

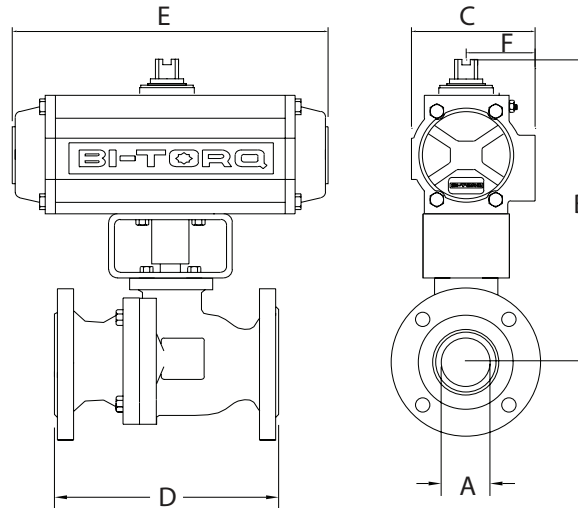
# FS-2PF(SS) & FW-2PF(CS) SERIES FLANGED FIRE SAFE BALL VALVES

## PNEUMATIC ACTUATORS

### PNEUMATIC FEATURES

- Rack and pinion design
- NAMUR accessory mounting
- Spring return and double acting
- Visual indicators
- Optional SS construction

ALL STANDARD ACTUATORS SIZED FOR 80 PSI AIR SUPPLY; PLEASE CONSULT FACTORY FOR OTHER COMBINATIONS

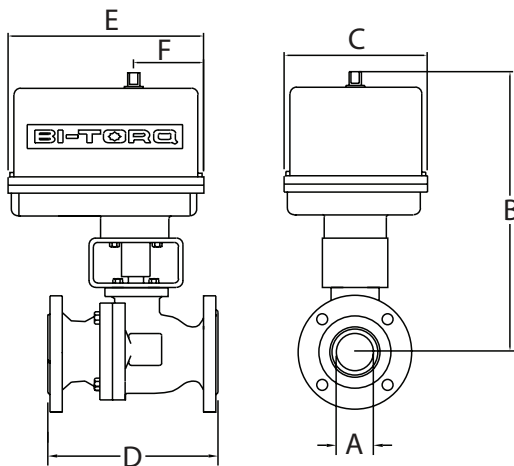


FOR A LIST OF AUTOMATION ACCESSORIES WE CAN OFFER, PLEASE REFER TO PAGE 31 OR VISIT BITORQ.COM

DOUBLE ACTING ASSEMBLY DIMENSIONS							
A	B	C	D	E	F	ACT.	WT.
1/2"	7.04	2.79	4.25	5.49	1.61	52DA	7.05
3/4"	7.15	2.79	4.63	5.49	1.61	52DA	10.30
1"	7.57	2.79	5.00	5.49	1.61	52DA	12.30
1-1/4"	8.31	3.17	5.50	6.38	1.77	63DA	17.30
1-1/2"	8.58	3.17	6.50	6.38	1.77	63DA	21.50
2"	9.56	3.17	7.00	8.15	2.07	75DA	28.60
2-1/2"	10.58	4.17	7.50	9.35	2.30	85DA	52.15
3"	12.29	4.17	8.00	9.35	2.30	85DA	56.50
4"	14.59	5.39	9.00	12.91	2.87	115DA	95.60

SPRING RETURN ASSEMBLY DIMENSIONS							
A	B	C	D	E	F	ACT.	WT.
1/2"	7.48	3.17	4.25	6.38	1.77	63SR	9.95
3/4"	7.59	3.17	4.63	6.38	1.77	63SR	11.95
1"	8.66	3.72	5.00	8.15	2.07	75SR	17.08
1-1/4"	9.41	4.17	5.50	9.35	2.30	85SR	24.50
1-1/2"	9.68	4.17	6.50	9.35	2.30	85SR	27.25
2"	10.52	4.84	7.00	10.69	2.68	100SR	36.45
2-1/2"	12.27	5.39	7.50	12.91	2.87	115SR	63.35
3"	14.45	5.83	8.00	14.41	3.15	125SR	80.50
4"	16.58	7.35	9.00	16.93	3.94	161SR	132.80

## ELECTRIC ACTUATORS



NEMA 4 ELECTRIC ASSEMBLY DIMENSIONS							
A	B	C	D	E	F	ACT.	WT.
1/2"	7.90	4.00	4.25	5.63	2.30	100E	11.00
3/4"	8.51	4.00	4.63	5.63	2.30	100E	13.00
1"	9.93	4.25	5.00	6.88	2.43	200E	17.00
1-1/4"	10.23	4.25	5.50	6.88	2.43	300E	23.00
1-1/2"	10.50	4.25	6.50	6.88	2.43	300E	26.00
2"	12.95*	7.00	7.00	7.00	2.38	675E	37.00
2-1/2"	13.52*	7.00	7.50	7.00	2.38	675E	55.00
3"	15.05*	7.00	8.00	7.00	2.38	1500E	65.00
4"	15.84*	7.00	9.00	7.00	2.38	1500E	94.00

\* DECLUTCHABLE MANUAL OVERRIDE INCLUDED IN DIMENSIONS

### ELECTRIC FEATURES

- 120VAC, 220VAC, 24VAC, 12VDC and 24VDC
- NEMA 4, 4X and 7 housings
- Manual overrides
- Visual indicators
- Open/close or modulating service

FOR NEMA 7 ELECTRIC DIMENSIONS OR OTHER CONFIGURATIONS, CONTACT OUR SALES STAFF.

FOR MORE INFORMATION ON BI-TORQ ACTUATORS, REFER TO OUR INDIVIDUAL PNEUMATIC AND ELECTRIC CATALOGS, OR VISIT BITORQ.COM.

# FS-2PF(SS) & FW-2PF(CS) SERIES FLANGED FIRE SAFE BALL VALVES

## BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	CF8M OR WCB	1
2	ENDS	CF8M OR WCB	2
3	BALL	CF8M	1
4	SEAT	PTFE OR RTFE	2
5	BODY SEAL	SS304 SPIRAL WOUND	2
6	STEM SEAL	GRAPHOIL	1
7	STEM PACKING	GRAPHOIL	1
8	THRUST WASHER	50% PTFE + 50% SS POWDER	1
9	GLAND	304SS	1
10	BELLEVILLE WASHER	304SS	2
11	LOCK WASHER	304SS	1
12	STEM NUT	304SS	1
13	HANDLE	304SS*	1
14	LOCK SANDAL WASHER	304SS	1
15	HANDLE NUT	304SS	1
16	STEM	316SS	1
17	ANT-STATIC DEVICE	316SS	1

\*handle for 2" and larger is plated steel

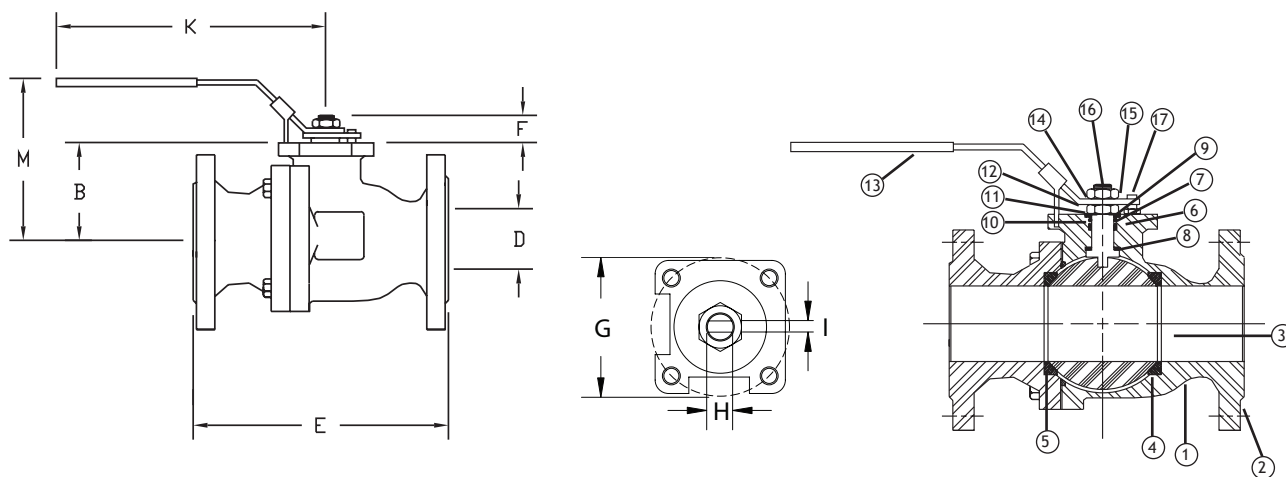
## VALVE FEATURES

- Full port stainless steel (FS) or WCB/SS (FW)
- 1/2" through 6"<sup>1</sup>
- Class 150# flanged designed to ANSI B16.34
- API607 fire safe approved
- ISO mounting pad
- Self-adjusting stem packing
- DIN 50049-3.1B certificate

<sup>1</sup>6" AVAILABLE IN STAINLESS MODELS ONLY

**PRESSURE RATING**  
ANSI Class 150  
**TEMPERATURE RATING**  
+400° F Maximum  
-20° F Minimum

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.



## DIMENSIONAL DATA

SIZE	ISO 5211	B	D	E	F	G	H	J	K	M	CV	WT.
1/2"	F04	1.52	0.59	4.25	0.69	1.42	0.47	0.25	5.91	3.54	30	4
3/4"	F04	1.63	0.79	4.63	0.72	1.42	0.47	0.25	5.91	3.88	50	6
1"	F05	2.05	0.98	5.00	0.85	1.97	0.51	0.31	7.09	4.25	100	8
1-1/4"	F05	2.35	1.26	5.50	0.81	1.97	0.51	0.31	7.09	4.62	180	12
1-1/2"	F07	2.62	1.57	6.50	1.14	2.76	0.53	0.37	8.27	5.00	250	16
2"	F07	2.95	1.97	7.00	1.16	2.76	0.53	0.37	8.27	6.00	480	21
2-1/2"	F07	3.52	2.56	7.50	1.52	2.76	1.14	0.67	10.24	7.00	750	38
3"	F10	4.23	3.15	8.00	1.85	4.02	1.14	0.67	10.24	7.50	1300	46
4"	F10	4.84	3.94	9.00	1.85	4.02	1.14	0.67	12.20	9.00	2400	73
6" <sup>1</sup>	F12/F14	7.02	5.91	13.78	1.100	4.92	C/F	C/F	16.20	10.94	5400	135

<sup>1</sup>AVAILABLE IN STAINLESS MODELS ONLY

THE MANUAL VERSION OF THESE MODELS ARE ED50 FOR SS AND W50 FOR CS

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