

B-Cryo Series

- ▶ MOPD: 900 PSI (62 Bar)
- ▶ C_v Range: 0.045 to 0.440 (K_v Range: 0.038 to 0.374)
- ▶ 9 Watts

The B-Cryo Series is a 2-way miniature Cryogenic valve designed and built for service down to -320°F (-196°C) in applications needing a C_v between 0.045 and 0.440 (K_v between 0.038 and 0.374). Depending on your temperature requirements, the B-Cryo Series can be configured for liquid nitrogen (LN2), liquid carbon dioxide (LCO2), and other extreme temperature media. PTFE coated plungers, 316 Stainless Steel guide tubes and plunger springs, encapsulated coils, and PTFE or Rulon® seat seals produce a truly robust Cryogenic valve for applications requiring high cycle life and media temperature control.

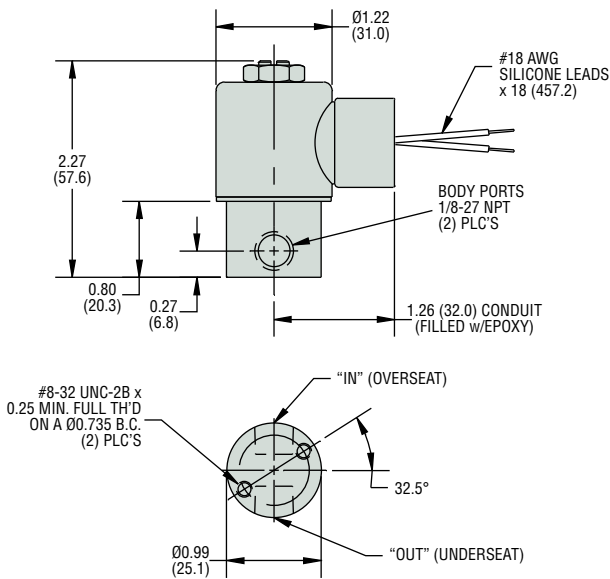


Typical Applications

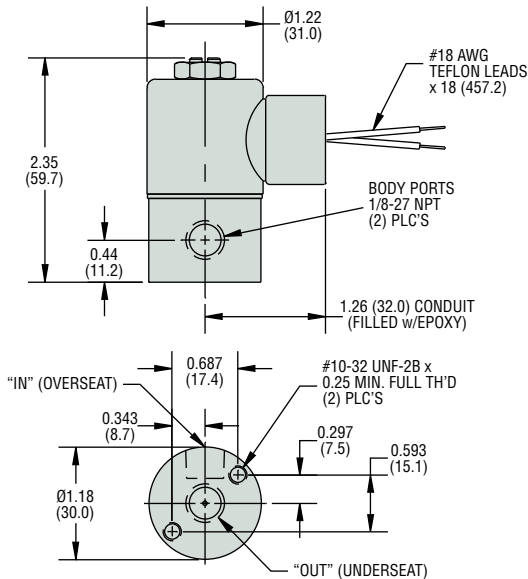
- Environmental Chambers
- Food Processing
- Laser Surgical Equipment
- Semiconductor Manufacturing

Dimensions

LN2-Liquid Nitrogen



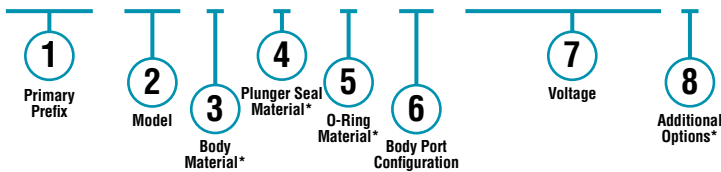
LCO2-Liquid Carbon Dioxide



How To Order

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

B2062 - LN2 - LB - 120/50/60VAC



* Blank entry indicates a "Standard" selection (430F Stainless Steel, Rulon® and Variseal®, in this case).

Example:

B2062-LN2-LB-120/50/60VAC

2-Way N.C. Liquid Nitrogen Class-H Encapsulated Coil with lead-wires, conduit filled housing solenoid valve, with 430F stainless steel body, Rulon® plunger seal, Variseal® o-ring, 1/4-18 NPT female thread, operating at 120/50/60 Volt AC.

Part Prefix Table ①

Orifice		MOPD		C _v	K _v	① Primary Prefix		
Body		psig	bar	Body		Class 180°C (H), Encapsulated Coils		
inches	mm					Lead Wires—Filled Conduit Housing	Lead Wires—Unfilled Conduit Housing	Lead Wires—Grommet Housing
3/64	1.19	900	62	0.045	0.038	B2060	B2020	B2010
1/16	1.59	405	28	0.075	0.064	B2061	B2021	B2011
5/64	1.98	270	19	0.105	0.089	B2062	B2022	B2012
3/32	2.38	160	11	0.160	0.136	B2063	B2023	B2013
7/64	2.78	110	7.6	0.190	0.162	B2064	B2024	B2014
1/8	3.18	80	5.5	0.255	0.217	B2065	B2025	B2015
5/32	3.97	65	4.5	0.365	0.310	B2066	B2026	B2016
3/16	4.76	30	2.1	0.440	0.374	B2067	B2027	B2017

② Model

- LN2 = Liquid Nitrogen model
- LCO2 = Liquid Carbon Dioxide model

③ Body Material

LN2 Only

(blank) = 430F Stainless Steel*

LCO2 Only

- (blank) = 303 Stainless Steel*
- BB = Brass
- SB = 304 Stainless Steel
- SB5 = 316 Stainless Steel

④ Plunger Seal Material

LN2 Only

(blank) = Rulon®*

LCO2 Only

- (blank) = PTFE*
- MQ = Silicone (consult factory)

⑤ O-Ring Material

LN2 Only

- (blank) = Variseal® (PTFE material with internal spring)*
- TO = PTFE (consult factory)

LCO2 Only

- (blank) = Variseal® (PTFE material with internal spring)*
- TO = PTFE (consult factory)

⑥ Body Port Configuration

LN2 Only

- (blank) = 1/8-27 NPT female thread*
- LB = 1/4-18 NPT female thread
- LT = 1/8-28 BSPT female thread
- LU = 1/4-19 BSPT female thread
- BI = Bottom over-seat port, female thread
 - max. orifice = 1/8" (3.18mm)
- BO = Bottom under-seat port, female thread
- RL = 90° porting - left hand
- RR = 90° porting - right hand

LCO2 Only

- (blank) = 1/8-27 NPT, bottom under-seat port, female thread*
- LB = 1/4-18 NPT female thread (in-line porting only)
- LT = 1/8-28 BSPT female thread
- LU = 1/4-19 BSPT female thread (in-line porting only)
- BOM = Bottom under-seat port, male thread
 - max. orifice = 1/8" (3.18mm), brass body only)
- IL = Inline porting, 180° apart

⑦ Voltage

LN2 Only

- ___ VDC = DC (specify voltage)
- ___ VAC = AC Rectified (specify voltage)

LCO2 Only

- ___ VDC = DC (specify voltage)
- ___ VAC = AC Rectified (specify voltage)

⑧ Additional Options

LN2 Only

- (blank) = Chamfered and PTFE coated plunger*
- (blank) = 316 Stainless Steel 1-piece guide assembly*
- (blank) = 316 Stainless Steel spring*

LCO2 Only

- (blank) = Chamfered and PTFE coated plunger*
- (blank) = 316 Stainless Steel 1-piece guide assembly*
- (blank) = 316 Stainless Steel spring*

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