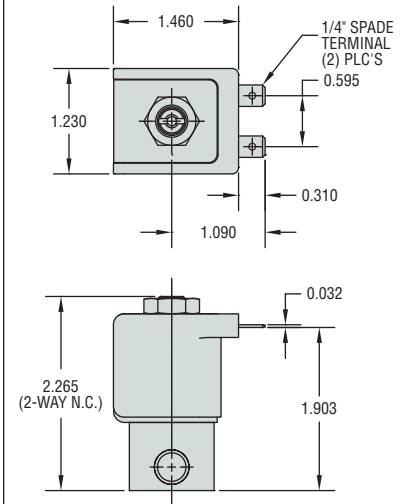
#### Threaded Port Body



#### Manifold Mount Body

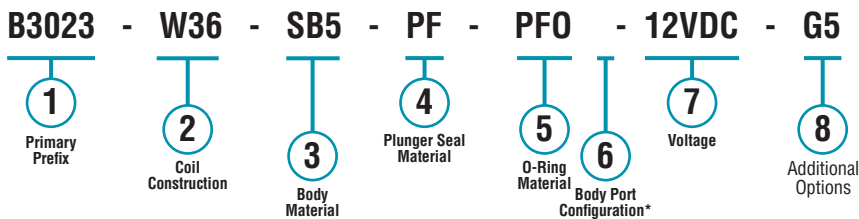


#### Molded Coil



### How To Order

Use the **Bold** characters from the choices listed on the following page to construct a product code.



\* Blank entry indicates a "Standard" selection (1/8-27 NPT female thread, in this case).

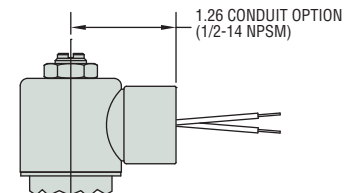
#### Example:

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

2-Way N.C. Free Vent (with 1.26 Conduit Option) solenoid valve, with 36" tape-wrapped coil, lead-wired, non-standard length, 316 stainless steel body, perfluoroelastomer plunger seal, perfluoroelastomer o-ring, 1/8-27 NPT female thread, operating at 12 VDC, and includes a one piece 316 stainless steel guide assembly option.

#### Alternate 1/2" Conduit Housing

Available on all body configurations



Part Prefix Table ①

	Orifice		MOPD (psig)	C <sub>v</sub>		① Primary Prefix	
	Body	Stop		Body	Stop	Grommet Housing	Conduit Housing
2-WAY N.C.	1/16	—	400	0.065	—	B2011	B2021
	5/64	—	300	0.090	—	B2012	B2022
	3/32	—	250	0.155	—	B2013	B2023
	7/64	—	200	0.200	—	B2014	B2024
	1/8	—	150	0.240	—	B2015	B2025
	5/32	—	100	0.300	—	B2016	B2026
	3/16	—	50	0.430	—	B2017	B2027
2-WAY N.O.	—	1/32	400	—	0.019	B2211	B2221
	—	3/64	300	—	0.040	B2212	B2222
	—	1/16	200	—	0.075	B2213	B2223
	—	5/64	150	—	0.090	B2214	B2224
3-WAY N.C. Free Vent	1/32	1/32	250	0.018	0.018	B3011	B3021
	3/64	3/64	175	0.040	0.040	B3012	B3022
	1/16	1/16	125	0.065	0.070	B3013	B3023
	5/64	5/64	100	0.090	0.090	B3014	B3024
	3/32	5/64	75	0.155	0.090	B3015	B3025
	1/8	5/64	50	0.240	0.090	B3016	B3026
	5/32	5/64	15	0.300	0.090	B3017	B3027
3-WAY N.C. Line Connection	1/32	1/32	250	0.018	0.018	B3111	B3121
	3/64	3/64	175	0.040	0.040	B3112	B3122
	1/16	1/16	125	0.065	0.070	B3113	B3123
	5/64	5/64	100	0.090	0.090	B3114	B3124
	3/32	5/64	75	0.155	0.090	B3115	B3125
	1/8	5/64	50	0.240	0.090	B3116	B3126
3-WAY N.O.	1/32	1/32	200	0.018	0.018	B3211	B3221
	3/64	3/64	150	0.040	0.040	B3212	B3222
	1/16	1/16	125	0.065	0.070	B3213	B3223
	5/64	5/64	100	0.090	0.090	B3214	B3224
	3/32	5/64	75	0.155	0.090	B3215	B3225
	1/8	5/64	50	0.240	0.090	B3216	B3226
3-WAY Multi Purpose	5/32	5/64	15	0.300	0.090	B3217	B3227
	1/32	1/32	175	0.018	0.018	B3311	B3321
	3/64	3/64	125	0.040	0.040	B3312	B3322
	1/16	1/16	100	0.065	0.070	B3313	B3323
	5/64	5/64	75	0.090	0.090	B3314	B3324
	3/32	5/64	50	0.155	0.090	B3315	B3325
3-WAY Directional Control	1/8	5/64	25	0.240	0.090	B3316	B3326
	5/32	5/64	15	0.300	0.090	B3317	B3327
	1/32	1/32	275	0.018	0.018	B3411	B3421
	3/64	3/64	200	0.040	0.040	B3412	B3422
	1/16	1/16	150	0.065	0.070	B3413	B3423
	5/64	5/64	100	0.090	0.090	B3414	B3424
	3/32	5/64	75	0.155	0.090	B3415	B3425
	1/8	5/64	50	0.240	0.090	B3416	B3426
	5/32	5/64	25	0.300	0.090	B3417	B3427

② Coil Construction

- (blank) = Tape-wrapped, Class-B, with 18" lead wires\*
- W\_\_\_ = Tape-wrapped coil, lead-wires, non-standard length (specify length)
- 1M = Over molded coil, Class-B, lead-wires
- 2M = Over molded coil, Class-F, lead-wires
- 3M = Over molded coil, Class-H, lead-wires
- 4M = Over molded coil, Class-B, 1/4" spade terminals
- 5M = Over molded coil, Class F, 1/4" spade terminals
- 6M = Over molded coil Class H, 1/4" spade terminals
- 4 = Encapsulated coil, Class-B, 3/16" spade terminals
- 5 = Encapsulated coil, Class-B, 0.110" spade terminals
- 8 = Encapsulated coil, Class F, 3/16" spade terminals
- 10 = Externally rectified coil (lead wires only)
- 11 = Tape-wrapped coil, Class H, lead wires

② Coil Construction, continued

- HC = molded coil, Class F, EN175301-803 Form B DIN, Industrial, 11mm, 2+1 poles
- HC2 = Encapsulated coil, Class B, EN175301-803 Form C DIN, Industrial, 9.4mm, 2+1 poles
- TK = Higher efficiency coil (2-way N.C. only)

③ Body Material

- (blank) = 303 Stainless Steel\*
- BB = Brass
- SB = 304 Stainless Steel
- SB5 = 316 Stainless Steel
- SBF = 430F Stainless Steel

④ Plunger Seal Material

- (blank) = Nitrile\*
- E = EPR
- 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 = PTFE
- V = Viton®

⑤ O-Ring Material

- (blank) = Nitrile\*
- EO = EPR
- NO = Neoprene
- NSO = Nitrile (NSF/FDA material)
- PFO = Perfluoroelastomer
- TO = PTFE
- VO = Viton®

⑥ Body Port Configuration

- (blank) = 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 = 5/64", 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

⑦ Voltage†† (see note below)

- \_\_\_VDC = DC (specify DC voltage)
- \_\_\_VAC = AC (specify AC voltage; includes copper shading ring)

⑧ Additional Options

- Y = Yoke (2-way N.C. only)
- WM = Mounting bracket
- TP = PTFE 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

\* Standard selection; will be used unless otherwise specified. Standard selections are not referenced in final part number.

† Internal rectified available. Consult factory.

†† Can be AC rectified without shading ring. Use coil construction Code 10.

††† Teflon® o-ring not suitable for manifold mount.