

D Series

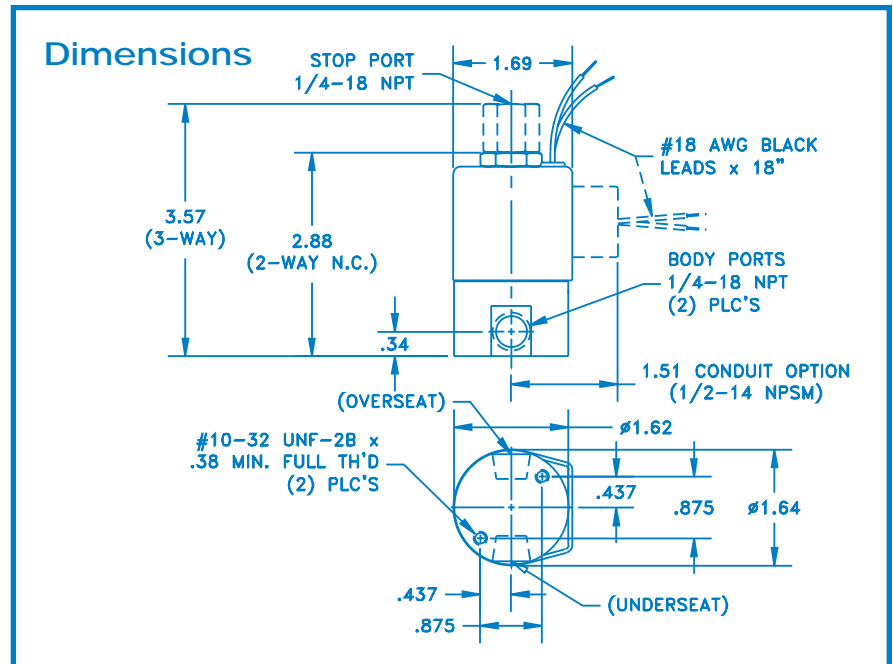
2- and 3-Way High Flow Valve



For maximum flow in a miniature solenoid valve the D Series valves delivers a wide range of C_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.

The D Series is excellent for applications in:

- Agriculture
- Defense
- Sterilization Equipment
- Industrial Automation



Configure Your D Series Part Number: Example Below

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

Prefix From Spec. Chart

Viton O-Ring

Manifold Mount Body

Vacuum Application

Viton Plunger Seal

5 Volt DC



D Series: 10 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
- 2 Molded coil, Class-F, lead-wires
- 3 Encapsulated coil, Class-H, lead-wires
- 4 Encapsulated coil, Class-B, 1/4" spade terminals
- 10 Externally rectified coil (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

Body Material

- D_ _1 *430F Stainless Steel (grommet housing)
- D_ _2 *430F Stainless Steel (1/2" conduit housing)

- BB Brass
- SB1 303 Stainless Steel
- SB5 316 Stainless Steel

Plunger Seal Material

- *Nitrile
- E EPR
- GV Gasoline Viton (2-way normally open and 3-way valves max. orifice = 3/32")
- N Neoprene (2-way normally closed valves only, max. orifice = 1/4")
- NS Nitrile (NSF/FDA, max. orifice = 1/4")
- PF Perfluoroelastomer (max. orifice = 1/4")
- R Rulon (2-way normally closed valves only)
- T Teflon
- V Viton

O-Ring Material

- *Nitrile
- EO EPR
- NO Neoprene
- NSO Nitrile (NSF/FDA, 2-way valves only)
- PFO Perfluoroelastomer
- TO Teflon
- VO Viton

Body Port Configuration

- *1/4-18 NPT female thread
- LC 1/8-27 NPT female thread (max. orifice = 1/4")
- LD 3/8-18 NPT female thread
- LT 1/8-28 BSPT female thread (max. orifice = 1/4")
- LU 1/4-19 BSPT female thread
- MM Manifold mount (1/2-20 UNF-2A mounting stud, max. orifice = 1/4")
- OB Omit body (operator style)
- BI Bottom over-seat port, female thread (max. orifice = 1/4")
- BO Bottom under-seat port, female thread

Voltage

- ___ VDC DC (specify voltage)
- ___ VAC AC (specify voltage; copper shading ring or rectified w/out shading ring)

Additional Options

- WM Mounting bracket on the coil housing
- TP Teflon coated plunger
- CP Chamfered plunger
- OO Quiet operation (2-way valves only)
- S Silver shading ring
- OC Cleaned for oxygen use
- VAC Vacuum application (0 to 29.5" Hg)
- G5 One piece 316 Stainless Steel guide assembly

* D 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					
D20_1	3/64		900	0.045	
D20_2	1/16		650	0.080	
D20_3	3/32		350	0.150	
D20_4	1/8		225	0.210	
D20_5	5/32		130	0.380	
D20_6	3/16		85	0.430	
D20_7	1/4		50	0.700	
D20_8	5/16		20	0.850	
D20_9	3/8		10	0.880	
2-WAY Normally Opened					
D22_1		3/64	900		0.045
D22_2		1/16	550		0.080
D22_3		5/64	300		0.110
D22_4		3/32	175		0.150
D22_5		1/8	110*		0.210
D22_6		5/32	60*		0.380
3-WAY Normally Closed, Free Vent/Line Connection					
D3_ _1	1/16	1/16	175	0.080	0.080
D3_ _2	5/64	5/64	150	0.110	0.110
D3_ _3	3/32	3/32	125	0.150	0.150
D3_ _4	1/8	1/8	85*	0.210	0.210
D3_ _5	5/32	5/32	45*	0.380	0.380
D3_ _6	3/16	5/32	30*	0.430	0.380
D3_ _7	1/4	5/32	10*	0.700	0.380
3-WAY Normally Open					
D32_1	1/16	1/16	200	0.080	0.080
D32_2	5/64	5/64	175	0.110	0.110
D32_3	3/32	3/32	150	0.150	0.150
D32_4	1/8	1/8	100*	0.210	0.210
D32_5	5/32	5/32	50*	0.380	0.380
D32_6	3/16	5/32	35*	0.430	0.380
D32_7	1/4	5/32	15*	0.700	0.380
3-WAY Multi Purpose					
D33_1	1/16	1/16	160	0.080	0.080
D33_2	5/64	5/64	130	0.110	0.110
D33_3	3/32	3/32	110	0.150	0.150
D33_4	1/8	1/8	75*	0.210	0.210
D33_5	5/32	5/32	40*	0.380	0.380
D33_6	3/16	5/32	25*	0.430	0.380
D33_7	1/4	5/32	10*	0.700	0.380
3-WAY Directional Control					
D34_1	1/16	1/16	225	0.080	0.080
D34_2	5/64	5/64	185	0.110	0.110
D34_3	3/32	3/32	150	0.150	0.150
D34_4	1/8	1/8	110*	0.210	0.210
D34_5	5/32	5/32	60*	0.380	0.380
D34_6	3/16	5/32	40*	0.430	0.380
D34_7	1/4	5/32	20*	0.700	0.380

* DC or rectified coil only