

Features

- All valve materials comply with FDA and USDA requirements
- Tri-Clamp ends for hygienic connections
- 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
- Rugged aluminum Type 4X weatherproof enclosure
- Heavy duty motor with overload protection
- Thermostatically controlled anti-condensation heater
- Manual override with end of travel mechanical stops
- Two auxiliary position confirmation switches
- Actuator CSA Listed per UL429 and CSA22.2

Applications

Sanitary 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.

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 direct to terminal strip via included cable connector, or optional 1/2" NPT conduit adapters.

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 alloy steel/aluminium bronze, self locking
Actuator Enclosure	Aluminium, polyester powder painted, Type 4X, IP67
Visual Valve Position Indicator	Clear cover, red/yellow open-closed
Fasteners	ASTM 304 Stainless Steel
Auxiliary Limit Switches	2 x SPDT (5A/125VAC), on-off actuators only



Description

Electric operated sanitary ball valves are used for on/off applications requiring a high degree of sanitation and easy cleaning. Investment cast 3-piece full port stainless steel body and end caps allow for unrestricted flow and minimum pressure loss. Valve seals are cavity filled with Dyneon® PTFE. Rugged corrosion-resistant actuator includes a manual override, auto calibration positioner module, thermostatically controlled anti-condensation heater and integral over-torque protection.

Approvals– Actuators

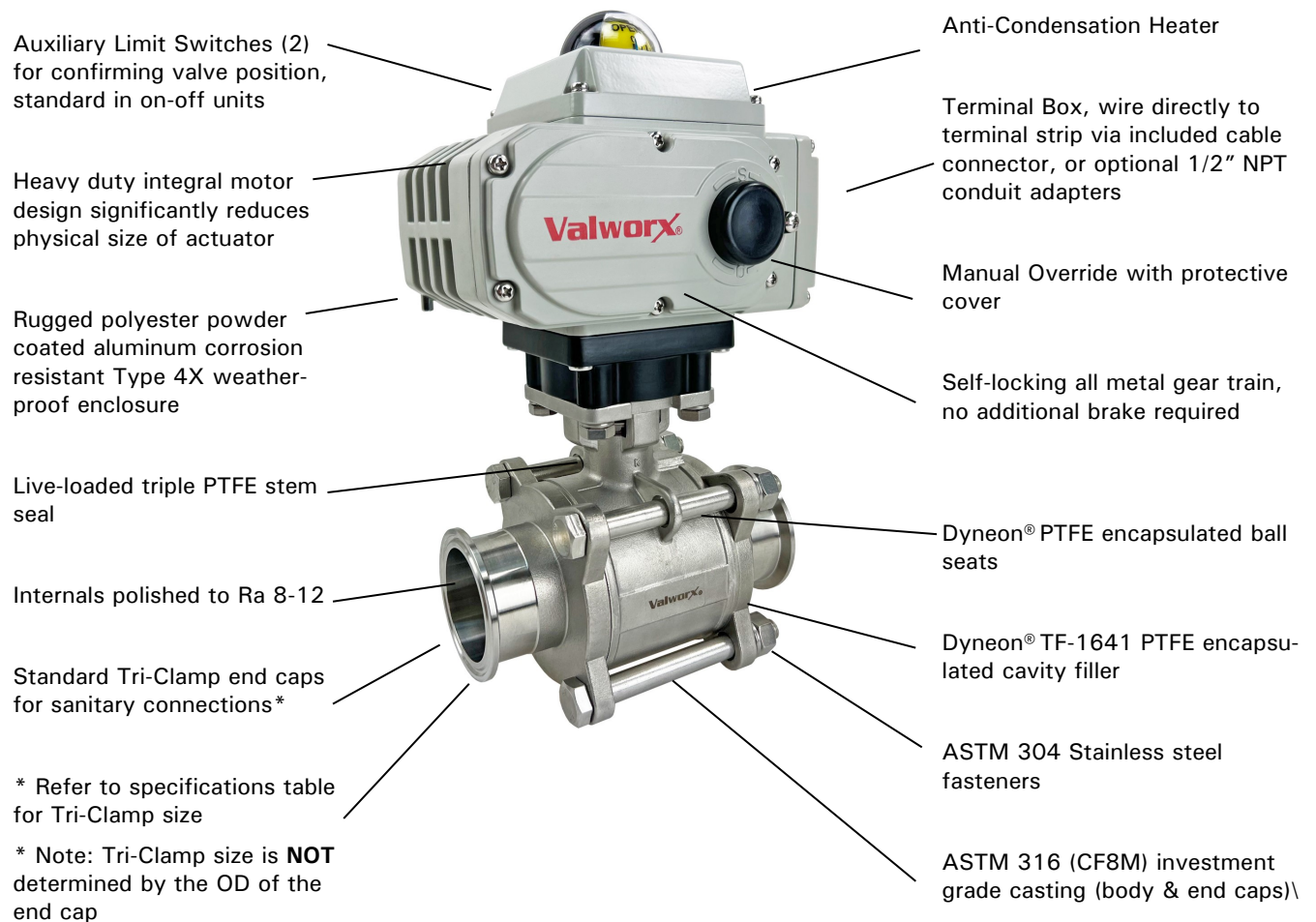
- CSA Listed to:
 - UL429 and CSA C22.2 no 139
 - Type 4X, IP67 weatherproof enclosure
- CE conformance
 - ISO5211 Mounting



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



Pressure Rating

Shell Pressure Rating (Max)*: 1000 PSI @ 120°F (1/2" to 2"),
800 PSI (2 1/2" to 4")

* See P/T chart (pages 3 & 4)

Temperature Rating

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

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

* See P/T chart (pages 3 & 4)



Visual Valve
Position Indicator

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.
110 VAC ELECTRIC ACTUATED SANITARY VALVE, TRI-CLAMP									
570500C	1/2	3/4	13.0	1000	25/21	110 VAC, 50/60Hz	0.27	70%	B
570501C	3/4	3/4	18.0	1000	25/21	110 VAC, 50/60Hz	0.27	70%	B
570502C	1	1-1/2	48.0	1000	25/21	110 VAC, 50/60Hz	0.27	70%	B
570503C	1-1/2	1-1/2	165.0	1000	25/21	110 VAC, 50/60Hz	0.27	70%	B
570504C	2	2	207.0	1000	25/21	110 VAC, 50/60Hz	0.27	70%	B
570505C	2-1/2	2-1/2	450.0	800	30/25	110 VAC, 50/60Hz	0.73	70%	B
570506C	3	3	780.0	800	30/25	110 VAC, 50/60Hz	0.73	70%	B
570507C	4	4	1050.0	800	30/25	110 VAC, 50/60Hz	0.73	70%	B
24 VDC ELECTRIC ACTUATED SANITARY VALVE, TRI-CLAMP									
570700C	1/2	3/4	13.0	1000	20	DC24	1.28	70%	G
570701C	3/4	3/4	18.0	1000	20	DC24	1.28	70%	G
570702C	1	1-1/2	48.0	1000	20	DC24	1.28	70%	G
570703C	1-1/2	1-1/2	165.0	1000	20	DC24	1.28	70%	G
570704C	2	2	207.0	1000	20	DC24	1.28	70%	G
570705C	2-1/2	2-1/2	450.0	800	30	DC24	3.57	70%	G
570706C	3	3	780.0	800	30	DC24	3.57	70%	G
570707C	4	4	1050.0	800	30	DC24	3.57	70%	G

Cv = The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

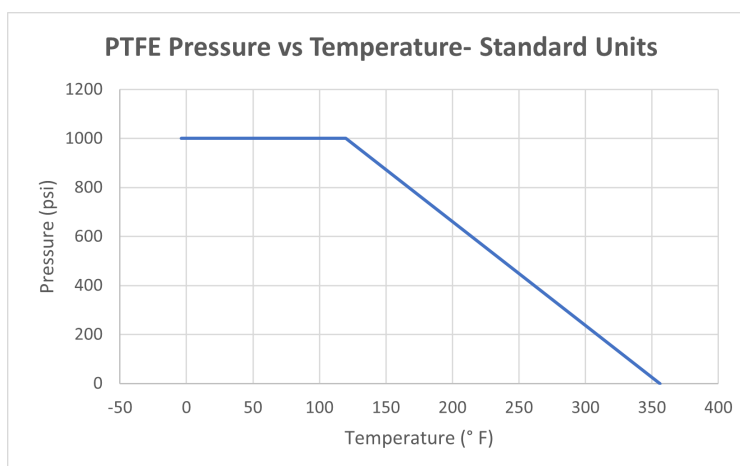
* Pressure @ -4° to 356° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 1000 PSI and 72°F

Pressure Temperature Chart

Standard Units

Temp °F	-4	120	356
Pressure	1000	1000	0



Specifications (Metric units)

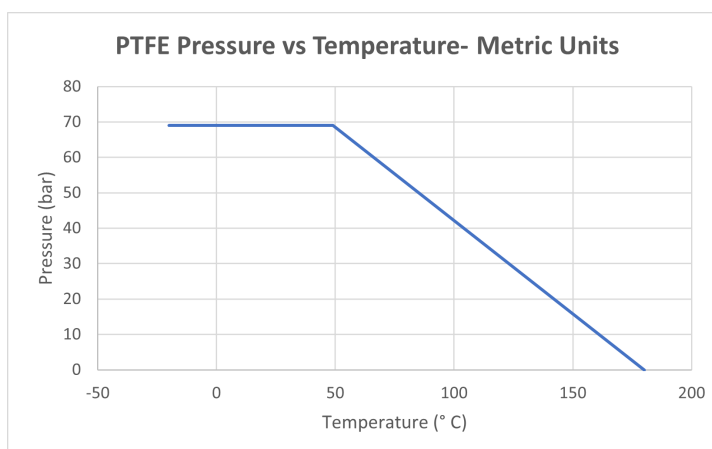
Stock Number	Pipe Size (mm)	Tri-Clamp Size (inch)	Kv Flow Factor*	Shell Pressure Max. (Bar)	Cycle Time/90° (seconds)	Voltage	Current (amps)	Duty Cycle	Electrical Dwg.
110 VAC ELECTRIC ACTUATED SANITARY VALVE, TRI-CLAMP									
570500C	12.7	3/4	11.2	69	25/21	110 VAC, 50/60Hz	0.27	70%	B
570501C	19.1	3/4	15.6	69	25/21	110 VAC, 50/60Hz	0.27	70%	B
570502C	25.4	1-1/2	41.5	69	25/21	110 VAC, 50/60Hz	0.27	70%	B
570503C	38.1	1-1/2	142.7	69	25/21	110 VAC, 50/60Hz	0.27	70%	B
570504C	50.8	2	179.1	69	25/21	110 VAC, 50/60Hz	0.27	70%	B
570505C	63.5	2-1/2	389.3	55	30/25	110 VAC, 50/60Hz	0.73	70%	B
570506C	76.2	3	674.7	55	30/25	110 VAC, 50/60Hz	0.73	70%	B
570507C	101.6	4	908.3	55	30/25	110 VAC, 50/60Hz	0.73	70%	B
24 VDC ELECTRIC ACTUATED SANITARY VALVE, TRI-CLAMP									
570700C	12.7	3/4	11.2	69	20	DC24	1.28	70%	G
570701C	19.1	3/4	15.6	69	20	DC24	1.28	70%	G
570702C	25.4	1-1/2	41.5	69	20	DC24	1.28	70%	G
570703C	38.1	1-1/2	142.7	69	20	DC24	1.28	70%	G
570704C	50.8	2	179.1	69	20	DC24	1.28	70%	G
570705C	63.5	2-1/2	389.3	55	30	DC24	3.57	70%	G
570706C	76.2	3	674.7	55	30	DC24	3.57	70%	G
570707C	101.6	4	908.3	55	30	DC24	3.57	70%	G

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

Pressure Temperature Chart

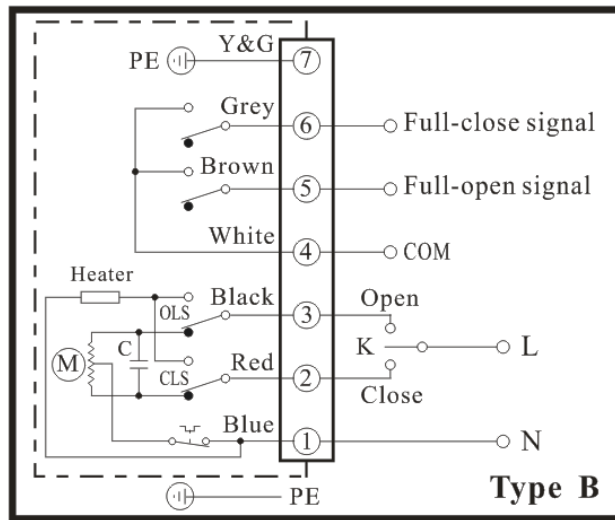
Metric Units

Temp °C	-20	49	180
Pressure	69	69	0

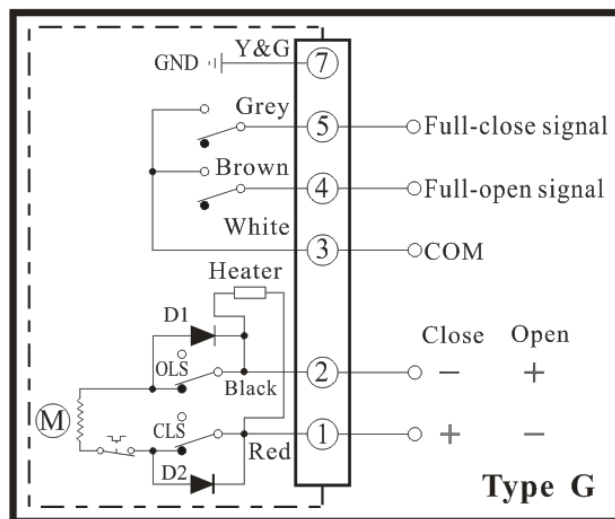


Electrical Wiring

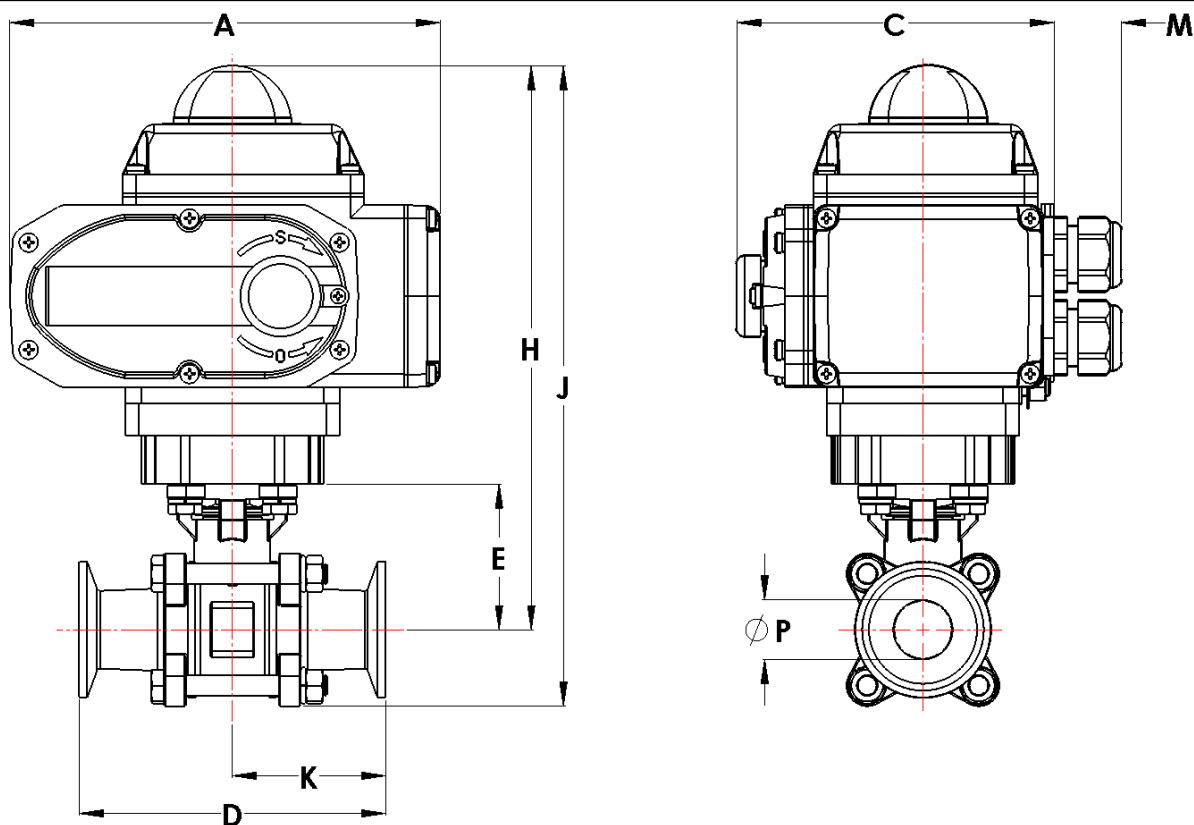
AC Voltages



DC Voltages



Dimensions:(24 VDC & 110 VAC)



Pipe Size		A	C	D	E	H	J	K	M	P	Valve ISO	Weight (AC/DC)
1/2	inch	6.4	4.7	3.5	1.5	7.7	8.6	1.8	1.0	0.4	F03/F04	7.3 lb
	mm	162.0	118.5	88.9	37.0	195.6	218.4	44.5	25.0	10.2		3.3 kg
3/4	inch	6.4	4.7	4.0	1.8	8.0	9.0	2.0	1.0	0.6	F03/F04	7.6 lb
	mm	162.0	118.5	101.6	45.0	203.2	228.6	50.5	25.0	15.2		3.4 kg
1	inch	6.4	4.7	4.5	2.1	8.3	9.4	2.2	1.0	0.9	F04/F05	8.4 lb
	mm	162.0	118.5	114.3	53.5	210.8	238.8	57.0	25.0	22.9		3.8 kg
1-1/2	inch	6.4	4.7	5.5	2.9	9.1	10.6	2.8	1.0	1.4	F05/F07	11.1 lb
	mm	162.0	118.5	139.7	74.8	231.1	269.2	70.0	25.0	35.6		5.0 kg
2	inch	6.4	4.7	6.2	3.3	9.5	11.3	3.1	1.0	1.9	F05/F07	14.1 lb
	mm	162.0	118.5	157.5	83.5	241.3	287.0	78.0	25.0	48.3		6.4 kg
2-1/2	inch	10.1	6.4	7.0	4.3	12.8	15.0	3.9	1.0	2.4	F07/F10	36.2 lb
	mm	255.5	161.5	177.8	108.8	325.1	381.0	98.5	25.0	61.0		16.4 kg
3	inch	10.1	6.4	9.0	4.7	13.2	15.8	4.5	1.0	2.9	F07/F10	44.6 lb
	mm	255.5	161.5	228.6	118.3	335.3	401.3	114.5	25.0	73.7		20.2 kg
4	inch	10.1	6.4	9.5	6.1	14.6	18.5	4.8	1.0	3.8	F07/F10	67.1 lb
	mm	255.5	161.5	241.3	153.8	370.8	469.9	121.5	25.0	96.5		30.4 kg