

### Features

- Quick close actuator– 4 or 8 second cycle times
- Fire safe approved (API 607)
- Fugitive Emission approved (API 641)
- Pipeline use approved (API 608)
- Fugitive Emission Stem Seal approved (API 622)
- RTFE (reinforced Teflon) ball seats; Braided graphite stem seals
- Highly visual dome style valve position indicator
- Rugged aluminum Type 4X weatherproof enclosure
- Heavy duty motors with overload protection
- Thermostatically controlled anti-condensation heater
- Manual override with end of travel mechanical stops
- Two auxiliary limit switches included
- Actuator CSA Listed per UL429 and CSA C22.2

### Applications

Electric actuated stainless steel ball valve with braided graphite seals typically used for On-Off control of water, air, oil and other media compatible with the materials of construction. Also for use in pipeline, firesafe and low-emission applications. The valve utilizes special high cycle life seals with the lowest operating torques. Steam service up to 25 PSI with optional high temperature mounting kit. Suitable for vacuum service up to 29inHg. Actuators designed for 70% duty cycle.

\*Not suitable for potable water, oxygen or high purity fluid applications.

### Operation

On-Off 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. Power connections via included cable connector or optional 1/2" NPT conduit adapter.

### Construction

Valve Body	316SS ASTM A351, CF8M
Ball/Stem	316SS CF8M
Ball Seats	RTFE (reinforced Teflon)
Stem Seals	Braided Graphite (Slade 3300i), Viton
Gear Drive	Heavy duty alloy steel /aluminium bronze, self locking
Actuator Enclosure	Aluminum, polyester powder painted, Type 4X, IP67
Visual Valve Position Indicator	Clear polycarbonate cover, red/yellow open-closed
Fasteners	Stainless Steel
Auxiliary Limit Switches	2 x SPDT 3A@125/250VAC, 30VDC resistive load



### Description

Electric actuated dual certified (low emission/ fire safe) investment cast 2-piece Full Port 150# flanged stainless body and ball offers unrestricted flow and minimum pressure loss. Flange dimensions meet ANSI B16.5 and B16.10 (face-to-face) Class150 mounting standards. Adjustable live loaded stem seal packing helps compensate for wear, pressure and/or temperature fluctuations, extending the cycle life of the valve. Rugged corrosion resistant electric actuator includes a manual override, valve position confirmation switches, thermostatically controlled anti-condensation heater, and over-torque protection.

### Approvals Actuators

- CSA listed:
  - UL429
  - CSA C22.2 No. 139
  - Type 4X weatherproof enclosure
- CE conformance– EN 60204-1:2006
  - ISO5211 mounting
  - IP67 weatherproof enclosure



### Valves

- Fire Safe: API 607(VI)/ISO10497(III)
- Fugitive Emission: API 641 (I)
- Pipeline Use: API 608
- Stem Packing: API 622
- Construction: ASME B16:34
- End Connection: ANSI Class 150 Flange RF
- Face to Face: ANSI B16.10 Class 150
- Flange Dimensions: ANSI B16.5 Class 150
- Pressure Testing: API 598, EN12266
- Direct Mounting Pad: ISO5211, square stem
- CE conformance– PED 2014/68/UE

### Construction Features

Auxiliary Limit Switches(2)  
for confirming valve position

Heavy duty integral motor  
design significantly reduces  
physical size of actuator

Rugged polyester powder  
coated aluminum corrosion  
resistant Type 4X weather-  
proof enclosure.

150# RF flange dimensions  
per ANSI B16.5 and face-to-  
face dimensions per B16.10

Fire safe sealing design  
(API 607)

316 stainless steel ball with  
RTFE ball seats

Anti-Condensation Heater

Terminal Box, wire directly to  
terminal strip via included  
cable connector or optional  
1/2" NPT conduit adapters.

Manual Override with  
protective cover

Self-locking all metal gear  
train, no additional brake  
required

Direct mount ISO5211  
mounting flange

Braided graphite stem  
packing (API 622 approved)



Visual Valve  
Position Indicator

### Pressure-Temperature\*

Valve Pressure Rating\*: 275 PSI (19 Bar) CWP non-shock,  
25 PSI saturated steam with high temp kit,  
Vacuum 29inHg

Ball Valve Temperature Rating: -4 to 392° F (-20 to 200° C)

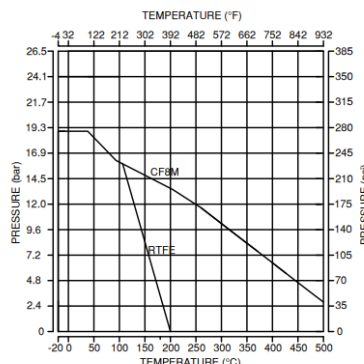
Actuator Temperature Rating: -13 to +131° F (-25 to 55° C)

\*See P/T chart below

### Pressure/Temperature

P/T Chart (PSI/°F)					
PSI	275	275	210	125	0
°F	-4	100	248	302	392

P/T Chart (BAR/°C)					
Bar	19	19	14.5	8.4	0
°C	-20	38	120	150	200



## Specifications: English units

Stock Number	Pipe Size (inch)	Orifice Size (inch)	Cv Flow Factor	Pressure Max.(PSI)*	Cycle Time /90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED 150# Flanged STAINLESS BALL VALVE, QUICK CLOSE version</b>										
566008E	1	1.0	60	275	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566012E	1-1/2	1.5	125	275	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566016E	2	2.0	240	275	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566018C	3	3.2	580	275	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
566019C	4	4.0	1020	275	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>24 VDC ELECTRIC ACTUATED 150# Flanged STAINLESS BALL VALVE, QUICK CLOSE version</b>										
566046E	1	1.0	60	275	4	DC24	6.0	70%	G	A561851
566048E	1-1/2	1.5	125	275	4	DC24	6.0	70%	G	A561851
566049E	2	2.0	240	275	4	DC24	6.0	70%	G	A561851
566051C	3	3.2	580	275	8	DC24	6.0	70%	G	A561871
566052C	4	4.0	1020	275	8	DC24	6.0	70%	G	A561871

\* Pressure @ 100° F (see P/T chart for higher temperatures)

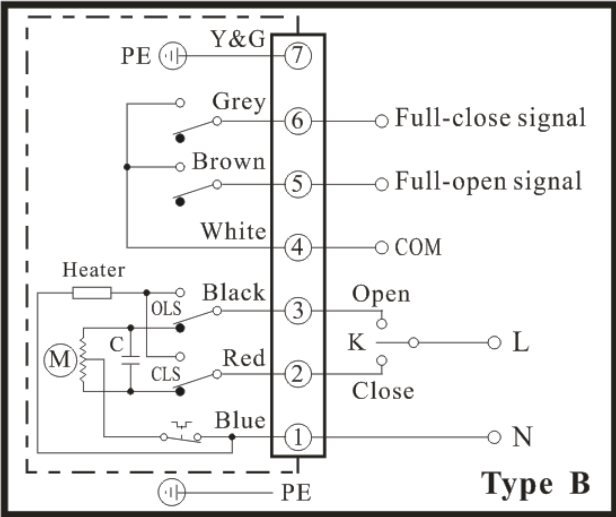
## Specifications: Metric Units

Stock Number	Pipe Size (inch)	Orifice Size (mm)	Kv Flow Factor	Pressure Max.(Bar)*	Cycle Time /90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED 150# Flanged STAINLESS BALL VALVE, QUICK CLOSE version</b>										
566008E	1	11.5	52	19	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566012E	1-1/2	12.5	108	19	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566016E	2	15.0	207	19	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
566018C	3	20.0	501	19	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
566019C	4	25.0	882	19	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>24 VDC ELECTRIC ACTUATED 150# Flanged STAINLESS BALL VALVE, QUICK CLOSE version</b>										
566046E	1	11.5	52	19	4	DC24	6.0	70%	G	A561851
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566049E	2	15.0	207	19	4	DC24	6.0	70%	G	A561851
566051C	3	20.0	501	19	8	DC24	6.0	70%	G	A561871
566052C	4	25.0	882	19	8	DC24	6.0	70%	G	A561871

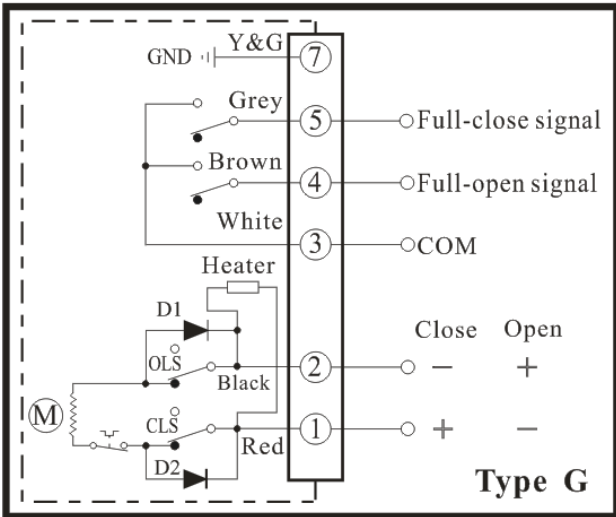
\* Pressure @ 70° C (see P/T chart for higher temperatures)

## 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.

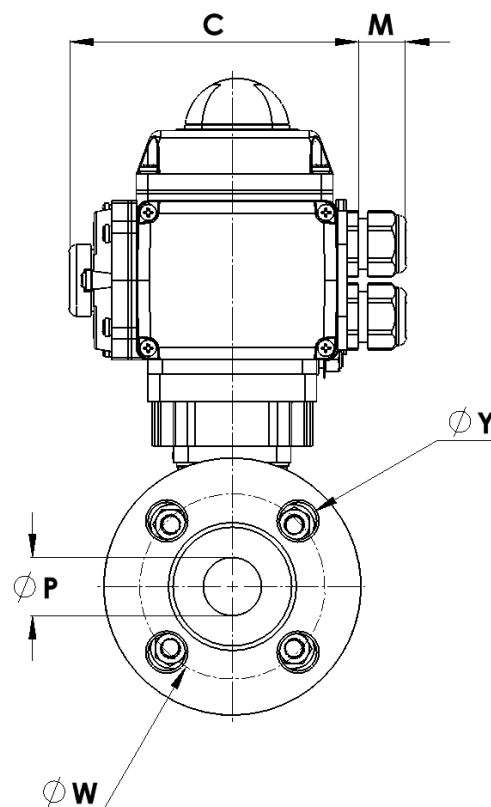
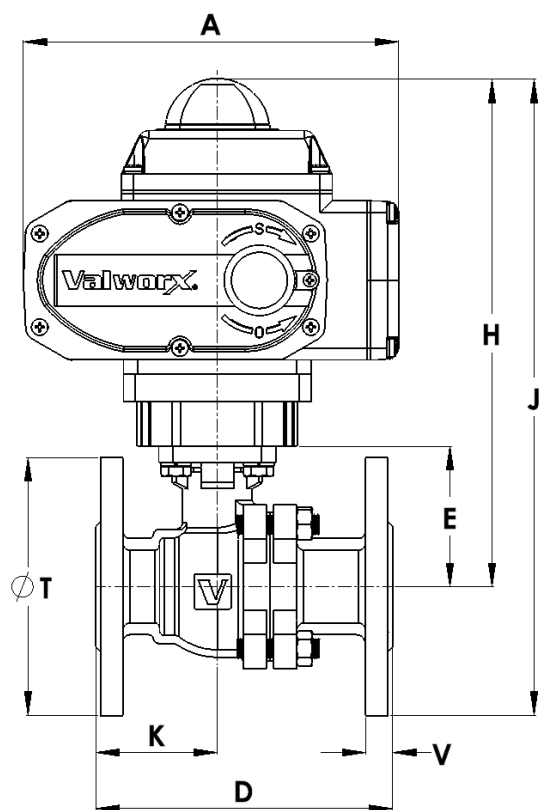
A manual override is provided for use in setup or power failure situations. The override is operated with a standard hex wrench (included).

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 motors are integral to the actuator housing. The actuator has the smallest physical size to power ratio of most actuator on the market.

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

## Dimensions:



End Connection: ANSI Class 150 Flange RF

Face to Face: ANSI B16.10 Class 150

Flange Dimensions: ANSI B16.5 Class 150

Pipe Size		A	C	D	E	H	J	K	M	P	T	V	W	Y	Weight
1	inch	7.7	5.0	5.0	2.4	9.4	11.6	2.0	1.0	1.0	4.3	0.4	0.3	4) 0.6	16.1 lb
	mm	196.5	126.0	127.0	60.0	238.8	294.6	50.8	25.0	25.0	110.0	9.6	7.0	4) 16.0	7.3 kg
1-1/2	inch	7.7	5.0	6.5	3.1	10.2	12.6	2.9	1.0	1.5	4.9	0.5	0.4	4) 0.6	23.2 lb
	mm	196.5	126.0	165.0	78.0	259.1	320.0	73.7	25.0	38.0	125.0	12.7	9.0	4) 16.0	10.5 kg
2	inch	7.7	5.0	7.0	3.4	10.5	13.5	3.2	1.0	2.0	5.9	0.6	0.4	4) 0.6	29.3 lb
	mm	196.5	126.0	178.0	87.0	266.7	342.9	81.3	25.0	50.0	150.0	14.3	10.0	4) 16.0	13.3 kg
3	inch	10.1	6.30	8.0	4.6	13.1	16.8	4.0	1.0	3.0	7.5	0.7	0.5	4) 0.8	60.5 lb
	mm	256.0	160	203.0	116.0	332.0	427.5	101.6	25.0	76.0	190.0	17.5	12.0	4) 19.0	27.5 kg
4	inch	10.1	6.30	9.0	5.5	14.0	18.5	4.5	1.0	3.9	9.1	0.9	0.5	8) 0.8	86.0 lb
	mm	256.0	160	229.0	140.0	356.0	471.0	114.3	25.0	100.0	230.0	22.3	12.0	8) 19.0	39.1 kg