

Features

- Full Port Lead Free Brass Diverter Valve
- Visual valve position indicator
- Rugged aluminum Type 4X weatherproof enclosure
- Heavy duty motors with overload protection
- Anti-condensation heater, thermostatically controlled
- Manual override with end of travel mechanical stops
- Two auxiliary limit switches included (on-off models)
- Energized PTFE ball seats for lower torque and longer life
- Triple PTFE/FKM stem seal packing
- Actuator listed per UL429 and CSA C22.2
- Valve certified NSF372 & NSF61 for potable/drinking water

Applications

Electric actuated flow diverter or selector valves are typically used to control the flow of water, air, oil and other media compatible with the materials of construction. Ideal where lead free and NSF approved construction are required for potable drinking water as well as general industrial applications. Suitable for steam service up to 25 PSI with optional high temperature mounting kit and vacuum service to 29"Hg. Actuator designed for 70% duty cycle.

Operation

Electric actuated valve uses power-to-open (Pos. 2) and power-to-close (Pos.1), stays in the last known position with power failure. On receipt of a continuous voltage signal, the motor runs and via a rugged all metal gear drive rotates the ball 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position. Electrical wiring is directly to terminal strip via included cable connector or optional 1/2" NPT Conduit adapters. Standard manual override can be used for setup and power failure situations.

Construction

| | |
|--|---|
| Valve Body | Lead free brass C69300 |
| Ball/Stem | 316 stainless steel |
| Ball Seats | (4) PTFE (Teflon) energized with FKM (Viton) |
| Stem Seals | PTFE (Teflon) with (2) additional FKM (Viton) seals |
| Gear Drive | Heavy duty alloy steel and aluminium bronze worm |
| Actuator Enclosure | Aluminum polyester powder coated, Type 4X, IP67 |
| Visual Valve Position Indicator | Clear polycarbonate cover, red/yellow open-closed |
| Fasteners | Stainless Steel |
| Auxiliary Limit Switches | 2 x SPST 3A@125VAC resistive, on-off actuators only |



Description

Electrically operated Full Port 3-way L-type flow pattern ball valve has four energized PTFE ball seats allowing for full pressure at any port. Leak free triple PTFE/FKM stem seal design. Rugged Type 4X corrosion resistant actuator includes a manual override, position confirm limit switches, thermostatically controlled anti-condensation heater, and over-torque protection.

Approvals

Actuators

- CSA listed:
 - UL429 and CSA C22.2 no.139
 - Type 4X, IP67 weatherproof enclosure
- CE conformance
 - ISO5211 Mounting

Valves

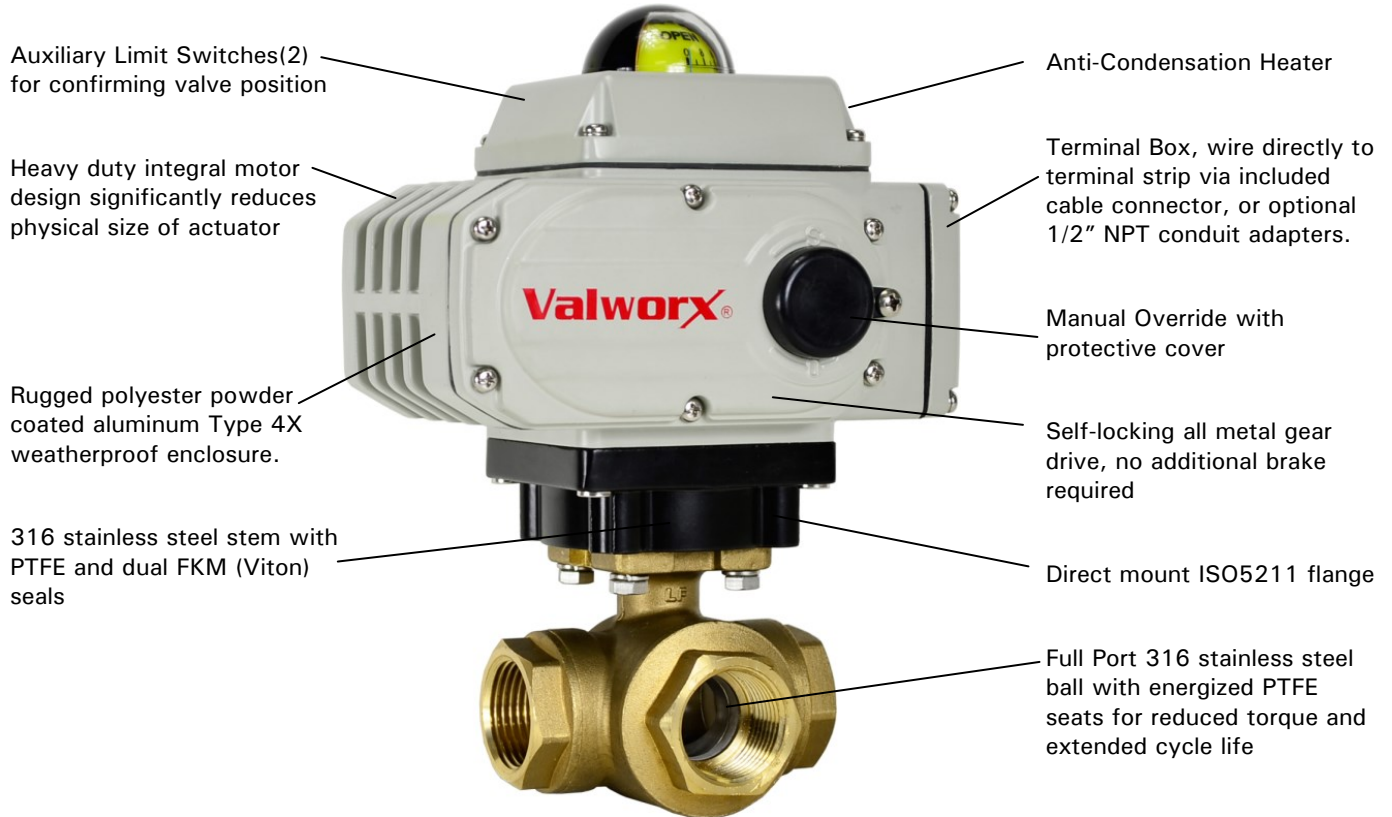
- IAPMO RT certified to:
 - NSF/ANSI 372 - 2011 Drinking Water
 - NSF/ANSI 61 - 2015
- Meets design MSS-SP-110



LEAD FREE



Construction Features



Visual Valve Position Indicator

Pressure-Temperature*

Pressure Rating: 400 PSI CWP (27 Bar) non-shock

29" Hg vacuum, 25 PSI steam with high temp. kit

Media Working Temperature: 0 to 158° F (-18 to 70° C)

Media temperatures up to 266° F (130° C) with optional high temp. mounting kit

Ball Valve Temperature Rating: 0 to 344° F (-18 to 173° C)

Actuator Temperature Rating: -22 to +140° F (-30 to 60° C)

*See P/T chart

Pressure/Temperature Chart (PSI/°F)

| P/T Chart | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|
| PSI | 400 | 400 | 400 | 400 | 375 | 275 |
| °F | 0 | 50 | 100 | 176 | 200 | 266 |

Pressure/Temperature Chart (Bar/°C)

| P/T Chart | | | | | | |
|-----------|-----|----|----|----|----|-----|
| Bar | 27 | 27 | 27 | 27 | 26 | 19 |
| °C | -18 | 10 | 38 | 80 | 93 | 130 |

Specifications (English units)

| Stock Number | Pipe Size (NPT) | Orifice Size (inch) | Cv Flow Factor | Pressure Max.(PSI)* | Cycle Time/90° (seconds) | Voltage | Current (amps) | Duty Cycle | Electrical Dwg. |
|--|-----------------|---------------------|----------------|---------------------|--------------------------|------------------|----------------|------------|-----------------|
| 120 VAC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: L-PORT | | | | | | | | | |
| 567802A | 1/4 | 0.39 | 3.2 | 400 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567803A | 3/8 | 0.39 | 3.5 | 400 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567804A | 1/2 | 0.59 | 4.5 | 400 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567806A | 3/4 | 0.75 | 10 | 400 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567808A | 1 | 1.00 | 16 | 400 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567810A | 1-1/4 | 1.22 | 31 | 400 | 20/17 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567812A | 1-1/2 | 1.50 | 49 | 400 | 20/17 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567816A | 2 | 2.00 | 82 | 400 | 30/25 | 110 VAC, 50/60Hz | 0.64 | 70% | B |
| 24 VDC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: L-PORT | | | | | | | | | |
| 567844A | 1/4 | 0.39 | 3.2 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567845A | 3/8 | 0.39 | 3.5 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567846A | 1/2 | 0.59 | 4.5 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567847A | 3/4 | 0.75 | 10 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567849A | 1 | 1.00 | 16 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567850A | 1-1/4 | 1.22 | 31 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567851A | 1-1/2 | 1.50 | 49 | 400 | 20 | DC24 | 1.28 | 70% | G |
| 567852A | 2 | 2.00 | 82 | 400 | 30 | DC24 | 2.03 | 70% | G |

* Pressure at 176° F (reduce pressure for higher temperatures, see P/T chart)

Electric Actuated 3-Way L-port Valves

Valworx electric actuated 3-way L-Port valves use power-to-open (pos.2) and power-to-close (pos.1), stays in the last known position with loss of power. The actuator will rotate the output drive 90° to change the position of the ball valve. Limit switches automatically stop the motor/gear drive in either position 1 or position 2 as required.

Two auxiliary limit switches are provided as standard to confirm valve position.

Rugged primary gear drive system is made of heat treated alloy steel for high strength, excellent wear resistance and high torque. Final stage aluminium bronze worm gear drive is self-locking, no motor brake required.

A manual override is provided for use in setup or power failure situations. The override is operated with a standard hex wrench (included).

The standard 4 watt thermostatically controlled anti-condensation heater will help prevent failures due to condensation buildup inside the actuator.

Robust aluminium alloy housing is corrosion-resistant, polyester powder coated, and weatherproof. The housing is rated Type 4X (IP67) and certified by CSA standards. Heavy duty motor is integral to the actuator housing, providing the smallest physical size to power ratio of typical actuators on the market.

Electrical wiring is directly to a terminal strip via included cable connectors, or optional 1/2" NPT Conduit adapters.

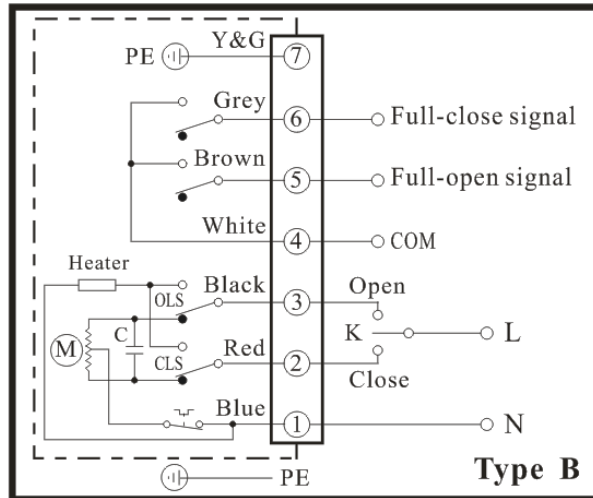
Specifications (Metric units)

| Stock Number | Pipe Size (NPT) | Orifice Size (mm) | Kv Flow Factor | Pressure Max.(Bar)* | Cycle Time/90° (seconds) | Voltage | Current (amps) | Duty Cycle | Electrical Dwg. |
|--|-----------------|-------------------|----------------|---------------------|--------------------------|------------------|----------------|------------|-----------------|
| 120 VAC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: L-PORT | | | | | | | | | |
| 567802A | 1/4 | 10 | 2.8 | 27 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567803A | 3/8 | 10 | 3.0 | 27 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567804A | 1/2 | 15 | 3.9 | 27 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567806A | 3/4 | 19 | 8.6 | 27 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567808A | 1 | 25 | 14 | 27 | 10/8 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567810A | 1-1/4 | 31 | 27 | 27 | 20/17 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567812A | 1-1/2 | 38 | 42 | 27 | 20/17 | 110 VAC, 50/60Hz | 0.27 | 70% | B |
| 567816A | 2 | 50 | 70 | 27 | 30/25 | 110 VAC, 50/60Hz | 0.64 | 70% | B |
| 24 VDC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: L-PORT | | | | | | | | | |
| 567844A | 1/4 | 10 | 2.8 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567845A | 3/8 | 10 | 3.0 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567846A | 1/2 | 15 | 3.9 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567847A | 3/4 | 19 | 8.6 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567849A | 1 | 25 | 14 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567850A | 1-1/4 | 31 | 27 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567851A | 1-1/2 | 38 | 42 | 27 | 20 | DC24 | 1.28 | 70% | G |
| 567852A | 2 | 50 | 70 | 27 | 30 | DC24 | 2.03 | 70% | G |

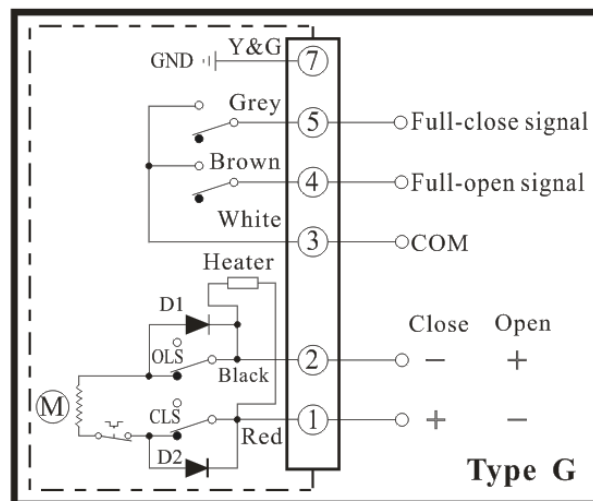
* Pressure at 80° C (reduce pressure for higher temperatures, see P/T chart)

Electrical Wiring Diagram

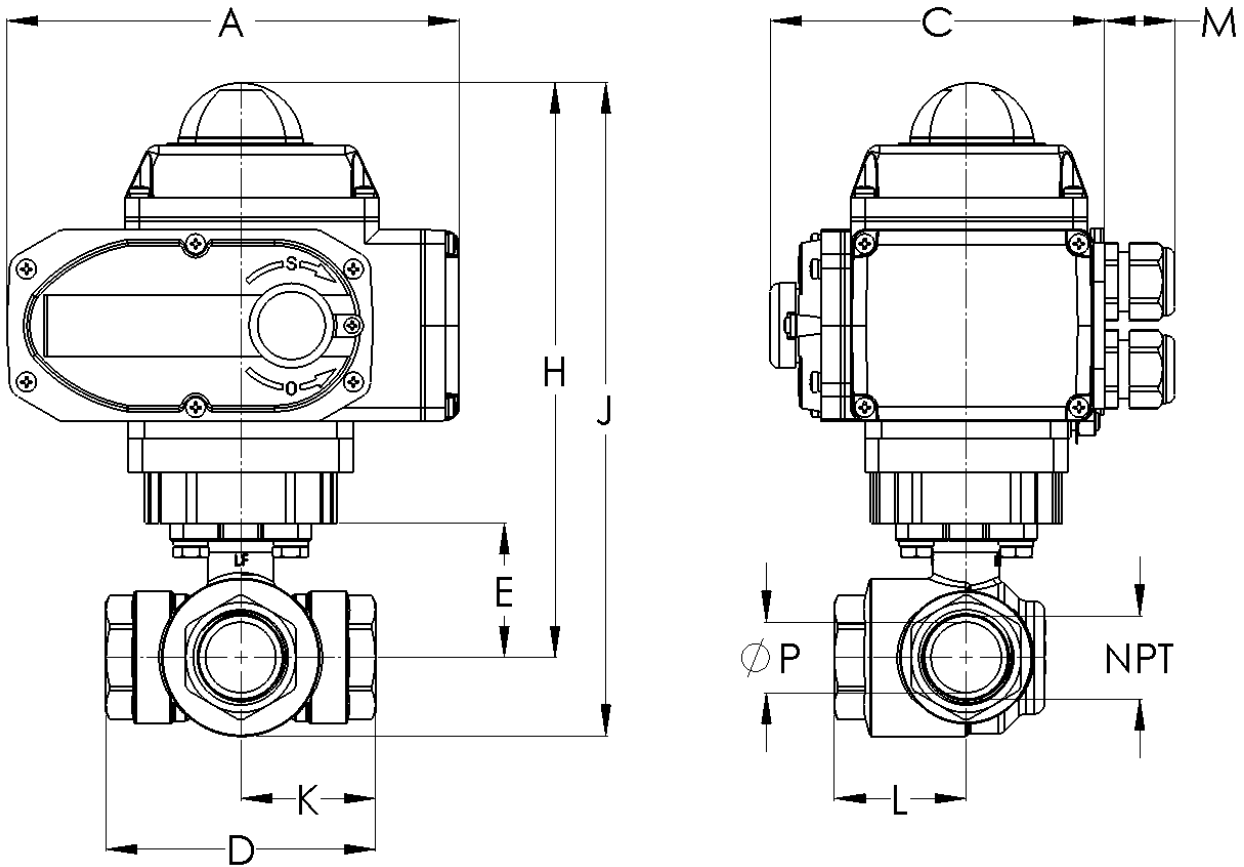
AC Voltages



DC Voltages



Dimensions:



| Pipe Size (NPT) | | A | C | D | E | H | J | K | L | M | P | Weight (AC/DC) |
|-----------------|------|-------|------|------|------|-------|-------|------|------|------|------|----------------|
| 1/4 | inch | 6.34 | 4.65 | 2.19 | 1.04 | 7.19 | 7.74 | 1.09 | 1.08 | 0.98 | 0.39 | 6.5 / 5.5 lb |
| | mm | 161 | 118 | 55.6 | 26.5 | 182.5 | 196.8 | 27.8 | 27.5 | 25 | 10 | 2.9 / 2.5 kg |
| 3/8 | inch | 6.34 | 4.65 | 2.19 | 1.04 | 7.19 | 7.74 | 1.09 | 1.08 | 0.98 | 0.39 | 6.7 / 5.7 lb |
| | mm | 161 | 118 | 55.6 | 26.5 | 182.5 | 196.8 | 27.8 | 27.5 | 25 | 10 | 3.1 / 2.6 kg |
| 1/2 | inch | 6.34 | 4.65 | 2.87 | 1.32 | 7.52 | 8.24 | 1.44 | 1.44 | 0.98 | 0.59 | 7.3 / 6.3 lb |
| | mm | 161 | 118 | 73 | 33.5 | 191.2 | 209.3 | 36.5 | 36.5 | 25 | 15 | 3.3 / 2.9 kg |
| 3/4 | inch | 6.34 | 4.65 | 3.27 | 1.69 | 7.83 | 8.75 | 1.63 | 1.63 | 0.98 | 0.75 | 8.1 / 7.1 lb |
| | mm | 161 | 118 | 83 | 43 | 199 | 222.3 | 41.5 | 41.5 | 25 | 19 | 3.7 / 3.2 kg |
| 1 | inch | 6.34 | 4.65 | 3.76 | 1.87 | 8.01 | 9.12 | 1.88 | 1.84 | 0.98 | 0.98 | 8.8 / 7.8 lb |
| | mm | 161 | 118 | 95.6 | 47.6 | 203.6 | 231.6 | 47.8 | 46.8 | 25 | 25 | 4.0 / 3.5 kg |
| 1-1/4 | inch | 6.34 | 4.65 | 4.21 | 2.17 | 8.31 | 9.61 | 2.11 | 2.01 | 0.98 | 1.22 | 10.0 / 9.0 lb |
| | mm | 161 | 118 | 107 | 55 | 211 | 244 | 53.5 | 51 | 25 | 31 | 4.5 / 4.1 kg |
| 1-1/2 | inch | 6.34 | 4.65 | 4.96 | 2.58 | 8.72 | 10.29 | 2.48 | 2.36 | 0.98 | 1.50 | 13.0 / 12.0 lb |
| | mm | 161 | 118 | 126 | 65.5 | 221.5 | 261.3 | 63 | 60 | 25 | 38 | 5.9 / 5.4 kg |
| 2 | inch | 10.08 | 6.30 | 5.87 | 3.03 | 10.12 | 12.04 | 2.93 | 2.72 | 0.98 | 1.97 | 19.3 / 18.3 lb |
| | mm | 256 | 160 | 149 | 77 | 257 | 306 | 74.5 | 69 | 25 | 50 | 8.8 / 7.3kg |