



**Next Day Shipping**  
On Many Configurations



## D Series – High Flow

- ▶ MOPD: 900 PSI (62 Bar)
- ▶  $C_v$  Range: 0.045 to 0.880 ( $K_v$  Range: 0.038 to 0.748)
- ▶ 10 Watts

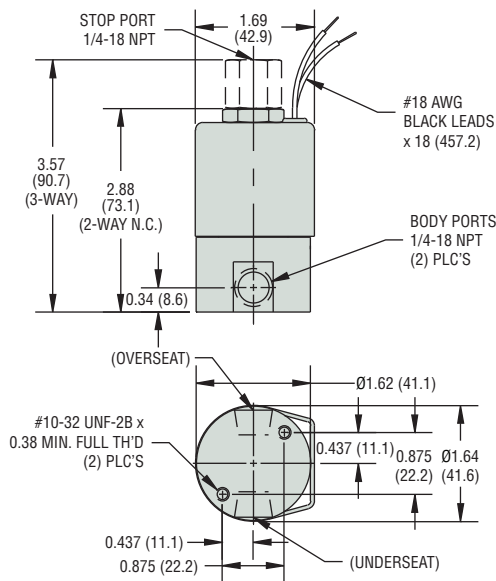
For maximum flow in a miniature solenoid valve the D Series valves delivers a wide range of  $C_v$  ( $K_v$ ) values and maximum operating pressures. The D Series is also available in multiple body materials, seal materials, coil constructions, voltages, and wattages. Proven to perform for millions of cycles without failure, the D valve—as with the entire valve series—is ideal for manifold configurations, sub-assemblies, and complete fluidic systems. The D Series is the largest in a progression—A Series, B Series, and C Series—of the highly flexible, modular design, (general purpose) valves.

### Typical Applications

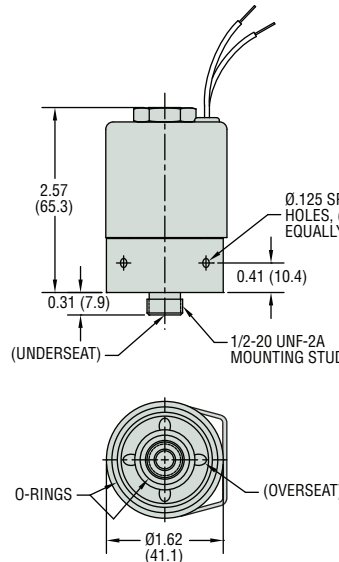
- Agriculture
- Defense
- Sterilization Equipment
- Industrial Automation

### Dimensions

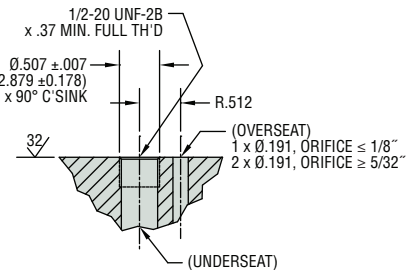
#### Threaded Port Body



#### Manifold Mount Body

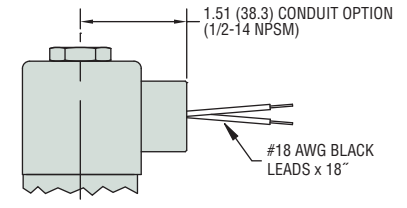


#### MANIFOLD MATING DIMENSIONS



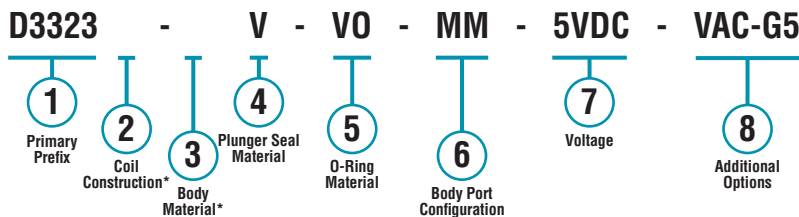
#### Alternate 1/2" Conduit Housing

Available on all body configurations



### 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 (Tape-wrapped, Class-B, with 18" (46cm) lead-wires and 303 Stainless Steel, in this case).

#### Example:

D3323-V-VO-MM-5VDC-VAC-G5

3-Way Multi Purpose (with 1.26 Conduit Option) solenoid valve, with tape-wrapped, Class-B, with 18" (46cm) lead-wires, 303 stainless steel body, Viton® plunger seal, Viton® o-ring, manifold mount (1/2-20 UNF-2A mounting stud, max. orifice = 1/4" (35.6cm)), operating at 5 VDC, and includes vacuum application (0 to 29.5" Hg (0 to 1000mBar)) and one piece 316 stainless steel guide assembly options.












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 <sub>v</sub> |       | K <sub>v</sub> |       | ① Primary Prefix |                 |
|----------------------------------|---------|------|--------|------|-------|------|----------------|-------|----------------|-------|------------------|-----------------|
|                                  | Body    |      | Stop   |      | psig  | bar  | Body           | Stop  | Body           | Stop  | Grommet Housing  | Conduit Housing |
|                                  | inches  | mm   | inches | mm   |       |      |                |       |                |       |                  |                 |
| 2-WAY<br>N.C.                    | 3/64    | 1.19 | —      | —    | 900   | 62   | 0.045          | —     | 0.038          | —     | D2011            | D2021           |
|                                  | 1/16    | 1.98 | —      | —    | 650   | 45   | 0.080          | —     | 0.068          | —     | D2012            | D2022           |
|                                  | 3/32    | 2.38 | —      | —    | 350   | 24   | 0.150          | —     | 0.128          | —     | D2013            | D2023           |
|                                  | 1/8     | 3.18 | —      | —    | 225   | 16   | 0.210          | —     | 0.179          | —     | D2014            | D2024           |
|                                  | 5/32    | 3.97 | —      | —    | 130   | 9.0  | 0.380          | —     | 0.323          | —     | D2015            | D2025           |
|                                  | 3/16    | 4.76 | —      | —    | 85    | 5.9  | 0.430          | —     | 0.366          | —     | D2016            | D2026           |
|                                  | 1/4     | 6.35 | —      | —    | 50    | 3.4  | 0.700          | —     | 0.595          | —     | D2017            | D2027           |
|                                  | 5/16    | 7.94 | —      | —    | 20    | 1.4  | 0.850          | —     | 0.723          | —     | D2018            | D2028           |
|                                  | 3/8     | 9.53 | —      | —    | 10    | 0.7  | 0.880          | —     | 0.748          | —     | D2019            | D2029           |
| 2-WAY<br>N.O.                    | —       | —    | 3/64   | 1.19 | 900   | 62   | —              | 0.045 | —              | 0.038 | D2211            | D2221           |
|                                  | —       | —    | 1/16   | 1.59 | 550   | 38   | —              | 0.080 | —              | 0.068 | D2212            | D2222           |
|                                  | —       | —    | 5/64   | 1.98 | 300   | 21   | —              | 0.110 | —              | 0.094 | D2213            | D2223           |
|                                  | —       | —    | 3/32   | 2.38 | 175   | 12   | —              | 0.150 | —              | 0.128 | D2214            | D2224           |
|                                  | —       | —    | 1/8    | 3.18 | 110** | 7.6  | —              | 0.210 | —              | 0.179 | D2215            | D2225           |
|                                  | —       | —    | 5/32   | 3.97 | 60**  | 4.1  | —              | 0.380 | —              | 0.323 | D2216            | D2226           |
| 3-WAY<br>N.C.<br>Free Vent       | 1/16    | 1.59 | 1/16   | 1.59 | 175   | 12   | 0.080          | 0.080 | 0.068          | 0.068 | D3011            | D3021           |
|                                  | 5/64    | 1.98 | 5/64   | 1.98 | 150   | 10   | 0.110          | 0.110 | 0.094          | 0.094 | D3012            | D3022           |
|                                  | 3/32    | 2.38 | 3/32   | 2.38 | 125   | 8.6  | 0.150          | 0.150 | 0.128          | 0.128 | D3013            | D3023           |
|                                  | 1/8     | 3.18 | 1/8    | 3.18 | 85**  | 5.9  | 0.210          | 0.210 | 0.179          | 0.179 | D3014            | D3024           |
|                                  | 5/32    | 3.97 | 5/32   | 3.97 | 45**  | 3.1  | 0.380          | 0.380 | 0.323          | 0.323 | D3015            | D3025           |
|                                  | 3/16    | 4.76 | 5/32   | 3.97 | 30**  | 2.1  | 0.430          | 0.380 | 0.366          | 0.323 | D3016            | D3026           |
|                                  | 1/4     | 6.35 | 5/32   | 3.97 | 10**  | 0.7  | 0.700          | 0.380 | 0.595          | 0.323 | D3017            | D3027           |
| 3-WAY<br>N.C.<br>Line Connection | 1/16    | 1.59 | 1/16   | 1.59 | 175   | 12   | 0.080          | 0.080 | 0.068          | 0.068 | D3111            | D3121           |
|                                  | 5/64    | 1.98 | 5/64   | 1.98 | 150   | 10   | 0.110          | 0.110 | 0.094          | 0.094 | D3112            | D3122           |
|                                  | 3/32    | 2.38 | 3/32   | 2.38 | 125   | 8.6  | 0.150          | 0.150 | 0.128          | 0.128 | D3113            | D3123           |
|                                  | 1/8     | 3.18 | 1/8    | 3.18 | 85**  | 5.9  | 0.210          | 0.210 | 0.179          | 0.179 | D3114            | D3124           |
|                                  | 5/32    | 3.97 | 5/32   | 3.97 | 45**  | 3.1  | 0.380          | 0.380 | 0.323          | 0.323 | D3115            | D3125           |
|                                  | 3/16    | 4.76 | 5/32   | 3.97 | 30**  | 2.1  | 0.430          | 0.380 | 0.366          | 0.323 | D3116            | D3126           |
|                                  | 1/4     | 6.35 | 5/32   | 3.97 | 10**  | 0.7  | 0.700          | 0.380 | 0.595          | 0.323 | D3117            | D3127           |
| 3-WAY<br>N.O.                    | 1/16    | 1.59 | 1/16   | 1.59 | 200   | 14   | 0.080          | 0.080 | 0.068          | 0.068 | D3211            | D3221           |
|                                  | 5/64    | 1.98 | 5/64   | 1.98 | 175   | 12   | 0.110          | 0.110 | 0.094          | 0.094 | D3212            | D3222           |
|                                  | 3/32    | 2.38 | 3/32   | 2.38 | 150   | 10   | 0.150          | 0.150 | 0.128          | 0.128 | D3213            | D3223           |
|                                  | 1/8     | 3.18 | 1/8    | 3.18 | 100** | 6.9  | 0.210          | 0.210 | 0.179          | 0.179 | D3214            | D3224           |
|                                  | 5/32    | 3.97 | 5/32   | 3.97 | 50**  | 3.4  | 0.380          | 0.380 | 0.323          | 0.323 | D3215            | D3225           |
|                                  | 3/16    | 4.76 | 5/32   | 3.97 | 35**  | 2.4  | 0.430          | 0.380 | 0.366          | 0.323 | D3216            | D3226           |
|                                  | 1/4     | 6.35 | 5/32   | 3.97 | 15**  | 1.0  | 0.700          | 0.380 | 0.595          | 0.323 | D3217            | D3227           |
| 3-WAY<br>Multi Purpose           | 1/16    | 1.59 | 1/16   | 1.59 | 160   | 11   | 0.080          | 0.080 | 0.068          | 0.068 | D3311            | D3321           |
|                                  | 5/64    | 1.98 | 5/64   | 1.98 | 130   | 9.0  | 0.110          | 0.110 | 0.094          | 0.094 | D3312            | D3322           |
|                                  | 3/32    | 2.38 | 3/32   | 2.38 | 110   | 7.6  | 0.150          | 0.150 | 0.128          | 0.128 | D3313            | D3323           |
|                                  | 1/8     | 3.18 | 1/8    | 3.18 | 75**  | 5.2  | 0.210          | 0.210 | 0.179          | 0.179 | D3314            | D3324           |
|                                  | 5/32    | 3.97 | 5/32   | 3.97 | 40**  | 2.8  | 0.380          | 0.380 | 0.323          | 0.323 | D3315            | D3325           |
|                                  | 3/16    | 4.76 | 5/32   | 3.97 | 25**  | 1.7  | 0.430          | 0.380 | 0.366          | 0.323 | D3316            | D3326           |
|                                  | 1/4     | 6.35 | 5/32   | 3.97 | 10**  | 0.7  | 0.700          | 0.380 | 0.595          | 0.323 | D3317            | D3327           |
| 3-WAY<br>Directional<br>Control  | 1/16    | 1.59 | 1/16   | 1.59 | 225   | 16   | 0.080          | 0.080 | 0.068          | 0.068 | D3411            | D3421           |
|                                  | 5/64    | 1.98 | 5/64   | 1.98 | 185   | 13   | 0.110          | 0.110 | 0.094          | 0.094 | D3412            | D3422           |
|                                  | 3/32    | 2.38 | 3/32   | 2.38 | 150   | 10.3 | 0.150          | 0.150 | 0.128          | 0.128 | D3413            | D3423           |
|                                  | 1/8     | 3.18 | 1/8    | 3.18 | 110** | 7.6  | 0.210          | 0.210 | 0.179          | 0.179 | D3414            | D3424           |
|                                  | 5/32    | 3.97 | 5/32   | 3.97 | 60**  | 4.1  | 0.380          | 0.380 | 0.323          | 0.323 | D3415            | D3425           |
|                                  | 3/16    | 4.76 | 5/32   | 4.76 | 40**  | 2.8  | 0.430          | 0.380 | 0.366          | 0.323 | D3416            | D3426           |
|                                  | 1/4     | 6.35 | 5/32   | 3.97 | 20**  | 1.4  | 0.700          | 0.380 | 0.595          | 0.323 | D3417            | D3427           |

\*\* DC or rectified coil only

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 in inches)**1** = Encapsulated coil, Class B, lead wires**3** = Encapsulated coil, Class H, lead wires**4** = Encapsulated coil, Class B, 1/4" (6.35mm) spade terminals**10** = Externally rectified coil, AC Voltages (lead-wires only) **11** = Tape-wrapped coil, Class H, lead wires**HC** = Encapsulated coil, Class B, EN175301-803 Style A, Industrial, 18mm, 2+1 poles**HC2** = Encapsulated coil, Class B, EN175301-803 Style C, Industrial, 9.4mm, 2+1 poles**3 Body Material****(blank)** = 303 Stainless Steel\* **BB** = Brass**SB5** = 316 Stainless Steel**4 Plunger Seal Material****(blank)** = Nitrile\* **E** = EPR **GV** = Gasoline Viton® – 2-way normally open and 3-way valves  
max. orifice = 3/32" (2.38mm)**N** = Neoprene – 2-way normally closed valves only,  
max. orifice = 1/4" (6.35mm) **NS** = Nitrile – NSF/FDA, max. orifice = 1/4" (6.35mm) **PF** = Perfluoroelastomer – max. orifice = 1/4" (6.35mm) **R** = Rulon® – 2-way normally closed valves only,  
max. orifice = 1/4" (6.35mm)**T** = PTFE – max. orifice = 1/4" (6.35mm)**V** = Viton® **5 O-Ring Material****(blank)** = Nitrile\* **EO** = EPR **NO** = Neoprene **NSO** = Nitrile (NSF/FDA, 2-way valves only) **PFO** = Perfluoroelastomer **TO** = PTFE**VO** = Viton® **6 Body Port Configuration****(blank)** = 1/4-18 NPT female thread\* **LC** = 1/8-27 NPT female thread – max. orifice = 5/16" (7.94mm)**LD** = 3/8-18 NPT female thread**LT** = 1/8-28 BSPT female thread – max. orifice = 5/16" (7.94mm)**LU** = 1/4-19 BSPT female thread**MM** = Manifold mount – 1/2-20 UNF-2A mounting stud,  
max. orifice = 1/4" (6.35mm)<sup>††</sup>**OB** = Omit body (operator style)**BI** = Bottom over-seat port, female thread  
– max. orifice = 1/4" (6.35mm)**BO** = Bottom under-seat port, female thread**7 Voltage<sup>†</sup> (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 voltage)\_\_\_ **VAC** = AC (specify voltage; includes copper shading ring)**8 Additional Options****WM** = Mounting bracket on the coil housing**TP** = PTFE coated plunger**CP** = Chamfered plunger**S** = Silver shading ring**OC** = Cleaned for oxygen use**VAC** = Vacuum application – 0 to 29.5" Hg (0 to 1000mBar)**G5** = One piece 316 Stainless Steel guide assembly\* Standard selection; will be used unless otherwise specified.  
Standard selections are not referenced in final part number.<sup>†</sup> Can be AC rectified without shading ring. Use coil construction Code 10.  
<sup>††</sup> Teflon® o-ring not suitable for manifold mount.

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