

## C Series – High Flow

- ▶ MOPD: 400 PSI
- ▶  $C_v$  Range: 0.019 to 0.420
- ▶ 7 Watts

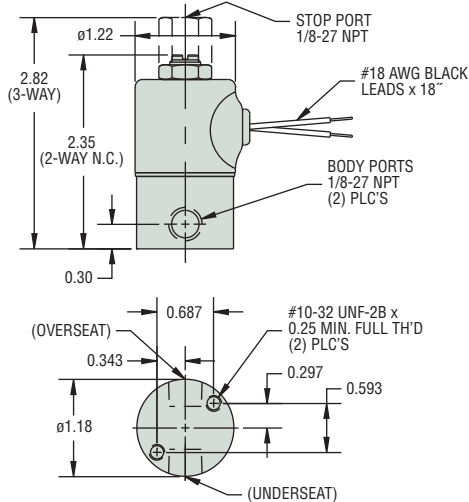
The C Series, available only in brass, is a highly durable miniature 2- or 3-way direct acting valve for applications that require a higher flow control. The C Series also utilizes a larger diameter body and larger port connections for higher  $C_v$  valve rates. The free machining brass body allows for fast and precise machining, translating into lower product costs as compared to stainless steel. Design engineers appreciate the quality inherent in solid brass components.

### Typical Applications

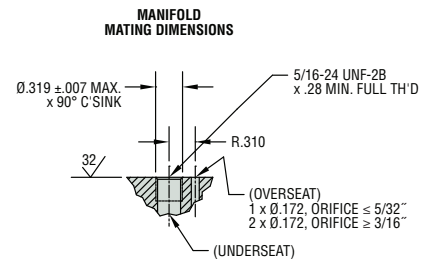
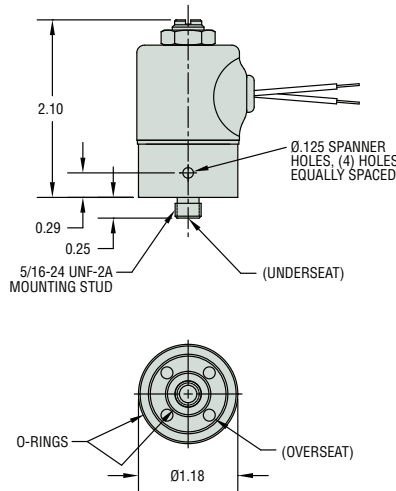
- Therapeutic Beds
- Automotive Applications
- Packaging Equipment

### Dimensions

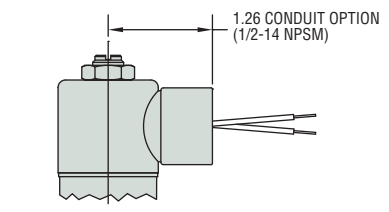
#### Threaded Port Body



#### Manifold Mount Body



#### 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.

<b>C2016</b>	-	<b>11</b>	-	<b>E</b>	-	<b>EO</b>	-	<b>LB</b>	-	<b>48VDC</b>	-	<b>VAC</b>		
<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>
Primary Prefix		Coil Construction		Body Material*		Plunger Seal Material		O-Ring Material		Body Port Configuration		Voltage		Additional Options

\* Blank entry indicates a "Standard" selection (Brass, in this case).

#### Example:

C2016-11-E-EO-LB-48VDC-VAC

2-Way N.C. solenoid valve, with tape-wrapped coil, Class-H, lead-wires, brass body, EPR plunger seal, EPR o-ring, 1/4-18 NPT female thread, operating at 48 VDC, and includes a vacuum application (0 to 29.5" Hg) option.



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	0.080	—	C2011	C2021
	7/64	—	200	0.180	—	C2012	C2022
	1/18	—	150	0.240	—	C2013	C2023
	5/32	—	100	0.300	—	C2014	C2024
	3/16	—	75	0.360	—	C2015	C2025
	7/32	—	40	0.420	—	C2016	C2026
2-WAY N.O.	—	1/32	400	—	0.019	C2211	C2221
	—	3/64	300	—	0.040	C2212	C2222
	—	1/16	200	—	0.075	C2213	C2223
	—	5/64	150	—	0.105	C2214	C2224
3-WAY N.C. Free Vent	1/16	1/16	125	0.080	0.075	C3011	C3021
	5/64	5/64	100	0.105	0.105	C3012	C3022
	1/8	5/64	50	0.240	0.105	C3013	C3023
	3/16	5/64	25	0.360	0.105	C3014	C3024
	7/32	5/64	VAC	0.420	0.105	C3015	C3025
3-WAY N.C. Line Connection	1/16	1/16	125	0.080	0.075	C3111	C3121
	5/64	5/64	100	0.105	0.105	C3112	C3122
	1/8	5/64	50	0.240	0.105	C3113	C3123
	3/16	5/64	25	0.360	0.105	C3114	C3124
	7/32	5/64	VAC	0.420	0.105	C3115	C3125
3-WAY N.O.	1/16	1/16	125	0.080	0.075	C3211	C3221
	5/64	5/64	100	0.105	0.105	C3212	C3222
	1/8	5/64	75	0.240	0.105	C3213	C3223
	3/16	5/64	40	0.360	0.105	C3214	C3224
	7/32	5/64	VAC	0.420	0.105	C3215	C3225
3-WAY Multi Purpose	1/16	1/16	100	0.080	0.075	C3311	C3321
	5/64	5/64	75	0.105	0.105	C3312	C3322
	1/8	5/64	25	0.240	0.105	C3313	C3323
	3/16	5/64	10	0.360	0.105	C3314	C3324
	7/32	5/64	5	0.420	0.105	C3315	C3325
3-WAY Directional Control	1/16	1/16	150	0.080	0.075	C3411	C3421
	5/64	5/64	100	0.105	0.105	C3412	C3422
	1/8	5/64	50	0.240	0.105	C3413	C3423
	3/16	5/64	25	0.360	0.105	C3414	C3424
	7/32	5/64	5	0.420	0.105	C3415	C3425

② Coil Construction

- (blank) = 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
- HC2 = Encapsulated coil, Class-B, EN175301-803 Style C, Industrial, 9.4mm, 2+1 poles

③ Body Material

- (blank) = Brass\*
- SB = 304 Stainless Steel
- SB1 = 303 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 (2-way N.C. only, max. orifice = 1/8")
- LU = 1/4-19 BSPT female thread (2-way N.C. only)
- OB = Omit body (operator style)
- BO = Bottom under-seat port, female thread
- RL = 90° porting - left hand
- RR = 90° porting - right hand
- MM4 = Manifold mount (5/16-24 UNF-2A mounting stud)††
- BS = Stop port, #10-32 female straight thread

⑦ Voltage† (see note below)

- \_\_\_ VDC = DC (specify voltage)
- \_\_\_ VAC = AC (specify voltage; includes copper shading ring)

⑧ Additional Options

- WM = Mounting bracket
- TP = PTFE coated plunger
- QO = Quiet operation (2-way normally closed valves 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

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

† Can be AC rectified without shading ring. Use coil construction Code 10.  
 †† Teflon® o-ring not suitable for manifold mount.

Gems specializes in the design and manufacturing of custom solenoid valves and fluidic systems. If you don't see what you're looking for, or have a question, contact us at 800-378-1600 or info@gemssensors.com.