

B-Cryo Series

2-Way Cryogenic Valve

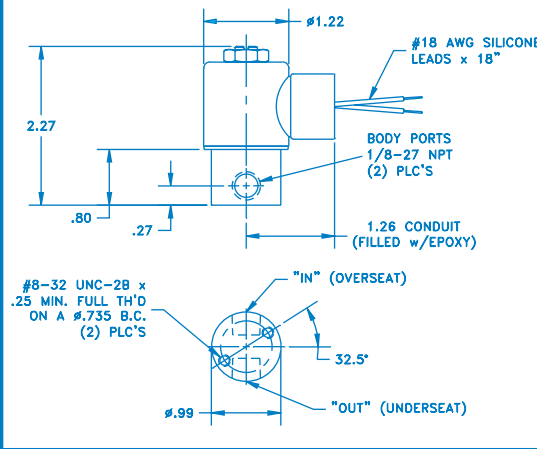


The B-Cryo Series is a 2-way miniature Cryogenic valve designed and built for service down to -320°F (-196°C) in applications needing a C_v between .045 and .440. Depending on your temperature requirements, the B-Cryo Series can be configured for liquid nitrogen (LN2), liquid carbon dioxide (LCO2), and other extreme temperature media. 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.

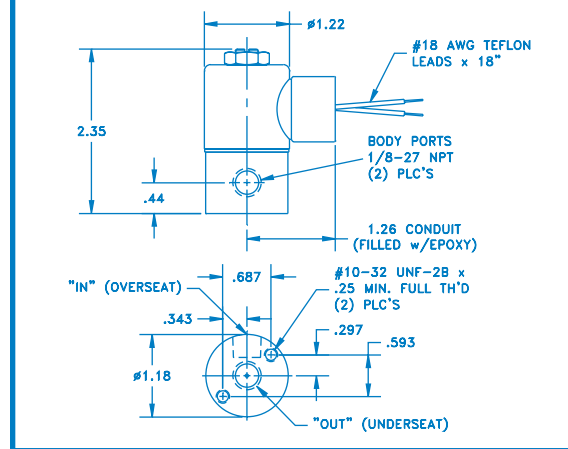
An excellent choice for:

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

Dimensions (B206_-LN2)



Dimensions (B206_-LCO2)



Configure Your B-Cryo Series Part Number: Example Below

B2062-LCO2-LB-120/50/60RVAC

Prefix From Spec. Chart

Liquid CO2 Valve

1/4" NPT Ports

120/50/60 Volt AC Rectified Coil

B2027-LN2-LT-24VDC

Prefix From Spec. Chart

Liquid Nitrogen Valve

24 Volt DC

1/8" BSPT Female Ports



B-Cryo Series: 9 Watts

Valve Options (LN2)

Coil Construction

- B206_LN2 *Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit filled)
- B202_LN2 Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit not filled)
- B201_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)
- TO Teflon (consult factory)

Body Port Configuration

- *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
- OB Omit body (operator style)
- BI Bottom over-seat port, female thread (max. orifice = 1/8")
- BO Bottom under-seat port, female thread
- RL 90° porting - left hand
- RR 90° porting - right hand

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

* B-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

- B206_LCO2 *Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit filled)
- B202_LCO2 Encapsulated coil, Class-H, with lead-wires, conduit housing (conduit not filled)
- B201_LCO2 Encapsulated coil, Class-H, with lead-wires, grommet housing

Body Material

- *303 Stainless Steel
- BB Brass
- SB 304 Stainless Steel
- SB5 316 Stainless Steel

Plunger Seal Material

- *Teflon
- MQ Silicone (consult factory)

O-Ring Material

- *Fluorosilicone
- TO Teflon

Body Port Configuration

- *1/8-27 NPT, bottom under-seat port, female thread
- LB 1/4-18 NPT female thread
- LT 1/8-28 BSPT female thread
- LU 1/4-19 BSPT female thread
- OB Omit body (operator style)
- BOM Bottom under-seat port, male thread (max. orifice = 1/8", brass body only)
- 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

* B-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 _v BODY
	2-WAY Normally Closed		
B20_0	3/64	900	0.045
B20_1	1/16	405	0.075
B20_2	5/64	270	0.105
B20_3	3/32	160	0.160
B20_4	7/64	110	0.190
B20_5	1/8	80	0.255
B20_6	5/32	65	0.365
B20_7	3/16	30	0.440