



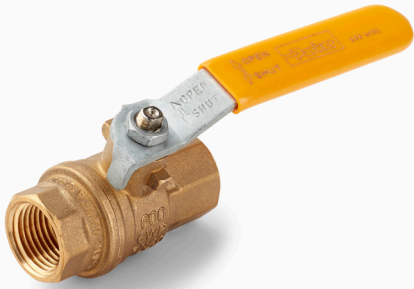
Ball Valve Quick Reference Guide

Meeting the Demands of Industrial Applications



ENGINEERING YOUR SUCCESS.

Ball Valves



Standard Port V525P

Specifications:

Pressure Range

- 600 PSI (41.4 bar)
- Saturated steam up to 150 PSI (10.3 bar)

Temperature

- -40° to +350°F (-40° to +177°C)

Product Features:

- Forged brass body
- Fluorocarbon adjustable stem packing
- 100% 24 hour leak testing
- Blowout proof stem improves safety in high pressure applications
- Virgin PTFE seal reduces leakage by ensuring 10% minimum contact between ball and seals
- Date code allows batch traceability

Applications:

Mobile equipment, Oil & Gas Trucks where 1" or smaller ball valve required, Oil field water truck, Waste water plants, Commercial Reverse Osmosis

Uses:

Standard applications where a pressure drop or flow turbulence is acceptable in the system



Full Flow V520P

Specifications:

Pressure Range

- 600 PSI (41.4 bar)
- Saturated steam up to 150 PSI (10.3 bar)

Temperature

- -40° to +350°F (-40° to +177°C)

Product Features:

- Forged brass body
- Fluorocarbon stem O-rings
- 100% 24 hour leak testing
- Blowout proof stem improves safety in high pressure applications
- Virgin PTFE seal reduces leakage by ensuring 10% minimum contact between ball and seals
- Date code allows batch traceability

Applications:

Aerial lift trucks hydraulic reservoir, Fracking blenders, Cement trucks

Uses:

Applications requiring full flow where pressure and flow turbulence must be maintained

Ball Valves



Premium Full Flow V500P

Specifications:

Pressure Range

- 600 PSI (41.4 bar)
- Saturated steam up to 150 PSI (10.3 bar)

Temperature

- 0° to +350°F (0° to +177°C)

Product Features:

- Forged brass body
- PTFE adjustable stem packing
- Vented valve: For use on pneumatic equipment
- Panel mounted*
- SS ball, stem, handle & nut*
- Straight thread O-ring*
- Valve materials*: Electroless nickel plated brass
- Configurations: Male X Female, Hose Barb X Female, 90 Degree, 3-Way, 4-Way

Applications:

CO2 carbonation tanks, Life science, and Test benches

Uses:

Applications requiring full flow and additional custom options

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



Miscellaneous Ball Valves

Specifications:

Pressure Range

- Up to 6000 PSI*

Temperature

- -50° to +425°F*

Product Features Include:

- 3 and 4 Way Diversion
- 90° Valves
- Compact body
- Beaded Hose Barb End, BSPP, STO, SAE, Solder ends
- Stainless steel, carbon steel, nickel plated brass, brass
- Compact, lever, oval, long, tee handle
- Vented & non-vented
- Locking & non-locking handle
- Rotary actuator series

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

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 a carbon dioxide ball valve for drink carbonation or a light weight 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

Product Specs

Industrial Ball Valves

	Type	Body Material	Temperature		Maximum Pressure	
			MIN.	MAX.	PSI	BAR
500 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
501 Series	Male/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
502 Series	Panel Mount	Brass	0°F (-18°C)	350°F (176°C)	600	41
506 Series	Straight Thread	Brass	0°F (-18°C)	350°F (176°C)	Up to 6000	41
509 Series	Solder Ends	Brass	—	—	—	—
510 Series	Male/Female Straight Thread	Brass	0°F (-18°C)	350°F (176°C)	600	41
520 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
525 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
533 Series	3-Way Diversion	Brass	-20°F (-29°C)	350°F (176°C)	400	27
540 Series	4-Way	Brass	-20°F (-29°C)	350°F (176°C)	400	27
590/591 Series	Right Angle	Brass	-50°F (-45°C)	350°F (176°C)	250	17
500HB Series	Hose Barb	Brass	0°F (-18°C)	350°F (176°C)	150	10
600 Series	Six Port Diversion	Brass	0°F (-18°C)	250°F (121°C)	150	10
500CS/502CS Series	Female/Female	Carbon Steel	-20°F (-29°C)	425°F (218°C)	2,000 (1/4 - 1) 1,500 (1 1/4 - 2)	137 (1/4 - 1) 103 (1 1/4 - 2)
506CS Series	Straight Thread	Carbon Steel	-20°F (-29°C)	425°F (218°C)	3,000	206
500HP/506HP Series	High Pressure	Carbon Steel	-10°F (-23°C)	210°F (99°C)	6,000	413
501SS	Male/Female	Stainless Steel	0°F (-18°C)	400°F (204°C)	2,000	137
502SS	Female/Female	Stainless Steel	0°F (-18°C)	400°F (204°C)	2,000 (1/4 - 1) 1,500 (1 1/4 - 2)	137 (1/4 - 1) 103 (1 1/4 - 2)
708 Series	Male/Female	Brass	-35°F (-37°C)	300°F (148°C)	500	34
709 Series	Female/Female	Brass	-35°F (-37°C)	300°F (148°C)	500	34
200 Series	Female/Female	Chrome Plated Brass	0°F (-18°C)	200°F (93°C)	200	13
608 Series	Male/Female	Brass	0°F (-18°C)	200°F (93°C)	450	31
609 Series	Female/Female	Brass	0°F (-18°C)	200°F (93°C)	450	31

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.

Parker Fluid Connectors Group

North American Divisions & Distribution Service Centers

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 BSP 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)**

North American Divisions

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phone 281 566 4500
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Otsego, MI
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fax 269 694 4614

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Parflex Division

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fax 330 296 8433

Quick Couplings Division

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