Ball Valve Quick Reference Guide
Meeting the Demands of Industrial Applications
**Ball Valves**

**Mini Valve 608/609 & 708/709**

**Specifications:**

**Pressure Range**
- 608/9: 450 PSI (31 bar)
- 708/9: 500 PSI (34.4 bar)

**Temperature**
- 608/9: 0° to +200°F (-18° to +93°C)
- 708/9: -35° to +300°F (-37° to +149°C)

**MV 608/9 Product Features:**
- Chrome plated brass body
- Chrome plated brass ball
- PTFE seats/seals
- Fluorocarbon stem seal
- Wedge handle
- Male X Female, Female X Female

**MV 708/9 Product Features:**
- Brass body
- Chrome plated brass ball
- PTFE seats/seals
- Nitrile stem seal
- Chrome plated steel handle
- Male X Female, Female X Female

**Applications:**
Medical, Control Valves, Pneumatic, Tire Inflater

**Uses:**
Economical & compact 1/8”-1/4” option

**Standard Port 525P & Full Flow 520P**

**Specifications:**

**Pressure Range**
- 525P: -40° to +350°F (-40° to +177°C)
- 520P: 0° to +350°F (-18° to +177°C)

**Product Features:**
- Standard port or full flow available
- Forged brass body
- Fluorocarbon stem O-rings
- 100% 24 hour leak testing
- PTFE seal reduces leakage by ensuring 10% minimum contact between ball and seals
- Date code allows batch traceability
- 520 Series available with locking and non-locking handle

**Applications:**
Aerial Lift Trucks Hydraulic Reservoir, Fracking Blenders, Cement Trucks, Mobile equipment, Oil Field Water Truck, Waste Water Plants, Commercial Reverse Osmosis

**Uses:**
Economical option for female x female configuration
**Full Flow 500P**

**Specifications:**

**Pressure Range**
- 600 PSI (41.4 bar)*

**Temperature**
- 0° to +350°F (-18° to +177°C)*

**Product Features:**
- Forged brass body
- PTFE adjustable stem packing
- Optional Features:
  - Vented & non-vented
  - Locking & non-locking handle
  - Panel mounted
  - SS ball, stem, handle & nut
  - Electroless nickel plated brass
  - Straight Thread SAE J1926-1
  - Short tee, oval, locking, extended & stainless steel handle options

**Configurations:**
Male X Female, Beaded Hose Barb X Female, 3 Way Diversion, 4 Way Diversion, 90° Angled

**Applications:**
CO2 Carbonation Tanks, Life Science, Test Benches

**Uses:**
Wide variety of configurations available up to 1”

*Note: Pressures and temperatures will vary depending on product series*

**Stainless Steel 501SS/502SS**

**Specifications:**

**Pressure Range**
- Up to 2000 PSI (137.8 bar)

**Temperature**
- 0° to +400°F (-18° to +204.4°C)*

**Product Features:**
- Male X Female, Female X Female
- CF-8M stainless steel body
- PTFE seats/seals
- Stainless steel handle
- Silicone free
- Meets material requirements of NACE MR-01-75
- Short handle, oval handle, and welded retainer nut options

**Applications:**
Semiconductor, Food and Beverage, Pharmaceutical, Cryogenics

**Uses:**
Used in corrosive environments, outdoors, and in clean rooms
# Product Specs

## Industrial Ball Valves

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<th>Temperature</th>
<th>Maximum Pressure</th>
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<tr>
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<tr>
<td>501 Series</td>
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<tr>
<td>525 Series</td>
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<td>501SS</td>
<td>Male/Female</td>
<td>Stainless Steel</td>
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<tr>
<td>502SS</td>
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<td>Stainless Steel</td>
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</tr>
<tr>
<td>609 Series</td>
<td>Female/Female</td>
<td>Brass</td>
<td>0°F (-18°C)</td>
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For more information, contact customer support at (269) 692-6555. For additional product literature, CAD drawings, technical support, or educational resources, visit www.parker.com/fsc.
Custom Ball Valve Solutions for OEMs

Parker FSC has the capability to create custom OEM parts tailored to your specific application.

In situations where standard ball valves aren’t suitable, Parker offers special order and custom assemblies. Our team of highly skilled, US-based engineers can design a part based on your requirements, develop a prototype, and complete testing based on designated criteria or specific specifications. Common applications include fuel shutoff, biodiesel fuel shutoff, coolant shutoff, purging air from the engine, and draining the air tank.

Hose Barb Ends
Commonly used on engine applications such as coolant shut off, Parker’s beaded hose barb ends can be used whenever rubber hose or tubing is required.

Metric Ends
Many of our custom ball valves utilize metric ends including ISO 6149, ISO 4039, ISO 9974, and our Parker Universal design. Metric ends are commonly used in pneumatic air tank connections.

Material Variations
Whether it’s an electroless nickel plated ball valve for CO2 drink carbonation or an aluminum ball valve for an electric car, Parker can accommodate your material needs.

The Process

1. Customer Input & Objectives
Parker’s team of engineers will work with you to understand the requirements for your application, including specifications for size, temperature, application, media, and pressure.

2. Define Part Attributes
Based on your objectives and the specifications, our engineers then define the part attributes including type of end connections and material selection.

3. Design Non-Standard Fitting or Modify Existing Fitting
Our team of engineers will either modify a standard fitting or create an entirely new design. Prints and CAD models will be provided for your review.

4. Create Prototype
After the design has been agreed upon, a prototype is created. This may involve the creation of a new forging for shaped brass bodies or a new mold for composite bodies.

5. Approval & Testing
Upon your approval, we will complete any necessary testing. Testing will always depend on the specific fitting designed; this may be as part of a specification or due to your own internal requirements.

Custom options include:
- Integrated Check Valve
- Low Temperature
- Custom Components
- Optional Seal Materials
- Custom Handles
- Custom Bodies
- Custom Threads

Material options include:
- Brass
- Nickel Plated Brass
- Electroless Nickel Plated Brass
- Chrome Plated Brass
- Carbon Steel
- Stainless Steel
- Aluminum
Your complete source for quality tub fittings, hose & hose fittings, brass & composite fittings, quick-disconnect couplings, valves and assembly tools, locally available from a worldwide network of authorized distributors.

Fittings:
Available in fractional inch and metric sizes covering BSPP thread configurations, manufactured from steel, stainless steel, brass, aluminum, nylon and thermoplastic.

Worldwide Availability:
Parker operates Fluid Connectors manufacturing locations and sales offices throughout North America, South America, Europe and Asia-Pacific.

For information, call toll free:
1-800-C-Parker
(1-800-272-7537)