

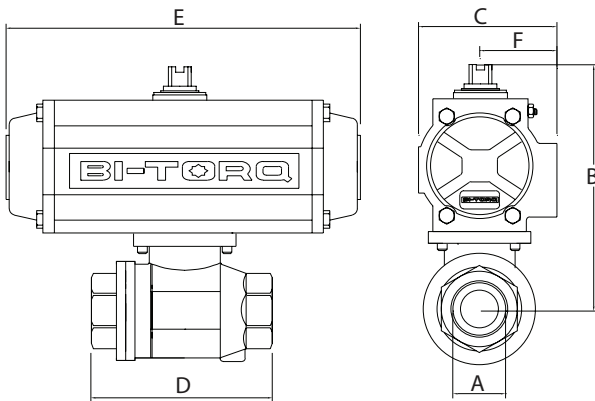
# AUTOMATED FULL PORT STAINLESS BALL VALVES



- Full Port SS Ball Valves  
1/4" through 3" NPT
- Direct Mount for Low-Profile,  
Cost-Efficient Operations
- Electric and Pneumatic Actuators
- Belleville Washers and Adjustable  
Stem Packing for High Cycle  
Automation Applications
- Vacuum rated to 22 inHg



## PNEUMATIC ACTUATORS



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

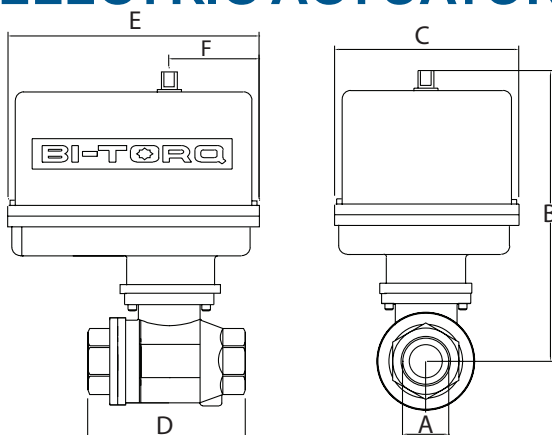
DOUBLE ACTING

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	1.77	1.77	1.77	1.77	2.80	2.80	3.17	3.17	4.17	4.84
B	4.25	4.25	4.25	4.33	5.60	5.76	6.64	6.99	8.96	9.94
C	1.77	1.77	1.77	1.77	2.80	2.80	3.17	3.17	4.17	4.84
D	2.56	2.56	2.95	3.15	3.54	4.33	4.72	5.31	7.28	8.07
E	4.33	4.33	4.33	4.33	5.49	5.49	6.38	6.38	9.35	10.69
F	0.89	0.89	0.89	0.89	1.61	1.61	1.77	1.77	2.30	2.68
ACT.	32DA	32DA	32DA	32DA	52DA	52DA	63DA	63DA	85DA	100DA
WT.	1.93	1.93	2.00	2.50	4.66	5.80	7.51	11.20	25.10	36.45

SPRING RETURN

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	1.61	1.61	1.61	1.61	1.77	1.77	2.07	2.30	2.87	3.15
B	5.21	5.21	5.21	5.29	6.05	6.20	7.29	8.09	10.65	11.49
C	2.80	2.80	2.80	2.80	3.17	3.17	3.72	4.17	5.39	5.83
D	2.56	2.56	2.95	3.15	3.54	4.33	4.72	5.31	7.28	8.07
E	5.49	5.49	5.49	5.49	6.38	6.38	8.15	9.35	12.91	14.41
F	1.61	1.61	1.61	1.61	1.77	1.77	2.07	2.30	2.87	3.15
ACT.	52SR	52SR	52SR	52SR	63SR	63SR	75SR	85SR	115SR	125SR
WT.	3.53	3.53	3.60	4.10	6.31	7.45	11.26	17.40	39.95	54.80

## ELECTRIC ACTUATORS



	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
A	1.61	1.61	1.61	1.61	1.77	1.77	2.07	2.30	2.87	3.15
B	6.57	6.57	6.57	6.65	7.96	8.12	8.55	8.91	11.90*	12.37*
C	4.00	4.00	4.00	4.00	4.25	4.25	4.25	4.25	7.00	7.00
D	2.56	2.56	2.95	3.15	3.54	4.33	4.72	5.31	7.28	8.07
E	5.60	5.60	5.60	5.60	6.88	6.88	6.88	6.88	7.00	7.00
F	2.30	2.30	2.30	2.30	2.43	2.43	2.43	2.43	2.38	2.38
ACT.	100E	100E	100E	100E	200E	200E	200E	300E	675E	1000E
WT.	5.88	5.88	5.95	6.45	9.36	10.50	11.21	14.90	30.60	38.30

\*INCLUDES DECLUTCHABLE MANUAL OVERRIDE

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

# IS-SERIES 2-PIECE SS BALL VALVES

## BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	ASTM A351 GR CF8M	1
2	ENDS	ASTM A351 GR CF8M	2
3	BALL	316SS	1
4	SEAT	RTFE	2
5	BODY SEAL	PTFE	1
6	STEM	316SS	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND NUT	304SS	1
10	BELLEVILLE WASHER	304SS	2
11	PACKING NUT	304SS	1
12	LOCK WASHER	304SS	1

## VALVE FEATURES

- Full port stainless steel ball valve 1/4" through 3"
- RTFE® seats and TFE seals
- ISO mounting pad
- blowout proof stem
- low-torque design
- Spring loaded belleville washers

**PRESSURE RATING**  
1000 WOG (CWP)

**TEMPERATURE RATING**  
+450° F Maximum CWP  
- 40° F Minimum  
+366° F Maximum Steam

*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-2008, or [www.bitorq.com](http://www.bitorq.com)*

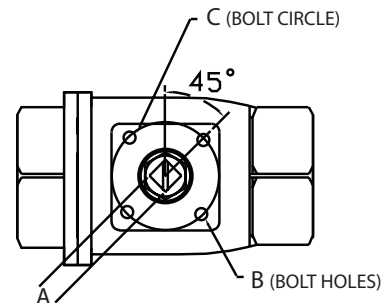
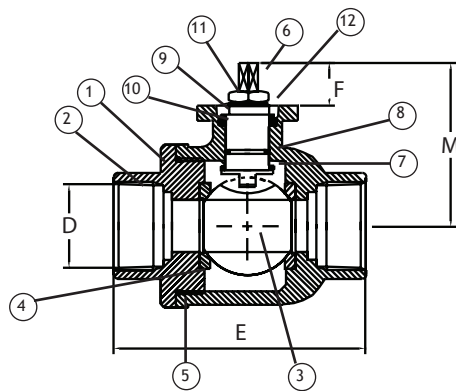
## ACTUATOR FEATURES

### 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 enclosures
- Manual override
- visual indicator



## DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	M	CV	WOG	WEIGHT (LBS.)
1/4"	F03-F04	0.354	0.28	1.42/1.65	0.45	2.56	0.29	1.98	10	1000	0.88
3/8"	F03-F04	0.354	0.28	1.42/1.65	0.48	2.56	0.29	1.98	12	1000	0.88
1/2"	F03-F04	0.354	0.28	1.42/1.65	0.59	2.95	0.34	1.98	15	1000	0.95
3/4"	F03-F04	0.354	0.28	1.42/1.65	0.79	3.15	0.34	2.08	38	1000	1.45
1"	F04-F05	0.433	0.28	1.65/1.97	1.00	3.54	0.43	2.42	65	1000	2.36
1-1/4"	F04-F05	0.433	0.28	1.65/1.97	1.25	4.33	0.43	2.62	118	1000	3.50
1-1/2"	F05-F07	0.551	0.28/0.35	1.97/2.76	1.50	4.72	0.55	3.14	195	1000	4.21
2"	F05-F07	0.551	0.28/0.35	1.97/2.76	1.97	5.51	0.55	3.69	320	1000	7.90
2-1/2"	F07-F10	0.669	0.35	2.76/4.02	2.56	7.28	0.70	3.90	386	1000	17.60
3"	F07-F10	0.669	0.35	2.76/4.02	3.15	8.07	0.70	4.37	600	1000	25.30

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