



# BALL VALVES

## FROM SIMPLE TO COMPLEX DESIGNS

- Sanitary Valves
- Cryogenic Valves
- Automated Valves
- Fusible Link Valves
- Cavity Filled Valves
- V-Port Control Valves
- Dribble Control Valves
- Instrumentation Valves
- Steam Jacketed Valves
- Flush Bottom Tank Valves
- Severe Service Metal Seats
- 3 And 4 Way Multi-Port Valves
- Pipeline Trunnion Type Valves
- Segmented Control Valves
- Custom Designed Ball Valves
- Electric, Pneumatic Actuators & Controls



## A Guide To Manual And Automated Ball Valves

*Flo-Tite Offers A Complete Line of High Quality Engineered  
Ball Valves For Your Most Demanding Applications*

**se habla español**

**[www.flotite.com](http://www.flotite.com)**

# Trunnion Type Ball Valves

## Flo-Tite™ Series

### Engineered Valves for Pipeline and Severe Service Applications

Designed and Fabricated for Pipeline Applications  
Offering both forged 3pc and cast 1 & 2 pc body designs

#### Design Features

- Full compliance with API-6D
- ISO 9001, CE & NACE
- Grease sealant fitting standard
- Fully welded bodies designs
- Size range 1" - 42"
- ANSI Class 150, 300, 600, 900, 1500, 2500
- High temperature metal seated
- NACE requirements
- Piggable service
- Control ball valve & half ball
- 3-way designs
- Double Block & Bleed
- Both Cast & Forged
- **Custom Designs Welcome!**

3 Way 10"

*Tech Bulletin page 80*



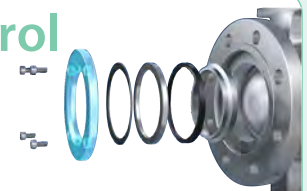
# Segmented Control Valves

## Flo-Tite's Sentinel Series

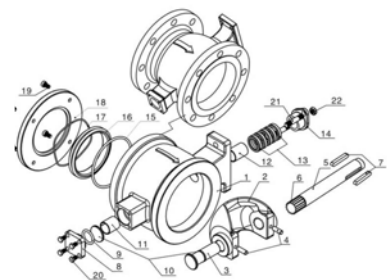
## Precise Control



ISA S75.04  
Rugged unibody Construction Available in  
Flanged or Wafer 150, 300 & 600 LBs  
Metal or Soft Seated  
Size Range 3/4" - 24"



**Exploded View  
Sentinel Series**



**Segmented Type  
Control Valves**

# High Performance-3 Piece Designs

## Multi-Choice Series

This series is our most versatile design. Series 200/300 ball valves are offered in Threaded, Socket Weld, Butt Weld, Flanged End, and extended Weld Ends. The Valve center body is drilled and tapped for cap screw bolting to assure exact alignment.

### Design Features

- 1500 WOG/150 WSP
- Live loaded stem
- V-Ring stem packing
- Anti-Static grounding device
- Size Range 1/4 Thru 12 inch
- I-SO-Mount automation pad
- Safety locking handle
- Wide range of seating materials
- V-Ball control valves
- Cavity fillers
- Carbon, stainless steel, Alloy 20 and many other special materials
- Secondary media containment
- Flush bottom tank



### I-SO Mount



Cap Screws  
Make the  
difference

Model 310

*Tech Bulletin page 45*

## Multi-Choice Series

### Weld - in - Place

Eliminate Valve disassembly when welded ball valves are required!

### Design Features

- Safer Installation
- Reduced Liability
- Save Valuable Time
- Reduce Labor Cost
- Assures Fool - Proof Installation
- Socket & Butt-Weld Design



Shown with  
optional stem  
extension

## Tri-Pro Series

High pressure 3 Piece Series built for demanding applications such as petrochemical, power, oil and gas, pulp and paper, and many other industrial process applications.

Both Full & Reduced Port Models

### Design Features

- 1/4" thru 4" 2250 PSI/WOG
- 1/4" thru 1" 3000 PSI/WOG (Reduced Bore)
- Fire safe designed to API 607-7
- ANSI B16.34
- Protected seat design
- Captive seats & body seals
- Weld-in place socket & butt weld
- Flanged end ANSI class 300 and 600
- Metal seats - both class V & VI

### I-SO Mount



Size 1 1/2"



HPF42

Size 3"

**Tongue & groove design ensures accurate alignment of body & end connections**

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# High Performance-3 Piece Designs

## Pro-Max Series

Model 360

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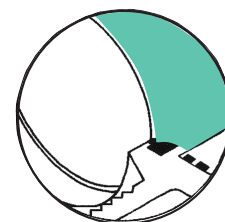
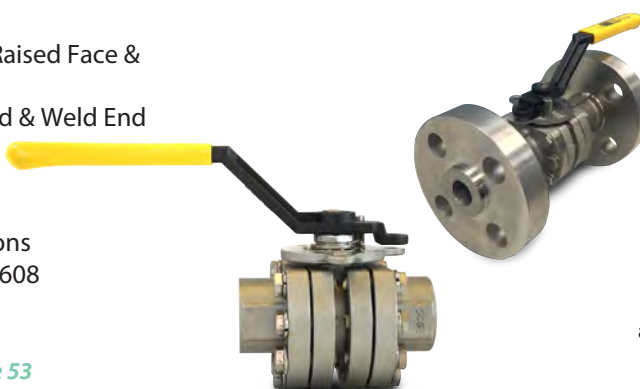


- Flo-Tite economical 3pc valve
- Reduced port
- Available with NPT or socket weld ends
- 2000/1500 WOG
- RPTFE seals
- Enclosed bolting
- ISO 5211 mounting pad
- Safety locking handle
- CE compliance
- Fire safe certified

## Titan Series *Engineered Valves for High Pressure Applications*

- ANSI Class 900 & 1500 Raised Face & RTJ Flange
- 5000 PSI/WOG Threaded & Weld End Connections
- V-Port Control Option
- Devlon Seats Standard
- Peak & Metal Seat Options
- Fire Safe API 607-7, API 608

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Detail of protected seat and encapsulated body seal design. Isolates and protects both seats and seals from flow path. Helps prevent cold flow

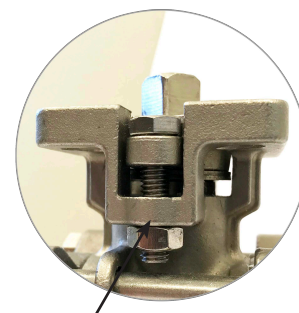
## DM - Series

### *Direct Mount Options*

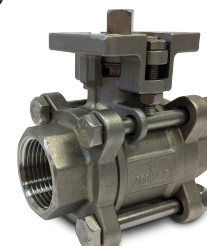
**Direct Connect Series is Tailored for low cost easy actuator mounting.**

- ISO-5211 Top Works - Live Loaded Stem
- 2 PC body 1000 PSI/WOG DM85
- 2 PC body - 2000 PSI/WOG Fire Safe Design
- 2 PC Flanged End DMF150
- 3PC DM 110/120 1000 PSI/WOG
- 3 Way - DM - MPT 100
- Wafer DM - WF150
- Valve Sizes Range from 1/2" - 3"

**Unique design provides easy adjustment of stem packing even when direct mounting of actuator is used.**



Leak Detection Passage Prevents actuator damage in the unlikely event of stem leakage



V Ball Options Available

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# Flanged End Ball Valves

**Full-Flo Series**  
Full Bore

**Uni-Flo Series**  
Standard Bore

**I-SO Mount**

Flo-Tite offers a complete range of Flanged End Ball Valves in both floating and trunnion type designs. Available in both carbon, stainless steel, Alloy 20, duplex stainless steel and many other special materials.

## Design Features

- ISO type mounting pad
- Safety locking handle
- Anti-Static grounding device
- ANSI Class, 150, 300, 600
- Special metal seats meeting class V & VI
- Cavity fillers size 1/2 thru 12 inch
- Complete size range 1/2 thru 14 inch
- Fugitive Emissions Per - ISO - 15848-1
- V-Ball control valves
- Fire Safe-API 607 and NACE requirements
- API 6D logo

**Model F150 Full Port**  
Tech Bulletin page 58



**EZ Series**  
2 PC Reduce Bore  
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**Petro Series F60**  
Tech Bulletin page 69



**2PC Full Bore**  
Tech Bulletin page 60

**EC Series**  
Low Cost Design



**1PC SF150 Reduced Bore**  
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**UNI-FLO Series**

## API 6D Certified Floating Ball Valves

**Media Containment**

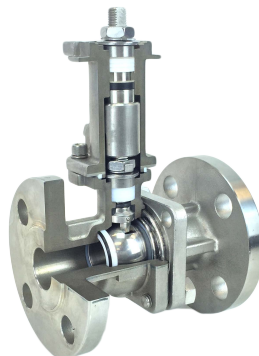
**Award Winning Product**

### Multi Purpose Secondary Containment

- Fugitive emissions
- Maintenance Repair
- High Temperature Applications

Upgrade standard Ball Valves with a simple low cost device.

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# Multi-Port 3 & 4 Way Ball Valves

## TRANS~FLO SERIES

Flo-Tite offers a wide selection of multi-port ball valves designed to simplify piping systems, eliminating the need for 2 or more standard valves. The valve has either one or 2 pc ball/stem with a trunnion type Ball Support, T, L, or LL Flow Plans. I-SO-Mount Actuator mounting pad is standard.



### Model

MPF15	150 LB. flanged end
MPF30	300 LB. flanged end
MPT60	600 LB. flanged end
MPT30	Threaded end
MPC15	Tri-Clamp ends
MPF154	4-Way

### Size Range

3/4 thru 12"

3-Way trunnion designs also available

### Type

150 LB. flanged end
300 LB. flanged end
600 LB. flanged end
Threaded end
Tri-Clamp ends
4-Way



ISO Mount



Model MPF 15

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### MPT-100 Series

- Stainless steel
- 3 way diverting or mixing
- Standard port design
- Threaded ends / Tri-Clamp
- Working pressure 800/1000 PSI/WOG
- Optional Brass T + L ports model # 355/365
- Size Range 1/4" – 3"



3 & 4 Way

Model MPT 100

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### Tri-Pro Bottom Flow Series

- 3-Way diverter design
- 1500 WOG fire safe type
- Threaded / SW / BW / Flanged
- Size Range 1/2" – 2 1/2"



Model 3W-HPF

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### Ball Porting



**Multiple  
Flow Plans**

### Bottom Entry Series

- 3-Way diverter design
- Ideal replacement for plug valves
- Class 150/300, size 2", 3", 4", 6"



Model MPF155

*Tech Bulletin page 96*

*Many Different Flow Patterns Are Available*

# Unique Application Design Ball Valves

## Cryogenic Design Ball Valves



**6" F150  
Cryo Top**

**Flo-Tite offers a complete line of cryogenic ball valves.**

- Available cryo bonnet tall stems
- One Piece High Strength stems
- Reaching temp. down to -320°F
- Flanged end 150/300/600
- NPT / SW / BW / 3PC Flanged End Design Ball Valves
- Sizes 1/4" – 18"

**CRYO-SERIES**



**1 1/2" Tri-Pro  
HPF with  
Cryogenic Stem  
Extension**

*Tech Bulletin page 138*

## Flush Bottom Tank Valves

Valve tank pad is welded flush to the tank bottom for unrestricted drainage of tank media. Available with threaded, SW / BW / flanged end 150/300

Tank pad All 316L-SS  
Size Range 3/4" – 8"



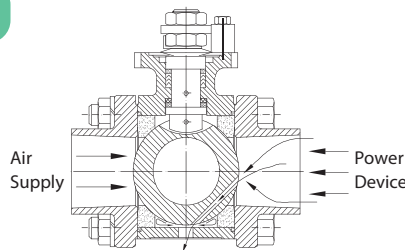
**Model TK300**

*Tech Bulletin page 142*



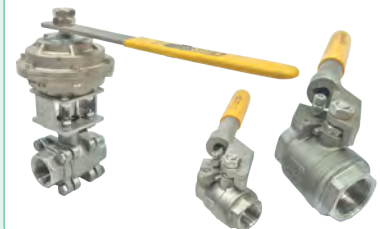
## Safety Exhaust 3PC Valve

Offers downstream air pressure "blow-down" design valve with complete service-ability without disturbing the piping system.



## Spring Return Handle

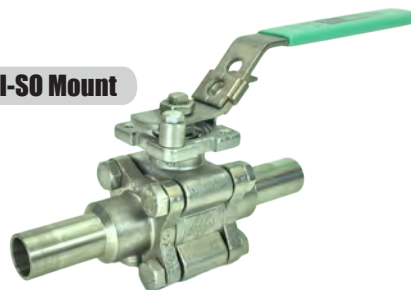
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**Model S350**

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**I-SO Mount**



**Model S370**

## Multi Choice Sanitary Designs

3PC sanitary ball valves with true tube bore clean-in-place, purge ports.

20-25 RA standard.

Electropolish, solution clean & bagged, optional.

All wetted parts SS316L.

Cavity fillers available.

In-Line orbital welding.

Sizes 1/2" – 6"



**25  
YEARS  
Of Performance**

# Industrial Process Threaded End Designs

## Fusion Series

- The Fusion series seal-welded high pressure valves incorporate safety. All welded body assures that the 2pc body can never be separated.
- Anti-Static, fire safe, API 608, Steam seals, Locking handle.
- ISO 5211 Actuator Mounting



- Model T23 2pc Body
- Model S23 1pc Body
- 2000PSI / 1500PSI
- 250 SWP
- Size 1/4" – 4"

*Tech Bulletin page 14*

## Flo Tron and Flo Tron II Series

- Rugged construction - Cast body
- All welded body
- This heavy duty valve is built for hydraulic and petrochemical applications.
- S3000 - 3000 WOG / S6000 - 6000 WOG
- Fire safe designed to API 607-4
- Anti-Static Grounding



**Model S3000**  
*Tech Bulletin page 16*

## ONMI Series

- 25/carbon/PTFE Seats
- 175 PSI/SWP
- 2000 WOG



**Model T12**  
*Tech Bulletin page 23*

- UNI-body Design
- Outstanding Low cost High Pressure Valve
- Fire Safe Certified API 607-4
- Double reduced bore fire safe certified
- For higher pressure application
- 316SS and Carbon Steel
- Economical Solution
- 1-pc body design
- Size Range 1/2" - 2"

## Econo-Groove Series

### Design Features

- 3 PC Body Design
- All Stainless Steel Design
- 1000 PSI/WOG
- Sizes From 1 1/2" to 6"
- Full Port Design

*Tech Bulletin page 56-16*  
**For More Info**



**I-SO Mount**



### Kompact Series

- Full port - size - 1/2" – 6"
- Full flanged wafer compact design
- Cavity filled
- Steam jacket
- V-Port control

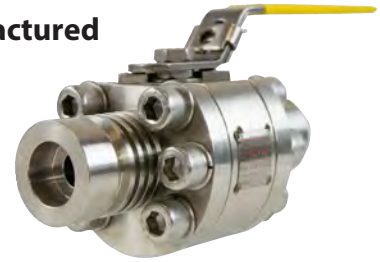


ISO - Mount  
Threaded Holes

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### API608/API6D Compliant

**Custom Manufactured  
Ball Valves  
Special Alloys**



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## V-BALL CONTROL VALVES

### V-Port Control Series

Most all of Flo-Tite's High Performance standard ball valves are now available with custom designed v-cut options such as: 15°, 30°, 60°, 90° and 120°



- Flanged Type 150, 300, 600 ANSI Class
- Wafer Design 150 LB
- Control-Set 2PC - 1000 WOG
- Segmented Design 150, 300, 600
- 3PC All Types 1000, 2250, 5000 WOG



**Flo-Tite's control ball valves feature a solid stainless steel ball, not a seat insert like many others.**

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### Flo-Tite's Automation Brands



# Economy Designs From Flo-Tite

## Econoflo-Series

1/4" T45SS

- 2 Piece Design Valves
- Reduced Port
- 1000 - MAWP/WOG
- Male X Female Connections
- 1/4" - 2"



1/4" T40MxF



1 1/4" T45SS



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## 7U<sup>h</sup> a5hem - Series

- 3 Piece Body - Full Port Design
- Threaded, Socket-Weld or Butt Weld Ends
- ISO Mounting Pad
- 1/2" - 4" Sizes Available
- 1000 MAWP/WOG
- **UL Certification Available**



3" 120



2" 110



1/2" 110

Model 110 Tech Bulletin page 33-17

## Econoflo-Series

- T80 ball valves offer an economical solution for low cost full port stainless steel 316SS/304SS
- 1000 WOG size 1/4" - 3"



Model T80



Model T82

Tech Bulletin page 28

## Forged Brass - Threaded & Solder Ends

- T51BZ ball valves are ideal utility valves for low pressure applications.
- Size 1/4" - 4"
- 600 WOG - 150 WSP
- FM / UL / SR certificates
- Lead Free Designs
- Locking Options



Model T92BZ

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## Commercial-Series

- T70 - 2PC standard port
- 2000/1500 WOG
- Size 1/4" - 3"

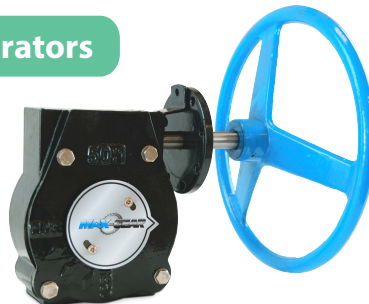


Model T70

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## MaxGear Manual Gear Operators

- Fully Lubricate
- Weather Proof Housing
- Grease Fittings Standard
- Mounting Dimensions to ISO 5211
- Locking Device Available



# Metal Seated Ball Valves

Engineered Valves for Severe Service

## Metal Seated Valves

Severe Service Valves Tailored to Your Applications

### DESIGN FEATURES

- Flanged Type 150, 300, 600 ANSI Class
- Wafer Design 150 LB
- Control-Set 2PC - 1000 WOG
- Segmented Design 150, 300, 600
- 3PC All Types 1000, 2250, 5000 WOG
- Uni and Bi Directional Flows

*Tech Bulletin page 130-11*



**Surface treatments and coatings to withstand abrasion resistance.**

- Tungsten Carbide • Chromium Carbide • Hard Chrome • Forged Stainless Steel Balls
- High Temperature Designs up to 1000°F**



Titan Series



Tri-Pro Series



Full-Flo Series



Sentinel Series

## Steam Jacket Series

Flo-Tite's valve jackets are designed for chemical service where absolute control of fluids is required within a specified temperature range. With special preparation, these valves can be used for severe and hazardous chemical service.

### DESIGN FEATURES

- Bolt on Jacket
- Clamp on Jacket
- Full Jacket
- Compact Full Jacket

**3-Way Bolt on Type**



**2" Carbon Steel F150  
with Steam Jacket**



*Tech Bulletin page 114A-09*





offers a complete package of pneumatic, hydraulic & electric actuators. All types of controls & accessories for a vast number of special automated applications

### Air-Con Series

Designed for quarter-turn ball, butterfly & plug valves as well as damper applications. Incorporating the latest technology in actuator design.

- Hard anodized aluminum body
- Namur interface & ISO5211 Mounting
- 5° - travel stops, optional 90° stops
- Torque range up to 1,565,200 in-lbs
- Optional Stainless Steel & Nickel Infused Available **Specs :CE, ISO, ATEX, SIL3**



### Smart Positioner VAC

Hart, Fieldbus and Profibus



### VRC Series All Specials



High Chemical Resistance Housing

### Solenoid Valve

Direct Design



304 Stainless

### Easy-Link ISO Mounting Hardware

**EASY LINK**



Set Screws Locking

### Electric Actuators

**PRO-torq**  
electric actuators



All Types & Designs

### Max-Seal Butterfly Valves

Flo-Tite also offers a wide variety of Max-Seal Butterfly Valves.

**MAX SEAL**  
Valves & Controls



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