

Low Pressure Instrumentation Brass Fittings & Valves

Quick Reference Guide

Bulletin 3531-QRG / USA



Instrumentation Products



Prestolok® Fittings

One piece brass fittings for use with polyethylene, nylon or soft metal tubing, and polyurethane tubing with an internal tube support.

Working Pressure Vacuum to 300 PSI

(tubing and temperature dependent)

Temperature Range

0° to +200°F



Prestolok II® Fittings

Compact one-piece fittings with an engineered plastic body and brass components. For use with nylon, polyethylene and polyurethane tubing.

Working Pressure Vacuum to 150 PSI

(tubing and temperature dependent)

Temperature Range 0° to +150°F



Plug Valves

Compact brass valve with internal nitrile seals and 1/4-turn, one-piece stem/handle. All valves are 100% leak tested and certified leakfree to one SCCM.

Working Pressure to 250 PSI

Temperature Range

-40° to +175°F



Pipe Fittings

Brass fittings meeting all functional SAE J512 industry requirements, with all threads made to Dryseal standards. For use with brass, copper or iron pipe.

Working Pressure to 1000 PSI

Temperature Range -65° to +250°F



Microlok® Fittings

Compact, one-piece push-on fittings for quick, economical connections with polyethylene, polyurethane and nylon tubing.

Working Pressure

to 150 PSI

Temperature Range 0° to +150°F



Integrated Valves

Right angle and in-line flow controls, blocking valves and slow start valves

Working Pressure

Temperature Range +5° to +150°F



Dubl-Barb® **Fittings**

Compact, one-piece push-on barbed fittings for quick, economical connections with highquality polyethylene tubing.

Working Pressure to 145 PSI

Temperature Range +5° to +150°F



Poly-Tite® Fittings

Compact brass compression fittings with exclusive sleeve that grips plastic tubing even when system pressure exceeds tubing bursting point. For use with high-quality thermoplastic and soft metal tubing.

Working Pressure

to 150 PSI (thermoplastic) to 300 PSI (soft metal)

Temperature Range

0° to +150°F (thermoplastic) 0° to +175°F (soft metal)



Euro Brass Fittings

A complete selection of brass adapters, pre-assembled compression fittings, pneumatic integrated fittings, and brass and plastic Prestolok fittings in metric sizes for threaded pipe and tubing. Working pressures and temperature ranges are dependent upon the fittings, and type and size of tubing. For complete information refer to Catalog 3550 USA.

Cartridges, Fittings & Manifolds



ISO Port Adapters

A comprehensive range of ISO port adapters for various sizes of metric threads and end configurations.

Working Pressure Dependent on tubing or

hose end connection. Temperature Range

-65° to +250°F



Miniature right angle flow controls with push-in connection. Available in both control knob and knobless styles.

Working Pressure

Temperature Range +30° to +150°F



SAE Cartridges

Designed for both soft metal and plastic cavity applications. SAE cartridges are thoroughly tested to meet or exceed the performance requirements of DOT FMVSS 571.106, SAE J1131 and the proposed dimensional standard SAE J2494-4 in 6061-T6 aluminum.

Working Pressure Vacuum to 250 PSI

Temperature Rating -40° to + 200°F



Manifolds

Manifolds provide a convenient junction to connect multiple tubing lines for pneumatic applications. Please consult factory for custom manifold designs.

Working Pressure Vacuum to 150 PSI

Temperature Range -40° to +200°F



DAT Fittings

Designed to work with Parker's PAT nylon tubing in pure air and gas distribution systems. Symmetrical design of sleeve ensures that it cannot be improperly assembled on the tubing

Working Pressure To 150 PSI

Temperature Range -40° to + 200°F

Ball Valves



Carbon Steel Ball Valve Series 500CS/502CS

High-quality carbon steel valves with corrosion-resistant coating for reliable, economical shutoff on general industrial and hydraulic lines.

1/4" & 3/8" (full port) 1/2" - 2" (standard port)

Working Pressure to 2000 PSI (1/4" - 1") to 1500 PSI (1 1/4" - 2")

to 150 PSI saturated steam

Temperature Range -50° to +450°F



Stainless Steel Ball Valve Series 500SS

Valves are manufactured from CF-8M stainless steel, the cast equivalent of 316 stainless steel. Full flow design and reinforced PTFE seats and seals assures maximum efficiency and reliability.

Sizes 3/4" - 2"

Working Pressure to 2000 PSI (3/4" - 1") to 1500 PSI (1 1/4" - 2") to 150 PSI saturated steam

Temperature Range -50° to +400°F

Brass Ball Valve Series 500P

Brass valves engineered for extended service life. Highly inert PTFE seats and seals provide resistance to chemical corrosion.

1/4" - 2"

Working Pressure 29in. Hg Vacuum to 600 PSI (Vented, 250 PSI) to 150 PSI saturated steam

Temperature Range 0° to +250°F



Mini Ball Valve

Economical chrome plated brass valves designed for use in confined or hard-to-reach applications. Available in two different working pressures. All Mini Ball Valves are available with optional long handles.

Sizes 1/8" - 1/2"

Working Pressure MV200 Series -- to 200 PSI MV608/609 Series -- to 450 PSI

Temperature Range 0° to +250°F



Panel Mount Ball Valve Series 502

Most standard female/female Parker Ball Valves are available as Panel Mount Ball Valves with the same working pressure and temperature ratings. and handle options.

Sizes

Brass -- 1/4" - 1" Stainless Steel -- 1/4" - 1/2"



Male/Female Ball Valve Series 501P

High quality forged brass valves with male/ female pipe threads, highly inert PTFE seats and seals, optimum flow design, and blow-out proof stem.

Sizes 1/4" - 1"

Working Pressure 29in. Hg Vacuum to 600 PSI (Vented, 250 PSI) to 150 PSI saturated steam

Temperature Range 0° to +250°F



Male/Female Straight Thread O-Ring Ball Valve Series 510P

High quality forged brass valves with male/ female straight threads and nitrile O-ring, highly inert PTFE seats and seals, optimum flow design, and blow-out proof stem.

Sizes 1/4" - 1"

Working Pressure 29in. Hg Vacuum to 600 PSI (Vented, 250 PSI) to 150 PSI saturated steam

Temperature Range 0° to +250°F



Female/Female Straight Thread O-Ring Ball Valve Series 506P

High quality forged brass valves with female/ female straight threads, highly inert PTFE seats and seals, optimum flow design, and blow-out proof stem.

Sizes

1/4" - 1"

Working Pressure 29in. Hg Vacuum to 600 PSI (Vented, 250 PSI) to 150 PSI saturated steam

Temperature Range 0° to +250°F



Locking Handle **Ball Valve**

A lever handle locking option is available on most standard Parker Ball Valves. Brass ball valves also are offered with a vented option for pressure relief to meet OSHA Standard 29CFR part 1910.



Stem Extender Kit

Parker Stem Extenders can be attached easily to any standard size Parker Ball Valve. Kits are available in 1-1/4" and 2-1/4" clearances for Parker Brass Ball Valves up to 1' and Parker Stainless Steel Ball Valves up to 2". All stem extender components are made from 300 Series stainless steel.



Rotary Actuator

A reliable dual vane actuator delivering maximum torque in a small envelope size. Torque output is uniform in both directions, with zero backlash for precise positioning, and guaranteed zero external leakage. For 1/4" - 1 Parker Ball Valves in brass and stainless steel.

Breakaway Pressure 75 PSI minimum

Temperature Range -40° to +180°F

Air Supply Pressure 75° to 150 PSI



90° Ball Valve Series 590/591P

Male/female and male/male right angle ball valves designed to provide reliable fuel line shut-off for gasoline and diesel powered over-the-highway, off-road and construction equipment vehicles.

1/4" - 1/2"

Working Pressure to 250 PSI

Temperature Range -50° to +350°F



3-Piece Swing Out **Ball Valve** Series 504SS

Parker Three-Piece, Swing-Out Stainless Steel Ball Valves allow valve seats and seals to be quickly replaced without disturbing pipe alignment.

Sizes 1/4" - 2"

Working Pressure to 1000 PSI

Temperature Range 0° to +400°F



Ball Valve Handle Options

In addition to standard lever handles, most Parker Ball Valves are available with Short Lever Handles, Oval Handles, Tee Handles and Handle



Series 500PUL

gas line service with flammable liquids (YRBX), LP gas (Y50T), and

Sizes 1/4" - 1"

Working Pressure to 250 PSI

Temperature Range 0° to +250°F



Brass Ball Valve Series 508P

Full Flow Brass Valves engineered for extended service life. Highly inert PTFE seats and seals provide resistance to chemical corrosion.

Sizes 3/4" - 1"

Working Pressure 29in. Hg Vacuum to 600 PSI

(Vented, 250 PSI)

150 PSI saturated steam Temperature Range

0° to +250°F



Economy Ball Valve Series 520P

Designed for applications that don't require frequent shutoff. Valve is full ported with a forged brass body and an o-ring stem seal.

Sizes 1/4" - 3"

Working Pressure 29in. Hg Vacuum to 600 PSI (1/4" -2") to 450 PSI (2-1/2" - 3")

150 PSI saturated steam Temperature Range 0° to +350°F



Brass Ball Valve Series 500HB

The hose barb end configuration eliminates a fitting and possible leak path. Optimum flow design assures maximum system effi-ciency, highly inert PTFE seats and seals provide resistance to chemical corrosion.

Sizes

1" beaded hose barb x 3/4" PTF

Working Pressure 29 in. Hg vacuum to 150 PSI 150 PSI saturated steam

Temperature Range

0° to +350°F



UL Ball Valve

Forged brass ball valves designed for Compressed Gas (YQNZ).



Carbon Steel Ball Valve Series 506CS

Female SAE straight thread with full flow design allows for maximum system efficiency. Highly inert PTFE seats and seals combined with an external phosphate coating provide superior corrosion resistance.

Sizes

1/4"- 1"

Working Pressure 29 in. Hg Vacuum to 3000 PSI 150 PSI saturated steam

Temperature Range 0° to + 450°F



Carbon Steel Ball Valve Series 500HP/506HP/507HP

High pressure valves featuring Delrin™ seats with Molydenum disulphide (MoS2) results in lower actuation torque and will increase high duty life cycle expectancy.

Sizes 1/4" - 2"

Working Pressure To 6000 PSI

Temperature Range 0° to + 180°F



Stainless Steel Series 501SS

Valve is manufactured from CF-8M stainless steel, the cast equivalent of 316 stainless steel, male/female pipe threads, reinforced PTFE seats and seals optimum flow and blowout proof stem.

Sizes 1/4" - 2"

Working Pressure To 2000 PSI (1/4" - 1") To 1500 PSI (1-1/4" - 2") 150 PSI Saturated steam

Temperature Range 0°to +400°F



Solder End Ball Valve Series 509P

High quality forged brass valves designed to be soft soldered into water and air service lines without disassembly. This allows installation without disturbing the seats and seals.

Sizes 1/2" - 2"

Working Pressure to 600 PSI (150 PSI saturated steam)

Temperature Range 0° to +350°F



Brass Ball Valve Series BVGC

Full flow, nickel-plated valve with female BSPP short threads to ISO-228.

1/4" - 2"

Working Pressure

To 435 PSI

Temperature Range 0° to +250°F



Brass Ball Valve Series BVGL

Full flow nickel-plated valve with female BSPP long threads to DIN 2999 / ISO-228

Sizes 1/4" - 2"

Working Pressure

To 435 PSI

Temperature Range 0° to +250°F



Brass Ball Valve Series 600P

Designed for applications where a fluid return or spillback is required. Full flow design assures maximum system efficiency. Viton o-rings seal between the upper and lower halves protect against cross-contamination of fluids.

Working Pressure 29 in. Hg Vacuum to 150 PSI

Temperature Range 0° to +250°F



Brass Ball Valve Series V533P

Designed for applications requiring flow diversion, this valve offers optimized flow design making tank selection and fluid transfer easy.

Sizes 1/4" - 1"

Working Pressure

To 400 PSI

Temperature Range 0° to +250°F



Stainless Steel Ball Valve Series 506SS

Manufactured from CF-8M stainless steel, the cast equivalent of 316 stainless steel, with female/female SAE straight threads.

Sizes 1/4" - 2"

Working Pressure To 2000 PSI (1/4" - 1") To 1500 PSI (1-1/4" - 2") 150 PSI Saturated steam

Temperature Range 0° to +400°F



Brass Ball Valve Series MV708/709

Designed for use in confined or hard-toreach areas, this miniature 2-way ball valve offers a barstock body with male pipe, female pipe ends.

Sizes 1/4"

Working Pressure

To 500 PSI

Temperature Range

0° to +250°F



Brass Ball Valve Series MVBG

Compact design of valve offers solution to applications where space limitation is a factor. Valves have female BSPP threads and PTFE seats.

Sizes

1/4" - 1/2"

Working Pressure To 215 PSI

Temperature Range 0° to +250°F

Accessories



Tools & Tube Fabricating Equipment

Parker offers a complete range of tools and equipment including, Tube Cutters, Tube Benders, 45° Flaring Tools, Tubing Tool Kits containing combinations of tools to cut, flare, and/or ream tube end connections, Swaging Tools, Par-Lok® Wrenches with drop-forged, high carbon steel iaws and a black conversion coat finish, and Tube Fabricating Equipment including Pinch Off Tool, In-Ex® Tube Deburring Tool, Tru-Kut® Sawing Vise, and Multi-Flame Torch. Copper tubing is available in 50-foot coiled rolls in 1/4" & 3/8" (.032 Wall) and 1/2" & 3/8" (.049 Wall) sizes.

Bins

Parker Bin Compartments have open hole storage bins for easy visual identification and retrieval. In addition, Parker Brass offers a range of stackable unit cabinets

with slide out drawers and dividers to create compact, expandable point-of-purchase displays. Self-adhesive bin labels are available for identifying Parker fittings and valves. The general line set includes all product lines. Individual product line labels also available. Custom Bin Labels are available in Catalog 3501CD.

Specials

Your resource for custom fittings, valves and manifolds

If you need a custom brass fitting, valve or manifold, we can design and manufacture it for your specific application. In exactly the configuration you want. And supply any quantity -- from a single part for a prototype to a large production run -- in an exceptionally short time frame.

Every part is manufactured on the most current CNC equipment available. So each piece will meet or exceed your most exacting tolerances. And all are guaranteed to comply with the applicable standards, including SAE, ISO, DIN, JIS, ASTM and MIL-Spec.

In most cases, we can provide a price quote and shipping date when you call, and supply approval designs within 48 hours after receiving your CAD files.





How to order Parker Brass Fittings and Valves

When ordering, please state the part number of each type of fitting or valve desired and the quantity. Part numbers are constructed from letters or numbers that identify individual products by style, type of material, size and any available options.

To select fittings for specific applications, refer to the Parker fitting selector chart in Catalog 3501E. Applications of the Parker fittings and valves are the responsibility of the customer. If questions arise concerning which type or size fitting or valve to specify, consult your Parker Brass Products Distributor, Parker Field Sales/Technical Services - Brass Products Division, or your local Parker Service Center.

Note: Refer to Parker Catalog 3501E for more detailed application information.

Call toll-free 1-800-C PARKER (1-800-272-7537)
Parker Information Center for catalogs, literature or additional information.

Additional Parker Brass Products Division Publications

The full line of Parker Brass Division products is available in the 3501-E master catalog. This soft cover catalog contains complete specifications and technical information, plus handy reference charts and tables. The catalog is also available on a CD-ROM for all Microsoft PC operating systems.

The inPHorm CD-ROM for Brass Products simplifies product selection by making it easy to find detailed information, specifications and CAD drawings. A built-in order form makes online quotation fast and simple.

The CD-ROM runs under all Microsoft PC operating systems.



WARNING



Failure or improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

OFFER OF SALE

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

Parker Fluid Connectors **Regional Sales Offices** & Service Centers

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

For information, contact the nearest Regional Sales Office listed, or Call toll-free 1-800-C-Parker (1-800-272-7537).

Your complete source for quality tube fittings, hose & hose fittings, brass fittings & valves, quick-disconnect couplings, and assembly tools, locally available from a worldwide network of authorized distributors.

Fittings & Couplings: Available in inch and metric sizes covering SAE, BSP, DIN, GAZ, JIS, and ISO thread configurations, manufactured from steel, stainless steel, brass, aluminum, nylon and thermoplastic.

Hose, Tubing and Bundles: Available in a wide variety of sizes and materials including rubber, wire-reinforced, thermoplastic, hybrid and custom compounds.

Cleveland Region Sales Office

Cleveland, OH (216) 896-3000 (216) 896-4022 FAX

Service Center

Waterville, OH (419) 878-7000 (419) 878-7001 FAX

Great Lakes Region Sales Office

Otsego, MI (616) 694-2550 (616) 694-4614 FAX

Service Center

Fort Wayne, IN (219) 747-3111 (219) 747-3026 FAX

Minneapolis Region Sales Office

Minneapolis, MN (763) 513-3500 (763) 544-3418 FAX

Service Center

Lakeville, MN (952) 469-5000 (952) 469-5729 FAX

Service Center

Hiawatha, IA (319) 393-1221 (319) 393-1224 FAX

Service Center

Oshkosh, WI (920) 426-8471 (920) 426-8570 FAX

Northeast Region Sales Office & Service Center

Trenton, NJ (609) 586-5151 (609) 586-3149 FAX

Pacific Region

Sales Office & Service Center Portland, OR

(503) 283-1020 (503) 283-2201 FAX

Service Center

Buena Park, CA (714) 522-8840 (714) 994-1183 FAX

Southeast Region Sales Office & Service Center

Greensboro, NC (336) 373-1761 (336) 378-0913 FAX

Service Center

Convers, GA (770) 929-0330 (770) 929-0230 FAX

Service Center

Mooresville, NC (704) 664-1922 (704) 664-5296 FAX

Southwest Region Sales Office & Service Center

Mansfield, TX (817) 473-4431 (817) 473-8078 FAX

Canada

Sales Office & Service Center Grimsby, ON (905) 945-2274 (905) 945-3946 FAX

(Contact Grimsby for other Service Center locations.)



Accredited by the Counci for Accreditation (RvA)



Quality Management System BPD Otsego, Michigan



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