

### Features

- Quick close actuator– 4 or 8 second cycle times
- Functions as a diverter, selector, or mixing valve
- All materials comply with FDA and USDA requirements
- Dyneon® TF-1641 (PTFE) FDA approved ball seats and cavity fillers
- Triple PTFE/Viton® high cycle live loaded stem seal packing
- Highly polished internals and end caps with 8-12 Ra finish
- Tri-Clamp ends for hygienic connections
- Visual 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 position confirmation limit switches
- Actuators CSA Listed per UL429 and CSA C22.2

### Applications

Sanitary 3-way ball valves are typically used for food, beverage, pharmaceutical, personal care, and pet care applications where sanitary construction is required, as well as for utility, process, and corrosive environment applications where quick clamp connections are beneficial. Often used as a diverter, selector or mixing valve with a variety of flow path options through the valve. 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. Power connections are via included cable connector or optional 1/2" NPT conduit adapters. Manual override is available for setup and power failure situation.

### Construction

Valve Body	ASTM 316 stainless steel
Ball/Stem/ End Caps	ASTM 316 stainless steel
Ball Seats/ Cavity Filler	Dyneon® PTFE
Stem Seals	PTFE / Viton®
Gear Drive	Heavy duty steel and aluminium bronze, self locking
Actuator Enclosure	Aluminium, polyester powder painted, Type 4X, IP67
Visual Valve Position Indicator	Clear polycarbonate cover, red/yellow open-closed
Fasteners	ASTM 304 Stainless Steel
Auxiliary Limit Switches	2 x SPDT 3A@125/250VAC, 30VDC resistive load



### Description

Electrically operated sanitary 3-way T-type flow pattern ball valve has four Dyneon® PTFE ball seats, allowing for full pressure at any port. Adjustable live loaded stem seal packing helps compensate for wear, pressure and temperature fluctuations, extending the cycle life of the valve. Rugged corrosion resistant electric actuator includes a manual override, position confirm switches (on-off units), 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



### Standards- Valves

- Construction:
  - ANSI B16/B2/B18
  - FDA 21 CFR 177.1550
  - ANSI B16.34
- Pressure Testing:
  - API 598
- Marking
  - MSS-SP-25

### 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 Type 4X  
weatherproof enclosure.

Live –loaded triple PTFE  
stem seal

Encapsulated Dyneon®  
PTFE cavity filler

Internals polished to 8-12 Ra

ASTM 304 stainless steel  
fasteners

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  
drive, no additional brake  
required

ASTM 316 (CF8M)  
investment grade casting  
(body & end caps)

Dyneon® PTFE ball seats

Standard Tri-Clamp end caps for sanitary  
connections\*

\* Refer to specifications table for Tri-Clamp  
size

\* Note: Tri-Clamp size is **NOT** determined  
by the OD of the end cap

### Pressure-Temperature

**Shell Pressure Rating (Max)\*:** 1000 PSI @ 120°F (1" to 2"),  
600 PSI (2 1/2" to 3")

**Temperature Rating:** -4° to 356° F (-20 to 180°C)

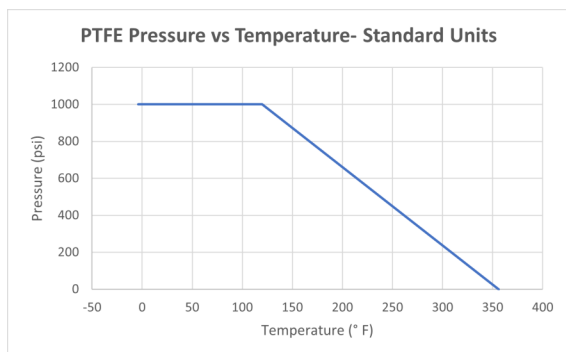
\*See P/T Chart

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



Visual Valve  
Position Indicator

### Pressure/Temperature Chart (PSI/°F)



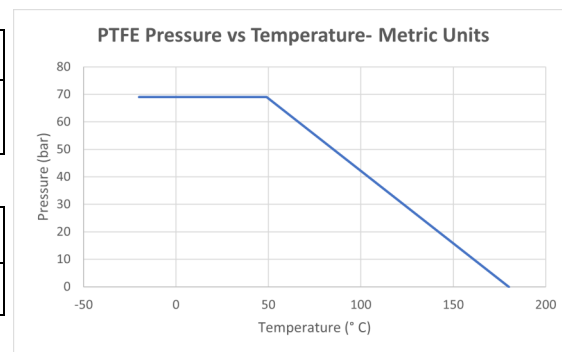
#### Standard Units

Temp °F	-4	120	356
Pressure	1000	1000	0

#### Metric Units

Temp °C	-20	49	180
Pressure	69	69	0

### Pressure/Temperature Chart (Bar/°C)



## Specifications (English units)

Stock Number	Pipe Size (inch)	Tri-Clamp Size (inch)	Cv Flow Factor	Shell Pressure Max.(PSI)*	Cycle Time/ 90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED 3-WAY T-PORT SANITARY STAINLESS BALL VALVE– QUICK CLOSE version</b>										
<b>572502C</b>	1	1-1/2	17.3	1000	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572503C</b>	1-1/2	1-1/2	43.3	1000	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572504C</b>	2	2	77.9	1000	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572505C</b>	2-1/2	2-1/2	115.9	600	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>572506C</b>	3	3	210.2	600	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>24 VDC ELECTRIC ACTUATED 3-WAY T-PORT SANITARY STAINLESS BALL VALVE– QUICK CLOSE version</b>										
<b>572702C</b>	1	1-1/2	17.3	1000	4	DC24	6.0	70%	G	A561851
<b>572703C</b>	1-1/2	1-1/2	43.3	1000	4	DC24	6.0	70%	G	A561851
<b>572704C</b>	2	2	77.9	1000	4	DC24	6.0	70%	G	A561851
<b>572705C</b>	2-1/2	2-1/2	115.9	600	8	DC24	6.0	70%	G	A561851
<b>572706C</b>	3	3	210.2	600	8	DC24	6.0	70%	G	A561851

\* Pressure @ -4° to 356° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 1000 PSI and 72°F

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

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

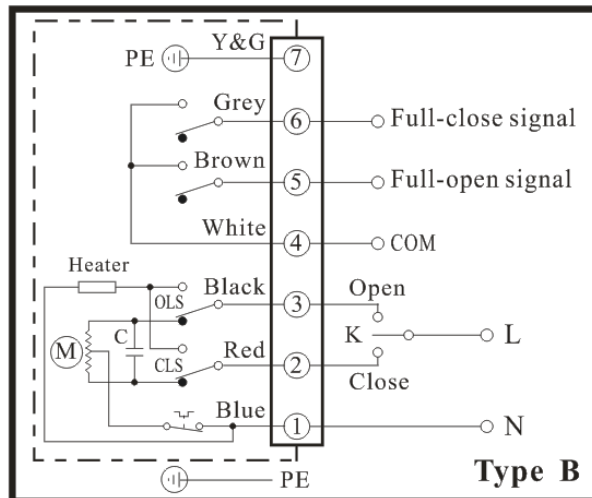
## Specifications (Metric units)

Stock Number	Pipe Size (mm)	Tri-Clamp Size (mm)	Kv Flow Factor	Shell Pressure Max.(Bar) *	Cycle Time/ 90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED 3-WAY T-PORT SANITARY STAINLESS BALL VALVE- QUICK CLOSE version</b>										
<b>572502C</b>	25.4	1-1/2	20.0	69	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572503C</b>	38.1	1-1/2	50.0	69	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572504C</b>	50.8	2	90.0	69	4	110 VAC, 50/60Hz	0.8	70%	B	A561850
<b>572505C</b>	63.5	2-1/2	134.0	41	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>572506C</b>	76.2	3	243.0	41	8	110 VAC, 50/60Hz	1.2	70%	B	A561870
<b>24 VDC ELECTRIC ACTUATED 3-WAY T-PORT SANITARY STAINLESS BALL VALVE- QUICK CLOSE version</b>										
<b>572702C</b>	25.4	1-1/2	20.0	69	4	DC24	6.0	70%	G	A561851
<b>572703C</b>	38.1	1-1/2	50.0	69	4	DC24	6.0	70%	G	A561851
<b>572704C</b>	50.8	2	90.0	69	4	DC24	6.0	70%	G	A561851
<b>572705C</b>	63.5	2-1/2	134.0	41	8	DC24	6.0	70%	G	A561851
<b>572706C</b>	76.2	3	243.0	41	8	DC24	6.0	70%	G	A561851

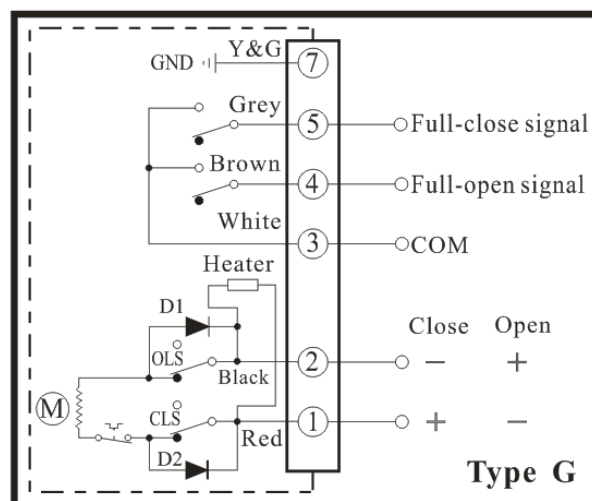
\* Pressure range @ -20° to 180° C (reduced pressure for higher temperatures—see P/T chart)

## Electrical Wiring

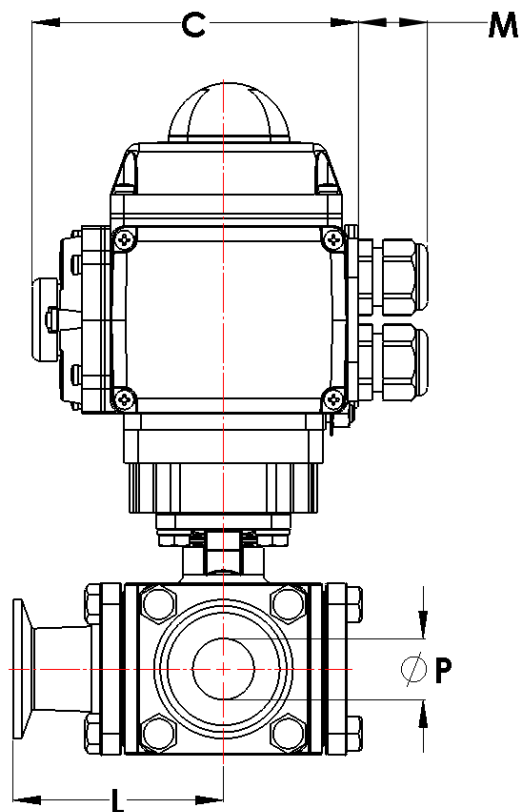
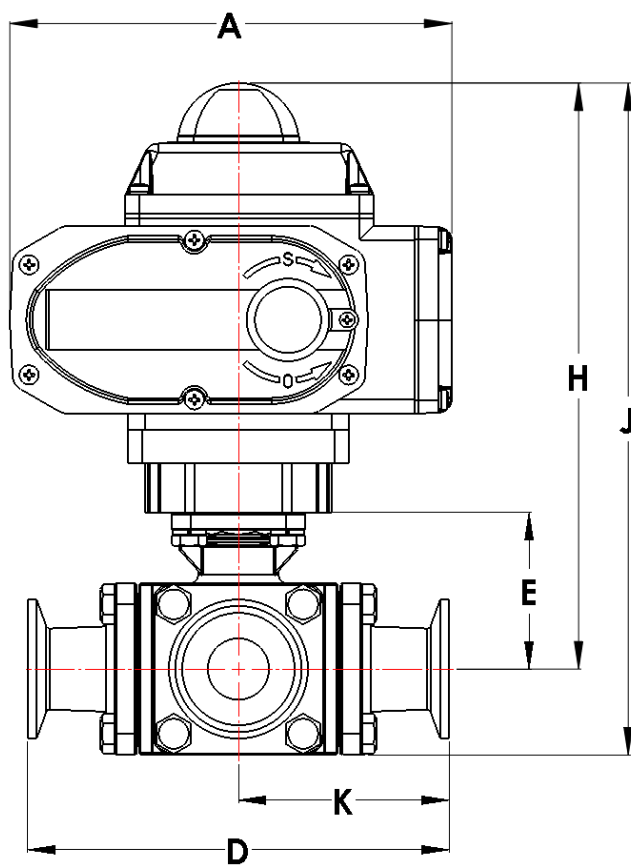
### AC Voltages



### DC Voltages



**Dimensions: (24 VDC & 110 VAC)**



Pipe Size		A	C	D	E	H	J	K	L	M	P	Weight
1	inch	7.7	5.0	6.0	2.3	9.4	10.6	3.1	3.0	1.0	0.9	16.3 lb
	mm	196.5	126.0	152.4	59.0	238.8	269.2	77.5	76.2	25.0	22.2	7.4 kg
1-1/2	inch	7.7	5.0	6.9	2.8	9.9	11.5	3.4	3.5	1.0	1.4	22.7 lb
	mm	196.5	126.0	175.0	72.0	251.5	292.1	87.5	88.8	25.0	35.0	10.3 kg
2	inch	7.7	5.0	7.5	3.2	10.3	12.3	3.7	3.8	1.0	1.9	29.7 lb
	mm	196.5	126.0	190.0	82.0	264.6	312.4	95.0	96.3	25.0	47.6	13.5 kg
2-1/2	inch	10.1	6.4	9.0	4.0	12.5	14.9	4.5	4.2	1.0	2.4	45.3 lb
	mm	255.5	161.5	228.0	102.5	317.5	378.5	114.0	107.0	25.0	60.2	20.6 kg
3	inch	10.1	6.4	10.2	4.9	13.4	164.4	5.1	4.2	1.0	2.9	63.1 lb
	mm	255.5	161.5	260.0	125.5	340.4	416.6	130.0	107.0	25.0	72.9	28.7 kg