



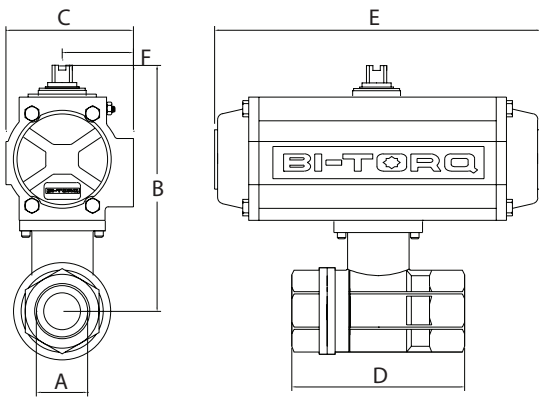
AUTOMATED FULL PORT BRONZE BALL VALVES



- Full Port Bronze Ball Valves
1/4" through 3" NPT
- Direct Mount for Low-Profile,
Cost-Efficient Operations
- Electric and Pneumatic Actuators
- 600 WOG/15 PSI Low Pressure Steam
(thru 2" size; 2-1/2" and 3" 400WOG)
- Fully vacuum rated
- Optional Handle for Manual Operation



PNEUMATIC ACTUATORS



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

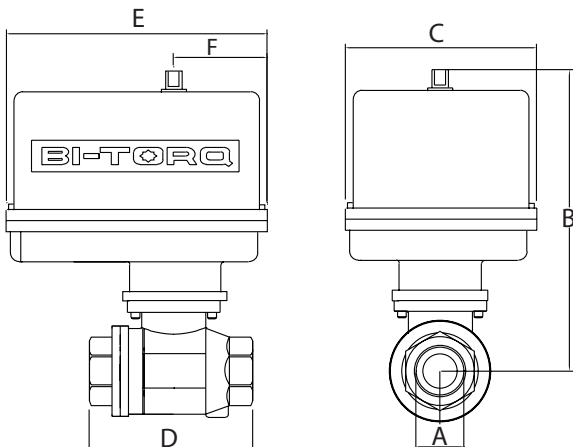
DOUBLE ACTING

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	4.15	4.15	4.21	4.27	5.59	5.80	5.50	7.03	7.93	8.46
B	1.77	1.77	1.77	1.77	2.80	2.80	2.80	3.17	3.72	3.72
C	2.50	2.50	2.50	2.50	3.15	3.58	3.94	4.84	6.18	7.32
D	4.33	4.33	4.33	4.33	5.49	5.49	5.49	6.38	8.15	8.15
E	0.89	0.89	0.89	0.89	1.61	1.61	1.61	1.77	2.07	2.07
ACT.	32DA	32DA	32DA	32DA	52DA	52DA	52DA	63DA	75DA	75DA
WT.	1.87	1.87	1.87	1.95	2.40	3.27	5.47	7.78	8.78	16.98

SPRING RETURN

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	5.01	5.01	5.12	5.46	6.03	6.24	6.77	7.78	8.99	9.42
B	2.80	2.80	2.80	2.80	3.17	3.17	3.17	3.72	4.84	4.84
C	2.50	2.50	2.50	2.50	3.15	3.58	3.94	4.84	6.18	7.32
D	5.49	5.49	5.49	5.49	6.38	6.38	6.38	8.15	10.69	10.69
E	1.61	1.61	1.61	1.61	1.77	1.77	1.77	2.07	2.68	2.68
ACT.	52SR	52SR	52SR	52SR	63SR	63SR	63SR	75SR	100SR	100SR
WT.	3.33	3.43	3.47	3.56	4.00	4.87	7.12	9.43	18.16	23.18

ELECTRIC ACTUATORS



	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	6.13	6.13	6.13	6.20	7.42	7.64	8.19	8.56	8.94	12.66*
B	4.00	4.00	4.00	4.00	4.22	4.22	4.22	4.22	4.22	8.50
C	2.50	2.50	2.50	2.50	3.15	3.58	3.94	4.84	6.18	7.32
D	5.63	5.63	5.63	5.63	6.88	6.88	6.88	6.88	6.88	7.00
E	2.31	2.31	2.31	2.31	2.43	2.43	2.43	2.43	2.43	3.13
ACT.	100E	100E	100E	100E	200E	200E	200E	200E	300E	400E
WT.	5.68	5.78	5.82	5.91	6.35	7.22	10.17	12.48	15.66	26.68

*INCLUDES DECLUTCHABLE MANUAL OVERRIDE

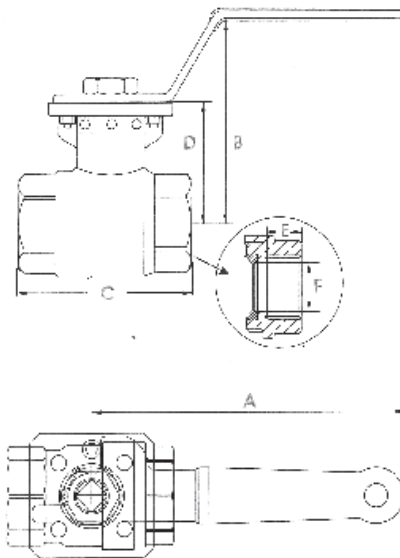
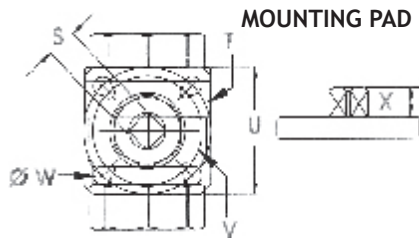
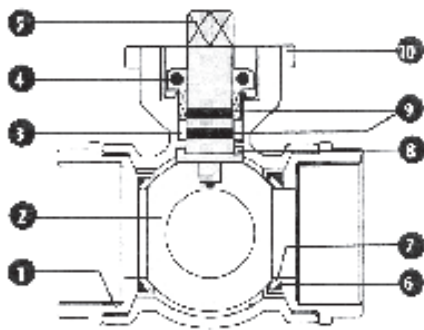
ALL ELECTRIC ACTUATOR DIMENSIONS ARE FOR NEMA 4 ENCLOSURES. FOR NEMA 7 ENCLOSURE DIMENSIONS, PLEASE CONSULT OUR SALES STAFF.

IZ-SERIES 2-PIECE BRONZE BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	BRONZE	1
2	BALL	CHROME PLATED BRASS	1
3	STEM PACKING	PTFE	1
4	PACKING GLAND	BRASS	1
5	STEM*	BRASS*	1
6	SEAT BACKING	EPDM	1
7	BALL SEAT	PTFE	2
8	STEM SEAL	PTFE	1
9	O-RING	BUNA-N	2
10	MOUNTING PAD	BRONZE	1

*Stainless Steel on 2-1/2" and 3"



VALVE FEATURES

- Full port bronze valve 1/4" through 3"
- TFE® seats with EPDM backing
- BUNA-N stem o-rings
- ISO mounting pad
- blowout proof stem
- fully vacuum rated
- manual handle option

PRESSURE RATING
600 WOG

TEMPERATURE RATING
+297°F Maximum

NOTE: Maximum temperature rating for standard actuators is 150°F (electric) and 180°F (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-2008, 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
- Manual override
- visual indicator

SIZE	CV	WT.	TORQUE
1/4"	6	0.68	30
3/8"	9	0.68	30
1/2"	13	0.68	35
3/4"	27	0.78	41
1"	49	0.82	53
1-1/4"	114	0.91	87
1-1/2"	161	1.35	125
2"	249	2.22	135
2-1/2"	503	3.17	274
3"	734	5.48	430

DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	S	T	U	V	W	X
1/4"	F03/F04	4.92	1.95	2.50	1.59	0.66	0.39	0.354	1.65	1.65	1.41	0.24	0.33
3/8"	F03/F04	4.92	1.95	2.50	1.59	0.66	0.39	0.354	1.65	1.65	1.41	0.24	0.33
1/2"	F03/F04	4.92	2.81	2.50	1.65	0.66	0.59	0.354	1.65	1.65	1.41	0.24	0.33
3/4"	F03/F04	4.92	3.08	2.50	1.94	0.58	0.75	0.354	1.65	1.65	1.41	0.24	0.41
1"	F04/F05	5.51	3.21	3.15	2.07	0.69	0.98	0.433	1.97	1.97	1.65	0.24/0.26	0.47
1-1/4"	F04/F05	5.51	3.41	3.58	2.28	0.73	1.26	0.433	1.97	1.97	1.65	0.24/0.26	0.40
1-1/2"	F05/F07	6.89	4.19	3.96	2.81	0.77	1.50	0.433	2.76	2.76	1.97	0.26/0.33	0.61
2"	F05/F07	6.89	4.55	4.84	3.17	0.80	1.97	0.551	2.76	2.76	1.97	0.26/0.33	0.70
2-1/2"	F07	---	---	6.18	3.42	1.19	2.56	0.551	---	2.76	2.76	0.35	0.59
3"	F07	---	---	7.32	3.85	1.31	2.99	0.551	---	2.76	2.76	0.35	0.59