



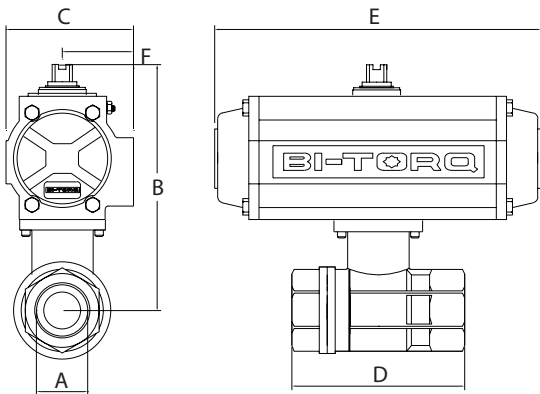
# AUTOMATED FULL PORT BRASS BALL VALVES



- Full Port Brass Ball Valves  
1/4" through 4" NPT
- Direct Mount for Low-Profile,  
Cost-Efficient Operations
- Electric and Pneumatic Actuators
- 600 WOG
- Vacuum rated to 29 inHg
- Optional SS ball and stem available  
(IB series - 1/2" through 2")



## PNEUMATIC ACTUATORS



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

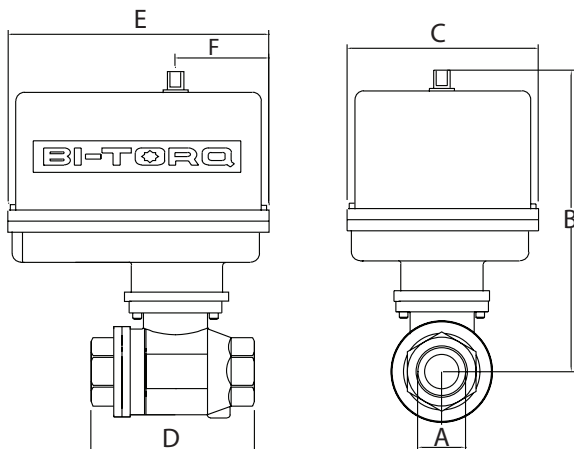
DOUBLE ACTING

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
A	1.77	1.77	1.77	1.77	1.77	1.77	2.80	2.80	3.17	3.17	4.17
B	4.20	4.20	4.20	4.27	4.64	4.77	5.50	5.86	6.71	7.10	8.92
C	1.77	1.77	1.77	1.77	1.77	1.77	2.80	2.80	3.17	3.17	4.17
D	2.64	2.64	2.64	2.98	3.35	3.66	4.13	4.81	6.95	7.40	8.86
E	4.33	4.33	4.33	4.33	4.33	4.33	5.49	5.49	6.38	6.38	9.35
F	0.89	0.89	0.89	0.89	0.89	0.89	1.61	1.61	1.77	1.77	2.30
ACT.	32DA	32DA	32DA	32DA	32DA	52DA	63DA	63DA	63DA	63DA	85DA
WT.	1.73	1.83	1.87	1.95	2.40	3.27	5.47	7.78	8.78	16.98	26.37

SPRING RETURN

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
A	1.61	1.61	1.61	1.61	1.61	1.61	1.77	1.77	2.30	2.68	2.68
B	4.45	4.45	4.45	4.52	4.86	5.00	5.94	6.30	7.81	8.70	9.43
C	2.80	2.80	2.80	2.80	2.80	2.80	3.17	3.17	4.17	4.84	4.84
D	2.64	2.64	2.64	2.98	3.35	3.66	4.13	4.80	6.50	7.40	8.86
E	5.49	5.49	5.49	5.49	5.49	5.49	6.38	6.38	9.35	10.69	10.69
F	1.61	1.61	1.61	1.61	1.61	1.61	1.77	1.77	2.30	2.68	2.68
ACT.	52SR	52SR	52SR	52SR	52SR	52SR	63SR	63SR	85SR	100SR	100SR
WT.	3.33	3.43	3.47	3.56	4.00	4.87	7.12	9.43	18.16	23.18	31.32

## ELECTRIC ACTUATORS



	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
A	2.31	2.31	2.31	2.31	2.31	2.31	2.43	2.43	2.43	3.13	3.13
B	6.13	6.13	6.13	6.20	6.57	6.70	8.29	8.62	9.18	12.26*	13.06*
C	4.00	4.00	4.00	4.00	4.00	4.00	4.22	4.22	4.22	8.50	8.50
D	2.64	2.64	2.64	2.98	3.35	3.66	4.13	4.82	6.50	7.40	8.59
E	5.63	5.63	5.63	5.63	5.63	5.63	5.63	6.88	6.88	7.00	7.00
F	2.31	2.31	2.31	2.31	2.31	2.31	2.43	2.43	2.43	3.13	3.13
ACT.	100E	100E	100E	100E	100E	100E	200E	200E	300E	400E	675E
WT.	5.68	5.78	5.82	5.91	6.35	7.22	10.17	12.48	15.66	26.68	29.87

\*INCLUDES DECLUTCHABLE MANUAL OVERRIDE

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



# IP-SERIES 2-PIECE BRASS BALL VALVES

## BILL OF MATERIALS

PART #	NAME	MATERIAL	OPTIONAL MATERIAL	QTY
1	BODY	BRASS UNI 5705-65	N/A	1
2	ENDS	BRASS UNI 5705-65	N/A	2
3	BALL	BRASS UNI 5705-65 CHROME PLATED	316SS	1
4	SEAT	TFE	N/A	2
5	BODY SEAL	VITON	N/A	2
6	STEM SEAL	TFE	N/A	1
7	BODY O-RING	VITON	N/A	2
8	STEM O-RING	VITON	N/A	1
9	STEM NUT	BRASS UNI 5705-65	316SS	1
10	STEM	BRASS UNI 5705-65	316SS	1

## VALVE FEATURES

- Full port brass valve 1/4" through 4"
- Optional stainless steel ball & stem 1/2" through 2"
- TFE<sup>®</sup> seats and seals
- Viton<sup>®</sup> body o-rings
- ISO mounting pad
- blowout proof stem
- CE rated
- Vacuum rated to 29 inHg

### PRESSURE RATING

600 WOG

### TEMPERATURE RATING

+297° F Maximum

*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<sup>®</sup> actuators, please refer to brochures PN-2007 and EL-2008, or [www.bitorq.com](http://www.bitorq.com)*

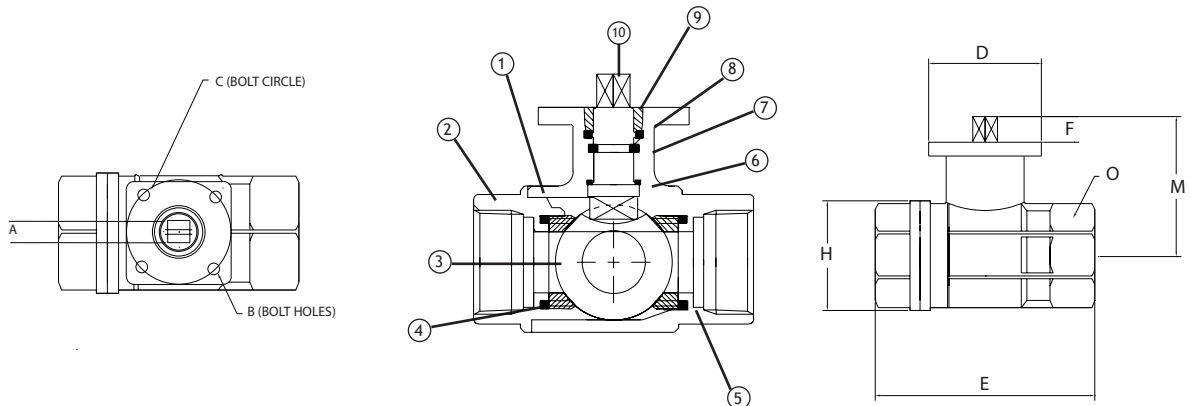
## ACTUATOR FEATURES

### 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



## DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	H	M	O	CV	PSI	WT.
1/4"	F03	0.354	0.21	1.42	1.49	2.63	0.27	1.31	1.20	1.06	6.3	600	0.68
3/8"	F03	0.354	0.21	1.42	1.49	2.63	0.27	1.31	1.20	1.06	7	600	0.78
1/2"	F03	0.354	0.21	1.42	1.49	2.60	0.27	1.31	1.20	1.06	19	600	0.82
3/4"	F03	0.354	0.21	1.42	1.49	2.93	0.27	1.57	1.27	1.25	19	600	0.91
1"	F03	0.354	0.21	1.41	1.49	3.56	0.35	1.92	1.69	1.61	34.5	600	1.35
1-1/4"	F03	0.551	0.21	1.97	1.49	4.09	0.35	2.30	1.83	1.96	50.2	600	2.22
1-1/2"	F05	0.551	0.25	1.97	1.96	4.61	0.42	2.81	2.40	2.16	268.4	600	3.17
2"	F05	0.551	0.25	1.97	1.96	5.31	0.42	3.60	2.76	2.75	309.3	600	5.48
2-1/2"	F07	0.551	0.25	2.76	2.75	6.10	0.59	4.45	3.34	3.54	629.5	600	8.66
3"	F07	0.551	0.33	2.76	2.75	6.89	0.59	5.31	3.72	4.13	944.5	600	13.68
4"	F07	0.669	0.33	2.76	2.75	8.86	0.70	6.53	4.56	5.11	1493	600	16.87

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