

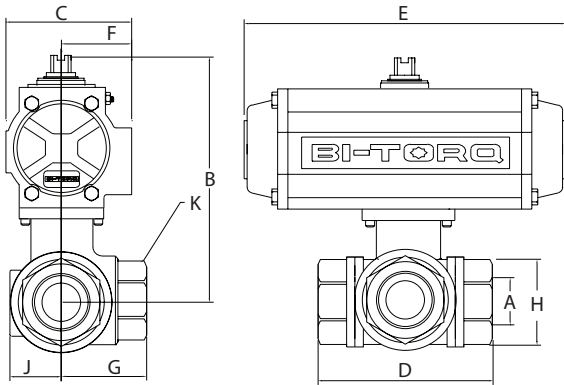
AUTOMATED 3-WAY BRASS BALL VALVES



- Standard Port Brass Ball Valves
1/4" through 3" NPT
- Direct Mount for Low-Profile,
Cost-Efficient Operations
- Electric and Pneumatic Actuators
- L-Port and T-Port Configurations
- 4-Seat Design for High Cycling



PNEUMATIC ACTUATORS



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

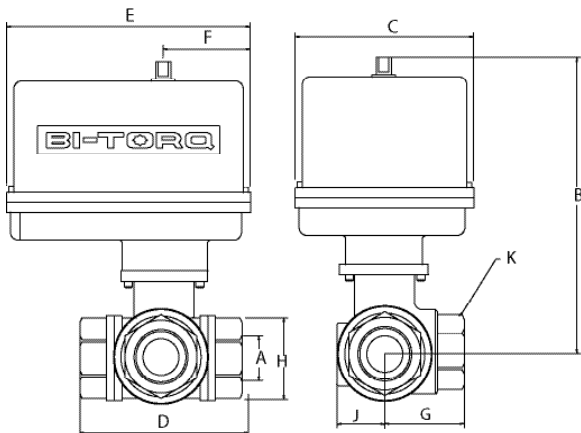
DOUBLE ACTING

A	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	3.96	3.96	3.96	4.30	4.86	5.00	5.50	6.95	7.96	7.96
C	1.77	1.77	1.77	1.77	2.80	2.80	2.80	3.72	3.72	3.72
D	2.64	2.64	2.87	3.19	3.74	4.39	4.86	5.73	6.93	7.08
E	4.33	4.33	4.33	4.33	5.49	5.49	5.49	8.15	8.15	8.15
G	1.43	1.43	1.43	1.59	1.87	2.20	2.44	2.87	3.47	3.54
H	1.33	1.33	1.33	1.53	1.88	2.36	2.83	3.38	4.37	4.45
J	0.76	0.76	0.76	0.86	1.00	1.22	1.45	1.75	2.20	2.20
K	0.86	0.86	1.06	1.25	1.61	1.96	2.16	2.75	3.34	4.13
ACT.	32DA	32DA	32DA	32DA	52DA	52DA	63DA	75DA	75DA	75DA
WT.	2.02	2.02	2.20	2.85	5.63	7.63	11.96	15.70	21.93	25.15

SPRING RETURN

A	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	4.45	4.45	4.45	4.52	5.30	5.44	5.94	7.40	8.92	8.92
C	2.80	2.80	2.80	2.80	3.17	3.17	3.17	4.17	4.84	4.84
D	2.64	2.64	2.87	3.19	3.74	4.39	4.86	5.73	6.93	7.08
E	5.49	5.49	5.49	5.49	6.38	6.38	6.38	9.35	10.69	10.69
G	1.43	1.43	1.43	1.59	1.87	2.20	2.44	2.87	3.47	3.54
H	1.33	1.33	1.33	1.53	1.88	2.36	2.83	3.38	4.37	4.45
J	0.76	0.76	0.76	0.86	1.00	1.22	1.45	1.75	2.20	2.20
K	0.86	0.86	1.06	1.25	1.61	1.96	2.16	2.75	3.34	4.13
ACT.	52SR	52SR	52SR	52SR	63SR	63SR	75SR	85SR	100SR	100SR
WT.	3.27	3.27	3.80	4.45	7.28	9.28	15.71	19.60	30.78	34.00

ELECTRIC ACTUATORS



A	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	5.90	5.90	6.13	6.20	7.51	7.73	8.29	8.62	12.30	12.30
C	4.00	4.00	4.00	4.00	4.75	4.75	4.75	4.75	7.00	7.00
D	2.64	2.64	2.87	3.19	3.74	4.39	4.86	5.73	6.93	7.08
E	5.63	5.63	5.63	5.63	6.88	6.88	6.88	6.88	7.00	7.00
G	1.43	1.43	1.43	1.59	1.87	2.20	2.44	2.87	3.47	3.54
H	1.33	1.33	1.33	1.53	1.88	2.36	2.83	3.38	4.37	4.45
J	0.76	0.76	0.76	0.86	1.00	1.22	1.45	1.75	2.20	2.20
K	0.86	0.86	1.06	1.25	1.61	1.96	2.16	2.75	3.34	4.13
ACT.	100E	100E	100E	100E	200E	200E	200E	300E	400E	400E
WT.	5.97	5.97	6.15	6.80	10.33	12.33	15.66	17.10	29.33	32.55

ALL ELECTRIC ACTUATOR DIMENSIONS ARE FOR NEMA 4 ENCLOSURES. FOR NEMA 7 ENCLOSURE DIMENSIONS, PLEASE CONSULT OUR SALES STAFF.
NOTE: ACTUATORS FOR 2-1/2" AND 3" VALVES HAVE DECLUTCHABLE MANUAL OVERRIDES (INCLUDED IN THE DIMENSIONS).

IP-3W SERIES 3-WAY BRASS BALL VALVES

BILL OF MATERIALS			
PART #	NAME	MATERIAL	QTY
1	BODY	BRASS UNI 5705-65	1
2	ENDS	BRASS UNI 5705-65	3
3	BALL	BRASS UNI 5705-65 CHROME PLATED	1
4	SEAT	TFE	4
5	BODY SEAL	VITON	4
6	STEM SEAL	TFE	1
7	BODY O-RING	VITON	1
8	STEM O-RING	VITON	1
9	STEM NUT	BRASS UNI 5705-65	1
10	STEM	BRASS UNI 5705-65	1

VALVE FEATURES

- Std. port brass valve 1/4" through 2"
- Multiple flow configurations
- TFE® seats and seals
- Viton® body o-rings
- ISO mounting pad
- blowout proof stem
- 4-seat design

PRESSURE RATING
400 WOG

TEMPERATURE RATING
+297° F Maximum
50 PSI Steam

ACTUATOR FEATURES

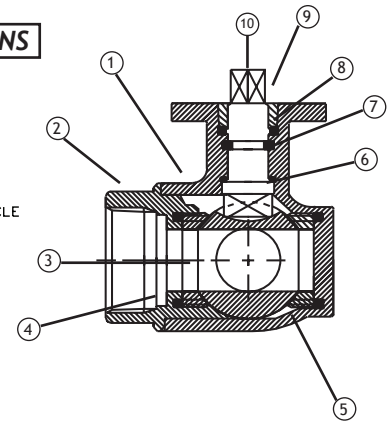
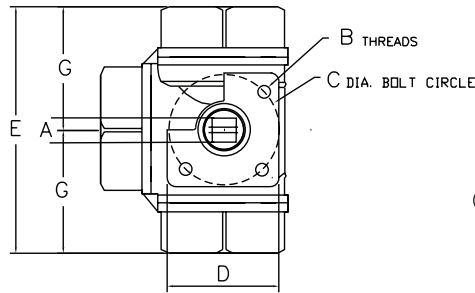
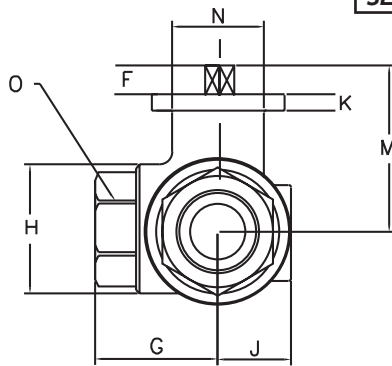
- PNEUMATIC ACTUATORS**
- Rack and pinion design
 - Spring return or double acting
 - open and closed adjustment stops
 - true NAMUR accessory mounting
 - visual indicator

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

NOTE: 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-2007 and EL-2006, or www.bitorq.com

SEE PAGE 25 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	G	H	J	K	M	O	CV	PSI	WT.
1/4"	F03	0.354	0.23	1.41	0.43	2.64	0.27	1.31	1.33	0.76	0.19	1.20	0.86	3.26	400	0.97
3/8"	F03	0.354	0.23	1.41	0.43	2.64	0.27	1.31	1.33	0.76	0.19	1.20	0.86	3.50	400	0.97
1/2"	F03	0.354	0.23	1.41	0.43	2.87	0.27	1.31	1.33	0.76	0.19	1.20	1.06	4.20	400	1.15
3/4"	F03	0.354	0.23	1.41	0.59	3.19	0.27	1.59	1.53	0.86	0.19	1.27	1.25	7.00	400	1.80
1"	F05	0.433	0.27	1.96	0.78	3.74	0.35	1.87	1.88	1.00	0.27	1.69	1.61	12.83	400	3.33
1-1/4"	F05	0.433	0.27	1.96	0.98	4.39	0.35	2.20	2.36	1.22	0.27	1.83	1.96	18.67	400	5.33
1-1/2"	F05	0.433	0.27	1.96	1.26	4.86	0.42	2.87	3.38	1.48	0.27	2.40	2.16	29.75	400	8.66
2"	F07	0.551	0.35	2.76	1.57	5.72	0.42	2.87	3.38	1.75	0.31	2.76	2.75	43.76	400	10.10
2-1/2"	F07	0.551	0.35	2.76	1.95	6.93	0.51	3.47	4.37	2.20	0.32	3.86	3.34	70	400	16.33
3"	F07	0.551	0.35	2.76	1.95	7.08	0.51	3.54	4.45	2.20	0.32	3.86	4.13	70	400	19.55

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