



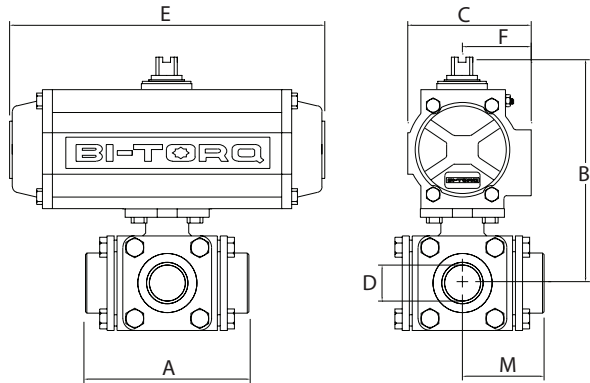
AUTOMATED 3-WAY FULL PORT SS BALL VALVE



- Maximum Flow Full Port Ball Valves
1/2" through 2" Stainless Steel
- L-Port or T-Port Configurations
- Threaded or Socket Ends
clamp ends available upon request
- Electric and Pneumatic Actuators
- 4-Seat Design for high cycling
- Secure True ISO Mounting Pad



PNEUMATIC ACTUATORS



ALL STANDARD PNEUMATIC ACTUATORS SIZED FOR 80 PSI SUPPLY; PLEASE CONSULT OUR SALES STAFF FOR OTHER COMBINATIONS

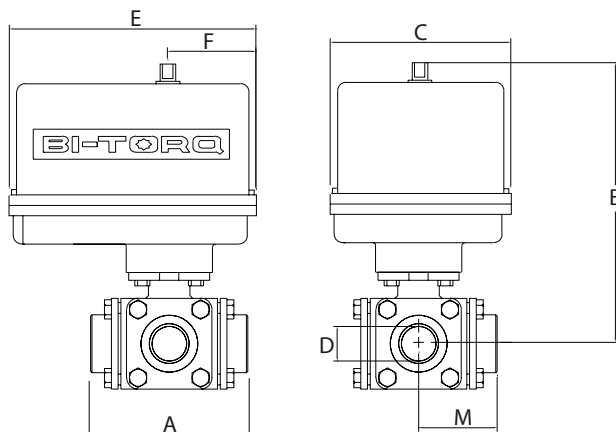
DOUBLE ACTING

SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
A	3.78	4.21	4.96	5.24	5.94	6.54
B	5.50	5.87	6.03	7.09	8.07	8.74
C	2.80	2.80	2.80	3.17	3.72	3.72
D	0.50	0.75	1.00	1.25	1.50	2.00
E	5.49	5.49	5.49	6.38	8.15	8.15
F	1.61	1.61	1.61	1.77	2.07	2.07
M	1.89	2.11	2.48	2.62	2.97	3.27
ACT.	52DA	52DA	52DA	63DA	75DA	75DA
WT.	6.20	7.85	11.85	14.20	24.05	28.85

SPRING RETURN

SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
A	3.78	4.21	4.96	5.24	5.94	6.54
B	5.50	6.30	7.11	7.74	9.03	10.88
C	2.80	3.17	3.72	3.72	4.84	5.39
D	0.50	0.75	1.00	1.25	1.50	2.00
E	5.49	6.38	8.15	8.15	10.69	12.91
F	1.61	1.77	2.07	2.07	2.68	2.87
M	1.89	2.11	2.48	2.62	2.97	3.27
ACT.	52SR	63SR	75SR	75SR	100SR	115SR
WT.	6.55	9.60	15.90	18.95	32.90	45.60

ELECTRIC ACTUATORS



SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
A	3.78	4.21	4.96	5.24	5.94	6.54
B	6.85	8.22	8.38	9.01	11.46*	12.13*
C	4.00	4.25	4.25	4.25	7.00	7.00
D	0.50	0.75	1.00	1.25	1.50	2.00
E	5.63	6.88	6.88	6.88	7.00	7.00
F	2.31	2.43	2.43	2.43	2.38	2.38
M	1.89	2.11	2.48	2.62	2.97	3.27
ACT.	100E	200E	200E	300E	400E	675E
WT.	8.90	12.65	15.85	18.90	31.45	34.25

*includes declutchable manual override and handwheel

ALL ELECTRIC ACTUATOR DIMENSIONS ARE FOR NEMA 4 ENCLOSURES. FOR NEMA 7 ENCLOSURE DIMENSIONS, PLEASE CONSULT OUR SALES STAFF.



IS-3W SERIES 3-WAY STAINLESS STEEL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	316SS	1
2	END CONNECTION	316SS	3
3	BODY SEAL	PTFE	4
4	BALL	316SS	1
5	SEATS	RTFE	4
6	STEM	316SS	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND	304SS	1
10	BELLEVILLE WASHER	304SS	2
11	PACKING NUT	304SS	1
12	SPRING WASHER	304SS	1
13	BODY BOLTS	304SS	1
14	BLANK CAP	316SS	1

VALVE FEATURES

- 3-Way full port stainless steel valves 1/2" through 2"
- Ideal for mixing, food and chem applications
- RTFE® seats and seals
- Threaded or socket
- 4-seat design for high cycle automation
- Self-adjusting stem packing with belleville washers

PRESSURE RATING
1000 WOG (valve body)
200 PSI operating

TEMPERATURE RATING
-40° F to +400° F CWP

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.

For more information on BI-TORQ® actuators, please refer to brochures PN-2010-1 and EL-2011-1, or www.bitorq.com.

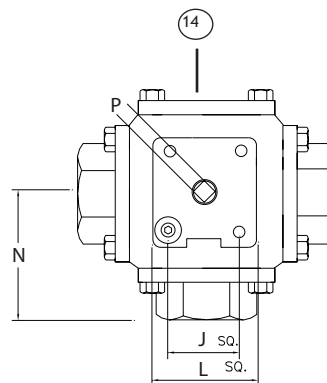
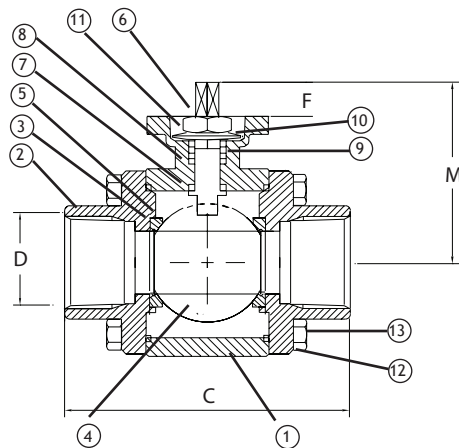
ACTUATOR FEATURES

PNEUMATIC ACTUATORS

- Rack and pinion design
- Spring return or double acting
- open and closed adjustment stops
- true NAMUR accessory mounting
- visual indicator

ELECTRIC ACTUATORS

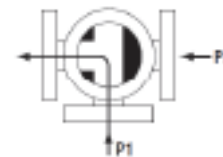
- 120VAC, 220VAC, 24VAC, 12VDC, 24VDC
- NEMA 4 and NEMA 7 enclosures
- Manual override
- visual indicator



NOTE: not suitable for vacuum service

Application Limitation (Floating Valve Design)

Referring to below diagram, 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



SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS

DIMENSIONAL DATA

SIZE	ISO 5211	B	C	D	F	J	L	M	N	P	PSI	WT.
1/2"	F03-F04	3.50	3.78	0.50	0.30	1.42	1.65	1.97	1.89	0.354	1000	3.90
3/4"	F04-F05	3.86	4.21	0.75	0.37	1.65	1.97	2.34	2.11	0.433	1000	5.65
1"	F04-F05	4.02	4.96	1.00	0.43	1.65	1.97	2.50	2.48	0.433	1000	8.85
1-1/4"	F05-F07	4.67	5.24	1.25	0.65	1.97	2.76	3.13	2.62	0.551	1000	11.90
1-1/2"	F05-F07	5.00	5.94	1.50	0.67	1.97	2.76	3.46	2.97	0.551	1000	18.45
2"	F07-F10	5.47	6.54	2.00	0.67	2.76	4.02	4.13	3.27	0.669	1000	23.25

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 psi IN BOTH THE OPEN AND CLOSED POSITIONS