

D-Cryo Series

- ▶ MOPD: 69 Bar (1000 PSI)
- ▶ K_v Range: 0.034 to 0.655 (C_v Range: 0.040 to 0.770)
- ▶ 15 Watts

The D-Cryo Series is a 2-way, high flow, miniature Cryogenic valve designed and built for service down to -196°C (-320°F). Depending on your temperature requirements, the D-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.

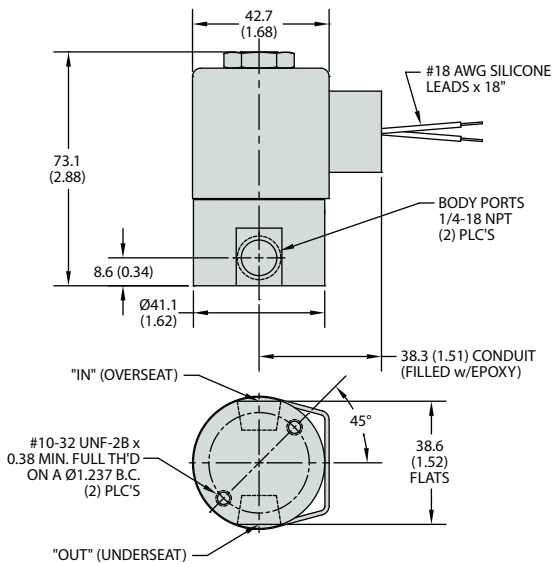


Typical Applications

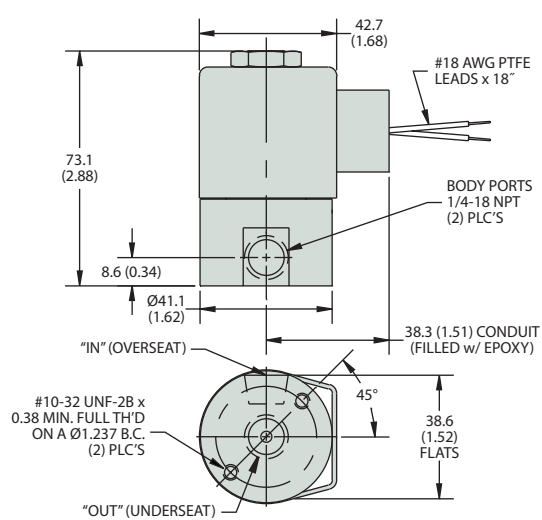
- Environmental Chambers
- Food Processing
- Laser Surgical Equipment
- Semiconductor Manufacturing

Dimensions

LN2-Liquid Nitrogen



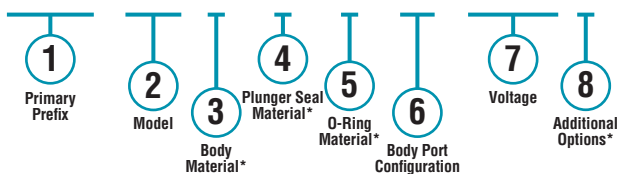
LCO2-Liquid Carbon Dioxide



How To Order

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

D2062 - LN2 - LT - 12VDC



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

Example:

D2062-LN2-LT-12VDC

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, spring energized PTFE o-ring, 1/8-28 BSPT female thread, operating at 12 Volt DC.

Materials

LN2	
Body	430F S.S.
Guide Assembly	316 S.S., 430FR S.S.
Plunger	430FR S.S.
Return Spring	316 S.S.
Plunger Seals	Rulon®
O-Rings	Teflon® with Internal Spring
LCO2	
Body	430F S.S.
Guide Assembly	316 S.S., 430FR S.S.
Plunger	430FR S.S.
Return Springs	316 S.S.
Plunger Seals	Teflon®
O-Rings	Fluorosilicone

Part Prefix Table ①

Orifice		MOPD		K_v	C_v	① Primary Prefix		
Body		bar	psig	Body		Class 180°C (H), Encapsulated Coils		
mm	inches					Lead Wires—Filled Conduit Housing	Lead Wires—Unfilled Conduit Housing	Lead Wires—Grommet Housing
1.19	3/64	69	1000*	0.034	0.040	D2061	D2021	D2011
1.59	1/16	69	1000*	0.060	0.070	D2062	D2022	D2012
2.38	3/32	44	640	0.140	0.165	D2063	D2023	D2013
3.18	1/8	26	375	0.259	0.305	D2064	D2024	D2014
3.97	5/32	13	185	0.310	0.365	D2065	D2025	D2015
4.76	3/16	9	130	0.400	0.470	D2066	D2026	D2016
6.35	1/4	3	40	0.655	0.770	D2067	D2027	D2017

* For higher pressure, consult factory.

② Model

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

③ Body Material

LN2 Only

(blank) = 430F Stainless Steel*

LCO2 Only

(blank) = 430F Stainless Steel*
 BB = Brass

④ Plunger Seal Material

LN2 Only

(blank) = Rulon®*

LCO2 Only

(blank) = PTFE*

⑤ O-Ring Material

LN2 Only

(blank) = PTFE seal with internal spring*

LCO2 Only

(blank) = Fluorosilicone*
 TO = PTFE

⑥ Body Port Configuration

LN2 Only

- (blank) = 1/4-18 NPT female thread*
- LC = 1/8-27 NPT female thread
- LD = 3/8-18 NPT female thread
- LT = 1/8-28 BSPT female thread with #10-32 mounting threads
- LU = 1/4-19 BSPT female thread with #10-32 mounting threads
- BI = Bottom over-seat port, female thread
- BO = Bottom under-seat port, female thread

LCO2 Only

- (blank) = 1/4-18 NPT, bottom under-seat port, female thread*
- LC = 1/8-27 NPT female thread
- LD = 3/8-18 NPT female thread (in-line porting only)
- LT = 1/8-28 BSPT female thread with #10-32 mounting threads
- LU = 1/4-19 BSPT female thread with #10-32 mounting threads
- 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.