
FLOW-TEK

SERIES 7000/8000 3 PIECE FULL PORT BALL VALVES

7000 Stainless Steel | 8000 Carbon Steel

¼" - 4" 1,000 psi WOG | 6" - 12" 400 psi WOG



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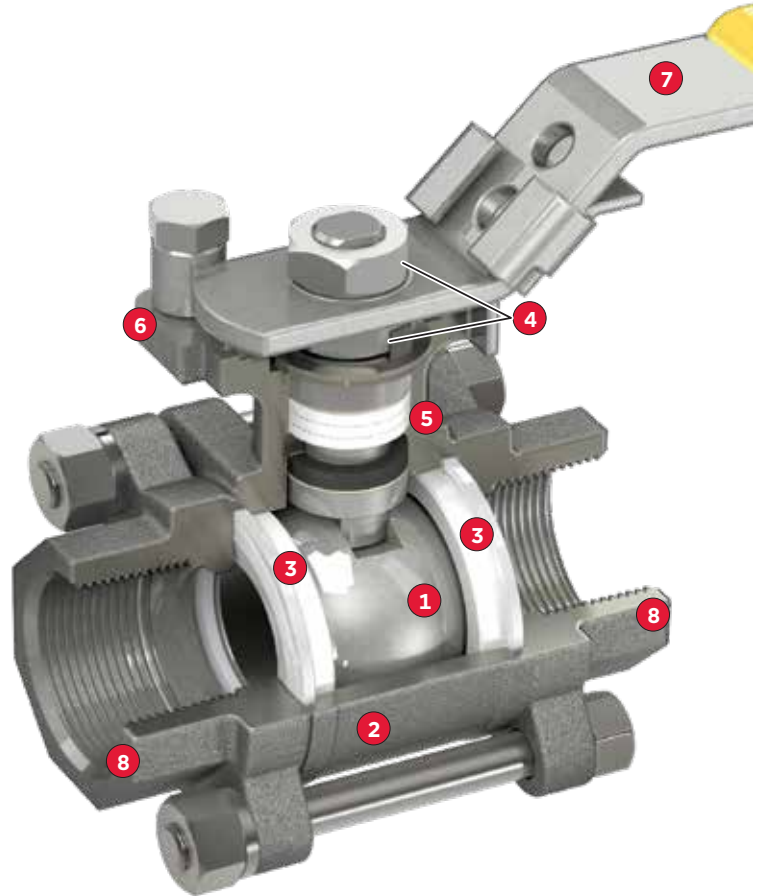
VALVE DESIGN FEATURES

The Series 7000 and 8000 ball valves offer the highest flexibility in selection of end connections, seat materials in a 3-piece design. To meet customer demands for a valve with the widest possible range of applications, these valves can be fitted with control or tri-ported balls (for full cavity drainage), as well as cavity fillers for special service requirements.

The Series 7000/8000 is designed with extensive interchangeability of balls, stems, stem packing, handles and mounting hardware between valve sizes and series members. This system reduces parts inventory and maintenance costs.

The 3-piece body design allows the body to swing-out for ease of in-line maintenance. It also makes it possible to offer a wide variety of end connections.

- 1. **Ball** | Balls are solid metal, precision machined and mirror finished for bubble-tight shut off with less operating torque. Ball edges have machined curvatures to reduce seat wear and provide a high cycle life.
- 2. **Body** | Valve bodies are investment cast and solution annealed/normalized for the highest quality and added strength. Body castings are marked with a foundry heat number for full traceability. Carbon steel bodies are phosphate coated for increased corrosion resistance.
- 3. **Seat** | The seat design ensures bidirectional, bubble-tight sealing while providing the lowest possible torque. This seat design reduces friction, minimizes seat wear and reduces operating torque.
Seat Materials | The following are the standard seat materials for the Series 7000/8000: RPTFE, TFM-1600, Stainless Steel/PTFE (50/50), UHMWPE, Virgin PTFE, Tek-Fil®, and Cavity Fillers. Other seat materials are available.
- 4. **Double Lock Nut Design** | Standard on the Series 7000/8000, the double lock nuts allow handles to be easily and safely removed while the valve is under full line pressure.
- 5. **Live-Loaded Stem Seals** | The standard (up to 2½”) live-loaded stem seals with Belleville washers considerably increase the number of cycles between maintenance adjustments.



- 6. **Secure Mount** | The integrally cast top flange ensures positive actuator mounting. Secure Mount eliminates unwanted actuator movement during high cycle or continuous duty applications. Actuation equipment can be easily and safely removed while the valve is under full line pressure. Designed to ISO 5211 bolting pattern standards.
- 7. **Handle** | The handles feature a standard Safety Trigger to prevent accidental movement of ball position. Operation is easily made with one hand. The trigger locks the handle in the open or closed position. The handle lock can be bypassed, if needed, with a small bolt through the handle in the bypass position. An Anti-Tamper Padlock can be used to secure the handle in position, preventing unwanted access. Travel stops limit the movement of handle to set 90° intervals, preventing over travel of the ball.
- 8. **End Connections** | Full range of interchangeable connections including threaded, socket weld, butt weld, ASME Class 150 flanged and extended weld in place.

STEM DESIGN FEATURES

Smart Stem - Valve Sizes ¼" through 2½" | The interchangeable family of valves feature strong, large diameter stems with live-loaded, self-adjusting stem seals utilizing Belleville washers which automatically adjust to compensate for changes in temperature and wear. The assembly is secured by a saddle-type tab lock washer which prevents stem nuts from unthreading in high cycle automation applications.

Stem Assemblies | Products are manufactured with heavy duty, high quality stems with double "D" connection to ball and operator mounting. Stems are mated with the ball to ensure positive contact. All stems are internal entry and blowout proof for maximum safety. 2½", 3" and 4" valves feature a NAMUR stem slot for ease of limit switch mounting.

Stem Packing | An adjustable V-ring design creates a multiple seal between the stem and body. Each stem assembly is composed of three or four (dependent on valve size) rings providing a very high cycle life by resisting creep and cold flow. The Thrust Washer and the Thrust Washer Protector combine to provide a primary seal, reduce torque and prevent galling.

Anti-Static Protection | Series 7000/8000 valves feature anti-static grounding devices as standard. These devices ensure electrical continuity between valve ball, stem and body, thus eliminating the possibility of static electrical charges creating sparks within the valve.

Stem Design for 3" -12" Valves | The stem is guided by the valve body and the gland, ensuring smooth operation even in high torque service. The packing gland is adjustable and all stems are polished to reduce torque. Optional Belleville washers can be added for a self-adjusting, live loaded stem packing assembly.



SPECIAL OPTIONS/SERVICES/CERTIFICATIONS

- > Cavity Fillers
- > Deadman Handles
- > Vented Balls
- > Chlorine Service
- > Polished Internals
- > Special Cleaning
- > Silicone Free
- > NSF/ANSI/CAN 61 and 372 Certification
- > PE(S)R UKCA S.I. 2016:1105

SPECIFICATIONS

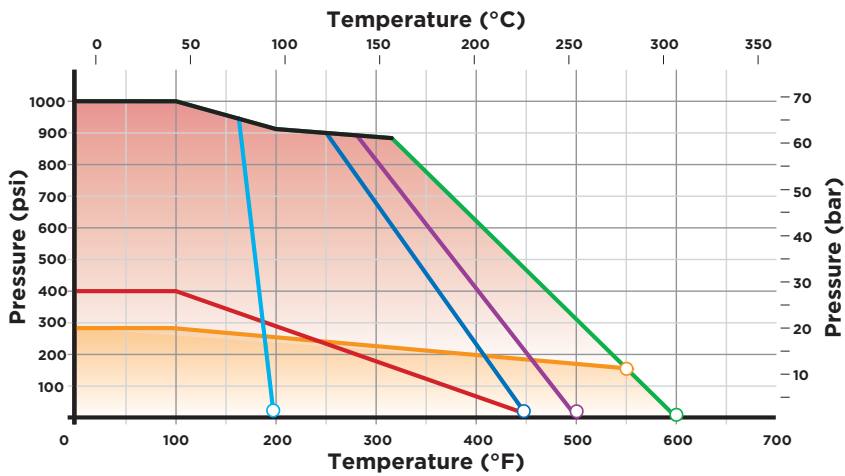
- > Valve Sizes 1/4" through 12"
- > Design meets MSS-SP-110.
- > Threaded End Connections meet ASME B1.20.1 NPT.
- > Socket Weld End Connections meet ASME B16.11.
- > Butt Weld End (Sch 40) Connections meet MSS SP-72 / ASME B16.25.
- > Flanged End Connections meet ASME Class 150.
- > Valve body and end cap connections are high quality investment cast and solution annealed/normalized.
- > Body and end cap wall thickness meets ASME B16.34.
- > Valve stems are blow-out proof for maximum safety and meet ASME B16.34 specification.
- > All valves are factory tested to MSS SP-72 and API 598.

PRESSURE RATINGS

| | | |
|--|-------------------------------|--------------|
| Threaded, Socket Weld and Butt Weld | Sizes ¼" - 4" | 1000 psi WOG |
| | Sizes 6" - 12" | 400 psi WOG |
| Flanged | ASME B16.34 Class 150 | |
| Steam Rating | 150 WSP TFM 425 WSP Tek-Fil | |
| Vacuum Rating | 29.9 in. Hg gauge | |

| Series | Pressure Rating | Valve Size by End Connection | | | |
|--------|-----------------------|------------------------------|------|-------|--------------|
| | | NPT | SW | BW | Flanged 150# |
| 7000 | ½" - 4": 1000 psi WOG | ≤ 4" | ≤ 4" | ≤ 12" | ≤ 12" |
| | 6" - 12": 400 psi WOG | | | | |
| 8000 | ½" - 4": 1000 psi WOG | ≤ 4" | ≤ 4" | ≤ 12" | ≤ 12" |
| | 6" - 12": 400 psi WOG | | | | |

Other connections with limited size availability such as Ext SW, Ext BW, JIC, Tank Bottom, and Tri-Clamp are available upon request.



- 1/4" - 4" Valves: UHMWPE
- 1/4" - 4" Valves: RPTFE/TFM
- 1/4" - 4" Valves: 50/50 SS Filled TFE
- 1/4" - 4" Valves: Tek-Fil
- 6"-12" Butt Weld Valves: RPTFE
- ASME Class 150 Flanged

NOTE:
 Series 8000 carbon steel valves are limited to -20°F.
 Series 7000 stainless steel valves are limited to -50°F.

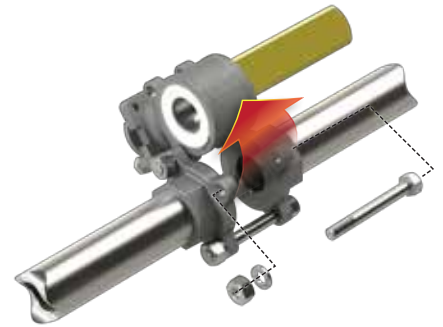
3 PIECE VALVE BODY DESIGN

The unique body design of the Series 7000/8000 offers many advantages, including installation flexibility, and ease of in line and out of line servicing. These time saving features are a big plus for process industries, automated valves and welded piping systems by reducing costly downtime. Heavy duty hinges, throughout the entire size range, provide

positive alignment of body to end connection during swing-out, in-line servicing. During maintenance, the actuator and mounting assemblies remain on the valve body. The entire valve and actuator assembly is easily reinstalled. No actuator adjustment or reattachment is necessary.

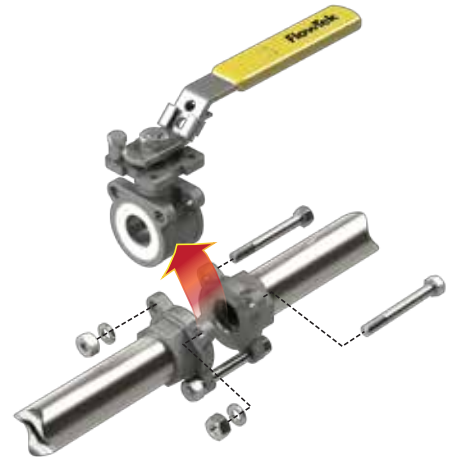
IN LINE SERVICING

To perform in line maintenance, remove one of the body bolts through one of the two body hinges, loosen the remaining bolts and swing the body up. The valve can swing to the left or right depending on which bolt is removed. All body components can be serviced in this position without disturbing the pipe system.



OUT OF LINE SERVICING

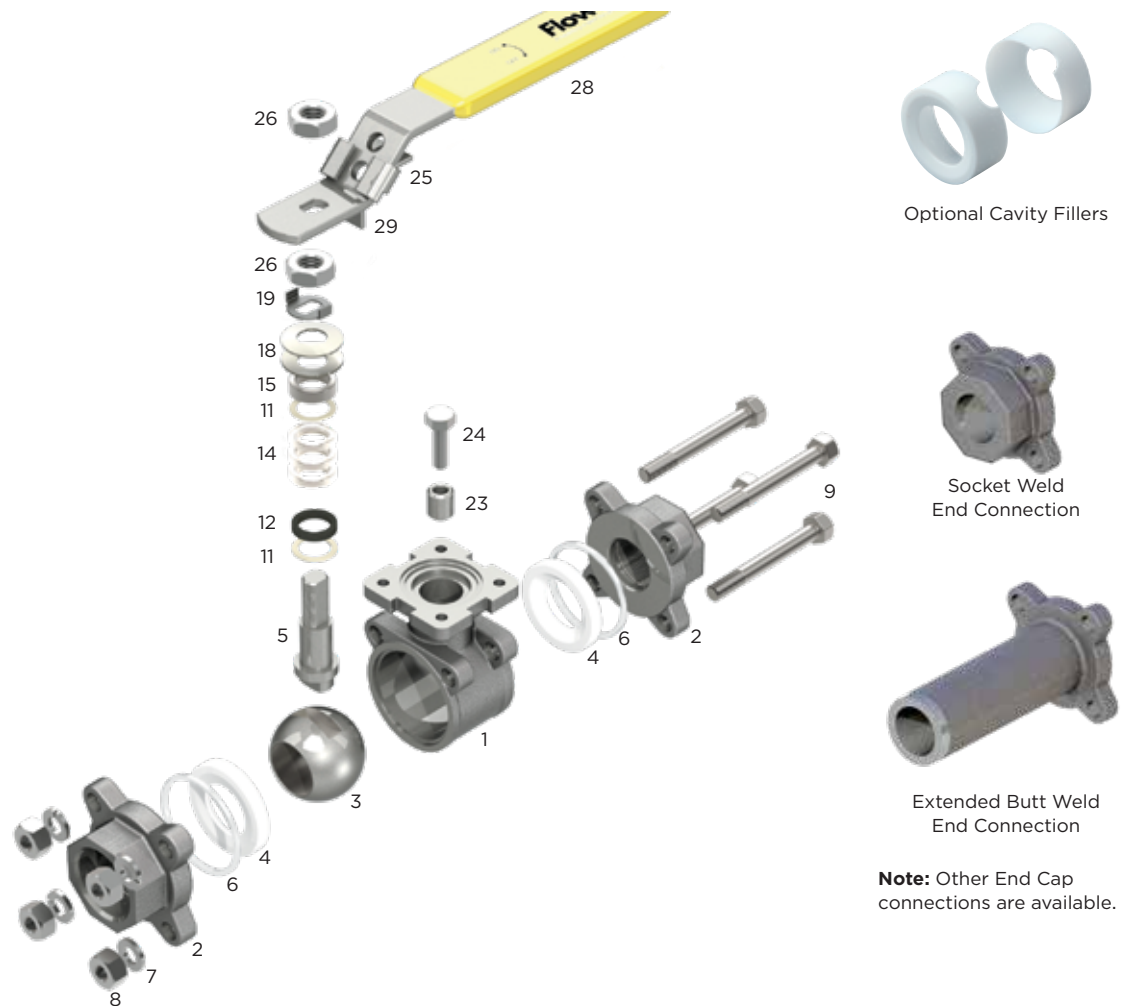
For complete removal of valve from the line, remove the upper two bolts that go through the body hinges, loosen the lower two while keeping them in line, then lift the valve body out of the pipeline. The remaining two bolts help to keep the pipeline system in place and maintain alignment. The removed body can then be serviced and/or replaced.



3 PIECE WELD-IN-PLACE SERIES SOCKET-WELD AND BUTT-WELD

Extended end connections are offered for the Series 7000/8000 valves. These ends allow the customer to weld the valve in the piping system without valve and/or actuator disassembly possibly damaging the seat or seals. Installation time and piping material is reduced. Additionally, the Weld-In-Place Series extended end connections limit potential installation errors. The valve is factory assembled and tested, then delivered to the customer for installation.



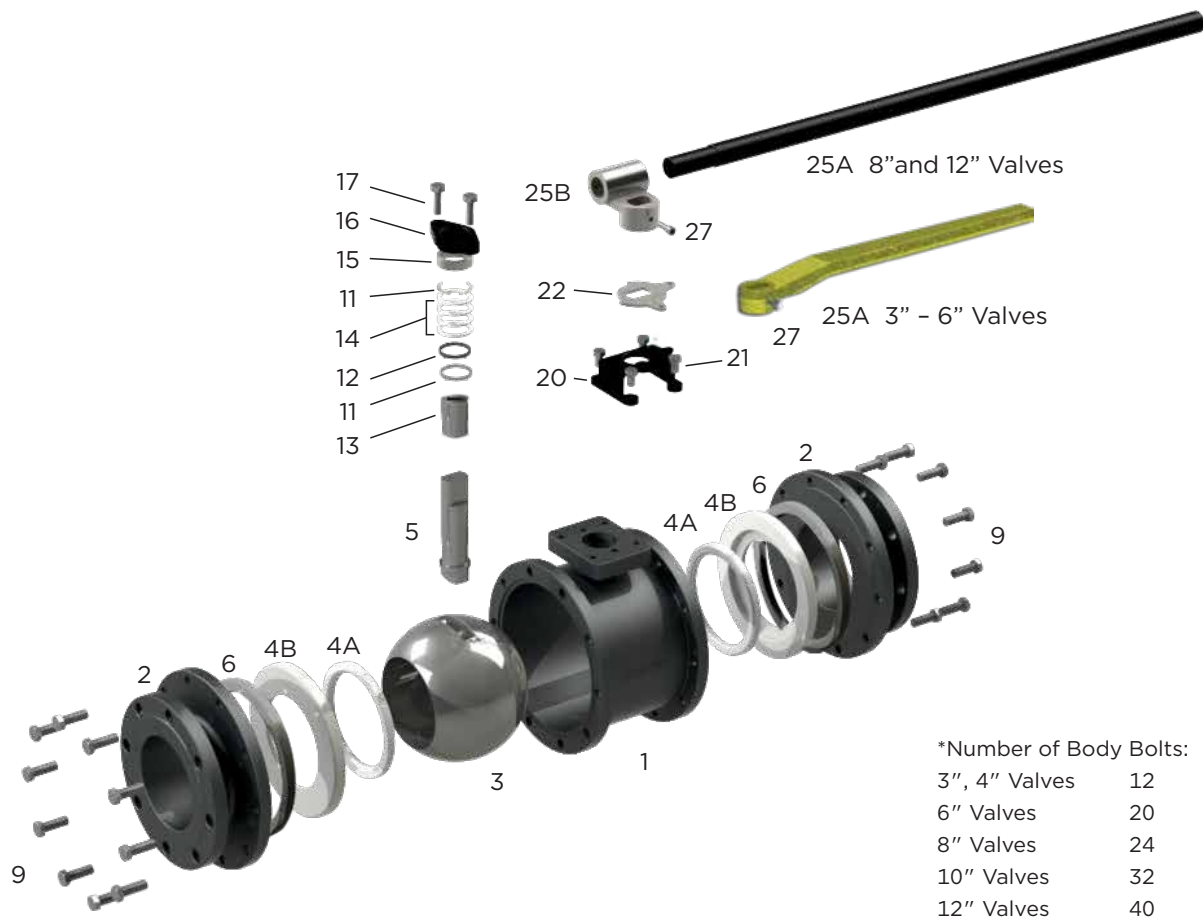


| ITEM | NAME | STAINLESS STEEL | CARBON STEEL | QTY. |
|------|---------------------------------|--------------------------------|--------------------|------|
| 1 | Body | ASTM A351 Gr CF8M | ASTM A216 Gr WCB | 1 |
| 2 | End Cap ¹ | ASTM A351 Gr CF8M ¹ | ASTM A216 Gr WCB | 2 |
| 3 | Ball | ASTM A351 Gr CF8M | ASTM A351 Gr CF8M | 1 |
| 4 | Seat | 15% RPTFE | 15% RPTFE | 2• |
| 5 | Stem | ASTM A479 Type 316 | ASTM A479 Type 316 | 1 |
| 6 | Body Seal | TFM | TFM | 2• |
| 7 | Spring Lock Washer | SS304 | SS304 | ‡ |
| 8 | Body Nut | SS304 | SS304 | ‡ |
| 9 | Body Bolt / Stud | SS304 | SS304 | 4 |
| 10 | Anti-Static Device (not shown) | SS316 | SS316 | 2 |
| 11 | Thrust Washer/Packing Protector | PEEK | PEEK | 2• |
| 12 | Thrust Washer | TEK-FIL | TEK-FIL | 1• |
| 14 | Stem Packing | 15% RPTFE | 15% RPTFE | 3• |
| 15 | Packing Gland Sleeve | SS304 | SS304 | 1 |
| 18 | Belleville Washer | SS301 | SS301 | 2 |
| 19 | Tab Lock Washer | SS304 | SS304 | 1 |
| 23 | Travel Stop Set Sleeve | SS304 | SS304 | 1 |
| 24 | Travel Stop Bolt | SS304 | SS304 | 1 |
| 25 | Handle | SS304 | SS304 | 1 |
| 26 | Stem Nut | SS304 | SS304 | 2 |
| 28 | Handle Sleeve | Vinyl | Vinyl | 1 |
| 29 | Locking Device | SS304 | SS304 | 1 |

¹Weld Ends use CF3M

‡Number of Nuts and Spring Washers: ¼" to 2" Valves - 4 | 2½" Valves - 8

• Recommended spare parts that are available as a packaged repair kit



*Number of Body Bolts:

| | |
|---------------|----|
| 3", 4" Valves | 12 |
| 6" Valves | 20 |
| 8" Valves | 24 |
| 10" Valves | 32 |
| 12" Valves | 40 |

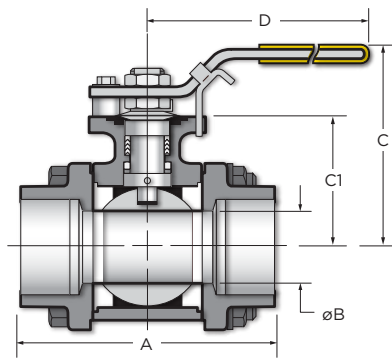
| ITEM | NAME | STAINLESS STEEL | CARBON STEEL | QTY |
|------|---------------------------------|--------------------------------|----------------------------|-----------------|
| 1 | Body | ASTM A351 Gr CF8M | ASTM A216 Gr WCB | 1 |
| 2 | End Cap ¹ | ASTM A351 Gr CF8M ¹ | ASTM A216 Gr WCB | 2 |
| 3 | Ball | ASTM A351 Gr CF8M | ASTM A351 Gr CF8M | 1 |
| 4A | Seat | 15% RPTFE | 15% RPTFE | 2• |
| 4B | Seat Support | ASTM A351 Gr CF8M | ASTM A216 Gr WCB | 2 ² |
| 5 | Stem | ASTM A479 Type 316 | ASTM A479 Type 316 | 1 |
| 6 | Body Seal | PTFE | PTFE | 2• |
| 9 | Body Bolt | SS304 | SS304 | * |
| 10 | Anti-Static Device (not shown) | SS316 | SS316 | 2 |
| 11 | Thrust Washer/Packing Protector | PEEK | PEEK | 2• |
| 12 | Thrust Washer | TEK-FIL | TEK-FIL | 1• |
| 13 | Stem Bearing | 15% RPTFE | 15% RPTFE | 1• |
| 14 | Stem Packing | 15% RPTFE | 15% RPTFE | 4• ³ |
| 15 | Packing Gland | SS304 | Carbon Steel | 1 |
| 16 | Packing Follower | ASTM A351 Gr CF8M | ASTM A216 Gr WCB | 1 |
| 17 | Gland Bolt | SS304 | Carbon Steel | 2 |
| 20 | Stop Housing | ASTM A351 Gr CF8M | ASTM A216 Gr WCB | 1 |
| 21 | Housing Bolt | SS304 | Carbon Steel | 4 |
| 22 | Travel Stop | SS304 | Carbon Steel,Zinc Plated | 1 |
| 25A | Handle | Ductile Iron/Carbon Steel | Ductile Iron/Carbon Steel | 1 |
| 25B | Handle Junction | Ductile Iron | Ductile Iron | 1 |
| 27 | Handle Bolt | Carbon Steel | Carbon Steel | 2 |
| 30 | Snap Ring (not shown) | Nickel Plated Carbon Steel | Nickel Plated Carbon Steel | 1 |

¹Weld Ends use CF3M

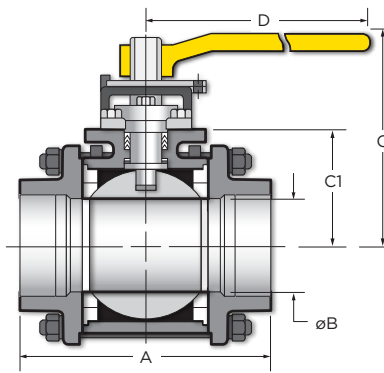
²Seat Supports for 6" and larger valves

³3 or 4 rings depending on valve size

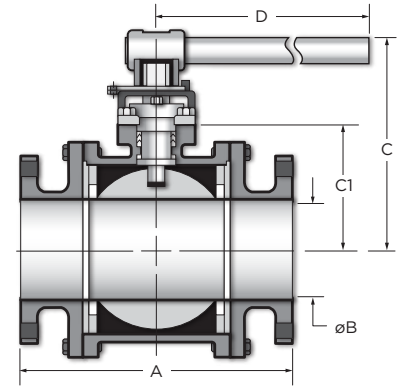
• Recommended spare parts that are available as a packaged repair kit



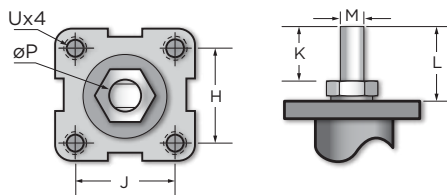
1/4" - 2 1/2" VALVES



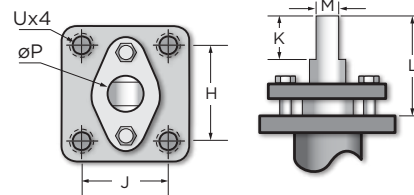
3" - 4" VALVES



6" - 12" VALVES



Secure Mount: 1/4" - 2 1/2" VALVES



Secure Mount: 3" - 12" VALVES

Dimensions (inch)

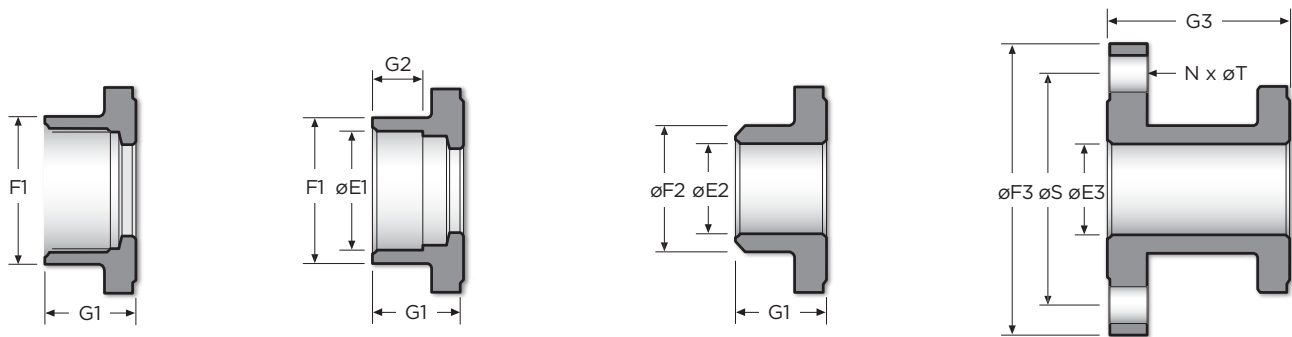
| NPS | A | | | | øB | C | C1 | D | H | J | K | L | M | P | U (UNC) |
|-------|-------------|-------|-------------|-------------|-------|-------|-------|-------|------|------|------|------|------|------|---------|
| | NPT, SW, BW | FLG | Extended SW | Extended BW | | | | | | | | | | | |
| 1/4 | 2.84 | — | — | — | 0.37 | 2.60 | 1.54 | 6.50 | 1.17 | 1.17 | 0.32 | 0.55 | 0.25 | 0.37 | 10-24 |
| 3/8 | 2.84 | — | — | — | 0.50 | 2.60 | 1.54 | 6.50 | 1.17 | 1.17 | 0.32 | 0.55 | 0.25 | 0.37 | 10-24 |
| 1/2 | 2.84 | 4.39 | 10.04 | 9.04 | 0.59 | 2.60 | 1.54 | 6.50 | 1.17 | 1.17 | 0.32 | 0.55 | 0.25 | 0.37 | 10-24 |
| 3/4 | 3.35 | 5.80 | 10.43 | 9.30 | 0.79 | 2.91 | 1.66 | 6.50 | 1.17 | 1.17 | 0.32 | 0.55 | 0.25 | 0.37 | 10-24 |
| 1 | 3.62 | 5.97 | 10.71 | 9.48 | 1.00 | 3.43 | 2.05 | 7.87 | 1.39 | 1.39 | 0.43 | 0.75 | 0.32 | 0.43 | 1/4-20 |
| 1 1/4 | 4.33 | — | 11.21 | 9.84 | 1.26 | 3.62 | 2.21 | 7.87 | 1.39 | 1.39 | 0.43 | 0.75 | 0.32 | 0.43 | 1/4-20 |
| 1 1/2 | 4.84 | 8.03 | 11.78 | 10.28 | 1.50 | 4.13 | 2.60 | 9.84 | 1.95 | 1.95 | 0.55 | 0.91 | 0.37 | 0.62 | 5/16-18 |
| 2 | 5.59 | 9.04 | 12.48 | 10.73 | 2.00 | 4.53 | 2.95 | 9.84 | 1.95 | 1.95 | 0.55 | 0.91 | 0.37 | 0.62 | 5/16-18 |
| 2 1/2 | 7.26 | — | — | 12.00 | 2.56 | 5.04 | 3.39 | 9.84 | 2.84 | 2.84 | 0.69 | 1.14 | 0.47 | 0.75 | 5/16-18 |
| 3 | 7.95 | 10.10 | — | 12.00 | 2.99 | 6.42 | 3.72 | 15.35 | 3.54 | 1.87 | 1.75 | 3.07 | 0.67 | 1.10 | 1/2-13 |
| 4 | 9.06 | 13.90 | — | 12.00 | 4.02 | 7.087 | 4.35 | 15.35 | 3.54 | 1.87 | 1.75 | 3.07 | 0.67 | 1.10 | 1/2-13 |
| 6 | 18.00 | 15.50 | — | — | 5.98 | 12.21 | 7.17 | 43.31 | 3.38 | 3.38 | 1.65 | 3.54 | 1.02 | 1.71 | 1/2-13 |
| 8 | 20.50 | 18.00 | — | — | 7.87 | 13.50 | 8.47 | 43.31 | 3.38 | 3.38 | 1.65 | 3.54 | 1.02 | 1.71 | 1/2-13 |
| 10 | 22.00 | 21.00 | — | — | 9.84 | 14.69 | 9.96 | 43.31 | 4.53 | 4.53 | 1.97 | 3.78 | 1.38 | 2.17 | 5/8-11 |
| 12 | 25.00 | 24.00 | — | — | 11.81 | 16.26 | 11.54 | 43.31 | 4.53 | 4.53 | 1.97 | 3.78 | 1.38 | 2.17 | 5/8-11 |

Note: Flanged face-to-face dimension on sizes 1/4" through 4" are manufacturer's standard; 6" through 12" meet ASME B16.10 long pattern

SERIES 7000 & 8000 DIMENSIONS 1/4" - 12" VALVES



The 3 piece valve is offered with a center body and a large selection of end connections. This versatile design offers easy customizing to meet most special application requirements.

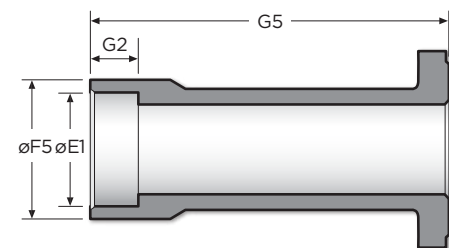


THREADED END
7100/8100

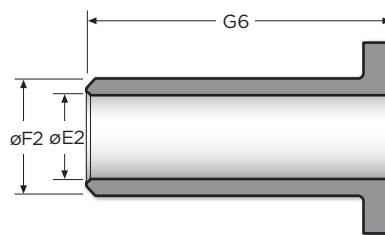
SOCKET WELD END
7200/8200

SCH 40 BUTT WELD END
7300/8300

FLANGED END
74A00/84A00



EXTENDED SOCKET WELD END
72E00/82E00



SCH. 40 EXTENDED BUTT WELD END
73E00/83E00

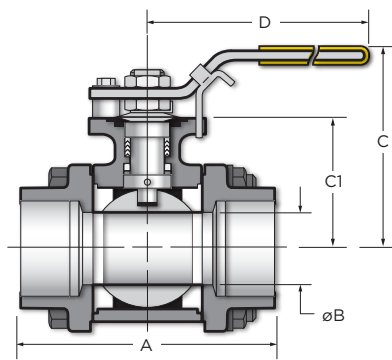
Extended End Connections may be fabricated from pipe and fittings.

Note:

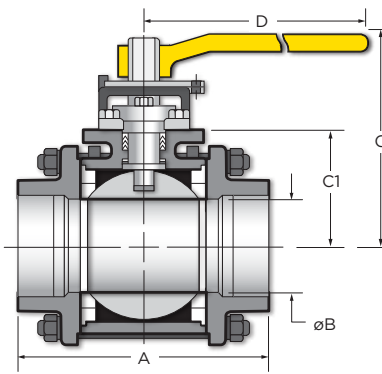
- > 1/4"-4" weights are based on threaded end connection.
- > 6"-12" weights are based on Class 150 flanged ends.
- > Torque values are at maximum rated pressures, clean water, RPTFE seats. Refer to Tech Bulletin 1005 for complete torque information.

| Dimensions (inch) | | | | | | | | | | | | | | | | Valve | | |
|-------------------|------|-------|-------|------|-------|------|------|------|-------|------|------|------|----|-------|------|--------|--------------|-----------|
| NPS | E1 | E2 | E3 | F1 | F2 | F3 | F5 | G1 | G2 | G3 | G5 | G6 | N | S | T | Cv | Torque lb-in | Weight lb |
| 1/4 | 0.55 | 0.36 | — | 0.98 | 0.54 | — | — | 0.90 | 0.500 | — | — | — | — | — | — | 8 | 60 | 1.8 |
| 3/8 | 0.69 | 0.49 | — | 0.98 | 0.68 | — | — | 0.90 | 0.500 | — | — | — | — | — | — | 8 | 60 | 1.8 |
| 1/2 | 0.85 | 0.62 | 0.57 | 1.10 | 0.84 | 3.50 | 1.14 | 0.90 | 0.500 | 1.67 | 4.50 | 4.00 | 4 | 2.38 | 0.62 | 32 | 60 | 1.8 |
| 3/4 | 1.07 | 0.82 | 0.79 | 1.39 | 1.05 | 3.88 | 1.46 | 1.02 | 0.560 | 2.24 | 4.56 | 4.00 | 4 | 2.75 | 0.62 | 54 | 95 | 2.3 |
| 1 | 1.33 | 1.05 | 0.98 | 1.65 | 1.32 | 4.25 | 1.77 | 1.07 | 0.63 | 2.24 | 4.61 | 4.00 | 4 | 3.12 | 0.62 | 105 | 140 | 3.4 |
| 1 1/4 | 1.67 | 1.38 | — | 2.05 | 1.66 | — | 2.17 | 1.24 | 0.69 | — | 4.69 | 4.00 | — | — | — | 200 | 195 | 4.9 |
| 1 1/2 | 1.91 | 1.61 | 1.50 | 2.36 | 1.90 | 5.00 | 2.44 | 1.28 | 0.75 | 2.87 | 4.75 | 4.00 | 4 | 3.88 | 0.62 | 275 | 315 | 7.6 |
| 2 | 2.41 | 2.07 | 2.00 | 2.91 | 2.38 | 6.00 | 2.91 | 1.43 | 0.87 | 3.15 | 4.87 | 4.00 | 4 | 4.75 | 0.75 | 500 | 510 | 11.4 |
| 2 1/2 | 2.91 | 2.46 | — | 3.39 | 2.87 | — | — | 1.95 | 0.98 | — | — | — | — | — | — | 780 | 800 | 21.8 |
| 3 | 3.54 | 2.99 | 2.99 | 4.17 | 3.62 | 7.50 | — | 1.97 | 0.98 | 3.04 | — | — | 4 | 6.00 | 0.75 | 1,150 | 1,100 | 34.6 |
| 4 | 4.54 | 4.02 | 3.40 | 5.32 | 4.78 | 9.00 | — | 2.09 | 1.18 | 4.51 | — | — | 8 | 7.50 | 0.75 | 2,100 | 3,600 | 54.7 |
| 6 | — | 6.07 | 5.98 | — | 6.63 | 11.0 | — | 4.87 | — | 3.62 | — | — | 8 | 9.50 | 0.88 | 5,000 | 4,150 | 233.7 |
| 8 | — | 7.98 | 7.87 | — | 8.63 | 13.5 | — | 5.23 | — | 3.98 | — | — | 8 | 11.75 | 0.88 | 9,600 | 6,200 | 377 |
| 10 | — | 10.02 | 9.84 | — | 10.75 | 16.0 | — | 4.94 | — | 4.43 | — | — | 12 | 14.25 | 1.00 | 15,000 | 14,700 | 632.7 |
| 12 | — | 11.94 | 11.81 | — | 12.75 | 19.0 | — | 5.14 | — | 4.65 | — | — | 12 | 17.00 | 1.00 | 21,000 | 22,000 | CF |

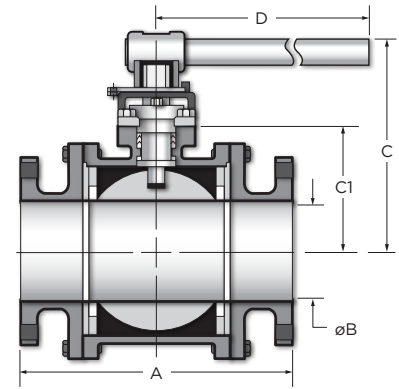
For Cam Lock, Tube O.D. and Flush Bottom Tank connection dimensions and for other available end connections, please consult the factory. End connections are fully interchangeable and can be used in any combination.



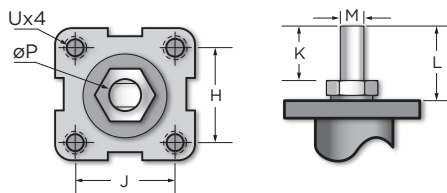
1/4" - 2 1/2" VALVES



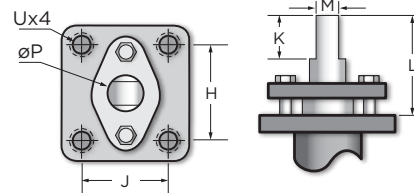
3" - 4" VALVES



6" - 12" VALVES



Secure Mount: 1/4" - 2 1/2" VALVES



Secure Mount: 3" - 12" VALVES

Dimensions (mm)

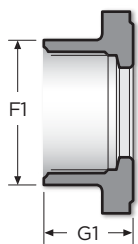
| DN | A | | | | øB | C | C1 | D | H | J | K | L | M | P | U (UNC) |
|------|-------------|-------|-------------|-------------|------|-----|-------|------|------|------|------|----|-----|------|---------|
| | NPT, SW, BW | FLG | Extended SW | Extended BW | | | | | | | | | | | |
| 80 | 72.1 | — | — | — | 9.5 | 66 | 39 | 165 | 29.7 | 29.7 | 8 | 14 | 6.4 | 9.3 | 10-24 |
| 100 | 72.1 | — | — | — | 12.7 | 66 | 39 | 165 | 29.7 | 29.7 | 8 | 14 | 6.4 | 9.3 | 10-24 |
| 150 | 72.1 | 111.5 | 254.9 | 229.5 | 15 | 66 | 39 | 165 | 29.7 | 29.7 | 8 | 14 | 6.4 | 9.3 | 10-24 |
| 200 | 85 | 147.2 | 264.8 | 236.2 | 20 | 74 | 42.1 | 165 | 29.7 | 29.7 | 8 | 14 | 6.4 | 9.3 | 10-24 |
| 250 | 92 | 151.7 | 271.9 | 240.7 | 25.4 | 87 | 52 | 200 | 35.7 | 35.7 | 11 | 19 | 8 | 10.9 | 1/4-20 |
| 320 | 110 | — | 284.8 | 249.8 | 32 | 92 | 56 | 200 | 35.7 | 35.7 | 11 | 19 | 8 | 10.9 | 1/4-20 |
| 400 | 123 | 204 | 299.2 | 261 | 38 | 105 | 66 | 250 | 49.5 | 49.5 | 14 | 23 | 9.5 | 15.7 | 5/16-18 |
| 500 | 142 | 229.6 | 317 | 272.6 | 50.8 | 115 | 75 | 250 | 49.5 | 49.5 | 14 | 23 | 9.5 | 15.7 | 5/16-18 |
| 650 | 184.5 | — | — | 304.8 | 65 | 128 | 86 | 250 | 72.1 | 72.1 | 17.5 | 29 | 12 | 19 | 5/16-18 |
| 800 | 202 | 256.5 | — | 304.8 | 76 | 163 | 94.5 | 390 | 90 | 47.6 | 44.5 | 78 | 17 | 28 | 1/2-13 |
| 1000 | 230 | 353 | — | 304.8 | 102 | 180 | 110.5 | 390 | 90 | 47.6 | 44.5 | 78 | 17 | 28 | 1/2-13 |
| 1500 | 457.2 | 394 | — | — | 152 | 310 | 182 | 1100 | 85.7 | 85.7 | 42 | 90 | 26 | 43.5 | 1/2-13 |
| 2000 | 520.7 | 457 | — | — | 200 | 343 | 215 | 1100 | 85.7 | 85.7 | 42 | 90 | 26 | 43.5 | 1/2-13 |
| 2500 | 558.8 | 533 | — | — | 250 | 373 | 253 | 1100 | 115 | 115 | 50 | 96 | 35 | 55 | 5/8-11 |
| 3000 | 635 | 610 | — | — | 300 | 413 | 293 | 1100 | 115 | 115 | 50 | 96 | 35 | 55 | 5/8-11 |

Note: Flanged face-to-face dimension on sizes 1/4" through 4" are manufacturer's standard; 6" through 12" meet ASME B16.10 long pattern

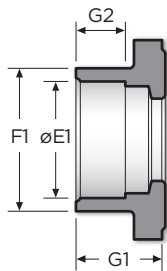
SERIES 7000 & 8000 DIMENSIONS VALVES 80mm - 3000mm



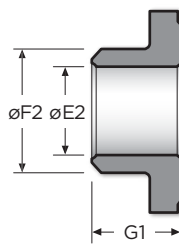
The 3 piece valve is offered with a center body and a large selection of end connections. This versatile design offers easy customizing to meet most special application requirements.



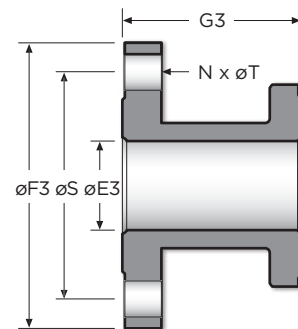
THREADED END
7100/8100



SOCKET WELD END
7200/8200



SCH 40 BUTT WELD END
7300/8300

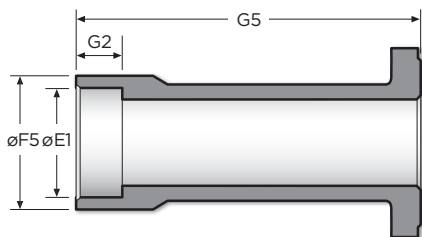


FLANGED END
74A00/84A00

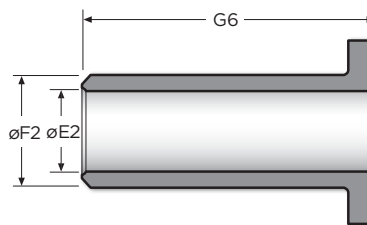
Extended End Connections may be fabricated from pipe and fittings.

Note:

- > ¼"-4" weights are based on threaded end connection.
- > 6"-12" weights are based on Class 150 flanged ends.
- > Torque values are at maximum rated pressures, clean water, RPTFE seats. Refer to Tech Bulletin 1005 for complete torque information.



EXTENDED SOCKET WELD END
72E00/82E00



SCH. 40 EXTENDED BUTT WELD END
73E00/83E00

| Dimensions (mm) | | | | | | | | | | | | | | | | Valve | | |
|-----------------|-------|-------|-------|-----|-------|-------|----|-------|------|-------|-------|-------|----|-------|------|--------|------------|-----------|
| DN | E1 | E2 | E3 | F1 | F2 | F3 | F5 | G1 | G2 | G3 | G5 | G6 | N | S | T | Cv | Torque N m | Weight Kg |
| 80 | 14 | 9.25 | — | 25 | 13.7 | — | — | 22.8 | 12.7 | — | — | — | — | — | — | 8 | 6.8 | 0.8 |
| 100 | 17.5 | 12.5 | — | 25 | 17.2 | — | — | 22.8 | 12.7 | — | — | — | — | — | — | 8 | 6.8 | 0.8 |
| 150 | 21.7 | 15.8 | 14.4 | 28 | 21.3 | 88.9 | 29 | 22.8 | 12.7 | 42.5 | 114.2 | 101.5 | 4 | 60.5 | 15.6 | 32 | 6.8 | 0.8 |
| 200 | 27.1 | 20.93 | 20 | 35 | 26.7 | 98.6 | 37 | 25.9 | 14.3 | 57 | 115.8 | 101.5 | 4 | 69.9 | 15.6 | 54 | 10.7 | 1.1 |
| 250 | 33.8 | 26.6 | 25 | 42 | 33.4 | 107 | 45 | 27.1 | 15.9 | 57 | 117.1 | 101.5 | 4 | 79.3 | 15.6 | 105 | 15.8 | 1.5 |
| 320 | 42.6 | 35.1 | — | 52 | 42.2 | — | 55 | 31.6 | 17.5 | — | 119 | 101.5 | — | — | — | 200 | 22.0 | 2.2 |
| 400 | 48.6 | 40.9 | 38 | 60 | 48.3 | 127 | 62 | 32.5 | 19.1 | 73 | 120.6 | 101.5 | 4 | 98.6 | 15.6 | 275 | 35.6 | 3.5 |
| 500 | 61.1 | 52.5 | 50.8 | 74 | 60.3 | 152.4 | 74 | 36.2 | 22.2 | 80 | 123.7 | 101.5 | 4 | 120.7 | 19.1 | 500 | 57.6 | 5.2 |
| 650 | 73.8 | 62.5 | — | 86 | 73 | — | — | 49.5 | 25 | — | — | — | — | — | — | 780 | 90.4 | 9.9 |
| 800 | 89.8 | 76 | 76 | 106 | 92 | 190.5 | — | 50 | 25 | 77.3 | — | — | 4 | 152.4 | 19.1 | 1,150 | 124.3 | 15.7 |
| 1000 | 115.4 | 102 | 101.5 | 135 | 121.5 | 228.6 | — | 53 | 30 | 114.5 | — | — | 8 | 190.5 | 19.1 | 2,100 | 406.7 | 24.8 |
| 1500 | — | 154.1 | 152 | — | 168.3 | 279.4 | — | 123.6 | — | 92 | — | — | 8 | 241.3 | 22.4 | 5,000 | 469 | 106 |
| 2000 | — | 202.7 | 200 | — | 219.1 | 342.9 | — | 132.9 | — | 101 | — | — | 8 | 298.5 | 22.4 | 9,600 | 700.5 | 171 |
| 2500 | — | 254.5 | 250 | — | 273.1 | 406.4 | — | 125.4 | — | 112.5 | — | — | 12 | 362 | 25.4 | 15,000 | 1,661 | 287 |
| 3000 | — | 303.2 | 300 | — | 323.6 | 482.6 | — | 130.5 | — | 118 | — | — | 12 | 431.8 | 25.4 | 21,000 | 2,486 | CF |

For Cam Lock, Tube O.D. and Flush Bottom Tank connection dimensions and for other available end connections, please consult the factory. End connections are fully interchangeable and can be used in any combination.

SINCE 1986, BRAY HAS PROVIDED FLOW CONTROL SOLUTIONS FOR A VARIETY OF INDUSTRIES AROUND THE WORLD.

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