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.

**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

- **Orifice**
  - 3/64: 1.19 psig, 900 bar
  - 1/16: 1.59 psig, 405 bar
  - 5/64: 1.98 psig, 270 bar
  - 3/32: 2.38 psig, 160 bar
  - 7/64: 2.78 psig, 110 bar
  - 1/8: 3.18 psig, 80 bar
  - 5/32: 3.97 psig, 65 bar
  - 3/16: 4.76 psig, 30 bar

- **MOPD**
  - 3/64: 1.19
  - 1/16: 1.59
  - 5/64: 1.98
  - 3/32: 2.38
  - 7/64: 2.78
  - 1/8: 3.18
  - 5/32: 3.97
  - 3/16: 4.76

- **C
  - MOPD:**
  - 3/64: 0.045
  - 1/16: 0.075
  - 5/64: 0.105
  - 3/32: 0.160
  - 7/64: 0.190
  - 1/8: 0.255
  - 5/32: 0.365
  - 3/16: 0.440

- **K
  - MOPD:**
  - 3/64: 0.038
  - 1/16: 0.064
  - 5/64: 0.089
  - 3/32: 0.136
  - 7/64: 0.162
  - 1/8: 0.217
  - 5/32: 0.310
  - 3/16: 0.374

### CRYOGENIC VALVES

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

#### Body Material
- LN2 Only: (blank) = 430F Stainless Steel*

#### Plunger Seal Material
- LN2 Only: (blank) = Rulon®

#### O-Ring Material
- LN2 Only: (blank) = Variseal® (PTFE material with internal spring)*

#### 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
  - BO = Bottom under-seat port, female thread
  - RL = 90° porting - left hand
  - RR = 90° porting - right hand

#### Voltage
- LN2 Only: VDC = DC (specify voltage)
  - VAC = AC Rectified (specify voltage)

#### Additional Options
- LN2 Only: (blank) = Chamfered and PTFE coated plunger*
  - (blank) = 316 Stainless Steel 1-piece guide assembly*
  - (blank) = 316 Stainless Steel spring*

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