

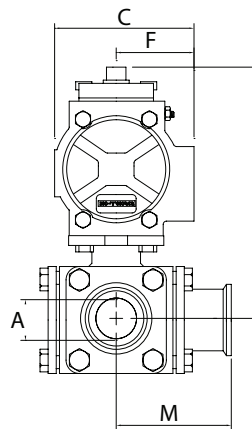
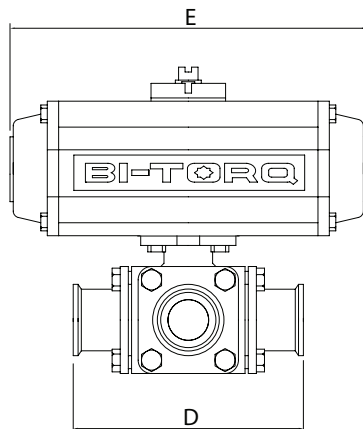
IS-3WTC SERIES SANITARY CLAMP END 3-WAY BALL VALVES

PNEUMATIC ACTUATORS

PNEUMATIC FEATURES

- Rack and pinion design
- NAMUR accessory mounting
- Spring return and double acting
- Visual indicators
- Optional SS construction

ALL STANDARD ACTUATORS SIZED FOR 80 PSI AIR SUPPLY; PLEASE CONSULT FACTORY FOR OTHER COMBINATIONS



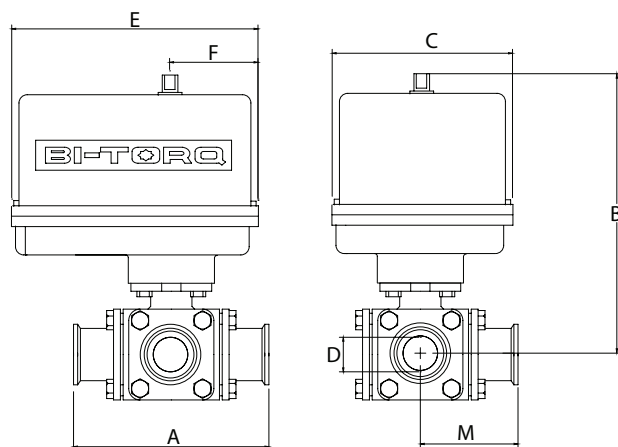
FOR A LIST OF AUTOMATION ACCESSORIES WE CAN OFFER, PLEASE REFER TO PAGE 31 OR VISIT BITORQ.COM

DOUBLE ACTING ASSEMBLY DIMENSIONS								
D	B	C	A	E	F	M	ACT.	WT.
1/2"	4.92	2.79	4.65	5.49	1.61	2.32	52DA	5.86
3/4"	5.06	2.79	5.00	5.49	1.61	2.50	52DA	6.61
1"	5.85	3.17	6.00	6.38	1.77	3.00	63DA	10.08
1-1/2"	6.89	3.72	6.89	8.15	2.07	3.45	75DA	18.40
2"	7.74	4.17	7.48	9.35	2.30	3.74	85DA	30.45

SPRING RETURN ASSEMBLY DIMENSIONS							
D	B	C	AE	F	M	ACT.	WT.
1/2"	4.92	2.79	5.49	1.61	2.32	52SR	6.23
3/4"	8.50*	3.17	6.38	1.77	2.50	63SR	11.33
1"	6.50	3.72	8.15	2.07	3.00	75SR	13.76
1-1/2"	9.03	5.39	12.91	2.87	3.45	115SR	36.81
2"	9.94	5.39	12.91	2.87	3.74	115SR	46.98

* MOUNTING KIT INCLUDED IN DIMENSIONS

ELECTRIC ACTUATORS



NEMA 4 ELECTRIC ASSEMBLY DIMENSIONS								
D	B	C	A	E	F	M	ACT.	WT.
1/2"	6.28	4.00	4.65	5.63	2.30	2.32	100E	8.61
3/4"	6.42	4.00	5.00	5.63	2.30	2.50	100E	11.36
1"	7.77	4.25	6.00	6.88	2.43	3.00	200E	13.82
1-1/2"	10.28	7.00	6.89	7.00	2.38	3.45	400E**	25.89
2"	10.68	7.00	7.48	7.00	2.38	3.74	1000E**	36.06

* DECLUTCHABLE MANUAL OVERRIDE INCLUDED IN DIMENSIONS

ELECTRIC FEATURES

- 120VAC, 220VAC, 24VAC, 12VDC and 24VDC
- NEMA 4, 4X and 7 housings
- Manual overrides
- Visual indicators
- Open/close or modulating service

FOR NEMA 7 ELECTRIC DIMENSIONS OR OTHER CONFIGURATIONS, CONTACT OUR SALES STAFF.

FOR MORE INFORMATION ON BI-TORQ ACTUATORS, REFER TO OUR INDIVIDUAL PNEUMATIC AND ELECTRIC CATALOGS, OR VISIT BITORQ.COM.

IS-3WTC SERIES SANITARY CLAMP END 3-WAY BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	CF8M	1
2	END CAP	CF8M	2
3	BALL	CF8M	1
4	SEAT	PTFE	2
5	GASKET	PTFE	2
6	THRUST WASHER	PTFE	1
7	O-RING	VITON	1
8	STEM PACKING	PTFE	1
9	PACKING RING	316 SS	1
10	BEVEL WASHER	301 SS	2
11	STEM	316 SS	1

VALVE FEATURES

- 3-Way sanitary valves
- 1/2" through 2" size range
- 240 grit bore polish
- Cavity filled TFE® seats to reduce the threat of media entrapment
- Block body and bolted end piece design for easy maintenance
- Polished clamp end to meet BS 4825.3

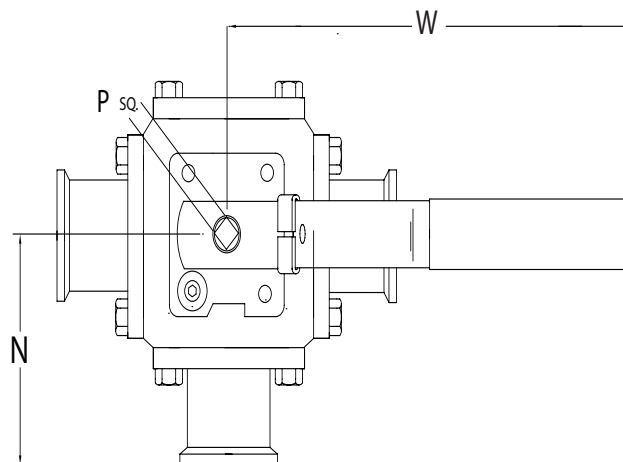
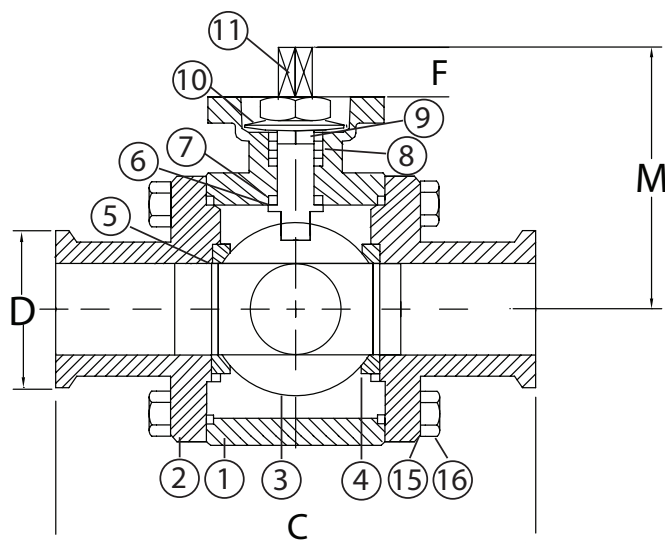
NOTE: not suitable for vacuum service

PRESSURE RATING
1000 PSI CWP (valve body)
200 PSI operating
TEMPERATURE RATING
+350°F Maximum
-4°F Minimum

See page 31 for possible pressure limitations due to flow patterns in certain applications with our floating ball valve design.

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150°F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

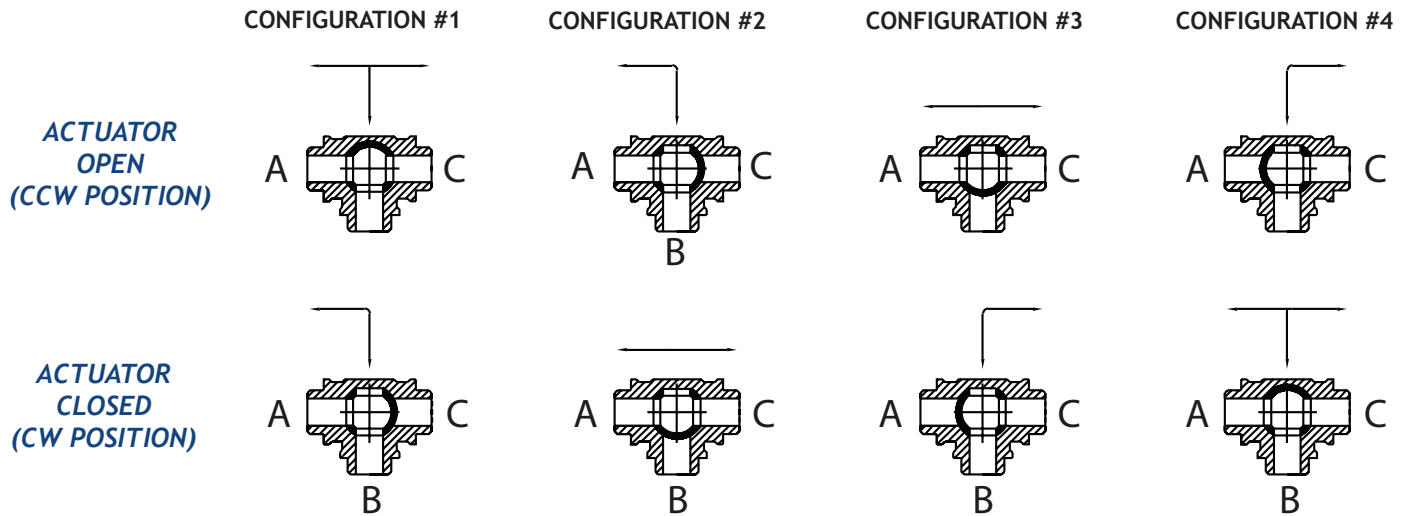
SIZE	ISO 5211	C	D	F	M	N	P	W	WT.
1/2"	F03-F04	4.65	0.99	0.35	1.75	2.32	0.35	4.76	3.61
3/4"	F03-F04	5.00	0.99	0.35	1.89	2.50	0.35	4.76	4.36
1"	F04-F05	6.00	1.99	0.43	2.32	3.00	0.43	5.39	6.82
1-1/2"	F05-F07	6.89	1.99	0.55	2.83	3.44	0.55	7.17	12.89
2"	F05-F07	7.48	2.52	0.55	3.23	3.74	0.55	7.17	23.06

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

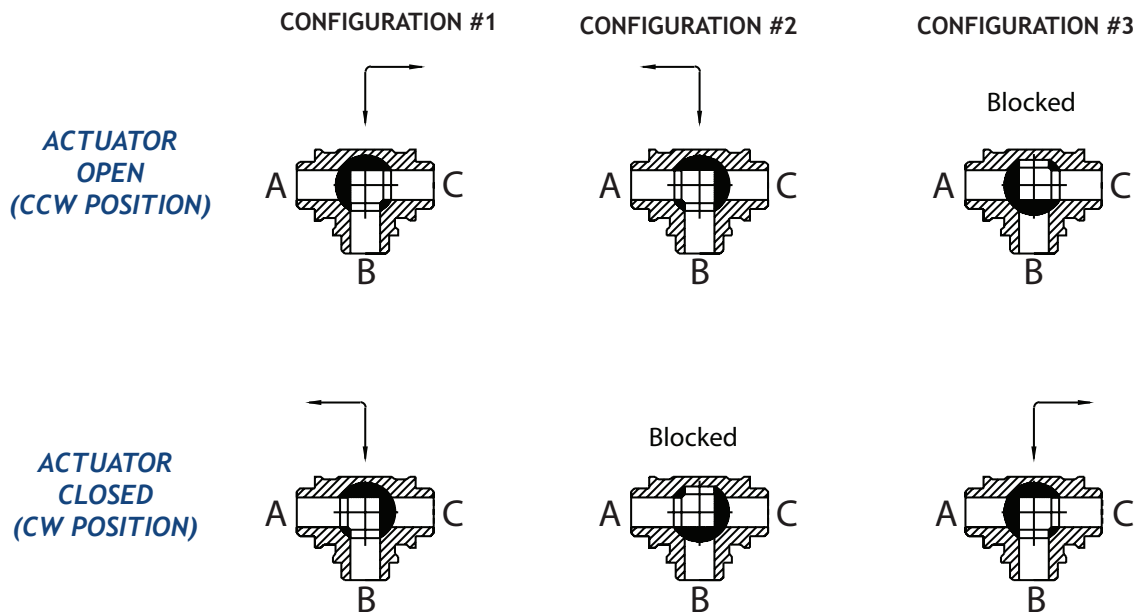
ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSIT

FOR IS-3W, IS-3WF, IC-3W, AND IP-3W VALVES

T-PORT DESIGN



L-PORT DESIGN



PLEASE CONSULT BI-TORQ FOR REVERSING ACTING ACTUATORS AND OTHER FLOW PATTERN OPTIONS NOT LISTED

APPLICATION LIMITATION (FLOATING VALVE DESIGN)

Referring to the diagram to the right, there is a limitation on the differential pressure between flow P2 and P1. Where $P2 > P1$, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns. The limitation is 150 PSI.

