

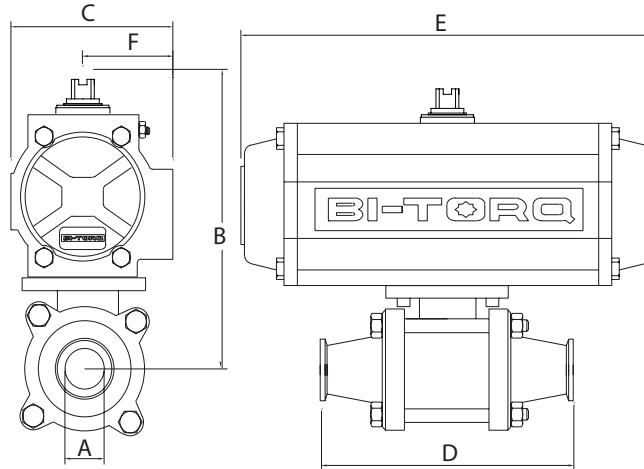
# IS-3TC SERIES SANITARY CLAMP END BALL VALVES

## 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

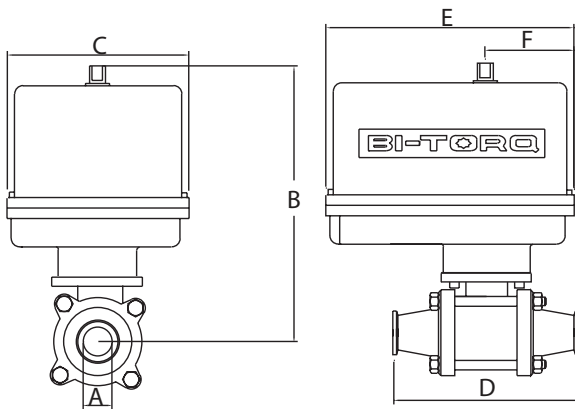


FOR A LIST OF AUTOMATION ACCESSORIES WE CAN OFFER, PLEASE REFER TO PAGE 31 OR VISIT BITORQ.COM

| DOUBLE ACTING ASSEMBLY DIMENSIONS |       |      |      |       |      |       |       |
|-----------------------------------|-------|------|------|-------|------|-------|-------|
| A                                 | B     | C    | D    | E     | F    | ACT.  | WT.   |
| 1/2"                              | 4.25  | 1.78 | 3.50 | 4.65  | 0.89 | 32DA  | 2.65  |
| 3/4"                              | 5.35  | 2.79 | 3.98 | 5.49  | 1.61 | 52DA  | 4.30  |
| 1"                                | 5.94  | 3.17 | 4.49 | 6.38  | 1.77 | 63DA  | 5.25  |
| 1-1/2"                            | 7.27  | 3.72 | 5.51 | 8.15  | 2.07 | 75DA  | 11.30 |
| 2"                                | 7.58  | 3.72 | 6.14 | 8.15  | 2.07 | 75DA  | 14.6  |
| 2-1/2"                            | 8.80  | 4.17 | 7.76 | 9.35  | 2.30 | 85DA  | 29.8  |
| 3"                                | 9.70  | 4.85 | 9.02 | 10.69 | 2.68 | 100DA | 46.35 |
| 4"                                | 11.71 | 5.39 | 9.57 | 12.91 | 2.87 | 115DA | 66.30 |

| SPRING RETURN ASSEMBLY DIMENSIONS |       |      |      |       |      |       |       |
|-----------------------------------|-------|------|------|-------|------|-------|-------|
| A                                 | B     | C    | D    | E     | F    | ACT.  | WT.   |
| 1/2"                              | 5.21  | 2.79 | 3.50 | 5.49  | 1.61 | 52SR  | 4.15  |
| 3/4"                              | 5.79  | 3.17 | 3.98 | 6.38  | 1.77 | 63SR  | 5.95  |
| 1"                                | 6.59  | 3.72 | 4.49 | 8.15  | 2.07 | 75SR  | 6.85  |
| 1-1/2"                            | 8.23  | 4.85 | 5.51 | 10.69 | 2.68 | 100SR | 20.15 |
| 2"                                | 8.54  | 4.85 | 6.14 | 10.69 | 2.68 | 100SR | 23.45 |
| 2-1/2"                            | 10.49 | 5.39 | 7.76 | 12.91 | 2.87 | 115SR | 46.65 |
| 3"                                | 11.35 | 5.83 | 9.02 | 14.41 | 3.15 | 125SR | 65.70 |
| 4"                                | 13.70 | 8.82 | 9.57 | 16.93 | 3.94 | 161SR | 103.5 |

## ELECTRIC ACTUATORS



| NEMA 4 ELECTRIC ASSEMBLY DIMENSIONS |        |       |      |       |      |       |       |
|-------------------------------------|--------|-------|------|-------|------|-------|-------|
| A                                   | B      | C     | D    | E     | F    | ACT.  | WT.   |
| 1/2"                                | 6.57   | 4.00  | 3.50 | 5.63  | 2.30 | 100E  | 6.40  |
| 3/4"                                | 6.71   | 4.00  | 3.98 | 5.63  | 2.30 | 100E  | 7.00  |
| 1"                                  | 7.86   | 4.25  | 4.49 | 6.88  | 2.43 | 200E  | 9.90  |
| 1-1/2"                              | 10.66* | 7.00  | 5.51 | 7.00  | 2.38 | 400E  | 18.7  |
| 2"                                  | 10.97* | 7.00  | 6.14 | 7.00  | 2.38 | 675E  | 22.00 |
| 2-1/2"                              | 11.74* | 7.00  | 7.76 | 7.00  | 2.38 | 1000E | 37.30 |
| 3"                                  | 12.13* | 7.00  | 9.02 | 7.00  | 2.38 | 1500E | 48.20 |
| 4"                                  | 20.59* | 10.00 | 9.57 | 10.00 | 3.75 | 2000E | 80.70 |

\* 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.

# IS-3TC SERIES SANITARY CLAMP END BALL VALVES

## BILL OF MATERIALS

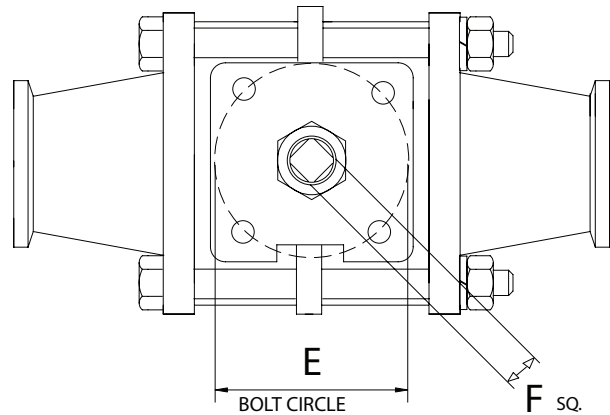
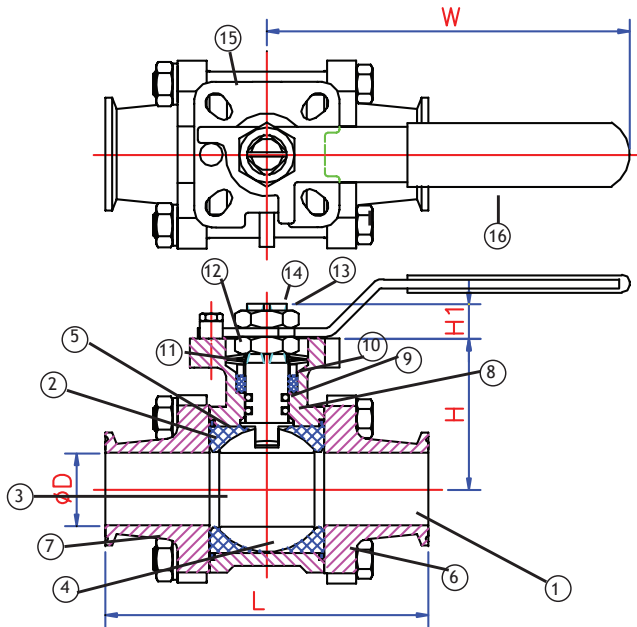
| PART # | NAME                      | MATERIAL          | QTY |
|--------|---------------------------|-------------------|-----|
| 1      | END CAP                   | ASTM A351/GR CF8M | 2   |
| 2      | BODY SEAL                 | TFE               | 2   |
| 3      | BALL                      | ASTM A351/316SS   | 1   |
| 4      | BODY                      | ASTM A351/316SS   | 1   |
| 5      | BALL SEAT                 | TFE               | 2   |
| 6      | SPRING WASHER             | 304SS             | 1   |
| 7      | GLAND NUT                 | 304SS             | 1   |
| 8      | STEM SEAL                 | TFE               | 1   |
| 9      | O-RING                    | VITON             | 1   |
| 10     | STEM PACKING              | TFE               | 1   |
| 11     | FOLLOWER                  | 304SS             | 1   |
| 12     | BELLEVILLE SPRING WASHERS | 301SS             | 4   |
| 13     | STEM NUT                  | 304SS             | 1   |
| 14     | STEM                      | 316SS             | 1   |
| 15     | BODY BOLT                 | 304SS             | 4   |
| 16     | HANDLE                    | 304SS             | 1   |

## VALVE FEATURES

- Full port sanitary valves
- 1/2" through 4"
- 240 grit bore polish
- Cavity filled TFE® seats to reduce the threat of media entrapment
- Swing out design for easy maintenance
- Polished clamp end to meet BS 4825.3

|                           |
|---------------------------|
| <b>PRESSURE RATING</b>    |
| 1000 PSI CWP (1/2" - 2")  |
| 800 PSI CWP (2-1/2" - 3") |
| 600 PSI CWP (4")          |
| <b>TEMPERATURE RATING</b> |
| +450° F Maximum           |
| -4° 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 | D    | E         | F    | H    | H1    | L    | W     | CV   | WT.  |
|--------|----------|------|-----------|------|------|-------|------|-------|------|------|
| 1/2"   | F03-F04  | 0.37 | 1.42/1.65 | 0.35 | 1.69 | 0.354 | 3.50 | 4.57  | 14   | 1.40 |
| 3/4"   | F03-F04  | 0.63 | 1.42/1.65 | 0.35 | 1.83 | 0.354 | 3.98 | 4.57  | 45   | 2.0  |
| 1"     | F04-F05  | 0.87 | 1.65/1.97 | 0.43 | 1.98 | 0.443 | 4.49 | 6.14  | 81   | 2.90 |
| 1-1/2" | F05-F07  | 1.36 | 1.97/2.76 | 0.55 | 2.66 | 0.551 | 5.51 | 7.13  | 215  | 5.70 |
| 2"     | F05-F07  | 1.87 | 1.97/2.76 | 0.55 | 2.97 | 0.551 | 6.14 | 7.13  | 410  | 9.00 |
| 2-1/2" | F07-F10  | 2.37 | 2.76/4.02 | 0.67 | 3.74 | 0.669 | 7.76 | 10.24 | 618  | 19.3 |
| 3"     | F07-F10  | 2.87 | 2.76/4.02 | 0.67 | 4.13 | 0.669 | 9.02 | 10.24 | 940  | 31.2 |
| 4"     | F10-F12  | 3.83 | 4.02/4.92 | 0.87 | 4.96 | 0.869 | 9.57 | 13.19 | 1840 | 43.7 |

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

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