

Features

- Quick Close Actuator– 2, 4 or 8 second cycle times
- Full Port lead free brass ball valve
- Energized PTFE ball seats for lower torque and longer life
- Leak free Triple PTFE/FKM stem seal packing
- Valve certified NSF372 & NSF/ANSI/CAN 61-2020 for potable/drinking water
- 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
- Actuator listed per UL429 and CSA C22.2

Applications

On-off control 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 vacuum service up to 29"Hg. Actuator designed for 70% duty cycle.

Operation

Electric actuated valve uses power-to-open and power-to-close, stays in the last known position with loss of power. On receipt of a continuous voltage signal, the motor runs and via a rugged all metal gear system 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. Wire directly to terminal strip via 1/2" NPT connection or use supplied cable connector.

Construction

Valve Body	Lead free brass C69300
Ball/Stem	316 stainless steel
Ball Seats	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



Description

Electric actuated full port lead free ball valves provide unrestricted flow and minimum pressure loss. Energized PTFE ball seats are designed for low torque and extended cycle life. Triple PTFE/FKM leak free stem seal design. Rugged Type 4X corrosion resistant electric actuator includes a manual override, valve position confirmation switches (on-off models), 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 60204-1:2006
 - ISO5211 mounting



Valves

- IAPMO RT certified to:
 - NSF/ANSI 372 - 2011 Drinking Water
 - NSF/ANSI/CAN 61-2020
 - Weighted average lead content <= 0.25%
- Meets design MSS-SP-110



Construction Features



Visual Valve Position Indicator

Pressure-Temperature*

Pressure Rating: 600 PSI CWP (41 Bar) non-shock 1/4"-2" sizes
300 PSI CWP (21 Bar) non-shock 2-1/2 & 3" sizes
29" Hg vacuum

Ball Valve Temperature Rating: -4 to 366° F (-20 to 186° 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	600	600	600	600	550	400
°F	0	50	100	176	200	266

Pressure/Temperature Chart (Bar/°C)

P/T Chart						
Bar	41	41	41	41	38	27
°C	-18	10	38	80	93	130

Specifications: On-Off Valves (English units)

Stock Number	Pipe Size (NPT)	Orifice Size (inch)	Cv Flow Factor	Pressure Max. (PSI)*	Cycle Time/ 90° (seconds)	Voltage	Current (amps)	Electrical Drawing	Quick Close Accessory
120 VAC ELECTRIC ACTUATED LF BRASS BALL VALVES: QUICK CLOSE version									
567602C	1/4	0.4	8	600	2	110 VAC, 50/60Hz	0.58	B	A561825
567603C	3/8	0.5	10	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567604C	1/2	0.6	15	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567606C	3/4	0.8	35	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567608C	1	1.0	60	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567610C	1-1/4	1.2	89	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567612C	1-1/2	1.5	125	600	2	110 VAC, 50/60Hz	0.8	B	A561825
567616C	2	2.0	240	600	4	110 VAC, 50/60Hz	0.8	B	A561850
567617C	2-1/2	2.5	320	300	4	110 VAC, 50/60Hz	0.8	B	A561850
567618A	3	3.0	551	300	8	110 VAC, 50/60Hz	1.2	B	A561862
24 VDC ELECTRIC ACTUATED LF BRASS BALL VALVES: QUICK CLOSE version									
567644C	1/4	0.4	8	600	4	DC24	6.0	G	A561851
567645C	3/8	0.5	10	600	4	DC24	6.0	G	A561851
567646C	1/2	0.6	15	600	4	DC24	6.0	G	A561851
567647C	3/4	0.8	35	600	4	DC24	6.0	G	A561851
567649C	1	1.0	60	600	4	DC24	6.0	G	A561851
567650C	1-1/4	1.2	89	600	4	DC24	6.0	G	A561851
567651C	1-1/2	1.5	125	600	4	DC24	6.0	G	A561851
567652C	2	2.0	240	600	4	DC24	6.0	G	A561851
567653C	2-1/2	2.5	320	300	4	DC24	6.0	G	A561851
567654A	3	3.0	551	300	8	DC24	6.0	G	A561865

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

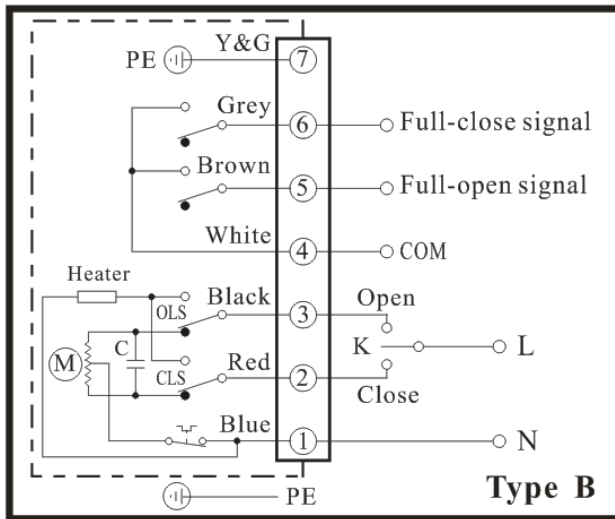
Specifications: On-Off Valves (Metric units)

Stock Number	Pipe Size (NPT)	Orifice Size (mm)	Kv Flow Factor	Pressure Max. (Bar)*	Cycle Time/ 90° (seconds)	Voltage	Current (amps)	Electrical Drawing	Quick Close Accessory
120 VAC ELECTRIC ACTUATED LF BRASS BALL VALVE: QUICK CLOSE version									
567602C	1/4	10.0	5.0	40	2	110 VAC, 50/60Hz	0.58	B	A561825
567603C	3/8	12.7	8.6	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567604C	1/2	15.0	13.0	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567606C	3/4	19.0	26.0	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567608C	1	25.0	52.0	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567610C	1-1/4	31.0	76.0	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567612C	1-1/2	38.0	107.0	40	2	110 VAC, 50/60Hz	0.8	B	A561825
567616C	2	50.0	206.0	40	4	110 VAC, 50/60Hz	0.8	B	A561850
567617C	2-1/2	63.0	275.0	21	4	110 VAC, 50/60Hz	0.8	B	A561850
567618A	3	76.0	474.0	21	4	110 VAC, 50/60Hz	1.2	B	A561862
24 VDC ELECTRIC ACTUATED LF BRASS BALL VALVE: QUICK CLOSE version									
567644C	1/4	10.0	5.0	40	4	DC24	6.0	G	A561851
567645C	3/8	12.7	8.6	40	4	DC24	6.0	G	A561851
567646C	1/2	15.0	13.0	40	4	DC24	6.0	G	A561851
567647C	3/4	19.0	26.0	40	4	DC24	6.0	G	A561851
567649C	1	25.0	52.0	40	4	DC24	6.0	G	A561851
567650C	1-1/4	31.0	76.0	40	4	DC24	6.0	G	A561851
567651C	1-1/2	38.0	107.0	40	4	DC24	6.0	G	A561851
567652C	2	50.0	206.0	40	4	DC24	6.0	G	A561851
567653C	2-1/2	63.0	275.0	21	4	DC24	6.0	G	A561851
567654A	3	76.0	474.0	21	8	DC24	6.0	G	A561865

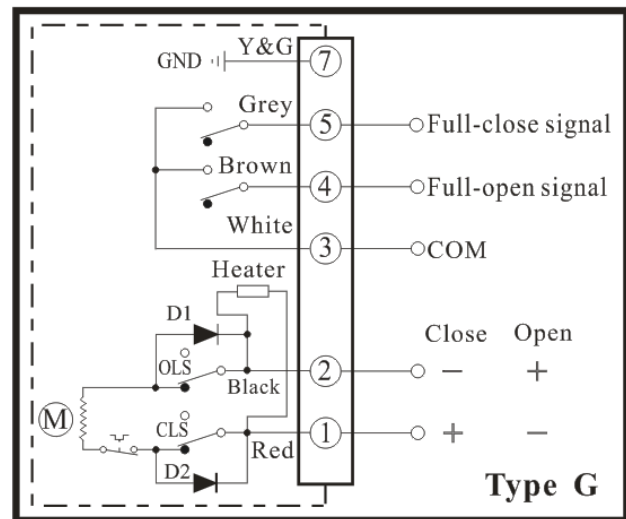
* Pressure at 80° C (see P/T chart for maximum pressure at higher temperatures)

Electrical Wiring

ON-OFF Valves AC Voltages



ON-OFF Valves DC Voltages



On-Off Electric Actuated Valves

Valworx electric actuated valves use power-to-open and power-to-close, stays in the last known position with loss of power. The actuator will rotate the output drive 90° to open or close the ball valve. Limit switches automatically stop the motor drive in either the open or closed position as required. Two auxiliary limit switches are provided as standard with on-off actuators to confirm valve open or closed position.

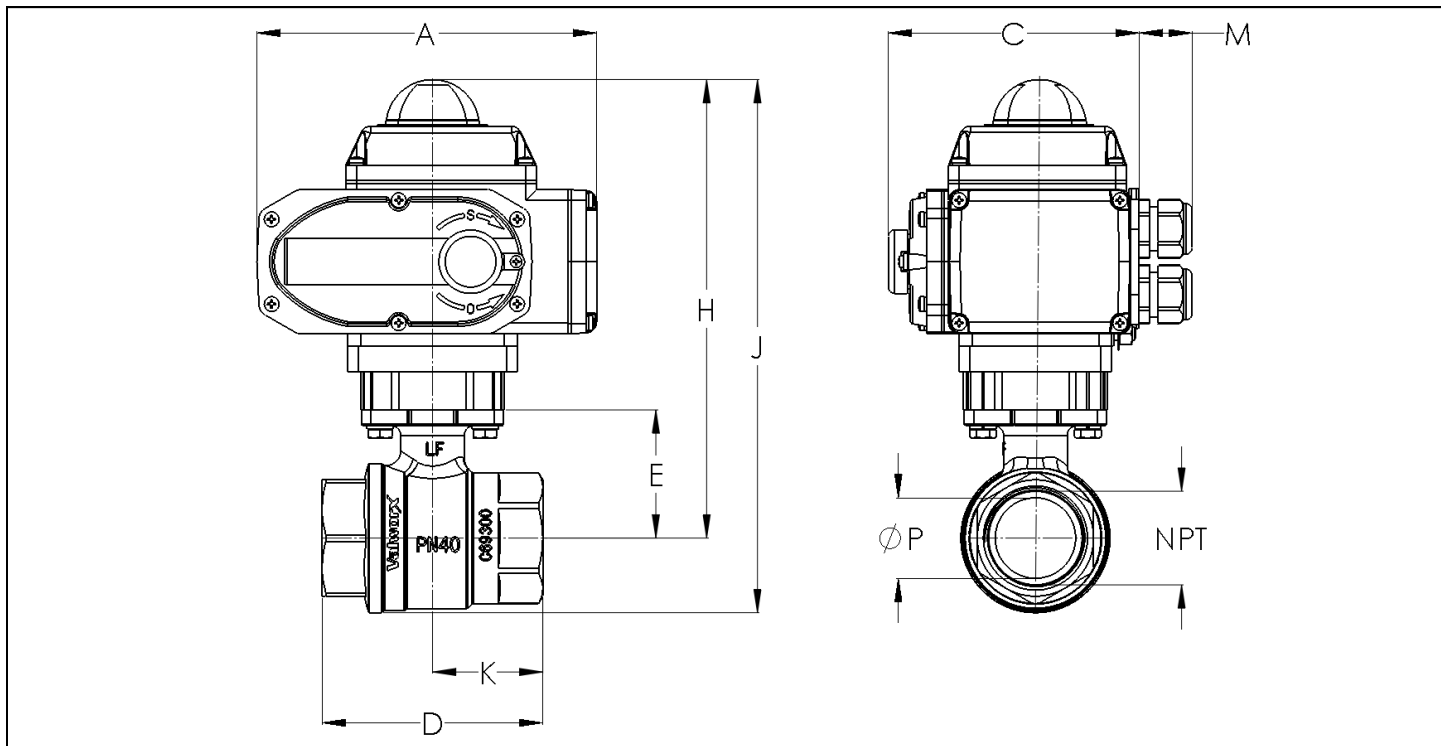
Rugged primary gear drive system is made of heat treated alloy steel for high strength, excellent wear resistance and high torque. Final stage aluminium bronze worm gear drive is self-locking, no motor brake required. A manual override is provided for use in setup or power failure situations.

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. 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 cable connectors (included) or optional 1/2" NPT conduit adapters.

Dimensions:



Pipe Size (NPT)		A	C	D	E	H	J	K	M	P	Weight
1/4	inch	7.7	5.0	1.9	0.9	8.1	8.6	0.9	1.0	0.4	10.5 lb
	mm	196.5	126.0	47.6	22.0	205.7	218.4	23.8	25.0	10.0	4.8 kg
3/8	inch	7.7	5.0	2.0	1.0	8.3	8.9	1.0	1.0	0.5	10.6 lb
	mm	196.5	126.0	51.4	26.5	210.8	226.1	25.7	25.0	12.7	4.8 kg
1/2	inch	7.7	5.0	2.5	1.3	8.5	9.2	1.3	1.0	0.6	10.7 lb
	mm	196.5	126.0	63.6	32.0	215.9	233.7	31.8	25.0	15.0	4.9 kg
3/4	inch	7.7	5.0	2.7	1.4	9.7	9.4	1.4	1.0	0.8	11.0 lb
	mm	196.5	126.0	69.0	34.8	246.4	238.8	34.5	25.0	19.0	5.0 kg
1	inch	7.7	5.0	3.3	1.8	9.0	10.0	1.7	1.0	1.0	11.6 lb
	mm	196.5	126.0	84.4	44.5	228.6	254.0	42.2	25.0	25.0	5.3 kg
1-1/4	inch	7.7	5.0	3.7	2.0	9.1	10.4	1.8	1.0	1.2	12.2 lb
	mm	196.5	126.0	92.7	49.5	231.1	264.2	46.3	25.0	31.0	5.5 kg
1-1/2	inch	7.7	5.0	4.1	2.4	9.5	11.0	2.1	1.0	1.5	13.7 lb
	mm	196.5	126.0	104.0	60.5	241.3	279.4	52.1	25.0	38.0	6.2 kg
2	inch	7.7	5.0	4.8	2.8	10.1	11.9	2.4	1.0	2.0	15.6 lb
	mm	196.5	126.0	121.0	72.0	256.5	302.3	60.6	25.0	50.0	7.1 kg
2-1/2	inch	7.7	5.0	6.1	3.4	10.7	12.9	3.0	1.0	2.5	19.8 lb
	mm	196.5	126.0	154.0	86.0	271.8	327.7	77.1	25.0	63.0	9.0 kg
3	inch	10.1	6.4	6.9	3.8	13.9	16.5	3.4	1.0	3.0	33.4 lb
	mm	255.5	161.5	175.0	97.0	352.5	419.5	87.6	25.0	76.0	15.2 kg