

# **D-Cryo Series**

- MOPD: 1000 PSI
- C<sub>v</sub> 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  $-320^{\circ}$ F (-196°C). 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<sup>®</sup> 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



LCO2–Liquid Carbon Dioxide

"OUT" (UNDERSEAT)

# How To Order

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



(430F Stainless Steel, Rulon<sup>®</sup> and Variseal<sup>®</sup>, 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<sup>®</sup> plunger seal, Variseal<sup>®</sup> o-ring, 1/8-28 BSPT female thread, operating at 12 DC with rectified coil.



# Part Prefix Table ①

			1 Primary Prefix		
Orifice	MOPD (psig)	Cv	Class H, Encapsulated Coils		
Body		Body	Lead Wires—Filled Conduit Housing	Lead Wires—Unfilled Conduit Housing	Lead Wires— Grommet Housing
3/64	1000*	0.040	D2061	D2021	D2011
1/16	1000*	0.070	D2062	D2022	D2012
3/32	640	0.165	D2063	D2023	D2013
1/8	375	0.305	D2064	D2024	D2014
5/32	185	0.365	D2065	D2025	D2015
3/16	130	0.470	D2066	D2026	D2016
1/4	40	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\*

#### 4 Plunger Seal Material

LN2 Only

(blank) = Rulon®\*

#### 50-Ring Material

LN2 Only

(blank) = Variseal® (PTFE material with internal spring)\*

#### 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
  - **LU** = 1/4-19 BSPT female thread
  - **BI** = Bottom over-seat port, female thread
  - **BO** = Bottom under-seat port, female thread

#### 7 Voltage

- LN2 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\*

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

#### LCO2 Only

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

#### LCO2 Only

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

#### LCO2 Only

(blank) = Fluorosilicone\* TO = PTFE

#### 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
LU = 1/4-19 BSPT female thread
IL = Inline porting, 180° apart

#### LCO2 Only

VDC = DC (specify voltage)				
<pre>VAC = AC Rectified (specify voltage)</pre>				

#### LCO2 Only

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