Valves
and Accessories

dixonvalve.com • Customer Service: 877.963.4966
Valve Selection Guide

**Ball Valve**
- Can be used for on and off service or throttling
- When positive shut-off is necessary
- Where a low valve profile is necessary
- Only 90° rotation from open to fully closed
- Handle position is a quick indication of whether valve is open or closed.
- Full port ball valves do not resist flow

**Butterfly Valve**
- Where positive shut-off is necessary
- Primarily for fully open or fully closed applications
- May be used for throttling
- Only 90° rotation from open to fully closed
- Lightweight
- Easy to install
- Less costly than an Iron body gate valve

**Gate Valve**
- For fully open or fully closed service
  - NOT FOR THROTTLING
- For minimum line pressure drop
- For minimum fluid entrapment in the line
- For relatively infrequent operation

**Check Valve**
- To control the direction of flow and for quick, automatic
  reactions to flow change. Swing check valves are used
  when a minimum resistance to flow is required.
- Swing check valves are recommended for use in
  conjunction with gate valves. They should not be used
  in a rapid recycling system such as reciprocating pumps
  or air compressor service where they could cause
  chatter and damaging vibration.

**Globe Valve**
- For regulation (throttling) of flow
- For frequent operation; short stem travel reduces
  operator’s time.
- Where some line resistance is acceptable

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**SAFETY**

- Use Dixon couplings, retention devices and accessory products **only** for their intended service.
- All recommendations of the Hose Manufacturer, and the Coupling Manufacturer, must be employed with
  regards to Size, Temperature, Application, Media, and Pressure when selecting the components for a
  hose assembly.
- All finished hose assemblies should be tested in accordance with the Rubber Manufacturers
  Association recommendations.
- All hose assemblies should be thoroughly inspected prior to each use to insure
  they are undamaged, and properly coupled.
- Use safety clips on couplings, and King Safety Cables on assemblies where
  required by the manufacturer, as well as State and Federal regulations.
- Call Dixon
  (1-877-963-4966) for advice on couplings,
  retention devices, and accessories for your application.
Full Flow Aluminum Ball Valves
Female NPT x Female NPT

Features
- High flow rate: low pressure drop
- Wetted parts are aluminum and stainless steel
- Seals are FPM (Viton® and PTFE)
- Spindle can be disassembled even when ball valve is installed
- Working pressure: **150 PSI**
- Female NPT outlets are standard
- Optional flanges are available
- 2", 3" and 4" available in one-way and two-way flow
- One-way (*1WAYBV*••) and two-way (*2WAYBV*••)

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Domestic Brass Ball Valves
Female NPT x Female NPT

Features
- For control of air, water, oil and gas in hose or pipe lines.
  For other services, please contact the factory.
- Rated to **600 PSI WOG; 150 PSI** saturated steam
- Brass valve bodies, balls and stems
- Blow-out proof stems
- Glass-filled reinforced PTFE seats and stuffing box ring; stem seals and washers.
- Plated steel handles and nuts with vinyl sleeves, both styles repairable
- Meets WW-V 35C, Type II Composition
- Ball valve handle replacements available, consult factory for pricing.
  - ¼" - ½" available in full port design (*BBV*•)
  - ⅜" - 2" available in standard port design (*BBV*••)

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Locking Handle Brass Ball Valves
Female NPT x Female NPT

Features
- For control of air, water, oil and gas in hose or pipe lines.
  For other services, please contact the factory.
- Rated to **600 PSI WOG; 150 PSI** steam
- Blow-out proof RPTFE stem
- Chrome-plated brass ball
- Stainless steel sliding lock mechanism secures handle in open or closed position; can be padlocked opened or closed.
  - ¼" - ½" available in full port design (*BBLV*•)
  - ⅜" - 2" available in standard port design (*BBLV*••)

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Two-way ball valve shown
Imported Brass Ball Valves
Female NPT x Female NPT

Features
- For control of air, water, oil and gas in hose or pipe lines.
  For other services, please contact the factory.
- Rated to 600 PSI WOG; 100 PSI steam
- Forged brass bodies
- Blow-out proof stems
- PTFE seats, seals and thrust washers
- Chrome-plated brass balls and plated steel handles
- Temperature range to 320°F
- Underwriters, Factory Mutual, American Gas Association and
  Canadian Gas Association approved
- ¼" - 4" available in full port design (FBV··, FBV···)

Global Brass Ball Valves
Female NPT x Female NPT

Features
- For control of air, water, oil and gas in hose or pipe lines.
- Rated to 600 PSI WOG
- Body: forged brass, UNS#C37700
- Adjustable stem packing nut
- Silicone free
- Temperature range to 300°F
- Underwriters approved
- CSA (Canadian Standards Association) approved
- ¼" - 2" available in full port design (FBVG··, FBVG···)

Imported Brass Ball Valves
Female NPT x Female NPT

Features
Standard design
- For control of air, water, oil and gas in hose or pipe lines.
  For other services, please contact the factory.
- Rated to 600 PSI WOG; 100 PSI steam
- Forged brass bodies
- Blow-out proof stems
- PTFE seats, seals and thrust washers
- Chrome-plated brass balls and plated steel handles
- Temperature range to 320°F
- ½" - 2" available in standard port design (BV··, BV···)

Features
Full port design
- For control of air, water, oil and gas in hose or pipe lines.
  For other services, please contact the factory.
- Rated to 400 PSI WOG; 125 PSI steam
- Blow-out proof stems
- PTFE seats, double O-ring stem packing
- Chrome-plated brass ball
- Temperature range to 266°F
- Underwriters approved
- ½" - 2" available in full port design (FBVI··, FBVI···)
Brass Mini Ball Valves
Female NPT x Female NPT

Features
- Rated to 450 PSI
- Nickel plated brass body
- PTFE seats and Buna-N stem seal
- Blow-out proof stem
- Temperature range to 200°F
- American Gas Association and Canadian Gas Association approved
  - 1/8" - 1/2" available in standard port design (MBV··)
  - 1/4" - 3/8" available in full port design (MBV··)

Safety Vented Ball Valves
Female NPT x Female NPT

Features
- For air service only
- Rated to 600 PSI WOG; 150 PSI saturated steam
- Lockable ball valves vent downstream air in accordance with new OSHA regulations for pneumatic systems.
- Brass valve
- Chromium plated ball
- RTFE seats and stuffing box ring
- Blow-out proof stem design
- Temperature range to 50°F - 200°F
- Adjustable packing gland
  - ¼" - ½" available in full port design (BBV··LV)
  - ¾" - 2" available in standard port design (BBV··LV)

 Bronze "Deadman" Spring Return Handle Ball Valves
Female NPT x Female NPT

Features
- Rated to 600 PSI WOG; 150 PSI saturated steam
- Vacuum service to 29 inches Hg
- Threaded bronze valve
- Stainless steel lever
- Chromium plated ball
- RTFE seats and stuffing box ring
- Blow-out proof stem design
- Adjustable packing gland
- Spring return to close and open valve
- Operating torque approximately three times standard valve torque.
  - ¼" - ¼" available in full port design (BBV··SR)
  - 1" - 2" available in standard port design (BBV··SR)
Bronze Ball Valves with NPT Tap for Drain  
Female NPT x Female NPT

**Features**
- Recommended for water and air service
- Rated to 125 PSI WOG
- Bronze ball valves vent downstream air in accordance with OSHA regulations for pneumatic systems.
- Chromium plated ball
- RTFE seats and stuffing box ring
- Blow-out proof stem design
- Adjustable packing gland
- Auto-drain / Auto-vent
- Features a ¼" NPT tapped port for additional options such as an air venting elbow or noise muffler.
- ¼" - 1” available in full port design (BBV-VT)

3-Way Diversion Ball Valves  
Female NPT x Female NPT

**Features**
**Brass Valves**
- Can be used with gasoline and diesel fuel
- Rated to 400 PSI WOG
- Bronze body
- Chromium-plated ball
- RTFE seats and stuffing box ring
- Stainless steel handle and nut with vinyl sleeve
- Adjustable packing gland
- Female NPT
- ¼” - 1” available in full and standard port design (BBV-TW)

**Stainless Steel Valves**
- Rated to 800 PSI WOG
- Stainless steel body and ball
- Blow out proof stem
- RTFE seats and stuffing box ring
- Stainless steel handle and nut with vinyl sleeve
- Adjustable packing gland
- Meets NACE MR-01-75
- Female NPT
- ¼” - 1” available in full and standard port design (SSBV-TW)

3-Way Diverting Ball Valves  
Female NPT x Female NPT x Female NPT

**Features**
- Rated to 400 PSI WOG; 100 PSI saturated steam
- Brass body
- Blow out proof stem
- Chrome plated brass ball
- PTFE seats, seals, and thrust washer
- Adjustable stem packing
- Temperature range to 320°F
- Female NPT
- ¼” - 2” available in standard port design (BBV-DTW)
**Domestic Full Port Ball Valves**
Female NPT x Female NPT

**Features**
- Rated to **600 PSI** WOG; **150 PSI** saturated steam
- Machined solid chrome-plated ball
- Multi-fill PTFE seats and seals
- Adjustable packing
- Blow-out proof stem design
- Bronze castings
- Vacuum service to 29 inches Hg
- ¼" - 4" available in full port design (**BBV··FP, BBV··FP**)  

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**250 Lb. Steam Ball Valves**
Female NPT x Female NPT

**Features**
- Recommended for use with fluids with widely varying temperatures and/or thermal expansion rates.
- Rated to **600 PSIG, 250 PSI** saturated steam
- Vacuum service to 29 inches Hg
- Threaded bronze valve
- 316 stainless steel ball and stem
- Multi-filled RPTFE seats
- Multi-filled stuffing box ring
- High-temperature MTFE stem packing
- Blow-out proof stem design
- Adjustable packing gland
- Maximum temperature rating **406°F**
- ½" - 2" available in standard port design (**BBV··ST**)  

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**Carbon Steel Ball Valves**
Female NPT x Female NPT

**Features**
- ¼" to 1" are rated to **2000 PSI** WOG
- 1¼" to 2" are rated to **1500 PSI** WOG
- Rated to **150 PSI** saturated steam
- For control of air, water, oil and gas in hose or pipe lines. For other services contact the factory.
- RPTFE seats and seals
- Blow-out proof stem design
- Adjustable packing gland
- Chromium plated ball
- 1/4" - 3/8" available in full port design (**IBV··**)  
- 1/2" - 2" available in standard port design (**IBV··**)  

Dixon Valve & Coupling Company, 877-963-4966
High Pressure Full-Bore Hydraulic Ball Valves  
Female NPTF x Female NPTF

**Features**
- Blow-out proof stems
- Rugged carbon steel construction
- Viton® shaft seals
- ¼" - 2" available, *(HPBV···)*

Dual Y Valves  
Female NPT x Female NPT

**Features**
- Dual action valve, ideal for compressor applications
- Female NPT threads
- Non-vented rated to **600 PSI** WOG
- Vented rated to **125 CWP** (Cold Working Pressure)
- 1" and 1¼" available in non-vented and vented flow
- Non-vented *(BBV···DW)* and vented *(BBV···DWV)*

Stainless Steel Ball Valves  
Female NPT x Female NPT

**Features**
- For use in water, oil and gas
- ¼" - 2" rated to **1000 PSI** WOG (CWP); 2½" - 3" rated to **800 PSI** WOG (CWP); **100 PSI** saturated steam
- 316 stainless steel body, ball and stem
- PTFE seat, joint gasket and thrust washer
- Plastic cover on handle
- Blow-out proof stem design
- Temperature range **-60°F to 450°F**
- ¼" - 3" available in full port design *(SSBV··, SSBV···)*
Stainless Steel Ball Valves
Female NPT x Female NPT

Features
• For use in water, oil and gas
• ¼" - 1" rated to 2000 PSI (CWP);
  1¼" - 2" rated to 1500 PSI (CWP)
• Body conforms to ASTM A-351 Grade CF8M
• Ball is 316 stainless steel
• PTFE, glass filled seat
• Blow-out proof stem design
• ¼" - 2" available in reduced port design (SSBV-RP, SSBV-RP)

Locking Handle Stainless Steel Ball Valves
Female NPT x Female NPT

Features
• For use in water, oil and gas
• Rated to 1000 PSI WOG; 100 PSI saturated steam
• 316 stainless steel body, ball and stem
• PTFE seat, joint gasket and thrust washer
• Plastic cover on handle
• Blow-out proof stem design
• Temperature range -60°F to 450°F
• ¼" - 2" available in full port design (SSLBV-, SSLBV--)

Pneumatically Actuated Stainless 3 Piece Ball Valves
Full Port
Female NPT x Female NPT

Features
• 3-piece rack and pinion design
• Hard anodized aluminum body actuator
• NAMUR mounting
• Swing out in-line easy maintenance
• Self-adjusting stem packing with Belleville washers
• ¼" - 2" rated to 1000 PSI WOG;
  2½" - 3" rated to 800 PSI WOG
• Media temperature range: -40°F to 400°F
• Minimum operating pressure: 70 PSI
• Maximum operating pressure: 150 PSI
• Material: 316 stainless steel
Pneumatically Actuated 2 Piece Ball Valves

Direct Mount - Full Port
Female NPT x Female NPT

*Features*

316 Stainless Steel Valves
- Precise stem alignment
- NAMUR interface
- Actuator temperature: -4°F to +185°F
- Ball valve rated to 1,000 WOG/150 PSI steam
- Ball valve maximum temperature: 366°F
- Minimum operating pressure: 70 PSI
- Maximum operating pressure: 150 PSI
- Compact, no brackets required
- O-ring backed seats for lowest torque
- Double Viton® O-ring stem seals
- ISO 5211 pad

Brass Valves
- Precise stem alignment
- NAMUR interface
- Actuator temperature: -4°F to +185°F
- Ball valve rated to 600 WOG/150 PSI steam
- Ball valve maximum temperature: 366°F
- Operating air pressure: 80 PSI minimum, 120 PSI maximum
- Minimum operating pressure: 40 PSI
- Compact, no brackets required
- O-ring backed seats for lowest torque
- Double Viton® O-ring seals
- ISO 5211 pad

Pneumatically Actuated 3-Way L Port Ball Valves

Direct Mount - Standard Port
Female NPT x Female NPT

*Features*

316 Stainless Steel Valves
- Precise stem alignment
- Diverting valve only
- 4-seat design - can use any port as an inlet
- ⅜” - 1” rated to 1,000 WOG
- 1¼” - 2” rated to 800 WOG
- Live loaded stem seal
- Temperature to 400°F
- Minimum operating pressure: 70 PSI
- Maximum operating pressure: 150 PSI
- ISO 5211 actuator pad
Pneumatically Actuated 3-Way L Port Ball Valves
Direct Mount - Standard Port
Female NPT x Female NPT

Features
Brass Valves
- Precise stem alignment
- Diverting valve only
- 4 seat design - can use any port as an inlet
- O-ring backed seats for lowest torque
- Double Viton® O-ring stem seals
- Temperature to 350°F
- Minimum operating pressure: 40 PSI
- Maximum operating pressure: 150 PSI
- 90° with off position
- 400 WOG - 100 PSI steam
- ISO 5211 actuator pad

Pneumatically Actuated 3-Way T Port Ball Valves
Direct Mount - Standard Port
Female NPT x Female NPT

Features
316 Stainless Steel Valves
- Precise stem alignment
- Diverting valve only
- 4-seat design - can use any port as an inlet
- ¼” - 1” rated to 1,000 WOG
- 1¼” - 2” rated to 800 WOG
- Live loaded stem seals
- Minimum operating pressure: 70 PSI
- Temperature to 400°F
- Can be used as a shut-off
- ISO 5211 actuator pad
- 90° and 180° flow paths

Features
Brass Valves
- Precise stem alignment
- Diverting valve only
- 90° and 180° flow paths
- O-ring backed seats for lowest torque
- Double Viton® stem seals
- 400 WOG - 100 PSI steam
- Minimum operating pressure: 40 PSI
- ISO 5211 actuator pad
- 4-seat design - can use any port as an inlet
- Can be used as a shut-off
**Electrically Actuated Ball Valves**
Dual Acting - Full Port - Electrical On/Off Control (115 volts)
Female NPT x Female NPT

### Features

**316 Stainless Steel Valves**
- 3-piece rack and pinion design
- Hard anodized aluminum body
- NAMUR mounting
- Swing out in-line easy maintenance
- Self-adjusting stem packing with Belleville washers
- 3" clearance required for cover removal
- ¼" - 2" rated to **1000 PSI** WOG;
  2½" - 3" rated to **800 PSI** WOG
- Media temperature range: **-40°F to 400°F**

**Brass Valves**
- 2-piece
- Direct mount for low-profile, cost efficient applications
- NAMUR mounting
- Manual override
- Nema 4 housing
- 3" clearance required for cover removal
- Rated to **600 PSI** WOG; **100 PSI** Steam
- Media temperature: **300°F**
Actuated Valve Accessories

3 and 4 Way Combination NAMUR Solenoids

- CSA (Canadian Standards Association) and Underwriters certified

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<tr>
<th>Mounting type</th>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>Nema 4X</td>
<td>XSO-4S4D-0A</td>
<td>115 volts, alternating current</td>
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<tr>
<td>Nema 4X</td>
<td>XSO-4S4B-0A</td>
<td>24 volts, direct current</td>
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Limit Switches

- Beacon indicator
- (2) SPDT electro-mechanical switches
- Direct mount

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<td>XLS-B4A0120P</td>
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Pneumatic Positioners

- 3-15 PSI modulating signal for proportional control
- Mounting hardware included

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<td>XPO-P4F</td>
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Electro-Pneumatic Positioners

- Electronic 4-20ma modulating signal for proportional control
- Mounting hardware included

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<tr>
<td>Nema 4X</td>
<td>XPO-E4F</td>
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Compact High Pressure Grooved End Ball Valves
Grooved End x Grooved End

Features
- Suitable for many applications in high pressure pipeline systems, including petroleum, process systems, water, oil and gas.
- Rated to 600 PSI
- Epoxy coated high strength ductile iron body
- 316 stainless steel ball and stem
- 15% glass reinforced PTFE seats
- Temperature rated to 450°F

Iron Butterfly Valves
Threaded Lug Style

NOT RECOMMENDED FOR STEAM SERVICE
Pictures are representative, different size valves have different hole patterns.

Features
- For use between two 150 lb. flanges
- Will lock "open" or "closed"
- Rated to 200 PSI
- Ductile iron body, ASTM A126, class B
- Aluminum bronze disc, ASTM B148, ALY.954
- Buna-N seal and stem seals and liner
- PTFE bushing
- Stainless steel top and bottom stems

Iron Butterfly Valves
Wafer Style

Features
- For use between two 150 lb. flanges
- Will lock "open" or "closed"
- Rated to 200 PSI
- Ductile iron body, ASTM A126, class B
- Stainless steel disc, ASTM A351, GR. CF-8M
- Buna-N seal and stem seals and liner
- PTFE bushing
- Stainless steel top and bottom stems
Flow Control Valves
Series MV

Features
With these high-precision metering and shutoff valves, you can readily make fine adjustments and reset with the exclusive color code 5000 that shows when you reach the desired setting.
• Body components are precision-turned from solid barstock
• All models have 416 stainless steel needles
• Steel - maximum operating pressure: 5000 PSI

Brass Needle Valves
NPT x NPT

Features
• Metal-to-metal seats allow positive sealing and flow adjustment
• Designed for air and water applications
• Maximum working pressure is 150 PSI

Mini Needle Valves
NPT x NPT

Features
Mini needle valves are available in a variety of materials, and handle options. All are equipped with both a Viton® O-ring seal and a PTFE back-up ring below the threads to protect the mini valve from corrosion and galling. The stem threads are rolled for strength and ease of operation, and the metal-to-metal hard seat design is 100% helium leak tested to $1 \times 10^{-4}$ ml/s at 200 PSI on each mini valve.
• Orifice size: 0.172"
• Flow coefficient: 0.42
• O-ring seal: Viton®
• Back-up ring: PTFE
• 1/8" and 1/4" available in knurled knob and T design handles,
Brass Gate Valves
Female NPT x Female NPT

Features
• Rated 200 PSI non-shock cold water, oil or gas
• Brass body
• Female NPT threaded ends
• Threaded bonnet
• Integral seat
• Adjustable packing nut
• Non-rising stem
• Solid wedge disc
• Iron handwheel
• 100% factory tested

Self-Closing Gate Valves
Male NPT

Features
• Features a gray iron body, brass sliding gate and machine lapped sealing surface.
• Gate closes automatically when handle is released, cleaning discharge surface.
• Ideal for dispensing viscous liquids such as oil, grease, paint, varnish and syrups from drums and tanks.
• Can be padlocked

Malleable Iron Drum Gate Valves
Male NPT

Features
• Manually operated
• Ideal for drawing non-flammable liquids from drums and tanks
• Iron body
• Machined and lapped brass faceplate designed for oval discharge to ensure no splashing and smooth operation.
• Black Japanned finish
• Can be padlocked

Aluminum Drum Gate Valve
Male NPT

Features
• Lightweight, durable aluminum body provides improved corrosion resistance for certain fluids.
• Sturdy 2” handle is stamped metal with black enamel finish.
• Can be padlocked
Compression Bibb Faucets
Male NPT

Features

• Rough brass finish
• Nozzle end is GHT
• Do not use light oil

Drum Faucets

Features

• Gold polyethylene
• Faucets are not to be used in applications where temperatures exceed 140°F (60°C)
• No wrench needed for screwing into drum opening
• 2" faucet is shipped with a gasket; the ¾" does not require a gasket

Bronze Drum Plug Wrench

Features

• Sparkproof, natural finish is safe around flammables
• Offset handle design reduces user stress and minimizes knuckle injury.
Single Union Polypropylene Ball Valves
Female NPT x Female NPT

**Features**
- Rated to **125 PSI** at **70°F**
- Corrosion resistant polypropylene
- PTFE ball seats
- EPDM O-rings
- FDA approved material
- ½” - 3” available (**SUBV···**)

Bolted Polypropylene Ball Valves
Female NPT x Female NPT

**Features**
- Rated to **125 PSI** at **70°F**
- Chemically-resistant, reinforced polypropylene
- FDA approved material
- PTFE ball seats
- EPDM O-ring body seals, Viton® O-ring stem seals
- 304 stainless steel nuts and bolts
- ½” - 4” available (**PVFP···**)

Compact Bolted Polypropylene Ball Valves

**Features**
- Rated to **125 PSI** at **70°F**
- Full port
- Chemically-resistant, reinforced polypropylene
- FDA approved material
- PTFE ball seats
- EPDM O-ring body seals, Viton® O-ring stem seals
- 304 stainless steel nuts and bolts
- 2” available (**PVFPS···**
Bolted Polypropylene Ball Valves with Nozzles
Female NPT x Nozzle

Features
- Rated to 125 PSI at 70°F
- Chemically-resistant, reinforced polypropylene
- PTFE ball seat
- EPDM O-ring body seals, Viton® O-ring stem seals
- 304 stainless steel nuts and bolts
- Body-to-flange design allows for low torque operation
- FDA approved material
- 1½" - 2" available (PVFPN···)

45° Single Union Polypropylene Nozzle Valves

Features
- Rated to 125 PSI at 70°F
- Corrosion resistant polypropylene
- PTFE ball seats
- EPDM O-rings
- FDA approved material
- 1" available (SUBVN100)

Flange Ball Valves and Fittings

Features
- Quick and easy assembly, no pipe or sealant necessary
- Positive seals
- Easy on/off hose connections
- 360° orientation
- Valves and fittings are manufactured from glass re-inforced polypropylene for strength and durability — will not rust or corrode.

Recommended operating pressure for valves:
- 100 PSI at 0°F
- 125 PSI at 70°F
- 70 PSI at 150°F

Accessories:
- stainless steel worm screw clamps
- EPDM flange gaskets
- assorted flanged fittings
Through its divisions and affiliated companies, Dixon is recognized as the premier manufacturer and supplier of hose fittings and accessories spanning a wide range of industrial uses. Dixon’s reach includes products for food, dairy processing, beverage and brewery, mobile tankers, mining, construction, chemical processing, petroleum, oilfields, refining and manufacturing.