

# D-Cryo Series

## 2-Way High Flow Cryogenic Valve

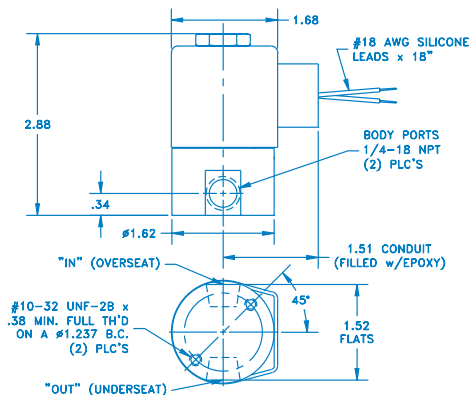


The D-Cryo Series is a 2-way, high flow, miniature Cryogenic valve designed and built for service down to  $-320^{\circ}\text{F}$  ( $-196^{\circ}\text{C}$ ). Depending on your temperature requirements, the D-Cryo Series can be configured for liquid nitrogen (LN<sub>2</sub>), liquid carbon dioxide (LCO<sub>2</sub>), and other extreme temperature media. Teflon® coated plungers, 316 Stainless Steel guide tubes and plunger springs, encapsulated coils, and Teflon® or Rulon® seat seals produce a truly robust Cryogenic valve for applications requiring high cycle life and media temperature control.

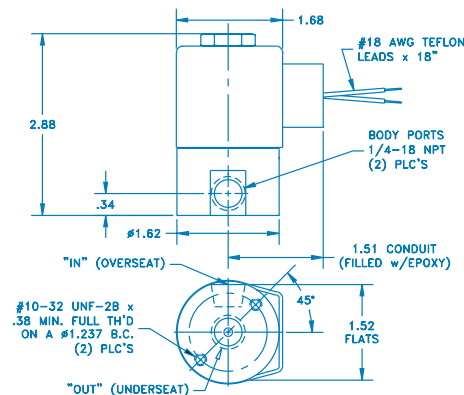
### An excellent choice for:

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

### Dimensions (D206\_-LN2)



### Dimensions (D206\_-LCO2)



### Configure Your D-Cryo Series Part Number: Example Below

D2027-LCO2-LD-24/50/60RVAC

Prefix From Spec. Chart

3/8" NPT Ports

Liquid CO<sub>2</sub> Valve

24/50/60 Volt AC Rectified Coil

D2062-LN2-12VDC

Prefix From Spec. Chart

12 Volt DC

Liquid Nitrogen Valve



## D-Cryo Series: 15 Watts

### Valve Options (LN2)

#### Coil Construction

- D206\_-LN2 \*Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit filled)
- D202\_-LN2 Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit not filled)
- D201\_-LN2 Encapsulated coil, Class-H, with lead-wires, grommet housing

#### Body Material

\*430F Stainless Steel

#### Plunger Seal Material

\*Rulon

#### O-Ring Material

\*Variseal® (Teflon material with internal spring)

#### Body Port Configuration

- LC \*1/4-18 NPT female thread
- LD 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
- OB Omit body (operator style)
- BI Bottom over-seat port, female thread
- BO Bottom under-seat port, female thread

#### Voltage

- \_\_\_ VDC DC (specify voltage)
- \_\_\_ VAC AC Rectified (specify voltage)

#### Additional Options

- \*Chamfered and Teflon coated plunger
- \*316 Stainless steel 1-piece guide assembly
- \*316 Stainless steel spring

\* D-Cryo (LN2) Series will be built with these options unless otherwise indicated. The option number is dropped in the final part number when using these materials.

### Valve Options (LCO2)

#### Coil Construction

- D206\_-LCO2 \*Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit filled)
- D202\_-LCO2 Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit not filled)
- D201\_-LCO2 Encapsulated coil, Class-H, with lead-wires, grommet housing

#### Body Material

- \*430F Stainless Steel
- BB Brass

#### Plunger Seal Material

- \*Teflon
- MQ Silicone (consult factory)

#### O-Ring Material

- \*Fluorosilicone
- TO Teflon

#### Body Port Configuration

- \*1/4-18 NPT, bottom
- under-seat port, 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
- OB Omit body (operator style)
- IL Inline porting, 180° apart

#### Voltage

- \_\_\_ VDC DC (specify voltage)
- \_\_\_ VAC AC Rectified (specify voltage)

#### Additional Options

- \*Chamfered and Teflon coated plunger
- \*316 Stainless Steel 1-piece guide assembly
- \*316 Stainless Steel spring

\* D-Cryo (LCO2) 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 <sub>v</sub>
			BODY
<b>2-WAY Normally Closed</b>			
D20_1	3/64	1000*	0.040
D20_2	1/16	1000*	0.070
D20_3	3/32	640	0.165
D20_4	1/8	375	0.305
D20_5	5/32	185	0.365
D20_6	3/16	130	0.470
D20_7	1/4	40	0.770

\* For higher pressures, consult factory.