

BL Series – Latching Valve

- ▶ 2 Way or 3 Way Valves
- ▶ Low Power Requirements
- ▶ MOPD: 100 PSI
- ▶ Dual Diode Protection Optional

The BL series latching valve allows the user to pulse the valve and have it change state. The voltage does not need to be constantly applied in order to hold it in a state. These valves are ideal for controlling larger pneumatic valves in remote applications where power is limited or when the temperature of the media cannot be impacted as it flows through the valve. The larger pneumatic valves can close and open large pipes and these latching valves control them. The term Latch refers to the valve in the open state where supply pressure goes to the external valve. The unlatched state is when the supply is cut off and the external valve is exhausted to ambient.

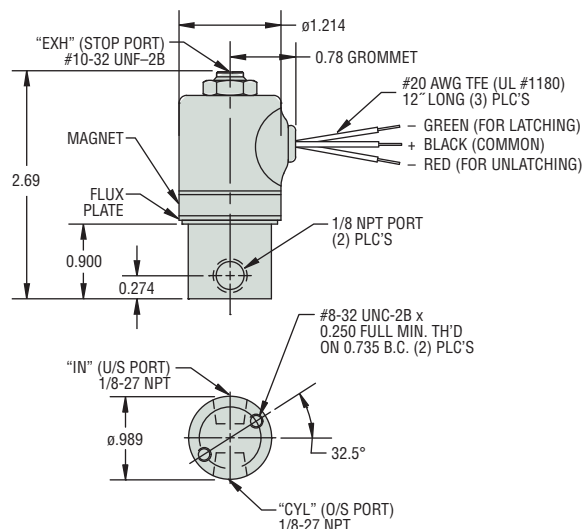


Typical Applications

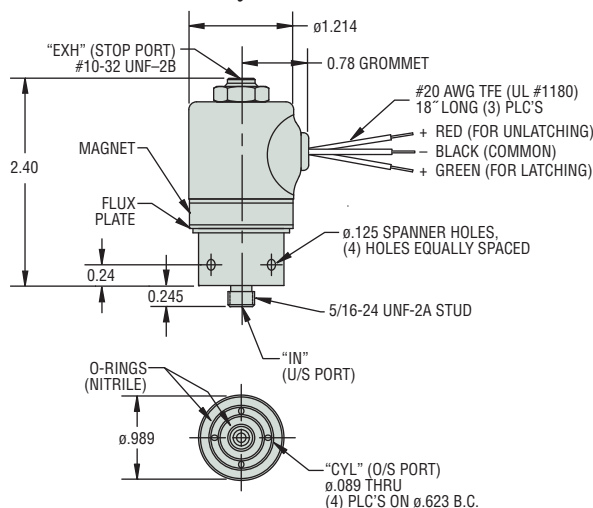
- Natural Gas Plunger Lifts
- Natural Gas Separators
- Gas Chromatography
- Irrigation Systems

Dimensions

Threaded Port Body



Manifold Mount Body



How To Order

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

| | | | | | | | | | | | | | | | | |
|----------------|---|-------------------|---|---------------|---|-----------------------|---|-----------------|---|-------------------------|---|---------------|---|--------------|--|------------------|
| BL3113 | - | 1 | - | BB | - | H | - | NBO | - | LC | - | C202 | - | WGR-N | | |
| <div>1</div> | | <div>2</div> | | <div>3</div> | | <div>4</div> | | <div>5</div> | | <div>6</div> | | <div>7</div> | | <div>8</div> | | <div>9</div> |
| Primary Prefix | | Coil Construction | | Body Material | | Plunger Seal Material | | O-Ring Material | | Body Port Configuration | | Exhaust Port* | | Voltage | | Wire Color Codes |

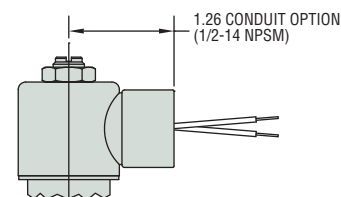
* Blank entry indicates a "Standard" selection (#10-32 female thread, in this case).

Example:

BL3113-1-BB-H-NBO-LC-C202-WGR-N

3-Way Latching valve, 18" epoxy coil, brass body, Hydrin® seal, Nitrile® o-ring, 1/8" NPT body port, free vent 6 Vdc coil, White/Common, Green/Latch, Red/Unlatch negative pulse leads.

Alternate 1/2" Conduit Housing Available on all body configurations



Part Prefix Table ①

| | Orifice | | MOPD (psi) | C _v | | ① Primary Prefix | |
|-------|---------|------|---------------|----------------|-------|------------------|-----------------------------|
| | Body | Stop | | Body | Stop | Grommet Housing | Unfilled Conduit Housing |
| 3-WAY | 1/32 | 3/64 | 100 | 0.018 | 0.040 | BL3111 | BL3121 |
| | 1/16 | 1/16 | 50 | 0.070 | 0.070 | BL3113 | BL3123 |
| 2-WAY | 1/16 | — | 240 | 0.065 | — | BL2011 | BL2021 |
| | 5/64 | — | 180 | 0.09 | — | BL2012 | BL2022 |
| | 3/32 | — | 150 | 0.155 | — | BL2013 | BL2023 |
| | 7/64 | — | 120 | 0.2 | — | BL2014 | BL2024 |
| | 1/8 | — | 90 | 0.24 | — | BL2015 | BL2025 |
| | 5/32 | — | 60 | 0.3 | — | BL2016 | BL2026 |
| | 3/16 | — | 30 | 0.43 | — | BL2017 | BL2027 |

② Coil Construction

- 1 = Encapsulated Coil, Class-B (130°C),
Lead Wires 18" Long, #20 AWG
2 = Encapsulated Coil, Class-F (155°C),
Lead Wires 18" Long, #20 AWG

③ Body Material

- BB = Brass
SB1 = 303 Stainless Steel
SB5 = 316 Stainless Steel

④ Plunger Seal Material

- H = Hydrin®
V = Viton®
PF = Perfluoroelastomer

⑤ O-Ring Material

- NBO = Nitrile®
VO = Viton®
PFO = Perfluoroelastomer

⑥ Body Port Configuration

- LC = 1/8" NPT female ports
LD = 1/4" NPT female ports
MM3 = Manifold-Mount (5/16" thread stud)

⑦ Exhaust Port

- (blank) = #10-32 female thread*
AB = 1/8" Brass Barb Fitting
AD = 1/8" NPT Brass Adapter

⑧ Voltage

- C202 = 6 VDC, 7 Watts Latching, 5 Watts Unlatching
C203 = 12 VDC, 9 Watts Latching, 7 Watts Unlatching
C204 = 24 VDC, 9 Watts Latching, 7 Watts Unlatching
C202D = 6 VDC, 7 Watts Latching, 5 Watts Unlatching
with internal diodes
C203D = 12 VDC, 9 Watts Latching, 7 Watts Unlatching
with internal diodes
C204D = 24 VDC, 9 Watts Latching, 7 Watts Unlatching
with internal diodes

⑨ Wire Color Codes

- WGR-N = White common (+), Green latch (-), Red Unlatch (-)
BRG-P = Black common (-), Red latch (+), Green Unlatch (+)
BGR-N = Black common (+), Green latch (-), Red Unlatch (-)

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