

Hydraulic Couplings

A wide variety of designs each tailored to a particular application. Based on valving, hydraulic couplings generally are either Double Shut-Off or Straight-Thru. Double Shut-Off couplings contain shut-off valves in both halves, body and nipple. Used extensively when loss of fluid is undesirable. Straight-Thru couplings have no valves in either half and are ideal for maximum flow applications.



Dust Caps



Dust Plugs/Caps

Keep mating surfaces clean and free of contamination.
 Size: 1/8" to 1-1/2"
 Material: Aluminum, Rubber



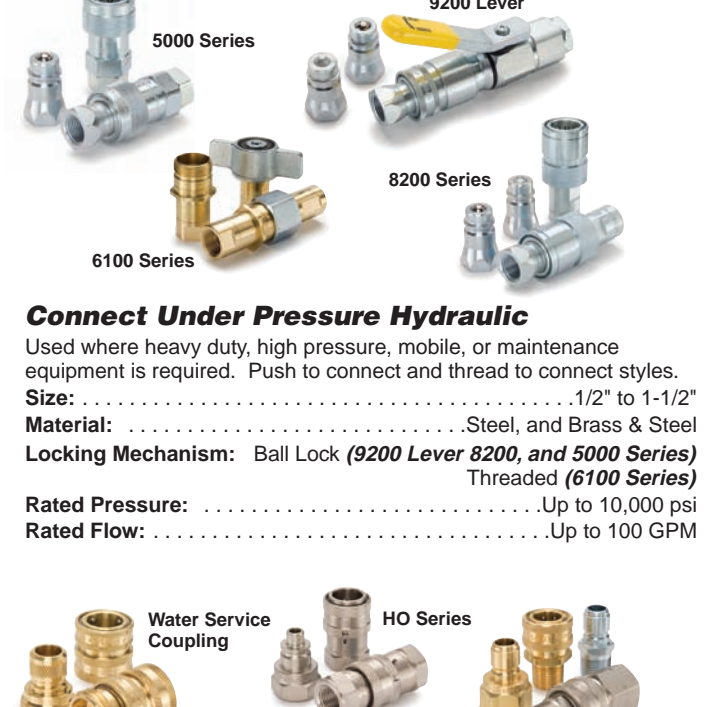
General Purpose Hydraulic
 Used primarily for transfer of hydraulic fluid, and also used with chemicals, water, steam and some gases.
 Size: 1/8" to 2-1/2"
 Material: Brass, Steel, and Stainless Steel
 Locking Mechanism: Ball Lock
 Rated Pressure: Up to 6000 psi
 Rated Flow: Up to 200 GPM
 Temp. Range: -40° to +250°



High Pressure Hydraulic
 Used in extreme high pressure applications: portable hydraulic rams, construction, railway maintenance and jacking equipment.
 Size: 1/2" to 1-1/2"
 Material: Steel, Stainless Steel, and Brass & Steel
 Locking Mechanism: Ball Lock (FH, HO, TC Series)
 Rated Pressure: Up to 10,000 psi
 Rated Flow: Up to 100 GPM



Non-Spill Hydraulic
 Used extensively where hydraulic oil spillage could cause safety hazards. Push-to-connect. Sleeve locking prevents accidental disconnection. Employs flush valving for non-spill connecting and disconnecting.
 Size: 3/8" to 2"
 Material: Steel, Stainless Steel
 Locking Mechanism: Ball Lock
 Rated Pressure: Up to 10,000 psi
 Rated Flow: Up to 50 GPM
 Temp. Range: -40°F to +250°F; 40°F to +140°F (PF Series only)



Connect Under Pressure Hydraulic
 Used where heavy duty, high pressure, mobile, or maintenance equipment is required. Push to connect and thread to connect styles.
 Size: 1/2" to 1-1/2"
 Material: Steel, and Brass & Steel
 Locking Mechanism: Ball Lock (9200 Lever 8200, and 5000 Series)
 Rated Pressure: Up to 10,000 psi
 Rated Flow: Up to 100 GPM

Thermoplastic Couplings



PPM/PPL, Spectrum and PF Series
 Parker's thermoplastic couplings offer light weight design and chemical resistance to meet a broad range of coupling applications. Valved and non-valved options on Spectrum and PPM/PPL. PF is non-spill with flush valves.
 Size: 1/8" to 2"
 Material: Acetal/SS, PVDF/SS, PVDF/PEEK™, Polypropylene/SS
 Locking Mechanism: Finger Lock, Pawl Lock, Push-Button Latch
 Rated Pressure: Up to 145 psi
 Rated Flow: Up to 50 GPM
 Temp. Range: Up to +250°F

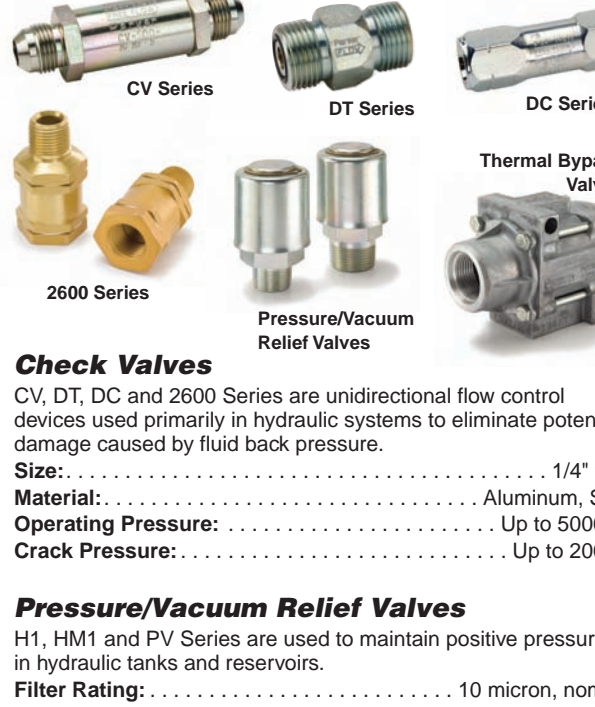
Special Purpose Miniature



DM Series
 Parker's DM Series features double shut off valving in a small envelope size.
 Operation: Push-To-Connect
 Size: 1/8"
 Material: Nickel Plated Brass
 Locking Mechanism: Ball Lock
 Rated Pressure: 250 psi

Mold Coolant Couplings
 Specifically designed for connecting coolant lines to molds and dies on injection molding machinery. Straight through/Single Shut-Off. Extensions are available in various lengths.
 Size: 1/4" to 3/8"
 Material: Brass
 Locking Mechanism: Ball Lock
 Rated Pressure: 200 psi
 Rated Flow: Up to 12 GPM

Valves



Check Valves
 CV, DT, DC and 2600 Series are unidirectional flow control devices used primarily in hydraulic systems to eliminate potential damage caused by fluid back pressure.
 Size: 1/4" to 2"
 Material: Aluminum, Steel
 Operating Pressure: Up to 5000 psi
 Crack Pressure: Up to 200 psi

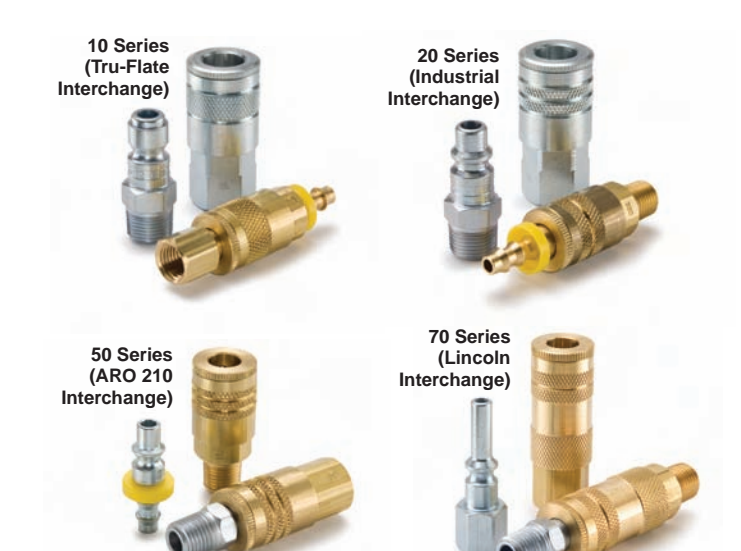
Pressure/Vacuum Relief Valves
 H1, HM1 and PV Series are used to maintain positive pressure in hydraulic tanks and reservoirs.
 Filter Rating: 10 micron, nominal
 Pressure Relief Settings: Up to 580 psi
 Vacuum Relief Settings: 0.3 psi

Thermal Bypass Valves
 TH Series will modulate fluid temperature by shifting return line flow through the cooler or bypassing it back to the reservoir.
 Port Size: 1" ORB
 Shift Temps: 100°F, 120°F, 140°F, 160°F, 180°F
 Relief Valve Setting: Up to 85 psi
 Max Flow: 60 gpm

Pneumatic Couplings



Pneumatic couplings, also referred to as single shut-off (SSO) couplings, are typically used in compressed air applications to connect air tools, equipment and hoses. Additional applications include other gases and low pressure liquids. Parker pneumatic couplings are offered in a wide range of interchanges, sizes, materials, ports and other options to satisfy most every pneumatic application.



General Purpose - Manual Connect
 Interchange: Industrial, Tru-Flate, ARO 210, and Lincoln "Long Stem"
 Operation: Manual
 Size: 1/4" to 1/2"
 Material: Brass and/or Steel
 Locking Mechanism: Ball Lock
 Rated Pressure: Up to 300 psi



General Purpose - Push-To-Connect
 Interchange: Industrial, RF, Tru-Flate, ARO 210
 Operation: Push-To-Connect
 Size: 1/4" to 3/4"
 Material: Brass and/or Steel
 Locking Mechanism: Ball Lock, Pawl Lock (30 Series only)
 Rated Pressure: Up to 300 psi



Special Purpose - Exhaust
 Parker's E-z-mate coupler incorporates a secondary valve sleeve that allows trapped internal pressure to be exhausted prior to disconnect. Tool-Mate Couplers are made of a durable composite yet are lightweight and non-marking.
 Interchange: Industrial and RF
 Operation: Push-To-Connect
 Size: 1/4" to 3/4"
 Material: Steel (E-z-mate Series), Polyamide (Tool-Mate Series)
 Locking Mechanism: Ball Lock and Fingers
 Rated Pressure: Up to 300 psi



Accessories - Blow Guns
 400 Series blow guns are available with either full pressure or controlled pressure nozzles.
 BG Series blow guns are available with either full pressure or OSHA approved nozzles.
 Size: 1/4" NPT (400 Series)
 Material: Zinc (400 Series)
 High Impact Plastic Handles (BG Series)
 Rated Pressure: Up to 175 psi
 Nozzles: Short or Extended (BG Series)
 Operation: Lever or Button Actuation (400 Series)
 Lever Actuation (BG Series)

Swivels



PS Series is ideal for an array of dynamic high pressure applications. A wide variety of port options are available.

S Series Swivels offer a pressure balanced, compact forged body design. A wide variety of port options are available.

PS and S Series Swivels
 Size: 1/4" to 2"
 Material: Steel, Stainless Steel
 Rated Pressure: Up to 5000 psi
 Configurations: Inline and 90° (PS Series)
 90° (S Series)
 Plating: Standard zinc and clear trivalent chromate plating
 Port Options: NPTF, JIC 37° Flare, Female NPSM Pipe Swivel, SAE O-Ring Boss

Diagnostic Products

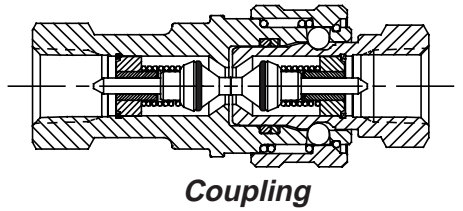
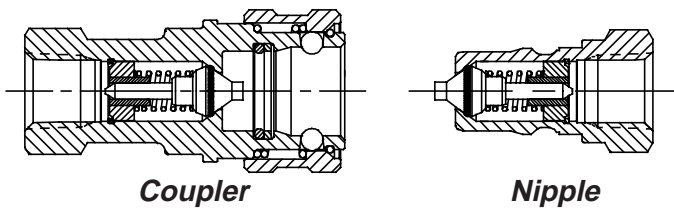


Parker's Diagnostic equipment can identify hard-to-detect variations in pressure, temperature, and flow quickly and easily.

SensoControl® Products

- The Parker Service Master and Serviceman Test Meters
- Transducers
- Flow Sensors
- Temperature Probes
- Test Meter Kits
- Service/Junior Digital Pressure Gauges

Test Port / Fluid Sampling Couplings
 Size: 1/8" (PD, PDP Series)
 1/8" and 9/16" (EMA-3 Series)
 Material: Steel
 Locking Mechanism: Threaded (EMA-3 Series)
 Ball Lock (PD, PDP Series)
 Rated Pressure: 300 to 6000 psi (PD, PDP Series)
 Up to 9000 psi (EMA-3 Series)
 Temp. Range: -40° to +250°F



Air Inclusion
The ambient atmosphere forced into the system during the connection of the quick disconnect halves.

Break-Away
Automatic disconnection of a coupling when an axial separation force is applied.

Brinelling
Dimples or grooves worn into the shoulder of a male half by the locking balls in the female half.

Burst Pressure
The pressure at which a device loses the capability to retain pressure.

Case Hardening
Hardening the surface of low carbon steel.

Cold Flow
Continued deformation under load.

Connect Under Pressure
Ability to connect coupling halves with internal line pressure applied to either both sides or one side.

Coupling, Female Half
Other nomenclature "coupler", "socket", "body".

Coupling, Male Half
Other nomenclature "nipple", "plug", "adapter".

Coupling, Quick Disconnect
A component which can quickly join or separate a fluid line without the use of tools or special devices.

Differential Pressure(ΔP)
The difference in pressure between any two points of a system or a component.

Double-Acting Sleeve.
Permits push-to-connect and pull-to-disconnect convenience on implement line when female half is clamp mounted and connected with a hose.

Dust Cap
Dust or dirt repelling enclosure for both halves.

Dust Plug
Dust or dirt repelling enclosure both halves.

Flow Checking.
Occurs when a nipple valve closes during flow conditions, such as when quickly lowering a heavy implement. (Also called Check Off, Back Checking or Lock-up.)

Flush Position (Valve)
When the coupler valve is fully open, allowing maximum oil flow.

Force to Connect
Axial and/or rotational force required to make a complete connection.

Force to Disconnect
The reverse of the above.

Induction Hardening.
Localized hardening of medium carbon steel.

Peak Pressure
Maximum momentary pressure encountered in the operation of a component.

Pressure Cap
Cap which incorporates a seal capable of withstanding the rated pressures on the male half.

Pressure Impulse Test
Subjecting a component to a specified pressure at a specified rate of increase or decrease for a specified time limit.

Pressure Operating
The pressure at which a system is operated.

Pressure Plug
Plug which incorporates a seal capable of withstanding the rated pressures on the female half.

Proof Pressure
The non-destructive test pressure in excess of the maximum rated operating pressure.

Push To Connect (Auto Lock)
Locking arrangement which permits one handed connection by pushing the nipple into the coupler.

Rated Pressure
The maximum pressure at which a product is designed to operate.

Single-Acting Sleeve
Permits pull-to-disconnect convenience on implement line when female body is clamp mounted. Making connection requires manually pulling female body forward, inserting male tip, then allowing body and tip to return to original position in the clamp.

Sleeve Lock
Arrangement which provides an additional lock which must be actuated before the locking sleeve can be retracted.

Spillage
The fluid removed from the system due to disconnection of a coupling assembly. This is the fluid trapped between the mating seal and the valve seal of the coupling halves.

Surge Pressure
The pressure existing from surge conditions.

Surge Flows
A rapid increase in fluid flow.

Thermal Build-Up.
Hydraulic pressure caused by expansion of the fluid due to heat from an external source such as sunlight.

Trapped Pressure
Pressurized hydraulic fluid trapped behind closed coupling valve.

Twist Lock
A locking arrangement which requires a rotational actuation to unlock the mating halves.

Types of Quick Disconnect Coupling Valves

Straight-Thru (ST)
This provides straight through flow.

Double Shut-off Valve (DSO)
A valve in the female half and a valve in the male half.

Single Shut-off Valve (SSO)
Generally, a valve in the female half with no valve in the male half.

***NOTE:** Refer to Parker's Publication No. 3800-B1.0: Safety Guide for Selecting and Using Quick Action Couplings and Related Accessories.*

Parker's Quick Coupling Division, established in 1968, has been supplying quality products to the marketplace since its inception. With manufacturing facilities on two continents, Parker QCD manufactures hydraulic and pneumatic products designed to meet the demanding requirements of a wide variety of applications in a host of markets including Agriculture, Automotive, Chemical, Off-Shore Oil, Pulp and Paper, Food Processing, Printing and Publishing, Plastics, Public Utilities, Construction, Alternative Fuels and others.

Quick Couplings are available in a variety of sizes and end configurations ranging from 1/8 inch to 2-1/2 inches to accommodate a broad spectrum of design requirements. Pressure capabilities to 15,000 psi working pressure, port configurations including metrics, body materials ranging from brass to 316 stainless steel to polypropylene, and an array of seal options have brought Parker's Quick Coupling Division to the forefront of the Fluid Connector Industry.

As the world's largest manufacturer of Quick Couplings, Parker QCD's commitment is to the customer. The Quick Coupling Division strives to improve by providing new products and solutions to the market, and developing state-of-the-art technologies to provide the highest quality products at a competitive price. Quality products not limited to standards, but inclusive of many non-standard products designed to meet specific customer requirements. Products designed, manufactured and delivered responsively through manufacturing cells set up for rapid response.

At Parker Quick Coupling, we view our customers as vital partners. It is for this reason we will continue to develop innovative solutions for our customers' complex applications and provide them with the very best in customer service.

- Checklist for Selecting Quick Couplings**
- What are the functional requirements of the coupling?
 - What is the maximum working pressure of the application?
 - Which seals and body material are compatible with the system's fluid?
 - Is the application static or dynamic?
 - What size coupler is required?
 - What is the maximum pressure drop suitable for the application?
 - Does the application require the ability to connect and disconnect under pressure?
 - What is the media temperature and ambient temperature?
 - What end configurations are required?
 - Is an industry interchange coupler required?
 - Is air inclusion and fluid loss a concern in the application?

Refer to Parker Catalog 3800 for more detailed product information.

⚠ 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 and 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".

Call Parker Information Center Toll Free: 1-800-C PARKER (1-800-272-7537)
for catalogs, literature, or additional information.
www.parker.com/quickcouplings



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Quick Coupling Products
Quick Reference Guide
Bulletin 3800-QRG USA | February 2010



ENGINEERING YOUR SUCCESS.

Quick Coupling Products

Quick Reference Guide Bulletin 3800-QRG/USA

Parker Fluid Connectors Group
North American Divisions & Distribution Centers

<p>North American Divisions</p> <p>Energy Products Division Stafford, TX phone 281 566 4500 fax 281 530 5353</p> <p>Fluid System Connectors Division Otsego, MI phone 269 694 9411 fax 269 694 4614</p> <p>Hose Products Division Wickliffe, OH phone 440 943 5700 fax 440 943 3129</p> <p>Industrial Hose Division Strongsville, OH phone 440 268 2120 fax 440 268 2230</p> <p>Parflex Division Ravenna, OH phone 330 296 2871 fax 330 296 8433</p> <p>Quick Coupling Division Minneapolis, MN phone 763 544 7781 fax 763 544 3418</p> <p>Tube Fittings Division Columbus, OH phone 614 279 7070 fax 614 279 7685</p>	<p>Distribution Service Centers</p> <p>Buena Park, CA phone 714 522 8840 fax 714 994 1183</p> <p>Conyers, GA phone 770 929 0330 fax 770 929 0230</p> <p>Lakeville, MN phone 952 469 5000 fax 952 469 5729</p> <p>Louisville, KY phone 502 937 1322 fax 502 937 4180</p> <p>Portland, OR phone 503 283 1020 fax 503 283 2201</p> <p>Toledo, OH phone 419 878 7000 fax 419 878 7001 fax 419 878 7420 (FCG Kit Operations)</p> <p>Canada</p> <p>Grimsby, ONT phone 905 945 2274 fax 905 945 3945 (Contact Grimsby for other Service Center locations.)</p>
--	--

Your complete source for quality tube 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 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.

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)



Parker Hannifin Corporation
Quick Coupling Division
8145 Lewis Road
Minneapolis, MN 55427
phone 763 544 7781
fax 763 544 3418
www.parker.com/quickcouplings

