

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
- Leak free triple PTFE/FKM stem seal packing
- Actuator CSA listed per UL429 and CSA C22.2
- Valve certified NSF372 & NSF/ANSI/CAN 61-2020 for potable/drinking water

Applications

Electric operated flow diverter valve controls 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 vacuum service up 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 T-type flow pattern ball valve has four energized PTFE ball seats, allowing for full pressure at any port. Triple PTFE/FKM leak free 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– EN 60204-12006
 - ISO5211 Mounting

Valves

- IAPMO RT certified to:
 - NSF/ANSI 372 - 2020 Drinking Water
 - NSF/ANSI 61 - 2020
- Meets design MSS-SP-110



Construction Features



Visual Valve Position Indicator

Pressure-Temperature*

Pressure Rating: 400 PSI CWP (27 Bar) non-shock
29" Hg vacuum

Ball Valve Temperature Rating: -4 to 344° F (-20 to 173° C)

Actuator Temperature Rating: -13 to 131° F (-25 to 55° 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°	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.
120 VAC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: T-PORT									
567902C	1/4	0.4	3.2	400	12/10	110 VAC, 50/60Hz	0.27	70%	B
567903C	3/8	0.4	3.5	400	12/10	110 VAC, 50/60Hz	0.27	70%	B
567904C	1/2	0.6	4.5	400	12/10	110 VAC, 50/60Hz	0.27	70%	B
567906C	3/4	0.8	10.0	400	12/10	110 VAC, 50/60Hz	0.27	70%	B
567908C	1	1.0	16.0	400	12/10	110 VAC, 50/60Hz	0.27	70%	B
567910C	1-1/4	1.2	31.0	400	25/21	110 VAC, 50/60Hz	0.27	70%	B
567912C	1-1/2	1.5	49.0	400	25/21	110 VAC, 50/60Hz	0.27	70%	B
567916A	2	2.0	82.0	400	30/25	110 VAC, 50/60Hz	0.64	70%	B
24 VDC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: T-PORT									
567944C	1/4	0.4	3.2	400	20	DC24	1.28	70%	G
567945C	3/8	0.4	3.5	400	20	DC24	1.28	70%	G
567946C	1/2	0.6	4.5	400	20	DC24	1.28	70%	G
567947C	3/4	0.8	10.0	400	20	DC24	1.28	70%	G
567949C	1	1.0	16.0	400	20	DC24	1.28	70%	G
567950C	1-1/4	1.2	31.0	400	20	DC24	1.28	70%	G
567951C	1-1/2	1.5	49.0	400	20	DC24	1.28	70%	G
567952A	2	2.0	82.0	400	30	DC24	2.03	70%	G

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

Electric Actuated 3-Way T-port Valves

Valworx electric actuated 3-way T-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.

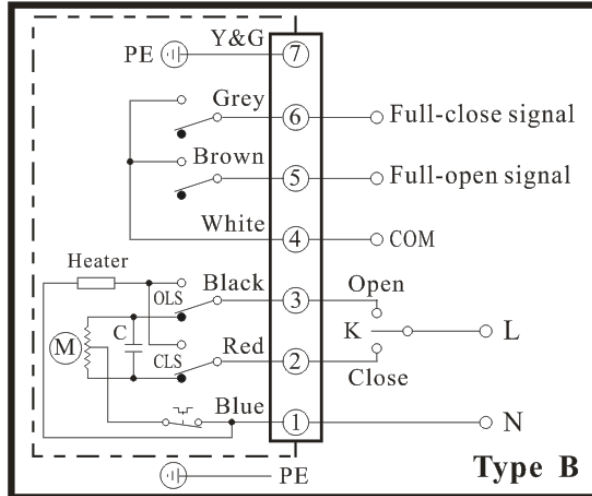
Specifications (Metric units)

Stock Number	Pipe Size (NPT)	Orifice Size (mm)	Kv Flow Factor	Pressure Max.(Bar)*	Cycle Time/90°	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.
120 VAC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: T-PORT									
567902C	1/4	10.0	2.8	27	12/10	110 VAC, 50/60Hz	0.27	70%	B
567903C	3/8	10.0	3.0	27	12/10	110 VAC, 50/60Hz	0.27	70%	B
567904C	1/2	15.0	3.9	27	12/10	110 VAC, 50/60Hz	0.27	70%	B
567906C	3/4	19.0	8.6	27	12/10	110 VAC, 50/60Hz	0.27	70%	B
567908C	1	25.0	14.0	27	12/10	110 VAC, 50/60Hz	0.27	70%	B
567910C	1-1/4	31.0	27.0	27	25/21	110 VAC, 50/60Hz	0.27	70%	B
567912C	1-1/2	38.0	42.0	27	25/21	110 VAC, 50/60Hz	0.27	70%	B
567916A	2	50.0	70.0	27	30/25	110 VAC, 50/60Hz	0.64	70%	B
24 VDC ELECTRIC ACTUATED 3-WAY LF BRASS BALL VALVE: T-PORT									
567944C	1/4	10.0	2.8	27	20	DC24	1.28	70%	G
567945C	3/8	10.0	3.0	27	20	DC24	1.28	70%	G
567946C	1/2	15.0	3.9	27	20	DC24	1.28	70%	G
567947C	3/4	19.0	8.6	27	20	DC24	1.28	70%	G
567949C	1	25.0	14.0	27	20	DC24	1.28	70%	G
567950C	1-1/4	31.0	27.0	27	20	DC24	1.28	70%	G
567951C	1-1/2	38.0	42.0	27	20	DC24	1.28	70%	G
567952A	2	50.0	70.0	27	30	DC24	2.03	70%	G

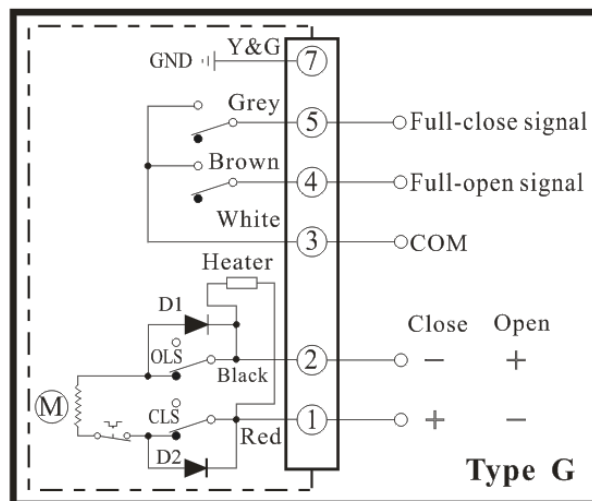
* Pressure at 80° C (reduce pressure for higher temperatures, see P/T chart)

Electrical Wiring Diagram

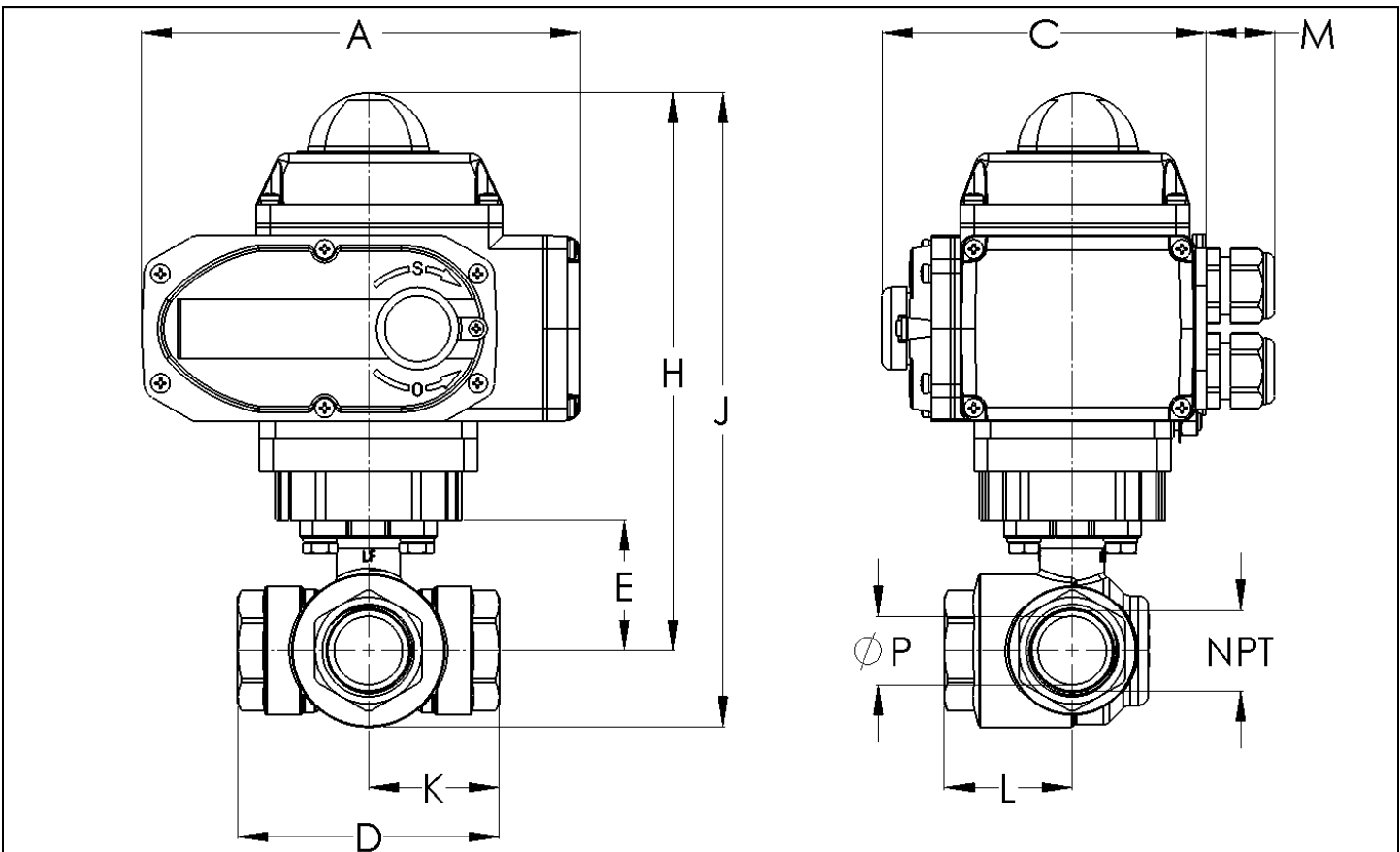
AC Voltages



DC Voltages



Dimensions:



Pipe Size (NPT)		A	C	D	E	H	J	K	L	M	P	Weight (AC/DC)
1/4	inch	6.4	4.7	2.2	1.0	7.2	8.3	1.1	1.1	1.0	0.4	6.5 / 5.5 lb
	mm	162.0	118.5	55.6	26.5	183.5	212.0	27.8	27.5	25.0	10.0	2.9 / 2.5 kg
3/8	inch	6.4	4.7	2.2	1.0	7.2	8.3	1.1	1.1	1.0	0.4	6.7 / 5.7 lb
	mm	162.0	118.5	55.6	26.5	183.5	212.0	27.8	27.5	25.0	10.0	3.1 / 2.6 kg
1/2	inch	6.4	4.7	2.9	1.3	7.5	8.6	1.4	1.4	1.0	0.6	7.3 / 6.3 lb
	mm	162.0	118.5	73.0	33.5	190.5	219.0	36.5	36.5	25.0	15.0	3.3 / 2.9 kg
3/4	inch	6.4	4.7	3.3	1.7	7.9	9.4	1.6	1.6	1.0	0.8	8.1 / 7.1 lb
	mm	162.0	118.5	83.0	43.0	200.0	239.0	41.5	41.5	25.0	19.0	3.7 / 3.2 kg
1	inch	6.4	4.7	3.8	1.9	8.1	9.6	1.9	1.8	1.0	1.0	8.8 / 7.8 lb
	mm	162.0	118.5	95.6	47.6	204.6	243.0	47.8	46.8	25.0	25.0	4.0 / 3.5 kg
1-1/4	inch	6.4	4.7	4.2	2.2	8.3	9.9	2.1	2.0	1.0	1.2	10.0 / 9.0 lb
	mm	162.0	118.5	107.0	55.0	212.0	251.0	53.5	51.0	25.0	31.0	4.5 / 4.1 kg
1-1/2	inch	6.4	4.7	5.0	2.6	8.8	10.4	2.9	2.4	1.0	1.5	13.0 / 12.0 lb
	mm	162.0	118.5	126.0	65.5	222.5	263.0	63.0	60.0	25.0	38.0	5.9 / 5.4 kg
2	inch	10.1	6.3	5.9	3.0	10.1	12.0	2.9	2.7	1.0	2.0	19.3 / 18.3 lb
	mm	256.0	160.0	149.0	77.0	256.0	306.0	74.5	69.0	25.0	50	8.8 / 7.3 kg