

B Series – Modular

- ▶ MOPD: 400 PSI (28 Bar)
- ▶ C_v Range: 0.018 to 0.430 (K_v Range: 0.016 to 0.372)
- ▶ 7 Watts

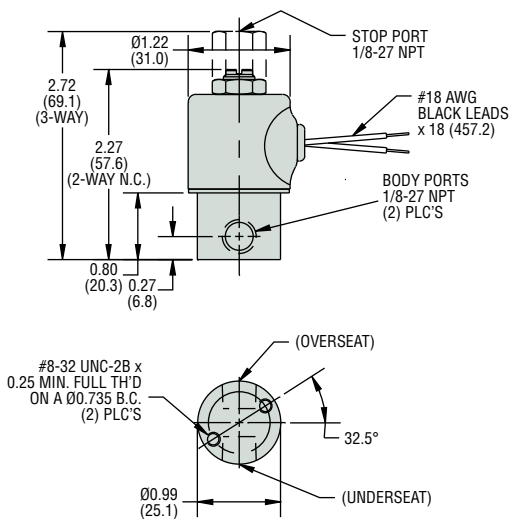
The B Series is a direct acting solenoid valve, available in 2- or 3-way functionality. Like all of our valves, the B Series has bubble tight plunger construction and is designed to last for millions of cycles in general purpose liquid, gas, and vacuum applications. The B Series is available in various 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_v of 0.018 to 0.430 (K_v of 0.016 to 0.372).

Typical Applications

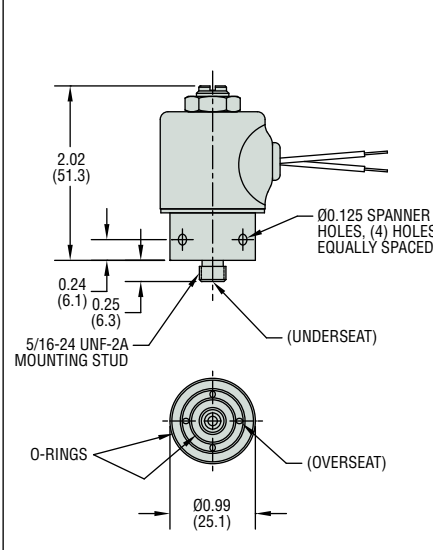
- Printing
- HVAC
- Semiconductor Equipment
- Medical Equipment

Dimensions

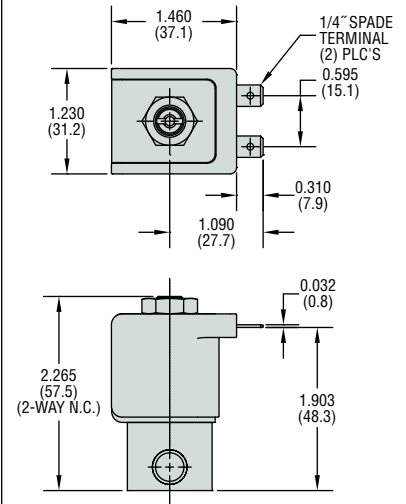
Threaded Port Body



Manifold Mount Body

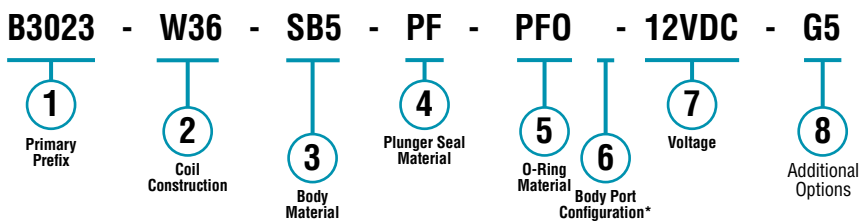


Molded Coil



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" (91cm) 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.

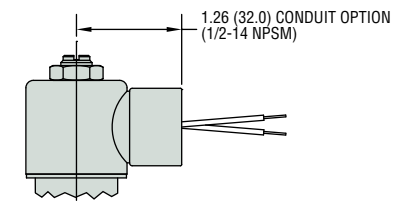


Next Day Shipping
On Many Configurations



Alternate 1/2" Conduit Housing

Available on all body configurations





Take advantage of next day shipping by making your selections from those marked with the Lightning Bolt icon.

Part Prefix Table ①

| | Orifice | | | | MOPD | | C _v | | K _v | | ① Primary Prefix | |
|-------------------------------------|---------|------|--------|------|------|-----|----------------|-------|----------------|-------|------------------|-----------------|
| | Body | | Stop | | psig | bar | Body | Stop | Body | Stop | Grommet Housing | Conduit Housing |
| | inches | mm | inches | mm | | | | | | | | |
| 2-WAY N.C. | 1/16 | 1.59 | — | — | 400 | 28 | 0.065 | — | 0.056 | — | B2011 | B2021 |
| | 5/64 | 1.98 | — | — | 300 | 21 | 0.090 | — | 0.078 | — | B2012 | B2022 |
| | 3/32 | 2.38 | — | — | 250 | 17 | 0.155 | — | 0.134 | — | B2013 | B2023 |
| | 7/64 | 2.78 | — | — | 200 | 14 | 0.200 | — | 0.173 | — | B2014 | B2024 |
| | 1/8 | 3.18 | — | — | 150 | 10 | 0.240 | — | 0.208 | — | B2015 | B2025 |
| | 5/32 | 3.97 | — | — | 100 | 6.9 | 0.300 | — | 0.259 | — | B2016 | B2026 |
| | 3/16 | 4.76 | — | — | 50 | 3.4 | 0.430 | — | 0.372 | — | B2017 | B2027 |
| 2-WAY N.O. | — | — | 1/32 | 0.79 | 400 | 28 | — | 0.019 | — | 0.016 | B2211 | B2221 |
| | — | — | 3/64 | 1.19 | 300 | 21 | — | 0.040 | — | 0.035 | B2212 | B2222 |
| | — | — | 1/16 | 1.59 | 200 | 14 | — | 0.075 | — | 0.065 | B2213 | B2223 |
| | — | — | 5/64 | 1.98 | 150 | 10 | — | 0.090 | — | 0.078 | B2214 | B2224 |
| 3-WAY N.C. Free Vent | 1/32 | 0.79 | 1/32 | 0.79 | 250 | 17 | 0.018 | 0.018 | 0.016 | 0.016 | B3011 | B3021 |
| | 3/64 | 1.19 | 3/64 | 1.19 | 175 | 12 | 0.040 | 0.040 | 0.035 | 0.035 | B3012 | B3022 |
| | 1/16 | 1.59 | 1/16 | 1.59 | 125 | 8.6 | 0.065 | 0.070 | 0.056 | 0.061 | B3013 | B3023 |
| | 5/64 | 1.98 | 5/64 | 1.98 | 100 | 6.9 | 0.090 | 0.090 | 0.078 | 0.078 | B3014 | B3024 |
| | 3/32 | 2.38 | 5/64 | 1.98 | 75 | 5.2 | 0.155 | 0.090 | 0.134 | 0.078 | B3015 | B3025 |
| | 1/8 | 3.18 | 5/64 | 1.98 | 50 | 3.4 | 0.240 | 0.090 | 0.208 | 0.078 | B3016 | B3026 |
| | 5/32 | 3.97 | 5/64 | 1.98 | 15 | 1.0 | 0.300 | 0.090 | 0.259 | 0.078 | B3017 | B3027 |
| 3-WAY N.C. Line Connection | 1/32 | 0.79 | 1/32 | 0.79 | 250 | 17 | 0.018 | 0.018 | 0.016 | 0.016 | B3111 | B3121 |
| | 3/64 | 1.19 | 3/64 | 1.19 | 175 | 12 | 0.040 | 0.040 | 0.035 | 0.035 | B3112 | B3122 |
| | 1/16 | 1.59 | 1/16 | 1.59 | 125 | 8.6 | 0.065 | 0.070 | 0.056 | 0.061 | B3113 | B3123 |
| | 5/64 | 1.98 | 5/64 | 1.98 | 100 | 6.9 | 0.090 | 0.090 | 0.078 | 0.078 | B3114 | B3124 |
| | 3/32 | 2.38 | 5/64 | 1.98 | 75 | 5.2 | 0.155 | 0.090 | 0.134 | 0.078 | B3115 | B3125 |
| | 1/8 | 3.18 | 5/64 | 1.98 | 50 | 3.4 | 0.240 | 0.090 | 0.208 | 0.078 | B3116 | B3126 |
| | 5/32 | 3.97 | 5/64 | 1.98 | 15 | 1.0 | 0.300 | 0.090 | 0.259 | 0.078 | B3117 | B3127 |
| 3-WAY N.O. | 1/32 | 0.79 | 1/32 | 0.79 | 200 | 14 | 0.018 | 0.018 | 0.016 | 0.016 | B3211 | B3221 |
| | 3/64 | 1.19 | 3/64 | 1.19 | 150 | 10 | 0.040 | 0.040 | 0.035 | 0.035 | B3212 | B3222 |
| | 1/16 | 1.59 | 1/16 | 1.59 | 125 | 8.6 | 0.065 | 0.070 | 0.056 | 0.061 | B3213 | B3223 |
| | 5/64 | 1.98 | 5/64 | 1.98 | 100 | 6.9 | 0.090 | 0.090 | 0.078 | 0.078 | B3214 | B3224 |
| | 3/32 | 2.38 | 5/64 | 1.98 | 75 | 5.2 | 0.155 | 0.090 | 0.134 | 0.078 | B3215 | B3225 |
| | 1/8 | 3.18 | 5/64 | 1.98 | 50 | 3.4 | 0.240 | 0.090 | 0.208 | 0.078 | B3216 | B3226 |
| | 5/32 | 3.97 | 5/64 | 1.98 | 15 | 1.0 | 0.300 | 0.090 | 0.259 | 0.078 | B3217 | B3227 |
| 3-WAY Multi Purpose | 1/32 | 0.79 | 1/32 | 0.79 | 175 | 12 | 0.018 | 0.018 | 0.016 | 0.016 | B3311 | B3321 |
| | 3/64 | 1.19 | 3/64 | 1.19 | 125 | 8.6 | 0.040 | 0.040 | 0.035 | 0.035 | B3312 | B3322 |
| | 1/16 | 1.59 | 1/16 | 1.59 | 100 | 6.9 | 0.065 | 0.070 | 0.056 | 0.061 | B3313 | B3323 |
| | 5/64 | 1.98 | 5/64 | 1.98 | 75 | 5.2 | 0.090 | 0.090 | 0.078 | 0.078 | B3314 | B3324 |
| | 3/32 | 2.38 | 5/64 | 1.98 | 50 | 3.4 | 0.155 | 0.090 | 0.134 | 0.078 | B3315 | B3325 |
| | 1/8 | 3.18 | 5/64 | 1.98 | 25 | 1.7 | 0.240 | 0.090 | 0.208 | 0.078 | B3316 | B3326 |
| | 5/32 | 3.97 | 5/64 | 1.98 | 15 | 1.0 | 0.300 | 0.090 | 0.259 | 0.078 | B3317 | B3327 |
| 3-WAY Directional Control | 1/32 | 0.79 | 1/32 | 0.79 | 275 | 19 | 0.018 | 0.018 | 0.016 | 0.016 | B3411 | B3421 |
| | 3/64 | 1.19 | 3/64 | 1.19 | 200 | 14 | 0.040 | 0.040 | 0.035 | 0.035 | B3412 | B3422 |
| | 1/16 | 1.59 | 1/16 | 1.59 | 150 | 10 | 0.065 | 0.070 | 0.056 | 0.061 | B3413 | B3423 |
| | 5/64 | 1.98 | 5/64 | 1.98 | 100 | 6.9 | 0.090 | 0.090 | 0.078 | 0.078 | B3414 | B3424 |
| | 3/32 | 2.38 | 5/64 | 1.98 | 75 | 5.2 | 0.155 | 0.090 | 0.134 | 0.078 | B3415 | B3425 |
| | 1/8 | 3.18 | 5/64 | 1.98 | 50 | 3.4 | 0.240 | 0.090 | 0.208 | 0.078 | B3416 | B3426 |
| | 5/32 | 3.97 | 5/64 | 1.98 | 25 | 1.7 | 0.300 | 0.090 | 0.259 | 0.078 | B3417 | B3427 |

SOLENOID VALVES

2 Coil Construction

- (blank)** = Tape-wrapped, Class B, with 18" (45.7cm) lead wires* ⚡
- W**___ = Tape-wrapped coil, lead wires, non-standard length (specify length)
 - 1** = Encapsulated coil, Class B, lead wires
 - 2M** = Over molded coil, Class F, lead wires (2-way N.C. only)
 - 3** = Encapsulated coil, Class H, lead wires
 - 3M** = Over molded coil, Class H, lead wires (2-way N.C. only)
 - 4** = Encapsulated coil, Class B, 3/16" (4.76mm) spade terminals
 - 5M** = Over molded coil, Class F, 1/4" (6.35mm) spade terminals (2-way N.C. only)
 - 6M** = Over molded coil, Class H, 1/4" (6.35mm) spade terminals (2-way N.C. only)
 - 10** = Externally rectified coil, AC Voltages (lead wires only) ⚡
 - 11** = Tape-wrapped coil, Class H, lead wires
- HC2** = Encapsulated coil, Class B, EN175301-803 Form C DIN, Industrial, 9.4mm, 2+1 poles

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" (3.18mm)
- 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" (3.18mm)
- BIM** = Bottom over-seat port, 1/8-27 NPT male thread
 - max. orifice = 5/64" (1.98mm), 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" (3.18mm), 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)

- C203** = 12 VDC ⚡
- C204** = 24 VDC ⚡
- C301** = 120/50/60R (add Coil Option -10) ⚡
- C303** = 240/50/60R (add Coil Option -10) ⚡
- ___ **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
- QQ** = Quiet operation (2-way N.C. only)
- S** = Silver shading ring
- OC** = Cleaned for oxygen use
- VAC** = Vacuum application - 0 to 29.5" Hg (0 to 1000mBar)
- 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.



Take advantage of next day shipping by making your selections from those marked with the Lightning Bolt icon.