

### Features

- All materials comply with FDA and USDA requirements
- Full port design for unrestricted flow
- Highly polished internals and end caps with 8-12 Ra finish
- ASTM 316 stainless steel investment cast body and end caps
- ASTM 304 stainless steel fasteners
- Dyneon® TF-1641 (PTFE) FDA approved ball seats and cavity fillers
- Triple PTFE/Viton® high cycle live loaded stem seal packing
- Tri-Clamp ends for hygienic connections
- Three piece, swing out design for easy cleaning and maintenance
- Actuator-ready ISO 5211 direct mounting pad
- 100% tested with full traceability of all components
- Valves tested per API598

### Applications

Sanitary ball valves are typically used for food, beverage, pharmaceutical, personal care, and pet care applications where sanitary construction is required, as well as for utility, process, and corrosive environment applications where quick clamp connections are beneficial. Valves can be manually operated or mounted to air or electric actuators.

### Operation

Turning the hand lever one quarter-turn (90°) rotates the ball from closed to full open position. A latch locking device allows for pad locking the valve in the open or closed position for safety lockout requirements. Simply remove the handle and the valve is actuator ready with standard ISO 5211 direct mounting pad and square output shaft.

### Construction

|                           |                          |
|---------------------------|--------------------------|
| Valve Body                | ASTM 316 Stainless Steel |
| Ball/Stem/End Caps        | ASTM 316 Stainless Steel |
| Ball Seats/Cavity Fillers | Dyneon® PTFE             |
| Stem Seals                | PTFE/Viton®              |
| Fasteners                 | ASTM 304 Stainless Steel |
| Hand Lever                | 304SS w/ vinyl grip      |



### Description

Investment cast 3-piece full port stainless steel body/ball/end caps for unrestricted flow and minimum pressure loss. Self-adjusting live loaded stem seal packing helps compensate for wear, pressure or temperature fluctuations, extending the cycle life of the valve. Blow-out proof stainless steel stem. Valve body held together with bolts for easy maintenance. Cavity fillers avoid media entrapment and quick clamp end connections allow for easy cleaning and sanitary operation

Note: Tri-Clamp size is determined by valve size, not the OD of the end cap

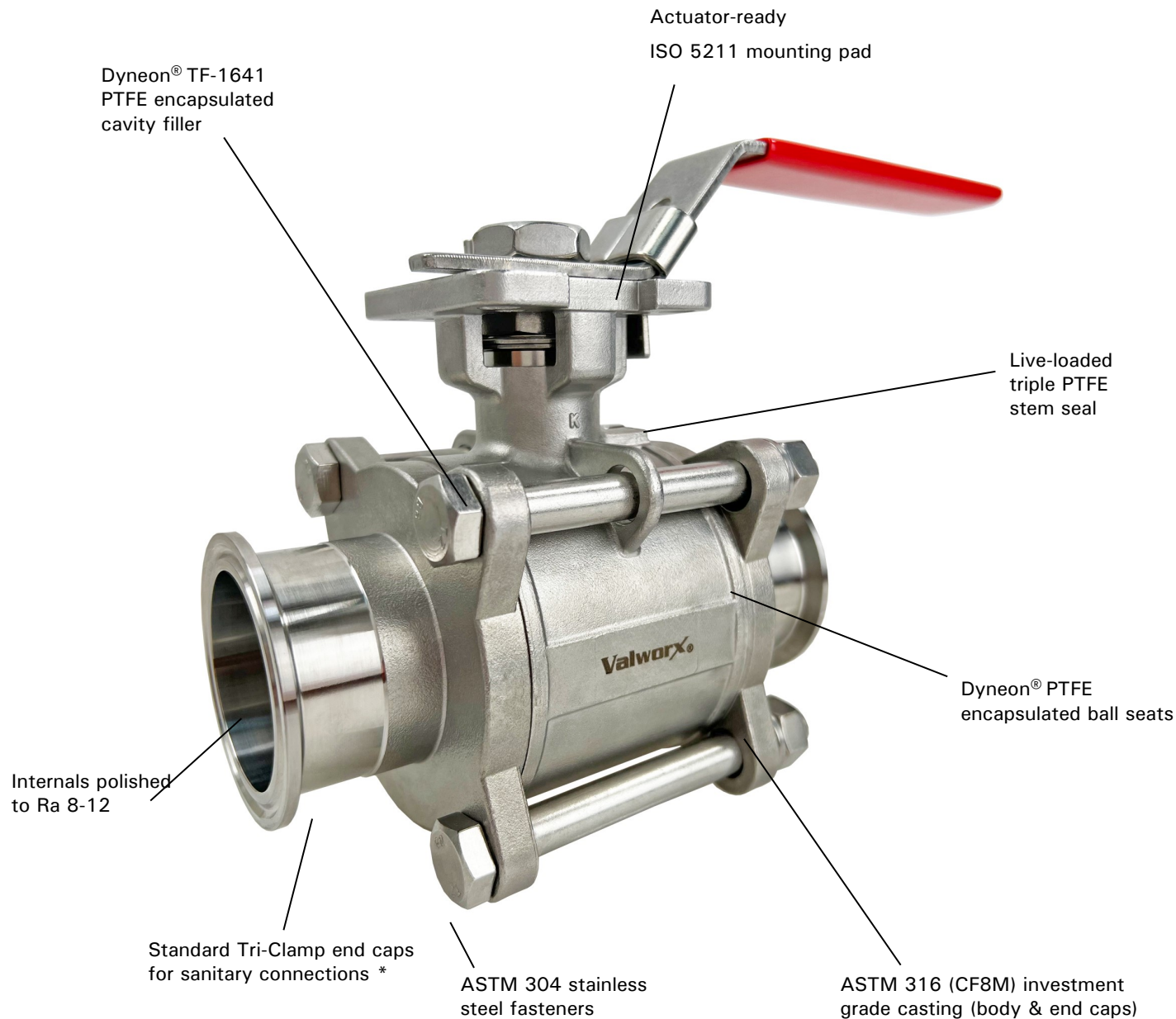
### Standards

- Construction:
  - ANSI B16/B2/B18
  - FDA 21 CFR 177.1550
  - ANSI B16.34
- Pressure Testing:
  - API 598
- Marking
  - MSS-SP-25

### Options

- Manual valve limit switches
- Air or electric actuators

## Features



## Pressure-Temperature Range

**Max Shell Pressure Rating\*:** 1000 PSI @ 120°F (1/2" to 2"),  
800 PSI (2 1/2" to 4")

**Temperature Rating:** -4 to 356° F (-20 to 180°C)

\*See P/T Chart

\* Refer to specifications table for Tri-Clamp size

\* Note: Tri-Clamp size is **NOT** determined by the OD of the end cap

## Specifications (English units)

| Stock Number | Pipe Size (inch) | Tri-Clamp Size (inch) | Cv     | Shell Pressure Max* (PSI) | Torque (inch lbs) | ISO5211 Mount | Weight (lbs) |
|--------------|------------------|-----------------------|--------|---------------------------|-------------------|---------------|--------------|
| 570100A      | 1/2              | 3/4                   | 13.0   | 1000                      | 70.8              | F03/F04       | 1.3          |
| 570101A      | 3/4              | 3/4                   | 18.0   | 1000                      | 106.2             | F03/F04       | 1.8          |
| 570102A      | 1                | 1-1/2                 | 48.0   | 1000                      | 159.3             | F04/F05       | 2.6          |
| 570103A      | 1-1/2            | 1-1/2                 | 165.0  | 1000                      | 292.1             | F05/F07       | 5.7          |
| 570104A      | 2                | 2                     | 207.0  | 1000                      | 398.3             | F05/F07       | 8.6          |
| 570105A      | 2-1/2            | 2-1/2                 | 450.0  | 800                       | 619.6             | F07/F10       | 17.0         |
| 570106A      | 3                | 3                     | 780.0  | 800                       | 973.6             | F07/F10       | 25.6         |
| 570107A      | 4                | 4                     | 1050.0 | 800                       | 1239.1            | F07/F10       | 49.6         |

Cv= The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

\* Pressure @ -4° to 356° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 1000 PSI and 72°F

## Specifications (Metric units)

| Stock Number | Pipe Size (mm) | Tri-Clamp Size (inch) | Kv    | Shell Pressure Max* (Bar) | Torque (Nm) | ISO5211 Mount | Weight (kg) |
|--------------|----------------|-----------------------|-------|---------------------------|-------------|---------------|-------------|
| 570100A      | 12.7           | 3/4                   | 11.2  | 69                        | 8.0         | F03/F04       | 0.6         |
| 570101A      | 19.1           | 3/4                   | 15.6  | 69                        | 12.0        | F03/F04       | 0.8         |
| 570102A      | 25.4           | 1-1/2                 | 41.5  | 69                        | 18.0        | F04/F05       | 1.2         |
| 570103A      | 38.1           | 1-1/2                 | 142.7 | 69                        | 33.0        | F05/F07       | 2.6         |
| 570104A      | 50.8           | 2                     | 179.1 | 69                        | 45.0        | F05/F07       | 3.9         |
| 570105A      | 63.5           | 2-1/2                 | 389.3 | 55                        | 70.0        | F07/F10       | 7.7         |
| 570106A      | 76.2           | 3                     | 674.7 | 55                        | 110.0       | F07/F10       | 11.6        |
| 570107A      | 101.6          | 4                     | 908.3 | 55                        | 140.0       | F07/F10       | 22.5        |

\* Pressure range @ -20° to 180° C (reduced pressure for higher temperatures—see P/T chart)

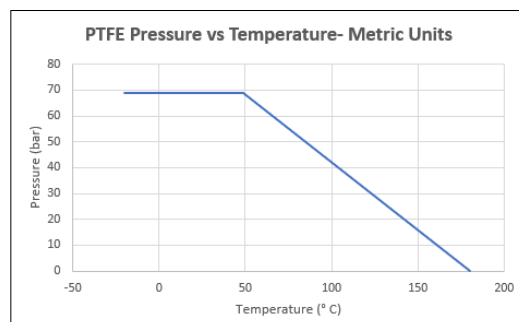
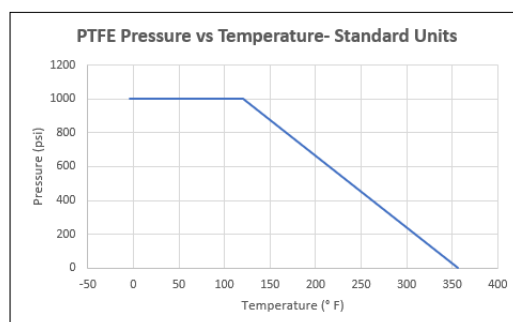
## Pressure/Temp. Chart - 1000 PSI (69 Bar)

### Standard Units

|          |      |      |     |
|----------|------|------|-----|
| Temp °F  | -4   | 120  | 356 |
| Pressure | 1000 | 1000 | 0   |

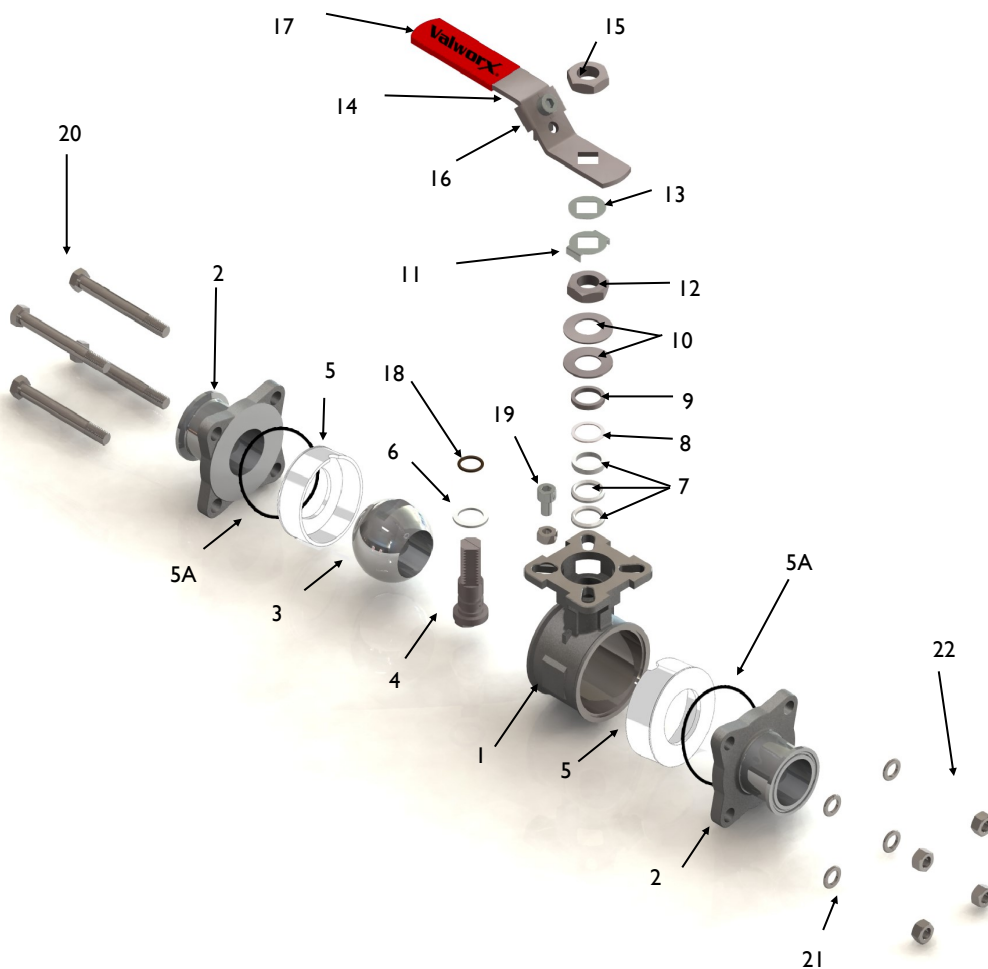
### Metric Units

|          |     |    |     |
|----------|-----|----|-----|
| Temp °C  | -20 | 49 | 180 |
| Pressure | 69  | 69 | 0   |

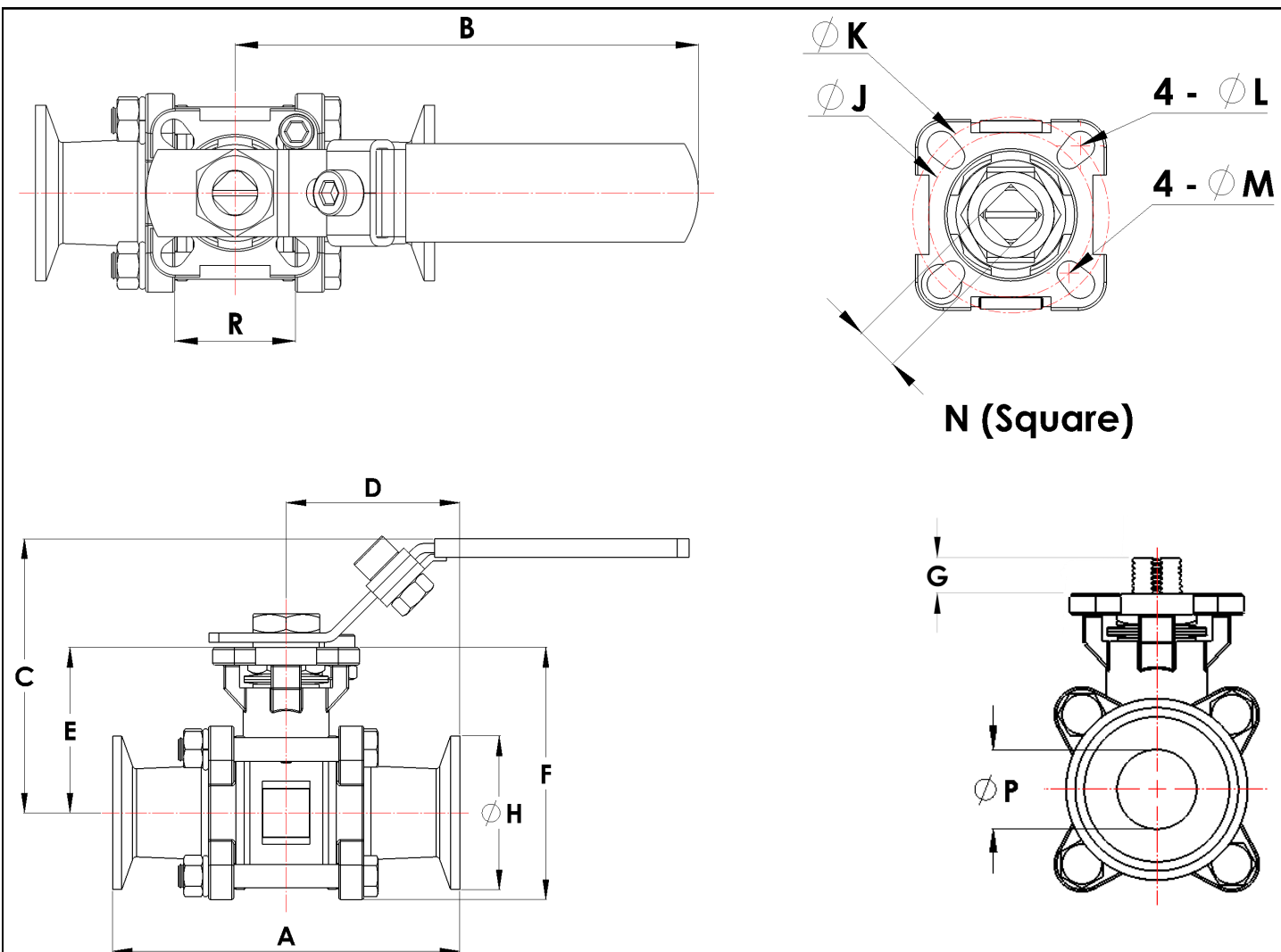


## Specifications (Parts Assembly)

| Item | Part (Qty)               | Material     |
|------|--------------------------|--------------|
| 1    | Body                     | CF8M/316     |
| 2    | End Caps (2)             | CF8M/316     |
| 3    | Ball                     | CF8M/316     |
| 4    | Stem                     | SS 316       |
| 5    | Seats/Cavity Filler (2)  | Dyneon® PTFE |
| 5A   | Body Seal (2)            | PTFE         |
| 6    | Thrust Washer            | PTFE         |
| 7    | Stem Packing (3)         | PTFE         |
| 8    | Packing Protector        | PTFE         |
| 9    | Gland Bushing            | SS 304       |
| 10   | Belleville Spring Washer | SS 301       |
| 11   | Tab Washer               | SS 304       |
| 12   | Stem Nut                 | SS 304       |
| 13   | Handle Washer            | SS 304       |
| 14   | Handle                   | SS 304       |
| 15   | Handle Nut               | SS 304       |
| 16   | Locking Pad              | SS 304       |
| 17   | Handle Cover             | PVC          |
| 18   | O-Ring                   | VITON        |
| 19   | Stop Pin                 | SS 304       |
| 20   | Bolts (4)                | SS 304       |
| 21   | Washer (4)               | SS 304       |
| 22   | Nuts (4)                 | SS 304       |

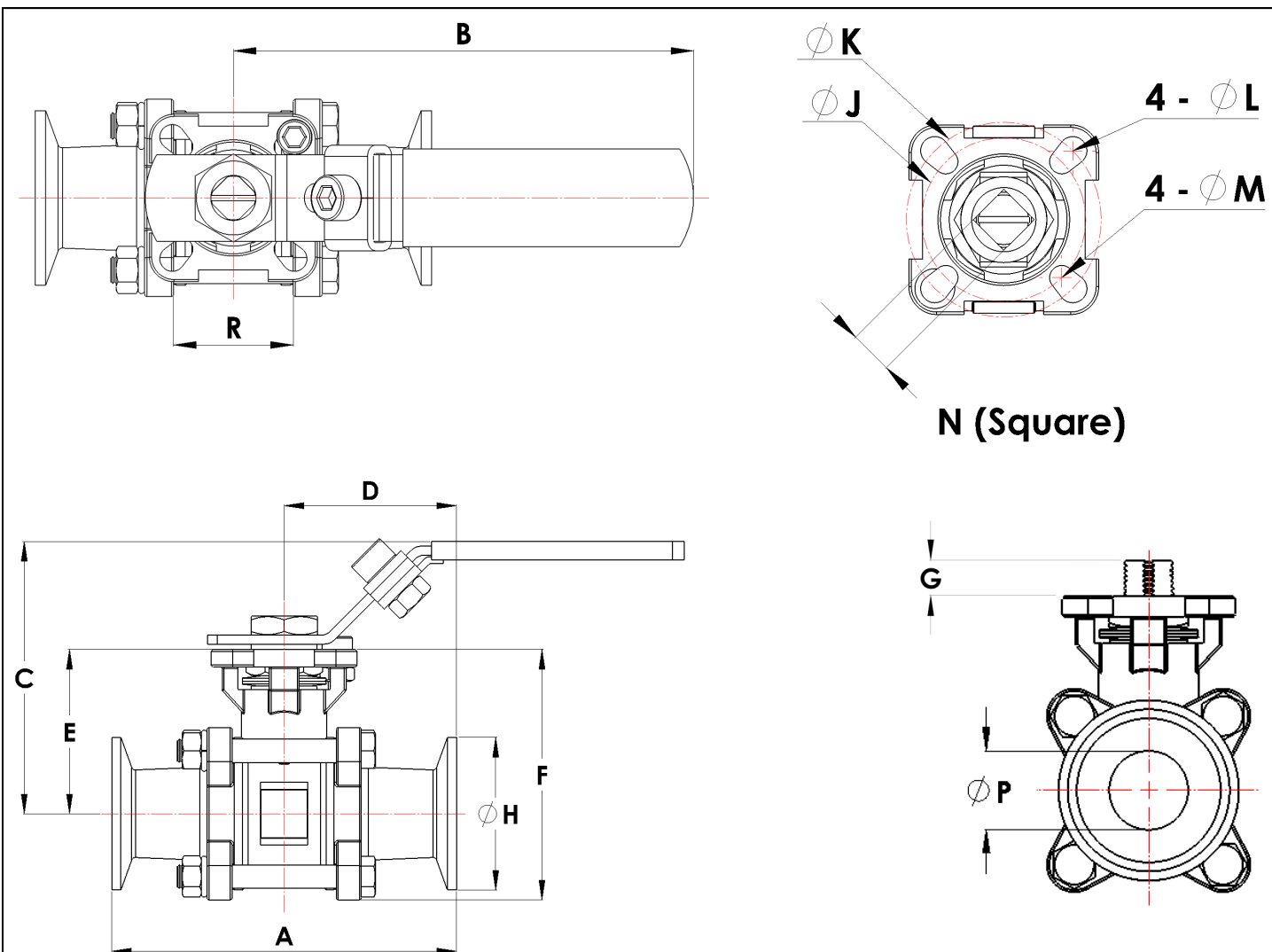


**Dimensions: (inches)**



| Pipe Size (inch) | A   | B    | C   | D   | E   | F    | G   | H   | J   | K   | L   | M   | N (mm) | P   | R   | ISO     | Weight (lbs) |
|------------------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|--------|-----|-----|---------|--------------|
| 1/2              | 3.5 | 4.4  | 2.9 | 1.8 | 1.5 | 2.4  | 0.3 | 1.0 | 1.4 | 2.0 | 0.3 | 0.2 | 9.0    | 0.4 | 1.0 | F03/F04 | 1.3          |
| 3/4              | 4.0 | 4.4  | 3.2 | 2.0 | 1.8 | 2.8  | 0.3 | 1.0 | 1.4 | 2.0 | 0.3 | 0.2 | 9.0    | 0.6 | 1.6 | F03/F04 | 1.8          |
| 1                | 4.5 | 5.4  | 3.6 | 2.2 | 2.1 | 3.2  | 0.4 | 2.0 | 1.4 | 2.0 | 0.3 | 0.2 | 9.0    | 0.9 | 1.4 | F04/F05 | 2.6          |
| 1-1/2            | 5.5 | 7.8  | 4.3 | 2.8 | 2.9 | 4.4  | 0.6 | 2.0 | 2.0 | 2.8 | 0.4 | 0.3 | 14.0   | 1.4 | 2.1 | F05/F07 | 5.7          |
| 2                | 6.1 | 7.8  | 4.9 | 3.1 | 3.3 | 5.1  | 0.5 | 2.5 | 2.0 | 2.8 | 0.4 | 0.3 | 14.0   | 1.9 | 2.6 | F05/F07 | 8.6          |
| 2-1/2            | 7.8 | 10.5 | 6.1 | 3.9 | 4.3 | 6.5  | 0.7 | 3.1 | 2.8 | 4.0 | 0.5 | 0.4 | 17.0   | 2.4 | 3.4 | F07/F10 | 17.0         |
| 3                | 9.0 | 10.5 | 6.5 | 4.5 | 4.7 | 7.3  | 0.7 | 3.6 | 2.8 | 4.0 | 0.5 | 0.4 | 17.0   | 2.9 | 4.1 | F07/F10 | 25.6         |
| 4                | 9.5 | 12.7 | 8.5 | 4.8 | 6.1 | 10.0 | 0.7 | 4.7 | 2.8 | 4.0 | 0.5 | 0.4 | 17.0   | 3.8 | 5.2 | F07/F10 | 49.6         |

**Dimensions: (mm)**



| Pipe Size<br>(mm) | A     | B     | C     | D     | E     | F     | G    | H     | J    | K     | L    | M    | N    | P    | R     | ISO     | Weight<br>(kg) |
|-------------------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|------|------|------|------|-------|---------|----------------|
| 1/2               | 89.0  | 112.0 | 73.0  | 44.5  | 37.0  | 59.7  | 8.5  | 25.0  | 36.0 | 50.0  | 7.0  | 6.0  | 9.0  | 9.4  | 24.5  | F03/F04 | 0.6            |
| 3/4               | 101.0 | 112.0 | 80.8  | 50.5  | 45.0  | 70.0  | 8.5  | 25.0  | 36.0 | 50.0  | 7.0  | 6.0  | 9.0  | 15.8 | 29.5  | F03/F04 | 0.8            |
| 1                 | 114.0 | 136.0 | 90.5  | 57.0  | 53.5  | 81.3  | 9.5  | 50.4  | 36.0 | 50.0  | 7.0  | 6.0  | 9.0  | 22.2 | 36.0  | F04/F05 | 1.2            |
| 1-1/2             | 140.0 | 197.9 | 115.3 | 70.0  | 74.8  | 112.2 | 14.0 | 50.4  | 50.0 | 70.0  | 9.0  | 7.0  | 14.0 | 34.9 | 54.0  | F05/F07 | 2.6            |
| 2                 | 156.0 | 197.9 | 124.0 | 78.0  | 83.5  | 128.5 | 13.7 | 63.9  | 50.0 | 70.0  | 9.0  | 7.0  | 14.0 | 47.5 | 66.8  | F05/F07 | 3.9            |
| 2-1/2             | 197.0 | 267.0 | 155.0 | 98.5  | 108.8 | 165.8 | 18.0 | 77.5  | 70.0 | 102.0 | 12.0 | 10.0 | 17.0 | 60.3 | 87.5  | F07/F10 | 7.7            |
| 3                 | 229.0 | 267.0 | 164.5 | 114.5 | 118.3 | 185.0 | 18.0 | 90.9  | 70.0 | 102.0 | 12.0 | 10.0 | 17.0 | 73.0 | 104.0 | F07/F10 | 11.6           |
| 4                 | 243.0 | 322.0 | 216.7 | 121.5 | 153.8 | 253.4 | 18.0 | 118.9 | 70.0 | 102.0 | 12.0 | 10.0 | 17.0 | 97.4 | 131.5 | F07/F10 | 22.5           |