

A  
Bray  
High  
Performance  
Company

# FlowTek®

A Subsidiary of BRAY INTERNATIONAL, Inc.

## Ball Valve Selection Guide



## 3 Piece Valves



### Triad Series

**Models FP/SP-2000/3000**  
**3 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Full Port / Standard Port**  
**Valve Sizes:**  
Model FP: 1/4" through 4"  
Model SP: 3/4" through 2 1/2"  
**Pressure Ratings:**  
Model FP: 2200 psi WOG  
Model SP: 2200 psi WOG  
FP & SP: up to 425 psi WSP

Triad Series ball valves are fire safe to API 607 4th Edition and are designed in accordance with ASME B16.34 specifications. Features include live loaded Smart Stem seals, a redundant body seal design, anti-static protection, locking safety handles and ISO 5211 Secure Mount actuator top flange. Hex head cap screws join end connections to the tapped center section. Threaded, weld end, extended weld end and custom end connections are offered.



### Series 7000 & 8000

**Models 7000/8000**  
**3 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Full Port**  
**Valve Sizes: 1/4" through 12"**  
**Pressure Ratings:**  
1/4"-4": 1000 psi WOG  
6"-12": 400 psi WOG

Series 7000/8000 ball valves offer threaded, socket weld, butt weld, flanged, quick clamp, and extended weld end connections. Features include live loaded Smart Stem seals, anti-static protection, ease of installation and maintenance, locking safety handles and ISO 5211 (1/4"-2") actuator top flange. These valves are also available with cavity filler seats for special service requirements.

Wide Selection of End Connections



### Series 5000 & 6000

**Model 5000/6000**  
**3 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Full Port**  
**Valve Sizes: 1/4" through 4"**  
**Pressure Ratings:**  
1/4"-2": 1000 psi WOG  
2 1/2"-4": 800 psi WOG

Series 5000/6000 ball valves offer the benefits of a 3 Piece body design at an economical price. Features include a swing out center section for ease of installation and maintenance, adjustable stem packing, heavy duty internal entry stems, stainless steel safety locking handles and ISO 5211 actuator top flange. Threaded and socket weld end connections are offered.

Economical 3 Piece Ball Valve



### Micro Pure Series

**Models S7500/S7700**  
**3 Piece Bodies**  
**Stainless Steel**  
**Tube Bore Port: 1/2"-2"**  
**Valve Sizes: 1/2" through 4"**  
**Pressure Rating:**  
1/2"-4": 1000 psi WOG

Specifically Designed For High Purity Applications

Micro Pure Series ball valves comply with ASME BPEa-2004 and have a tube bore port. The ball and end connections have the same I.D. as the tube piping system. Valves come standard with 20 RA maximum (SFV-1) surface finishes and all are solution cleaned and bagged. Features include live loaded Smart Stem seals, ease of installation/maintenance, locking safety handles and ISO 5211 (1/2"-2") actuator top flange. Quick clamp, extended weld tube ends and SAE Male end connections are offered.

# Flanged Valves



## Series F15 & F30

**Models F15/F30**  
**2 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Full Port**  
**Valve Sizes: 1/2" through 12"**  
**Pressure Ratings:**  
**Model F15: ASME Class 150**  
**Model F30: ASME Class 300**  
Non-Fire Safe or Fire Safe

Series F15/F30 ball valves are available as non-fire safe or fire safe to API 607 4th Edition and are designed in accordance with ASME B16.34 specifications. ASME Class 150 & 300 Flanges are standard. Features include live loaded Smart Stem seals, anti-static protection, locking safety handles and ISO 5211 (1/2"-2") actuator top flange. Larger sized valves feature trunnion-type ball support. Special body materials are also offered.



## Series RF15 & RF30

**Models RF15/RF30**  
**1 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Standard Port**  
**Valve Sizes:**  
**Model RF15: 1" through 12"**  
**Model RF30: 1" through 12"**  
**Pressure Ratings:**  
**Model RF15: ASME Class 150**  
**Model RF30: ASME Class 300**

Series RF15/RF30 ball valves are available as non-fire safe or fire safe to API 607 4th Edition and are designed in accordance with ASME B16.34 specifications. These economical, one piece Class 150/300 end entry flanged valves are an excellent cost effective choice. Features include live loaded Smart Stem seals, anti-static protection, locking safety handles and ISO 5211 (1"-2") actuator top flange. Special body materials are offered upon request.



## Trunnion Series

**Models A105/LF2**  
**2 Piece Bodies**  
**Stainless Steel & Carbon Steel**  
**Full Port / Standard Port**  
**Valve Sizes: 2" through 24"**  
**Pressure Ratings:**  
**ASME Class 150, 300, 600,**  
**900 & 1500**

Trunnion Valves for Heavy Duty Service

Trunnion Series ball valves feature trunnion design ball support. Offering a wide range of pressure ratings and both full and standard port models, Trunnion Series valves are ideal for heavy duty applications such as oil and gas production, power and waste water industries. Fire safe to API 607 4th Edition and designed in accordance with ASME B16.34 and API 60 specifications. The valve seats are spring loaded to maintain bubble tight shut off.

# Multi-Port Valves



## Multi-Port 130 Series

**Models MPT130/MPC130**  
**3-Way**  
**Standard Port**  
**Stainless Steel**  
**Valve Sizes: 1/4" through 2"**  
**Pressure Ratings:**  
**1/4"-1 1/4": 1000 psi WOG**  
**1 1/2"-2": 800 psi WOG**

Compact Design

Multi-Port 130 Series ball valves offer a wide range of flow patterns with 90° and 180° T & L port 3-way balls. Features include a 4th seat to prevent leakage and maintain proper ball alignment, live loaded stem seal, locking handles and ISO 5211 actuator top flange with direct mount capability. Interchangeable threaded and quick clamp end connections are offered.

## Multi-Port Valves



### Multi-Port 230/240 Series

Models MPT230/MPC230 3-Way  
MPT240/MPC240 4-Way

Full Port

Stainless Steel & Carbon Steel  
Valve Sizes: 1/4" through 4"

Pressure Ratings:

1/4"-1" : 1000 psi WOG

1 1/4"-4" : 800 psi WOG

Block Style, Bolted Ends to  
Body Design

Multi-Port 230/240 Series ball valves offer a compact, low-profile body design. Flow patterns include 90° and 180° T & L port 3-way balls, and 90°, 180° and 270° 4-way balls. Features include a 4th seat to prevent leakage and maintain proper ball alignment, live loaded stem seal, locking handles and ISO 5211 actuator top flange with direct mount capability. Interchangeable threaded, quick clamp and welded end connections are offered. Cavity filler seats are optional.



### Multi-Port Flanged Series

Models MPF150/MPF300

3 & 4 Way Full Port

Stainless Steel & Carbon Steel  
Valve Sizes:

MPF150: 1/2" through 12"

MPF300: 1/2" through 12"

Pressure Ratings:

MPF150: ASME Class 150

MPF300: ASME Class 300

Block Style, Bolted Ends to  
Body Design

Multi-Port Flanged Series ball valves are Side Ported 3 & 4-way ball valves offering excellent versatility for mixing and diverting applications. Flow patterns include 90° and 180° T & L port 3-way balls, and 90°, 180° and 270° 4-way balls. Features include a 4th seat to prevent leakage and maintain proper ball alignment, live loaded stem seal, locking handles and ISO 5211 actuator top flange with direct mount capability.

## Instrument Valves



### Models HP & HX

High Pressure 3 Piece Bodies  
Standard Port Stainless Steel  
Valve Sizes: 1/4" through 1"

Pressure Ratings:

Model HP: 6000 psi WOG

Model HX: 10,000 psi WOG

HP, HX & 3HP End Connections:  
Standard NPT Threaded,  
Optional Female Compression  
Fittings



### Model 3HP

High Pressure 3-Way  
Standard Port Stainless Steel  
Valve Sizes: 1/4" through 1"

Pressure Rating:

1/4"-1": 6000 psi WOG

HP, HX & 3HP are available in  
optional materials, including  
Duplex SS, Hastelloy, Monel  
and Titanium

## Commercial Valves



### Series S51

2 Piece Brass Body Full Port  
Valve Sizes: 1/4" through 4"  
Threaded End Connections

Pressure Ratings:

1/4"-2": 600 psi WOG

2 1/2"-4": 400 psi WOG

1/4"-4": 150 psi WSP

Ideal commercial utility valve



### MPT355/MPT365

3-Way Brass Bodies  
Standard Port

Valve Sizes: 1/4" through 2"  
Threaded End Connections

Pressure Ratings:

1/4"-2": 400 psi WOG

90° & 180° T & L ports

L ports have an off position.



## Series S85

**Model S85**  
**2 Piece Bodies Full Port**  
**Stainless Steel**  
**Valve Sizes: 1/2" through 3"**  
**Pressure Ratings:**  
1/2"-3": 1000 psi WOG  
150 psi WSP

Series S85 ball valves have been designed for ease of automation featuring Flow-Tek's ISO 5211 actuator top flange. Other features include live loaded Smart Stem seals, anti-static protection, replaceable seats and seals, and safety latch handles. Threaded end connections.



## Series S80

**Model S80**  
**2 Piece Bodies Full Port**  
**Stainless Steel**  
**Valve Sizes: 1/4" through 4"**  
**Pressure Ratings:**  
1/4"-4": 1000 psi WOG  
150 psi WSP

Series S80 ball valves have been designed to meet the needs of the chemical, textile and process industries. An economical full port valve featuring adjustable stem packing, integrally cast actuator mounting pad and safety latch handles. Threaded end connections.



## Series S70 & S90

**Models S70/S90**  
**2 Piece Bodies Standard Port**  
**Stainless Steel & Carbon Steel**  
**Valve Sizes: 1/4" through 3"**  
**Pressure Ratings: 150 psi WSP**  
1/4"-1": 2000 psi WOG  
1 1/4"-2": 1500 psi WOG  
2 1/2"-3": 1000 psi WOG

Series S70/S90 ball valves offer an economical solution for high pressure applications in the process industry. Features include adjustable stem packing, integrally cast actuator mounting pad and safety latch handles. Available in Stainless Steel and Carbon Steel bodies. Threaded end connections.



## Series S20

**Model S20**  
**1 Piece Bodies Reduced Port**  
**Stainless Steel**  
**Valve Sizes: 1/2" through 2"**  
**Pressure Ratings:**  
1/2"-2": 2000 psi WOG  
150 psi WSP

Series S20 ball valves can be furnished as fire safe to API 607 4th Edition standards. One piece body design supplies maximum structural strength while reducing leak paths. Features include live loaded stem seals, actuator mounting pad, safety latch handles, and optional oval handles. Threaded end connections.



## Series S40

**Model S40**  
**1 Piece Bodies**  
**Reduced Port**  
**Stainless Steel**  
**Valve Sizes: 1/4" through 2"**  
**Pressure Rating:**  
1/4"-2": 1000 psi WOG

Series S40 ball valves offer an economical, compact, one piece body design that supplies maximum structural strength while reducing leak paths. Features include low operating torque and safety latch handles. Optional oval and butterfly handles are available. Threaded end connections.



## V-Control Ball Valves

Characterized V-Port Balls  
Standard: 15°, 30°, 60° & 90°

Custom and Slotted Ports

Full Port / Standard Port  
3-Piece and Flanged Valves

Valve Sizes

7000/8000: 1/4"-12"

Triad Series: 1/2"-4"

F15/F30: 1/2"-12"

RF15/RF30: 1"-12"

With characterized V-ports, slotted ports or custom ports, V-Control Ball Valves provide accurate flow control. Available in 3-Piece and Flanged bodies, V-Control valves offer superior rangeability, repeatability and high flow capacity. These quarter turn valves are easily automated and make an ideal control element in process piping systems. When combined with Flow-Tek's line of Pneumatic and Electric Actuators and controls, the V-Control delivers exceptional performance.



## Cryogenic Service Ball Valves

Flanged F15: Full Port

3-Piece Triad: Full Port &  
Standard Port

Stainless Steel

Valve Sizes: 1/2"-4"

Service to -425°F

Used in the production, transportation and storage of liquefied gases, these specially designed valves have extended stems and bonnets that position the packing above the cryogenic fluid. Some key features include high-density TFM 1600 seat and seals, live loaded stem packing, and ISO 5211 (1/2"-2") actuator top flange. Valves are unidirectional with vent holes in the stem slot and upstream face of the ball. All valves are permanently marked with a flow direction arrow. These valves are also available in a shorter stem/bonnet, low temperature version.



## Tank Bottom Series

TK7000/TK8000/TKF15

2 or 3 Piece Bodies Full Port

Stainless Steel & Carbon Steel

Valve Sizes: 1" through 10"

Pressure Ratings:

TK7000/TK8000:

1"-4": 1000 WOG

6"-10": 400 WOG

TKF15: ASME Class 150

Tank Series ball valves are welded flush to the tank bottom for unrestricted drainage of tank media. Features include live loaded Smart Stem seals, anti-static protection, interchangeable parts, locking safety handles and ISO 5211 (1"-2") actuator top flange. Valves are available with threaded, socket weld, butt weld, flanged, and quick clamp end connections opposite the flush bottom flange end.



## Media Containment

Valve Sizes: 1/2" through 10"

Media Containment Units are designed to prevent costly downtime and provide double stem sealing. Button-head check valve for injection of a sealing agent can be added.

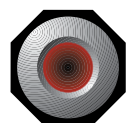


## Steam Isolation

Valve Sizes: 1 1/2" through 12"

Full port flanged ball valves are available for low temperature steam distribution and isolation service. The carbon steel, ASME Class 300 valves are offered with optional bypass and feature quarter turn operation & positive shutoff.

Other speciality products include Chlorine Service Ball Valves, Stem Extensions, Oval Handles, Memory Stops and Dual Valve Assemblies.



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