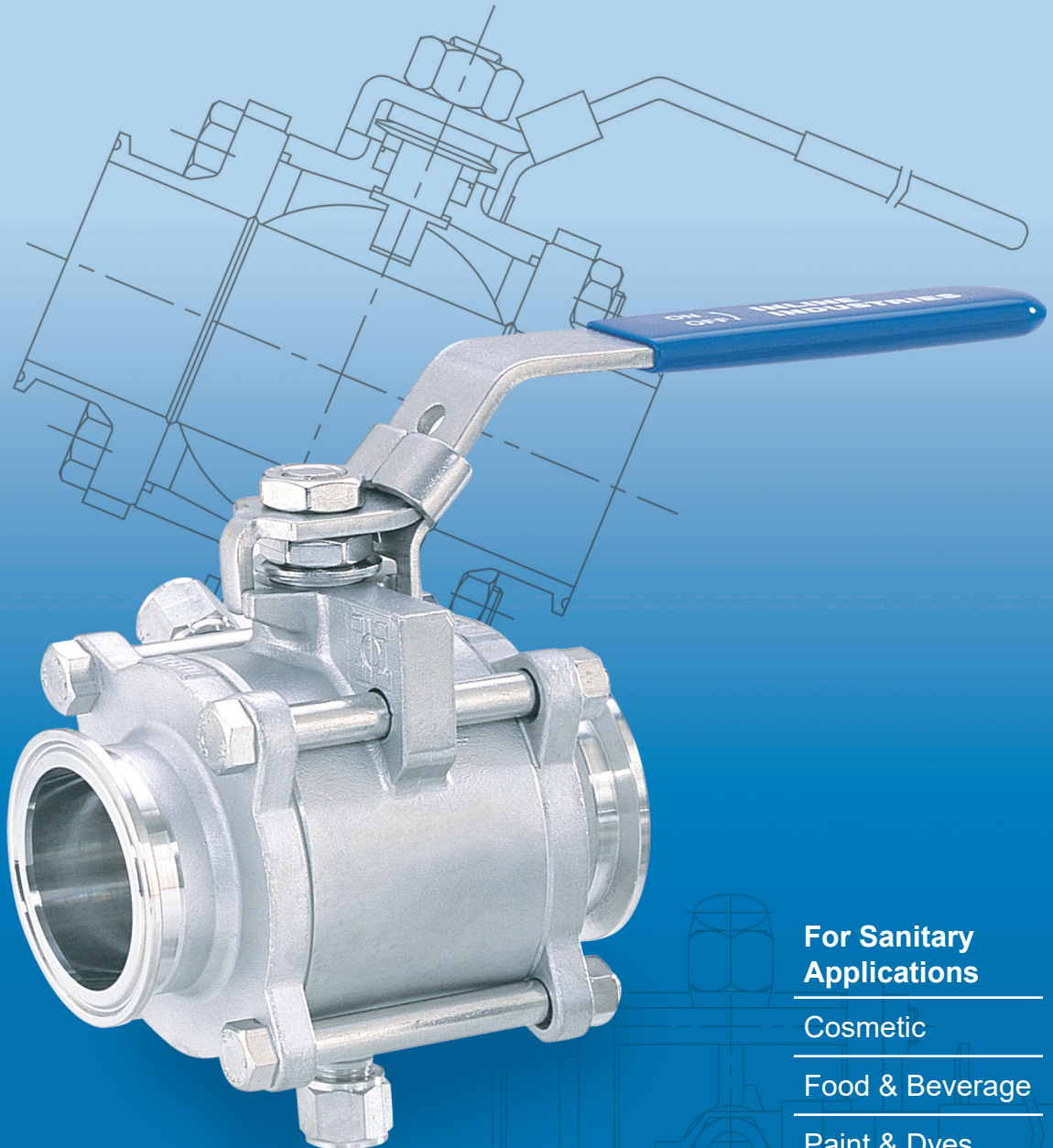


# 307F Sanitary Ball Valve

3-Piece Tube Full Port



**For Sanitary  
Applications**

Cosmetic

Food & Beverage

Paint & Dyes

# The 307F Series Sanitary Ball Valve

The 307F series utilizes a unique Tru-Drain tapered body cavity and integral purge and drain ports to eliminate potential pooling of process media. Available with a variety of sanitary end connections, this clean-in-place system provides outstanding performance in food, beverage and high purity applications.

High-Cycle,  
Live-Loaded  
Stem Packing

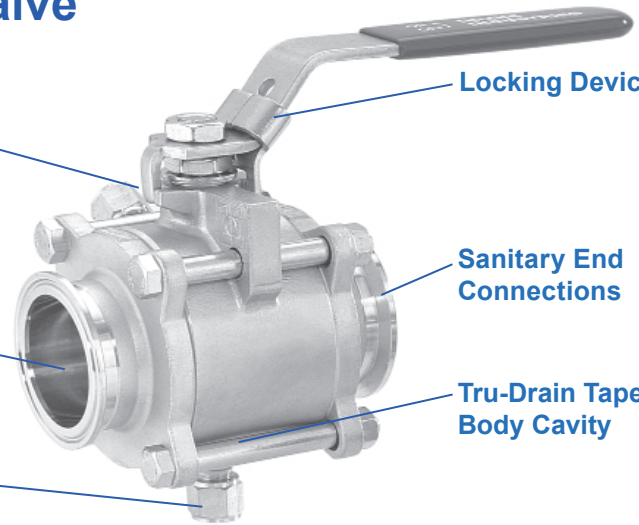
Tube Full Port

Integral Purge  
& Drain Ports

Locking Device

Sanitary End  
Connections

Tru-Drain Tapered  
Body Cavity

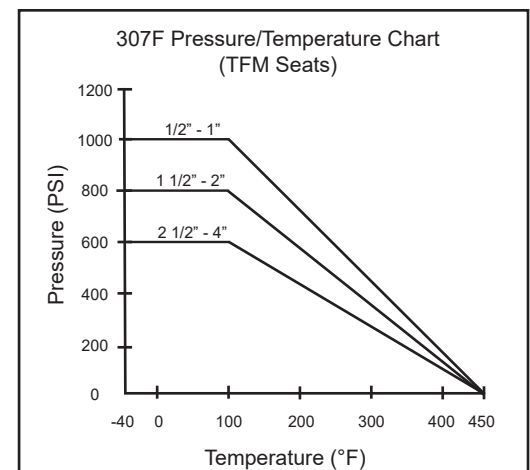


## Standard Features and Benefits

- **Tru-Drain Tapered Body Cavity**  
Eliminates pooling of process media
- **Integral Purge and Drain Ports**  
Quickly drains body cavity
- **High-Cycle, Live-Loaded Stem Packing**  
Ensures tight stem seal and extends service life
- **3-Piece Swing-in-Place Construction**  
Provides easy access for in-line maintenance and repair
- **Made of Corrosion-Resistant 316 SS (A-351 Gr. CF8M) with 316L SS (A351 Gr. CF3M) Weld Ends**  
One valve can be used for many service conditions
- **Blow-Out-Proof Stem**  
Bottom loaded stem prevents removal when valve is in service
- **Investment Cast**  
Improves dimensional control and reduces porosity
- **Locking Device**  
Enables plant personnel to secure valve in open or closed position when manually operated
- **25 Ra Internal Surface Finish**

## Options

- **Clamp, Tube Butt Weld, Ext. Tube Butt Weld, Compression, Flange, NPT, I-Line, Tank Bottom Ends Available**
- **Mechanical Polish and Electro-polish to Customer's Specification**
- **Oxygen Cleaning**
- **Material Test Reports Available Upon Request**

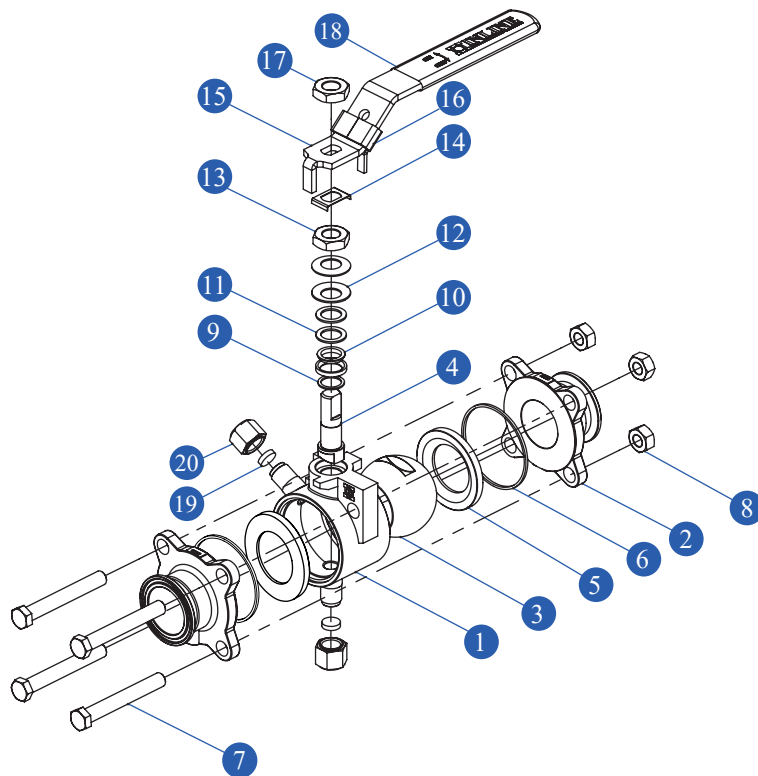


## Operating Conditions

- **Temperature Range (TFM):**  
-40°F ~ 450°F
- **Maximum Pressure (TFM):**  
1000 PSI (1/2" - 1")  
800 PSI (1 1/2" - 2")  
600 PSI (2 1/2" - 4")

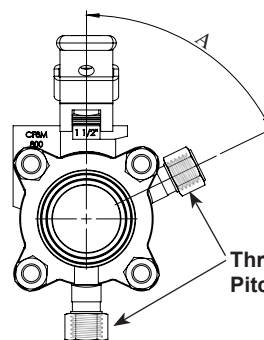
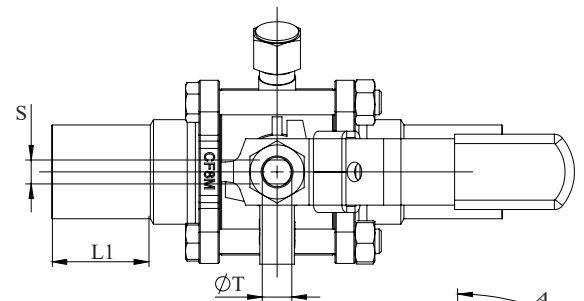
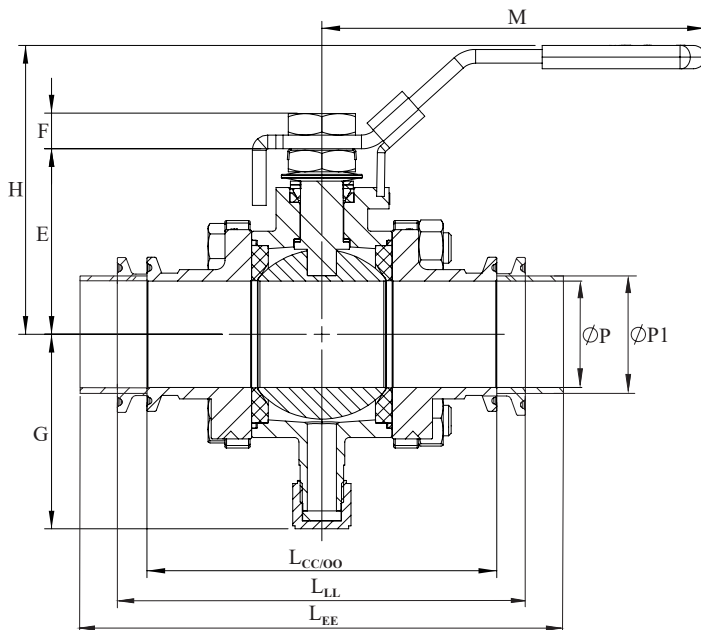
## Specifications

- Valves designed and tested to ASME B16.34, API 598 and MSS SP-110, and meet ANSI/FCI 70-2 Class VI and MSS SP-61 leakage requirements
- All materials comply with applicable ASTM material specifications and USDA and FDA material requirements
- NSF/ANSI/CAN 61 & 372 certified
- All soft wetted parts comply with FDA CFR Title 21 Part 177
- **End connections**  
Clamp to ASME BPE  
NPT to ASME B1.20.1  
Socket Weld to ASME B16.11  
Butt Weld to ASME B16.25  
Flanges to ASME B16.5

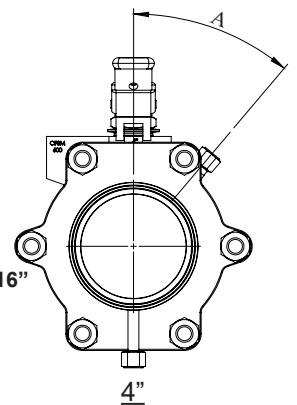


| Valve Components |                       |           |     |
|------------------|-----------------------|-----------|-----|
| No.              | Part Name             | Material  | Qty |
| 1                | Body                  | A351 CF8M | 1   |
| 2                | End Cap               | A351 CF8M | 2   |
| 3                | Ball                  | A351 CF8M | 1   |
| 4                | Stem                  | 316 SS    | 1   |
| 5                | Seat                  | TFM       | 2   |
| 6                | Body Seal             | TFM       | 2   |
| 7                | Body Bolt             | 304 SS    | 4*  |
| 8                | Body Nut              | 304 SS    | 4*  |
| 9                | Thrust Washer         | TFM       | 1   |
| 10               | Stem Packing Set      | TFM       | 1   |
| 11               | Packing Gland         | 304 SS    | 1   |
| 12               | Belleville Washer     | 301 SS    | 2   |
| 13               | Gland Nut             | 304 SS    | 1   |
| 14               | Gland Nut Lock Washer | 304 SS    | 1   |
| 15               | Handle                | 304 SS    | 1   |
| 16               | Handle Lock           | 304 SS    | 1   |
| 17               | Handle Nut            | 304 SS    | 1   |
| 18               | Handle Cover          | Vinyl     | 1   |
| 19               | Purge Port Seal       | TFM       | 2   |
| 20               | Purge Port Cap        | 316 SS    | 2   |

\* 3" Valve: Body Studs X4, Split Lock Washers X8, Body Nuts X8.  
 4" Valve: Body Studs X6, Split Lock Washers X12, Body Nuts X12



1/2" to 3"



| Dimensions (Inches) |                    |                 |                 |                |      |                |      |     |      |      |     |      |      |    | Cv*  | Weight (lbs)* |
|---------------------|--------------------|-----------------|-----------------|----------------|------|----------------|------|-----|------|------|-----|------|------|----|------|---------------|
| Size                | L <sub>CC/OO</sub> | L <sub>EE</sub> | L <sub>LL</sub> | L <sub>1</sub> | P    | P <sub>1</sub> | M    | H   | E    | F    | G   | S    | T    | A° |      |               |
| 1/2"                | 3.50               | 4.90            | -               | 1.57           | 0.37 | 0.50           | 4.3  | 2.1 | 1.17 | 0.28 | 1.8 | 0.20 | 0.31 | 85 | 6.0  | 1.0           |
| 3/4"                | 3.50               | 5.61            | 4.00            | 1.57           | 0.62 | 0.75           | 5.1  | 2.3 | 1.35 | 0.36 | 2.0 | 0.26 | 0.38 | 77 | 20.5 | 1.5           |
| 1"                  | 3.50               | 6.40            | 4.50            | 1.57           | 0.87 | 1.00           | 5.9  | 2.8 | 1.77 | 0.36 | 2.2 | 0.31 | 0.46 | 67 | 44.1 | 2.6           |
| 1 1/2"              | 4.50               | 7.20            | 5.50            | 1.57           | 1.37 | 1.50           | 7.6  | 3.7 | 2.34 | 0.45 | 2.6 | 0.38 | 0.54 | 64 | 115  | 5.1           |
| 2"                  | 5.00               | 7.60            | 6.25            | 1.80           | 1.87 | 2.00           | 7.6  | 4.0 | 2.70 | 0.48 | 2.9 | 0.38 | 0.54 | 60 | 211  | 7.6           |
| 2 1/2"              | 6.75               | 10.00           | -               | 1.80           | 2.37 | 2.50           | 12.3 | 5.6 | 3.54 | 0.69 | 3.3 | 0.47 | 0.77 | 60 | 340  | 16.8          |
| 3"                  | 7.76               | 11.00           | -               | 1.80           | 2.87 | 3.00           | 12.3 | 5.9 | 3.90 | 0.70 | 3.7 | 0.47 | 0.77 | 60 | 501  | 25.7          |
| 4"                  | 9.51               | 12.00           | -               | 2.01           | 3.83 | 4.00           | 12.6 | 6.9 | 4.76 | 0.96 | 4.5 | 0.59 | 0.93 | 40 | 899  | 45.8          |

Please contact us for additional information

Cv value represents flow data to ISA 75.01.01 - 2007  
 \*Cv value & weights based on Ext. Weld Ends



Oxygen Cleaning  
& Electropolishing



Sanitary Products



Automation  
Systems

## 307F Ordering Information

Example: 2" Full Port Sanitary Ball Valve with Lever Handle and Locking Device, 316 SS Body and Trim, TFM Seats and Seals, 316 SS Clamp Ends, 25 Ra Max Mechanical Polish (ID)

| 307F                                                  | D                                                                                                                                | 6                              | 6                                                                 | 6                 | 6                 | M                                                                          | M                                                                          | CC                                                                                                                                                                                                                                                | 2                | S                        |                                                                                                                                                                                                                                       |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------|-------------------|-------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valve Series                                          | Valve Size                                                                                                                       | Body Material                  | End Material                                                      | Ball Material     | Stem Material     | Seat                                                                       | Seal                                                                       | End Connection                                                                                                                                                                                                                                    | Port             | Ball Config.             | Surface Finish                                                                                                                                                                                                                        |
| <b>307F</b> - Full Port<br><b>307C</b> - Compression* | <b>5</b> 1/2"<br><b>7</b> 3/4"<br><b>A</b> 1"<br><b>C</b> 1 1/2"<br><b>D</b> 2"<br><b>E</b> 2 1/2"<br><b>F</b> 3"<br><b>G</b> 4" | <b>6</b> - A351 Gr. CF8M (316) | <b>6</b> - A351 Gr. CF8M (316)<br><b>3</b> - A351 Gr. CF3M (316L) | <b>6</b> - 316 SS | <b>6</b> - 316 SS | <b>M</b> - TFM<br><b>N</b> - TFM 1-Piece Seat/Body Seal<br><b>T</b> - PTFE | <b>M</b> - TFM<br><b>N</b> - TFM 1-Piece Seat/Body Seal<br><b>T</b> - PTFE | <b>C</b> - Clamp<br><b>E</b> - Ext. Tube O.D. Butt Weld**<br><b>O</b> - Tube O.D. Butt Weld**<br><b>A</b> - ANSI 150# (316)<br><b>K</b> - Tank Bottom**<br><b>L</b> - Long Clamp<br><b>P</b> - Compression<br><b>R</b> - I-Line<br><b>T</b> - NPT | <b>2</b> - 2 Way | <b>S</b> - Straight Port | <b>None</b> - 25 Ra Max Mech. Polish<br><b>F1</b> - 20 Ra Max Mech. Polish<br><b>F3</b> - 30 Ra Max Mech. Polish<br><b>F4</b> - 15 Ra Max Electropolish<br><b>F5</b> - 20 Ra Max Electropolish<br><b>F6</b> - 25 Ra Max Electropolish |

\*Available in 1/4" - 1".

\*\*316L - Standard Material

Due to continuous product development, information may change without notice.



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