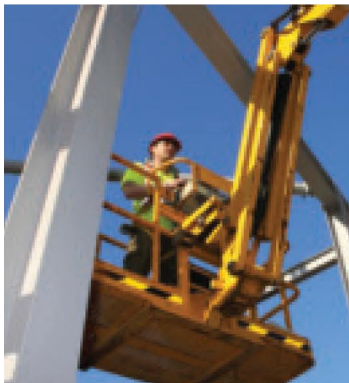




aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Quick Coupling Products and Custom Capabilities

For Original Equipment Manufacturers
Catalog 3800 – OEM | June 2010



ENGINEERING YOUR SUCCESS.

Quick Coupling Division Locations



Minneapolis, Minnesota



Grantsburg, Wisconsin



Lincoln, Nebraska



Chetek, Wisconsin

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS 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 or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

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" located on the inside back cover of this publication.

Table of Contents

Together We Can Deliver Unparalleled,
Cost-Effective, OEM Solutions



Custom Solutions	Section A
Introduction	2
Rigid Mount Quick Couplings	4
Cartridge Quick Couplings	5
Custom Castings	5
Multi Couplings	6
Quick Couplings	Section B
Introduction	7
60 Series – General Purpose Quick Couplings	8
IB Series – Connect Under Pressure Quick Couplings	10
6600 Series – General Purpose Quick Couplings	12
4000 Series – General Purpose Quick Couplings	14
4200 Series – General Purpose Quick Couplings	16
FEM Series – Non-Spill Quick Couplings	18
IF Series – Non-Spill Connect Under Pressure Quick Couplings	20
FA Series – Non-Spill Aluminum Couplings	22
PF Series – Non-Spill Thermoplastic Chemical Transfer Couplings	24
8200 Series – Connect Under Pressure Quick Couplings	26
9200 Series – Connect Under Pressure Quick Couplings	28
Valves	Section C
Introduction	31
DT Series – Check Valves	32
CV Series – Check Valves	33
DC Series – Check Valves	34
2600 Series – Swing Check Valves	35
TH Series – Thermal Bypass Valves	36
PV Series – Pressure/ Vacuum Relief Valves	38
H1/HM1 Series – Pressure/ Vacuum Relief Valves	39
Swivels	Section D
Introduction	41
PS Series	42
S Series	43
SensoControl Industrial Products	Section E
Introduction	45
SensoControl Sensors	46
SensoControl Controllers	48
SensoControl Diagnostic Equipment	Section F
Introduction	51
The Parker Service Master Easy	52
The Parker Service Master Easy Accessories	52
The Serviceman	53
The ServiceJunior	54
Product Selection Guide	55
PD Series Test Port Couplings	56
EMA3 Test Port Couplings	59

A Custom

B Quick Couplings

C Valves

D Swivels

E Industrial Products

F Diagnostics

- ag attachments
- construction equipment
- manufacturing machinery
- snow plows
- industrial equipment
- refuse hauling
- mining

ENGINEERING YOUR SUCCESS.

Parker's Quick Coupling division puts an extraordinary amount of resources and commitment into solution designs for OEMs like you. Sometimes the process is extremely simple. "Yes, we've seen something like that before. This off-the-shelf component does exactly what you need." Other times, we perform modifications that enhance its function in a new application; but in either case, a proven Parker design has unparalleled cost-effective value.

Sometimes the challenge is much greater and the solution involves designing a complete system or sub-system that is specific to the application's unique requirements.

Pumps, motors, valves, hoses, couplers, Parker is one of a very few who have virtually all the pieces in any motion control equation. If castings are involved, we draw on design experience that far exceeds anyone else in the coupling world. Our development team uses the most advanced flow analysis and FEA software, and is also supported by an internal world class test lab. It is here where we perform impulse, flow, burst, and other such critical testing.

In the end, our goal is simple... deliver an OEM solution with functionality that gives you a market advantage.

"Parker
is one of a very few
suppliers who have virtually
all the pieces required for
an entire motion and
control solution."

"We design
Castings, Ag cartridges,
Multi-couplings, Check valves,
Thermal relief valves
and much more."



Proven Products and Custom Solutions

“Engineering Your Success”...
It’s More than a Slogan



Parker is Your Partner in Designing and Developing Innovation Solutions

Together, we can design unparalleled, cost-effective, OEM solutions that translate to a distinct market advantage.



Product Range:

- Custom Castings
- Rigid Mount Style Quick Couplers
- Cartridge Style Quick Couplers
- Multi-Couplers, Standard and Custom Configured



- mid-sized agricultural equipment
- construction equipment
- forestry equipment
- mobile applications

Rigid Mount Quick Couplers and Custom Castings



“Our focus is on our customers... improving their productivity and profitability.”

Parker’s OEM expertise is more extensive...

When it comes to the business of providing quick connections in the countless configurations needed to satisfy OEM specifications, Parker is the clear choice.

We partner with original equipment manufacturers to provide the best solution for their needs. Parker engineers know that each application has its own very specific requirements.



Rigid Mount Couplers



Many Dust Protection Options

- large and high feature tractors
- construction equipment
- forestry equipment
- mobile applications

Cartridge Quick Couplers and Custom Castings



"Parker is your trusted source for custom engineered systems and components."

than any other quick coupling manufacturer today.

Whether couplings are rigidly mounted to valve housings or integrated into custom enclosures, we provide more innovative solutions than any other quick

coupling manufacturer. From custom castings and full featured couplings to dust protection options with color coded identification, Parker delivers.



Sliding Dust Covers to Prevent Contamination



Custom Castings Many Configurations



Nested Castings with Lever Assistance

- in-plant machinery
- production equipment
- chemical lines
- paper mills
- mid-sized agricultural machinery
- large and high feature tractors

Multi-Couplings Standard & Custom Solutions



- Pneumatic, hydraulic and electric lines can be centralized onto one multi-coupling unit
- Keyed connection for proper line match up every time
- Easy to replace cartridge style couplings reduce downtime

One Motion Completes Multiple Connections

Parker's multi-coupling provided the agricultural industry's first single point connection to mate both the hydraulic as well as the electrical lines on the implement and harvester. Design collaboration is the key to taking custom solutions from concept to reality.

A single connection can include hydraulic, pneumatic, electrical and mechanical attributes. Our multi-couplings can be configured as true "full featured" couplings, offering complete connection, total disconnection, and connection under full system pressure in one single motion.



Custom Multi-Couplings with Cartridge Coupler Options



Standard Configuration



Multi-Coupling with Protective Dust Covers

Quick Couplings

Together, We Can Make
a Quick Connection



Connect Fluid Lines Quickly and Easily

General purpose couplings are used across the spectrum of fluid system applications. Couplings can be found wherever fluid lines need to be connected or disconnected more efficiently, eliminating the need for additional tools to make the connection.

Parker offers a broad range of coupling products for nearly every design requirement; including industrial, agricultural and mobile hydraulic systems.

Couplings are available in steel, stainless steel, aluminum and other materials. Parker manufactures the largest volume of quick coupling products in the industry and offers a wide variety of special port options and sealing materials for numerous applications.



Quick Coupling Product Range:

- **General purpose**
- **Non-spill**
- **Connect under pressure**



- general industrial applications
- mobile applications
- in-plant machinery
- production equipment
- chemical lines
- paper mills

60 Series

General Purpose Quick Couplings

Parker 60 Series couplings meet ISO 7241-1, Series B interchange and are used across a wide spectrum of hydraulic applications. These double shut-off couplings can be used anywhere that fluid transfer lines are regularly connected and disconnected, and where a minimum loss of fluid is desirable. The product is primarily used with hydraulic fluid; however, general purpose 60 Series couplings are also used with chemicals, water, steam, and gas transfer lines.

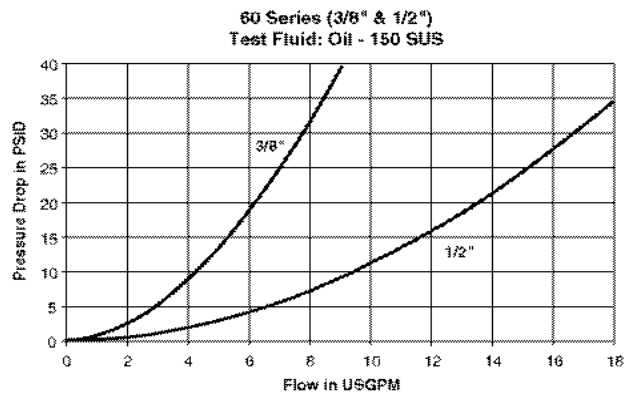
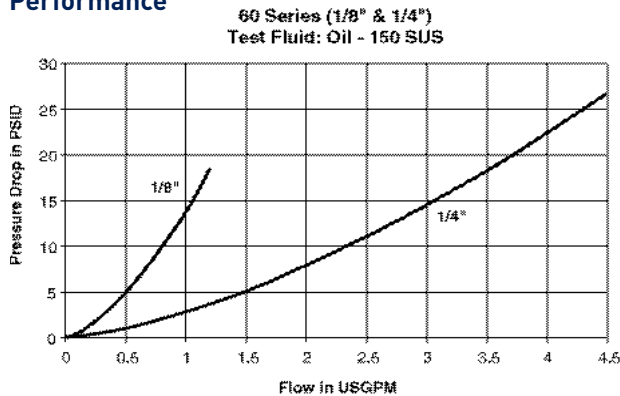
- ISO 7241 Series B standard
- Sizes: 1/8" – 2 1/2" (1 1/2" and 2 1/2" not shown – contact Division)
- Rated pressure up to 5,000 PSI
- Temperature range -40 to +250° F
- Standard seal material is nitrile
- Available in steel, brass, 303 & 316 stainless steel and aluminum



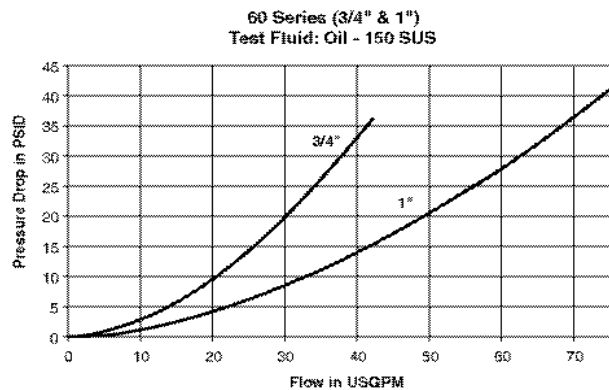
Specifications (steel material only)

Body Size (in.)	1/8	1/4	3/8	1/2	3/4	1
Rated Pressure (PSI)	5000	5000	4000	4000	2500	2000
Rated Flow (GPM)	.8	3	6	12	28	50

Performance



Aluminum couplings are color coded to indicate seal material.



60 Series

General Purpose Quick Couplings

Couplers; Steel

Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
1/8	H1-62	.125-27 NPFT	1.90	0.68	0.96
1/8	H1-62-T4	.437-20 ORB	2.06	0.68	0.96
1/4	H2-62	.250-18 NPFT	2.26	0.81	1.14
1/4	H2-62-T6	.562-18 ORB	2.41	0.81	1.14
3/8	H3-62	.375-18 NPFT	2.49	0.88	1.40
3/8	H3-62-T8	.750-16 ORB	2.75	1.00	1.40
1/2	H4-62	.500-14 NPFT	2.87	1.12	1.77
1/2	H4-62-T10	.875-14 ORB	3.05	1.12	1.77
3/4	H6-62	.750-14 NPFT	3.56	1.31	2.14
3/4	H6-62-T12	1.062-12 ORB	3.56	1.31	2.14
1	H8-62	1.000-11.5 NPFT	4.18	1.62	2.52
1	H8-62-T16	1.312-12 ORB	4.18	1.62	2.52

Contact Division for other body sizes, materials and seal options.

Nipples; Steel

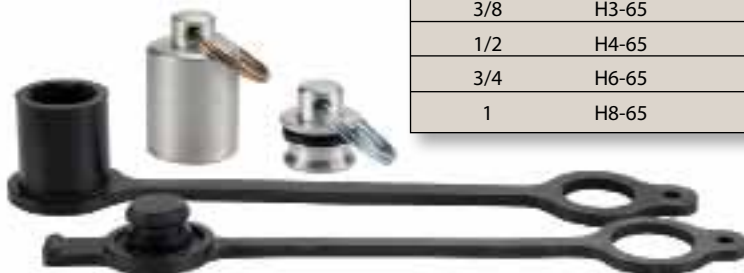
Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/8	H1-63	.125-27 NPFT	1.26	0.56	0.65
1/8	H1-63-T4	.437-20 ORB	1.41	0.69	0.79
1/4	H2-63	.250-18 NPFT	1.54	0.75	0.87
1/4	H2-63-T6	.562-18 ORB	1.69	0.88	1.01
3/8	H3-63	.375-18 NPFT	1.68	0.88	1.01
3/8	H3-63-T8	.750-16 ORB	1.94	1.00	1.15
1/2	H4-63	.500-14 NPFT	1.94	1.12	1.30
1/2	H4-63-T10	.875-14 ORB	2.12	1.19	1.37
3/4	H6-63	.750-14 NPFT	2.43	1.38	1.59
3/4	H6-63-T12	1.062-12 ORB	2.54	1.34	1.59
1	H8-63	1.000-11.5 NPFT	2.91	1.62	1.88
1	H8-63-T16	1.312-12 ORB	2.91	1.62	1.88

Contact Division for other body sizes, materials and seal options.

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Plug Part No.	Dust Cap Part No.	
			Aluminum	Rubber
			Aluminum	Rubber
1/8	H1-65	H1-65M	H1-66	H1-66M
1/4	H2-65	H2-65M	H2-66	H2-66M
3/8	H3-65	H3-65M	H3-66	H3-66M
1/2	H4-65	H4-65M	H4-66	H4-66M
3/4	H6-65	H6-65M	H6-66	H6-66M
1	H8-65	H8-65M	H8-66	H8-66M

- truck & off-highway
- forestry equipment
- in-plant hydraulic systems
- mining
- asphalt paving

IB Series

General Purpose Connect Under Pressure Couplings

The IB Series Pressure Eliminator complements our standard 60 Series product offering. This series meets the ISO 7241-1, Series B industrial interchange specifications, while providing a connect-under-pressure feature.

The unique integrated Pressure Eliminator valve makes it possible to complete a connection under trapped, residual pressure up to 1450 PSI.

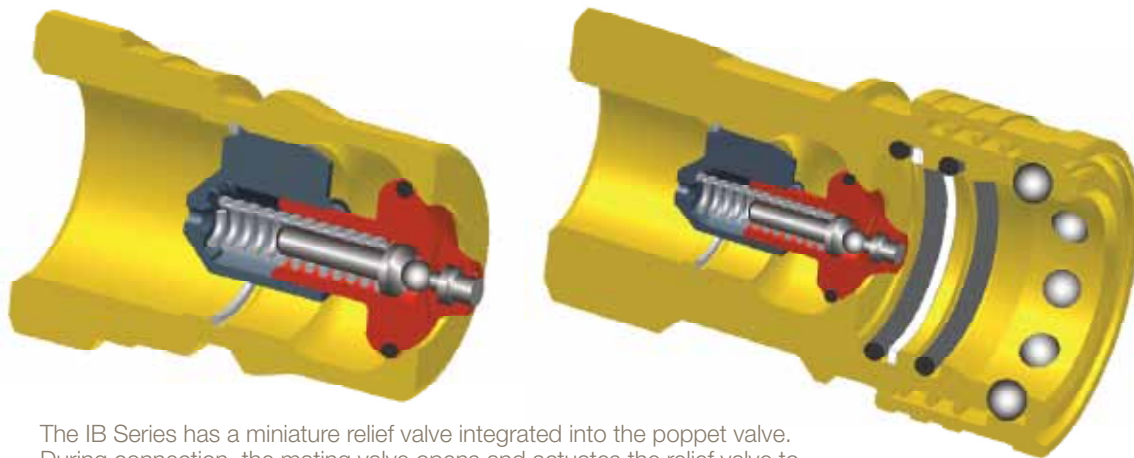
- ISO 7241-1, Series B interchange
- Steel & Brass construction
- Sizes from 1/4" to 1"
- Pressure rated up to 4060 PSI
- Temperature range: -40 to +212° F
- Double shut-off poppet style valve
- Standard seal material is nitrile
- Port configurations: NPTF, UNF & BSPP



Use Parker's IB Series to connect under the force of built-up pressure when mating with a 60 Series or other ISO, Series B coupler or nipple.

Specifications

Body Size (in.)	1/4	3/8	1/2	3/4	1
Working Pressure (PSI)					
Coupled	4060	4000	3625	2500	2000
Uncoupled	5800	4640	4350	4350	4350
Connect under pressure up to	1450	1450	1450	1450	1450



The IB Series has a miniature relief valve integrated into the poppet valve. During connection, the mating valve opens and actuates the relief valve to reduce the excess pressure.

IB Series

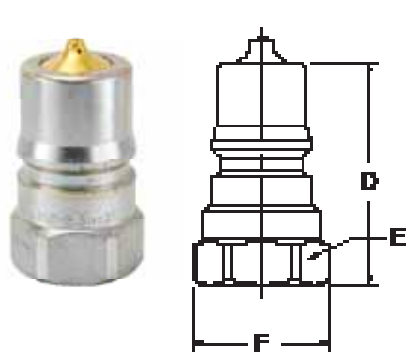
Connect Under Pressure Quick Couplings

Couplers Female Thread



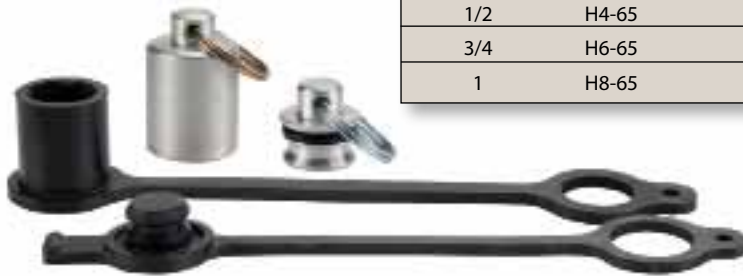
Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Hex	Largest Diameter
			A	B	C
1/4	IB2511 NPT	.250-18 NPFT	2.24	0.94	1.10
3/8	IB3811 NPT	.375-18 NPFT	2.48	1.18	1.34
1/2	IB5011 NPT	.500-14 NPFT	2.60	1.30	1.57
3/4	IB7511 NPT	.750-14 NPFT	3.19	1.81	2.05
1	IB10011 NPT	1.000-11.5 NPFT	3.70	1.97	2.44

Nipples Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Hex	Largest Diameter
			D	E	F
1/4	IB2521 NPT	.250-18 NPFT	1.38	0.75	0.83
3/8	IB3821 NPT	.375-18 NPFT	1.50	0.87	0.96
1/2	IB5021 NPT	.500-14 NPFT	1.63	1.10	1.21
3/4	IB7521 NPT	.750-14 NPFT	2.09	1.42	1.54
1	IB10021 NPT	1.000-11.5 NPFT	2.48	1.65	1.81

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Plug Part No.	Dust Cap Part No.	Dust Cap Part No.
	Aluminum	Rubber	Aluminum	Rubber
1/8	H1-65	H1-65M	H1-66	H1-66M
1/4	H2-65	H2-65M	H2-66	H2-66M
3/8	H3-65	H3-65M	H3-66	H3-66M
1/2	H4-65	H4-65M	H4-66	H4-66M
3/4	H6-65	H6-65M	H6-66	H6-66M
1	H8-65	H8-65M	H8-66	H8-66M

- construction equipment
- manufacturing machinery
- paper mills
- refuse hauling
- mining
- asphalt paving

6600 Series

General Purpose Quick Couplings

Parker 6600 Series couplers meet the ISO 7241-1, Series A interchange and offer a double shut-off solution for higher pressure general purpose applications. The sleeve and nipple body are hardened to resist damage from brinelling and mechanical shock. The 6600 Series' rugged construction makes this product a great choice for a wide range of applications.

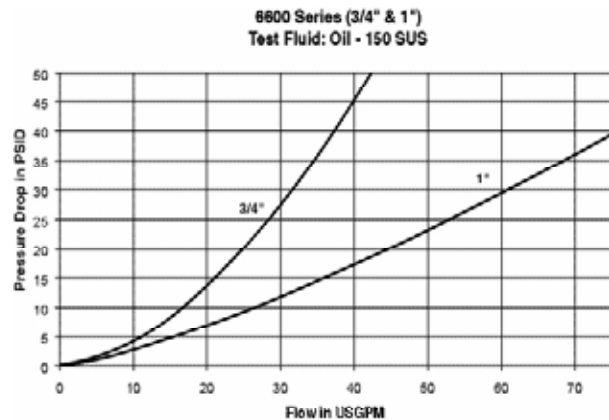
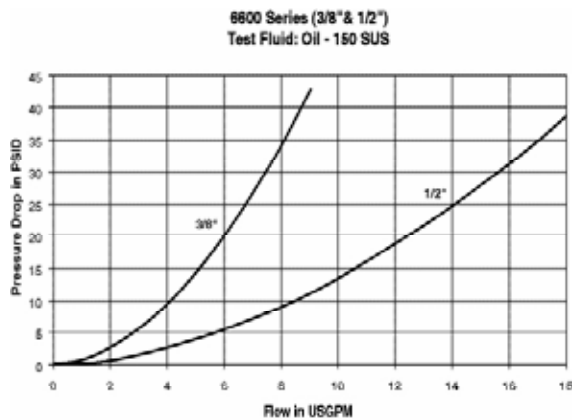
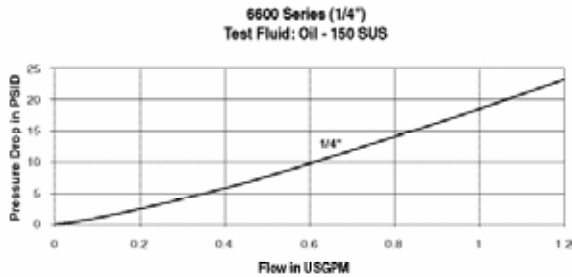
- ISO 7241-1 Series A standard
- Steel construction
- Sizes: 1/4" to 1"
- Rated pressure up to 5,000 PSI
- Temperature range: -40 to +250° F
- Standard seal material is nitrile
- Port configurations: NPTF & SAE ORB



Specifications

Body Size (in.)	1/4	3/8	1/2	3/4	1
Rated Pressure (PSI)	5000	4000	4000	4000	4000
Rated Flow (GPM)	0.8	6	12	28	50

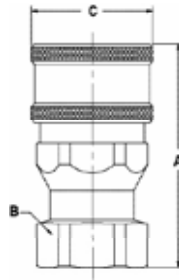
Performance



6600 Series

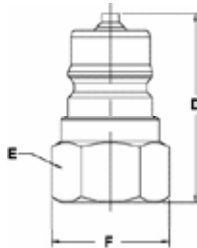
General Purpose Quick Couplings

Couplers Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	6601-2-4	.125-27 NPTF	1.85	.88	1.08
1/4	6601-4-4	.250-18 NPTF	1.85	.88	1.08
3/8	6601-6-6	.375-18 NPTF	2.18	1.06	1.27
3/8	6608-6-6	.562-18 ORB	2.18	1.06	1.27
1/2	6601-8-10	.500-14 NPTF	2.75	1.25	1.52
1/2	6601-12-10	.750-14 NPTF	2.88	1.38	1.52
1/2	6608-8-10	.750-16 ORB	2.74	1.25	1.52
1/2	6608-10-10	.875-14 ORB	2.79	1.25	1.52
1/2	6608-12-10	1.062-12 ORB	3.01	1.38	1.52
3/4	6601-12-12	.750-14 NPTF	3.36	1.62	1.90
3/4	6608-12-12	1.062-12 ORB	3.35	1.62	1.90
1	6601-16-16	1.000-11.5 NPTF	4.11	1.88	2.14
1	6608-16-16	1.312-12 ORB	4.11	1.88	2.14

Nipples Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/4	6602-2-4	.125-27 NPTF	1.41	.56	.65
1/4	6602-4-4	.250-18 NPTF	1.41	.75	.87
3/8	6602-6-6	.375-18 NPTF	1.63	.88	1.01
3/8	66010-6-6	.562-18 ORB	1.63	.88	1.01
1/2	6602-8-10	.500-14 NPTF	2.08	1.06	1.23
1/2	6602-12-10	.750-14 NPTF	2.30	1.38	1.59
1/2	66010-8-10	.750-16 ORB	2.08	1.06	1.23
1/2	66010-10-10	.875-14 ORB	2.08	1.12	1.30
1/2	66010-12-10	1.062-12 ORB	2.30	1.38	1.59
3/4	6602-12-12	.750-14 NPTF	2.55	1.38	1.59
3/4	66010-12-12	1.062-12 ORB	2.55	1.38	1.59
1	6602-16-16	1.000-11.5 NPTF	3.10	1.62	1.88
1	66010-16-16	1.312-12 ORB	3.10	1.62	2.17

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Cap Part No.
	Rubber	Rubber
1/4	H1-65M	H1-66M
3/8	TR-37	TR-37
1/2	5205-4M	5209-4M
3/4	6659-12M	6657-12M
1	6659-16M	6657-16M

4000 Series

General Purpose Quick Couplings

The 4000 Series is an industry proven double shut-off coupler. This general purpose series features a rugged design for use in heavy duty hydraulic applications.

It is available in either a ball or poppet valve design. Critical parts are induction hardened for durability and for a long service life. A dependable ball locking mechanism reduces hose twisting. This product features a single acting sleeve, and must be retracted when connecting and disconnecting.

These couplers are the ideal choice for industrial, agricultural, mobile and other demanding applications.

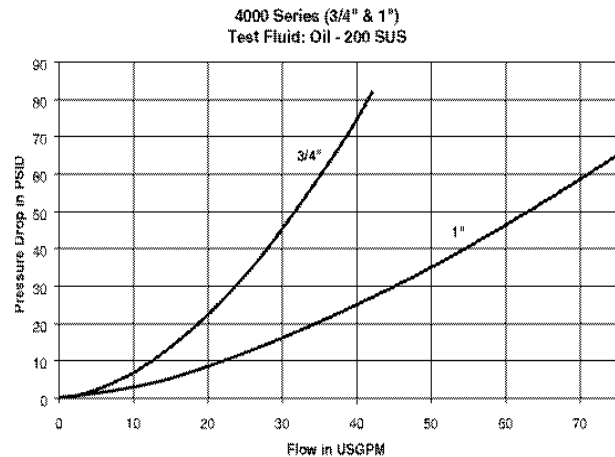
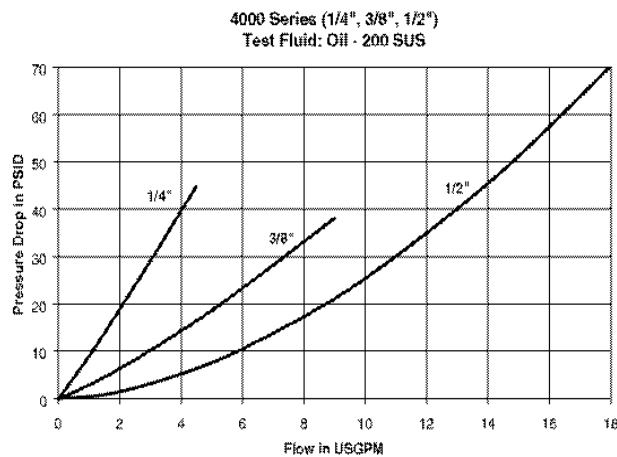
- Flows rated from 3 to 50 GPM
- Rated to 3000 PSI for all sizes
- Temperature range:
-40 to +250° F
- Available from 1/4" to 1"
- Single Acting Sleeve
- Nitrile Seals



Specifications

Body Size (in.)	1/4	3/8	1/2	3/4	1
Rated Pressure (PSI)	3000	3000	3000	3000	3000
Rated Flow (GPM)	3	6	12	28	50

Performance

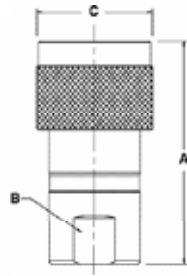


4000 Series

General Purpose Quick Couplings

Couplers

Female Thread

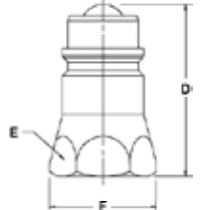
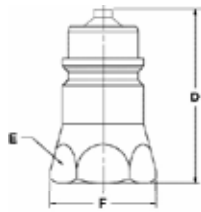


Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
1/4	4050-2P	.250-18 NPTF	2.18	0.88	1.06
1/4	4050-2P-T8M	.750-16 ORB (Male)	1.80	0.88	1.06
1/4	4050-T6	.562-18 ORB	2.18	0.88	1.06
1/4	4050P-T6**	.562-18 ORB	2.43	0.81	1.33
3/8	4050-3P	.375-18 NPTF	2.31	0.94	1.33
1/2	4050-4	.500-14 NPTF	2.60	1.06	1.52
1/2	4050-4P	.500-14 NPTF	2.60	1.06	1.52
1/2	4050-5	.750-14 NPTF	2.69	1.13	1.52
1/2	4050-5P	.750-14 NPTF	2.69	1.13	1.52
1/2	4050-15	.750-16 ORB	2.81	1.06	1.52
1/2	4050-15P	.750-16 ORB	2.81	1.06	1.52
1/2	4050-16	.875-14 ORB	2.75	1.06	1.52
1/2	4050-16P	.875-14 ORB	2.75	1.06	1.52
1/2	4050-29	.500-14 BSPP	2.68	1.06	1.52
3/4	4150-5	.750-14 NPTF	3.50	1.38	1.90
1	4050-6P	1.000-11.5 NPTF	3.84	1.63	2.08

* P in part number designates Poppet design ** Push-to-Connect design.

Nipples

Female Thread

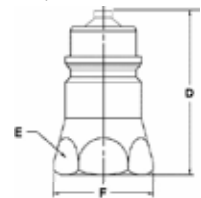


Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/4	4010-2P	.250-18 NPTF	1.39	0.75	0.87
1/4	4010-T6	.562-18 ORB	1.49	0.75	0.87
3/8	4010-3P	.375-18 NPTF	1.50	0.94	1.08
1/2	8010-4	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-4P	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-5	.750-14 NPTF	2.14	1.25	1.44
1/2	8010-5P	.750-14 NPTF	2.14	1.25	1.44
1/2	8010-15	.750-16 ORB	2.06	1.06	1.23
1/2	8010-15P	.750-16 ORB	2.06	1.06	1.23
1/2	8010-16	.875-14 ORB	2.05	1.06	1.23
1/2	8010-16P	.875-14 ORB	2.05	1.06	1.23
1/2	8010-29	.500-14 BSPP	1.95	1.06	1.18
3/4	4110-5	.750-14 NPTF	1.81	1.31	1.52
1	4010-6P	1.000-11.5 NPTF	2.79	1.63	1.88

* P in part number designates Poppet design; without P designates ball valve

Nipples

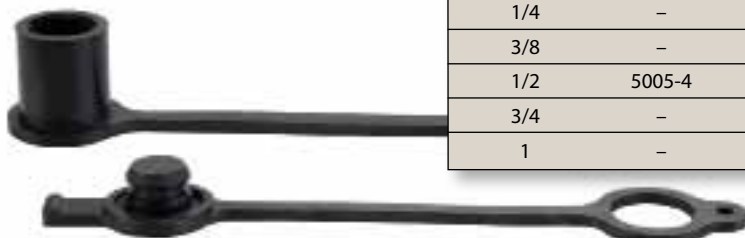
(Connect-Under-Pressure)



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4P-DC	.500-14 NPTF	1.80	1.06	1.16
1/2	8010-15P-DC	.750-14 ORB	1.80	1.06	1.16

* P in part number designates Poppet design; without P designates ball valve

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Plug Part No.	Dust Cap Part No.	Dust Cap Part No.
			Steel	Rubber
1/4	-	5205-2M	-	5209-2M
3/8	-	5205-3M	-	5209-3M
1/2	5005-4	5205-4M	5509-4	5209-4M
3/4	-	5205-5M	-	5209-5M
1	-	5205-6M	-	5209-6M

4200 Series

General Purpose Quick Couplings

The 4200 Series is a double shut-off coupler designed for bracket mounted break-away applications. This series features a rugged double acting sleeve, which when bracket mounted allows easy one handed push/pull operation.

It is available in either a ball or poppet valve design. Critical parts are induction hardened for durability and for a long service life. A dependable ball locking mechanism reduces hose twisting.

These couplers are the ideal choice for industrial, agricultural, mobile and other demanding breakaway applications.

- Flows rated from 6 to 12 GPM
- Rated to 3000 PSI for all sizes
- Available in 3/8" & 1/2"
- Temperature range: -40 to +250° F
- Double Acting Sleeve
- Nitrile (Buna N) Seals
- Requires clamp mounting

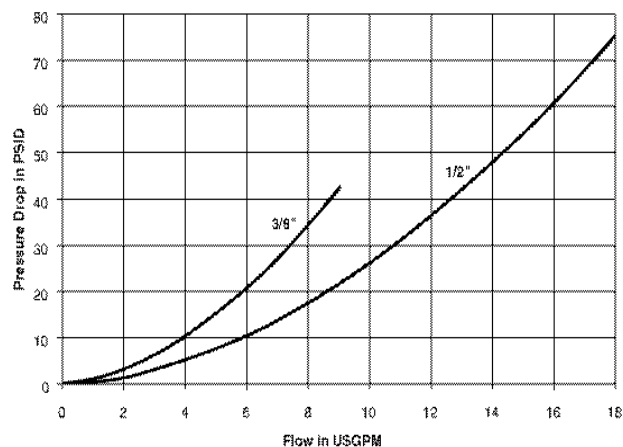


Specifications

Body Size (in.)	3/8	1/2
Rated Pressure (PSI)	3000	3000
Rated Flow (GPM)	6	12

Performance

4200 Series (3/8" & 1/2")
Test Fluid: Oil - 200 SUS



4200 Series

General Purpose Quick Couplings

Couplers

Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
3/8	4250-3P	.375-18 NPTF	2.31	0.81	1.31
1/2	4250-4	.500-14 NPTF	2.68	0.94	1.50
1/2	4250-4P	.500-14 NPTF	2.68	0.94	1.50
1/2	4250-15	.750-16 ORB	2.68	0.94	1.50
1/2	4250-15P	.750-16 ORB	2.68	0.94	1.50

* P in part number designates Poppet design

Nipples

Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
3/8	4010-3P	.375-18 NPTF	1.60	0.94	1.31
1/2	8010-4	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-4P	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-15	.750-16 ORB	2.06	1.06	1.23
1/2	8010-15P	.750-16 ORB	2.06	1.06	1.23

* P in part number designates Poppet design; without P designates ball valve

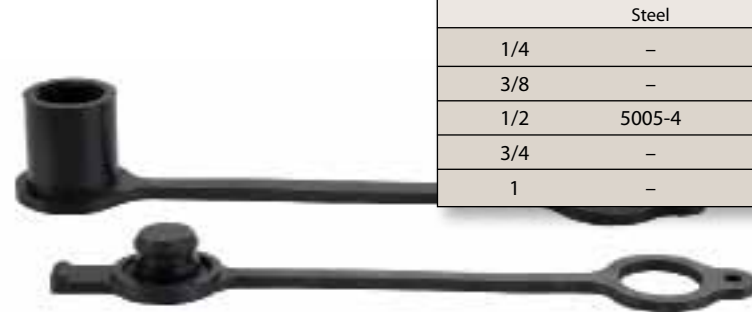
Nipples

(Connect-Under-Pressure)



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4P-DC	.500-14 NPTF	1.80	1.06	1.16
1/2	8010-15P-DC	.750-14 ORB	1.80	1.06	1.16

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Plug Part No.	Dust Cap Part No.	Dust Cap Part No.
1/4	–	5205-2M	–	5209-2M
3/8	–	5205-3M	–	5209-3M
1/2	5005-4	5205-4M	5509-4	5209-4M
3/4	–	5205-5M	–	5209-5M
1	–	5205-6M	–	5209-6M

- construction and agricultural equipment
- skid steer loaders, mini excavators, hydraulic attachments
- utility vehicles
- fork lifts, aerial lifts

FEM Series

Non-Spill Quick Couplings

Parker FEM Series couplings are manufactured to meet the stringent design and pressure requirements of ISO 16028. The FEM two-piece modular design also facilitates a wide variety of port options. As with all Parker non-spill designs, the flush-face valving virtually eliminates hydraulic spillage and limits air inclusion upon connection. The FEM Series is ideal for applications where global interchangeability is important.

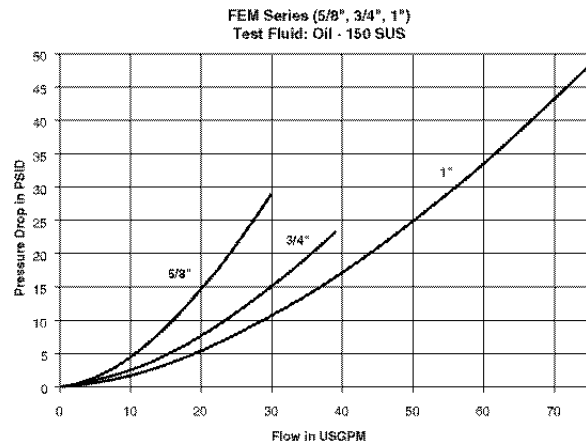
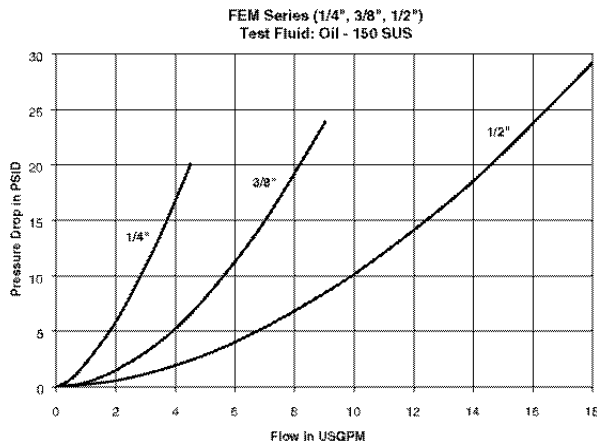
- ISO 16028 global standard
- Steel construction
- Sizes: 1/4" to 1"
- Rated pressure up to 4568 PSI (315 bar)
- Temperature range: -40 to +250° F
- Standard seal material is nitrile
- Port configurations: NPTF & UNF



Specifications

Body Size (in.)	1/4	3/8	1/2	5/8	3/4	1
Rated Pressure (PSI)	4568	3625	3625	3625	3625	2900
Rated Flow (GPM)	3	6	12	20	26	50
Temperature Range (std.seals)	-40 to +250° F					
Spillage (ML) (max. per disconnect)	0.015	0.015	0.020	0.030	0.150	0.200
Air Inclusion (ML) (max. per connect)	0.020	0.020	0.070	0.070	0.100	0.150

Performance



FEM Series

Non-Spill Quick Couplings

Couplers



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	FEM-251-4FP-NL	.250-18 NPSF	1.96	1.00	1.06
1/4	FEM-251-6FO-NL	.562-18 UNF	2.08	1.00	1.06
3/8	FEM-371-6FP-NL	.375-18 NPSF	2.89	1.06	1.19
3/8	FEM-371-8FO-NL	.750-16 UNF	2.89	1.06	1.19
1/2	FEM-501-8FP-NL	.500-14 NPSF	3.04	1.06	1.19
1/2	FEM-501-10BMS-NL	1.000-14 UNS	4.02	1.38	1.58
1/2	FEM-501-10BMF-NL	.875-14 UNF	4.03	1.38	1.58
1/2	FEM-501-10FO-NL	.875-14 UNF	3.04	1.25	1.58
1/2	FEM-501-12FO-NL	1.062-12 UN	3.24	1.38	1.58
5/8	FEM-621-12FO-NL	1.062-12 UNF	3.70	1.50	1.70
3/4	FEM-751-12FP-NL	.750-14 NPSF	3.95	1.75	1.95
3/4	FEM-751-12FO-NL	1.062-12 UNF	3.95	1.75	1.95
1	FEM-1001-16FP-NL	1.000-11.5 NPSF	4.21	2.00	2.25
1	FEM-1001-16FO-NL	1.312-12 UNF	4.21	2.00	2.25

Nipples



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/4	FEM-252-4FP	.250-18 NPSF	1.71	1.00	1.06
3/8	FEM-372-6FP	.375-18 NPSF	2.48	1.06	1.16
3/8	FEM-372-8FO	.750-16 UNF	2.48	1.06	1.16
1/2	FEM-502-8FP	.500-14 NPSF	2.85	1.38	1.50
1/2	FEM-502-10FO	.875-14 UNF	2.85	1.38	1.50
1/2	FEM-502-10BMS	1.000-14 UNS	3.84	1.38	1.50
1/2	FEM-502-10BMF	.875-14 UNF	3.85	1.38	1.50
1/2	FEM-502-12FO	1.062-12 UN	3.05	1.38	1.50
5/8	FEM-622-12FO	1.062-12 UN	3.09	1.50	1.65
3/4	FEM-752-12FP	.750-14 NPSF	3.38	1.75	1.94
3/4	FEM-752-12FO	1.062-12 UN	3.38	1.75	1.94
1	FEM-1002-16FP	1.000-11.5 NPSF	3.85	2.00	2.25
1	FEM-1002-16FO	1.312-12 UN	3.85	2.00	2.25

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Cap Part No.
	Rubber	Rubber
1/4	FR-25	FR-25
3/8	NR-50	NR-37
1/2	FR-501	FR-502
3/4	FR-751	FR-752
1	FR-1001	

Standard Port Configurations

FP - Female Pipe Thread
 FO - Female Straight Thread
 BMF - Bulkhead Male Flare 37° JIC
 BMS - Bulkhead Male Seal-Iok
 Other fitting port configurations available upon request.

- construction and agricultural equipment
- skid steer loaders, mini excavators, hydraulic attachments
- utility vehicles
- fork lifts, aerial lifts

IF Series

Non-Spill Connect Under Pressure Quick Couplings

The IF Series Pressure Eliminator complements our standard FEM Series product offering. This series meets the ISO 16028 specifications, while providing a connect-under-pressure feature.

The unique integrated Pressure Eliminator valve makes it possible to complete a connection under residual pressure up to 2900 PSI.

- ISO 16028
- Steel construction
- Sizes from 1/4" to 1"
- Pressure rated up to 4630 PSI
- Temperature range: -40 to +250° F
- Standard seal material is nitrile
- Port configurations: NPTF, UNF & BSPP
- Sleeve lock is standard

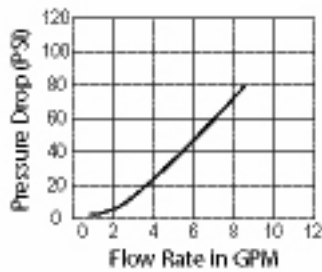


Specifications

Body Size (in.)	1/4	3/8	1/2	5/8	3/4	1
Rated Pressure (PSI)	4630	3675	3675	3675	3675	2940
Rated Flow (GPM)	3	6	12	20	26	50
Temperature Range (std.seals)	-40 to +250° F					
Spillage (ML) (max. per disconnect)	0.015	0.015	0.020	0.030	0.150	0.200
Air Inclusion (ML) (max. per connect)	0.020	0.020	0.070	0.070	0.100	0.150

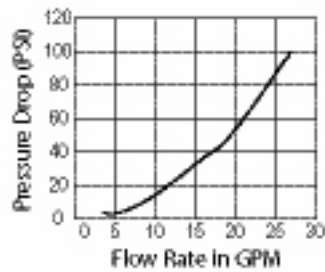
IF Series (1/4")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



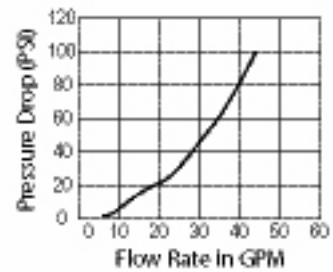
IF Series (3/8")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



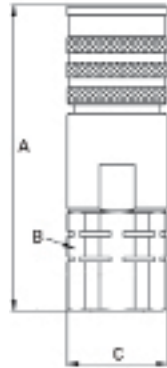
IF Series (1/2")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



IF Series

Non-Spill Connect Under Pressure Quick Couplings



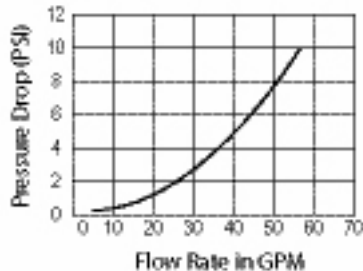
Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	IF2511N	1/4 - 18 NPTF	3.58	1.06	1.16
1/4	IF2511	G1/4 (BSPP)	3.58	1.06	1.16
1/4	IF2511U	9/16 - 18 UNF	3.58	1.06	1.16
3/8	IF3811N	3/8 - 18 NPTF	3.90	1.18	1.26
3/8	IF3811	G 3/8 IG (BSPP)	3.90	1.18	1.26
3/8	IF3811U	3/4 - 16 UNF	4.00	1.18	1.26
1/2	IF5011N	1/2 - 14 NPTF	4.55	1.57	1.69
1/2	IF5011	G 1/2 (BSPP)	4.41	1.57	1.69
1/2	IF5011U	7/8 - 14 UNF	4.51	1.57	1.69
5/8	IF6311	G 3/4 (BSPP)	4.61	1.57	1.69
3/4	IF7511N	3/4 - 14 NPTF	5.17	1.97	2.12
3/4	IF7511	G 3/4 (BSPP)	5.11	1.97	2.12
3/4	IF7511U	1-1/16 - 12 UNF	5.27	1.97	2.12
1	IF10011N	1 - 11.5 NPTF	5.66	2.16	2.36
1	IF10011	G 1 (BSPP)	5.63	2.16	2.36



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	IF2521N	1/4 - 18 NPTF	2.91	1.06	1.16
1/4	IF2521	G 1/4 (BSPP)	2.91	1.06	1.16
1/4	IF2521U	9/16 - 18 UNF	2.91	1.06	1.16
3/8	IF3821N	3/8 - 18 NPTF	3.42	1.18	1.26
3/8	IF3821	G 3/8 IG (BSPP)	3.42	1.18	1.26
3/8	IF3821U	3/4 - 16 UNF	3.54	1.18	1.26
1/2	IF5021N	1/2 - 14 NPTF	4.00	1.57	1.69
1/2	IF5021	G 1/2 (BSPP)	3.86	1.57	1.69
1/2	IF5021U	7/8 - 14 UNF	3.96	1.57	1.69
5/8	IF6321	G 3/4 (BSPP)	3.98	1.57	1.69
5/8	IF6321U	1-1/16 - 12 UNF	4.17	1.57	1.69
3/4	IF7521N	3/4 - 14 NPTF	4.53	1.97	2.12
3/4	IF7521	G 3/4 (BSPP)	4.49	1.97	2.12
3/4	IF7521U	1-1/16 - 12 UNF	4.63	1.97	2.12
1	IF10021N	1 - 11.5 NPTF	5.01	2.16	2.36
1	IF10021	G 1 (BSPP)	4.96	2.16	2.36
1	IF10021U	1-5/16 - 12 UNF	5.01	2.16	2.36

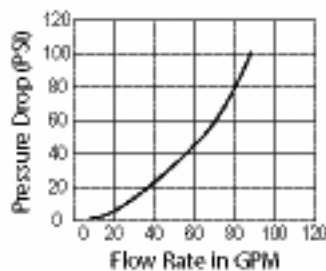
IF Series (5/8")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



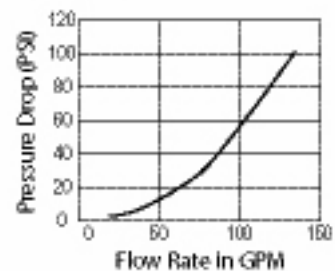
IF Series (3/4")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



IF Series (1")

Viscosity for 32cSt at 104°F as per ISO 7241/2-2000



- truck and off-highway
- mobile cooling systems
- industrial and injection mold cooling

FA Series

Non-Spill Aluminum Quick Couplings

Parker FA couplings are designed to be a lightweight, corrosion resistant alternative to our traditional non-spill couplers.

The simple push-to-connect operation is quick and saves valuable time when mating fluid lines. As with all Parker flush-face designs, the non-spill feature eliminates fluid spillage and minimizes air inclusion when connecting or disconnecting the couplings. FA Series' modular design enables wide variations in fitting options to meet each customer's needs.

Parker's FA Series is ideal for use wherever lightweight construction and high corrosion resistance are needed.

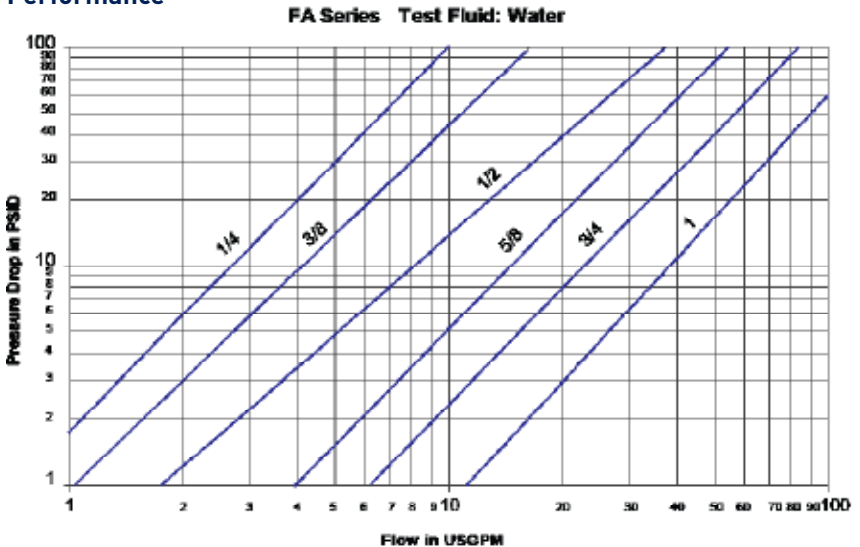


- **Lightweight, corrosion-resistant aluminum construction (up to 60% lighter than comparable steel couplings)**
- **Modular two-piece design allows for a wide variety of end configurations**
- **Flush face valving with positive stop to prevent flow checking**
- **Suitable for both pressure and vacuum applications**
- **Smooth flow path with low pressure drop**
- **Anodized coating provides a hard surface and color options to help identify mating lines or seal materials (consult QCD for availability)**

Specifications

Size	Rated Operating Pressure		Rated Flow		Pressure Drop @ Rated Flow	
	Inch	Bar	PSI	L/min	GPM	Bar
1/4	137.9	1000	12	3	0.82	12.0
3/8	137.9	1000	23	6	1.15	16.7
1/2	137.9	1000	45	12	1.25	18.1
5/8	137.9	1000	72	19	1.00	14.5
3/4	137.9	1000	98	26	1.09	16.0
1	68.9	1000	189	50	1.30	18.8

Performance

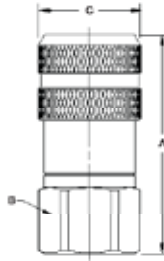


FA Series

Non-Spill Aluminum Quick Couplings

Couplers

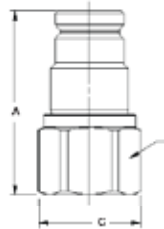
Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	FA-251-4FP	.250-18 NPSF	1.78	1.00	1.06
3/8	FA-371-6FP	.375-18 NPSF	2.83	1.06	1.30
3/8	FA-371-6FO	.562-18 UNF	2.83	1.06	1.30
1/2	FA-501-8FP	.500-14 NPSF	2.87	1.38	1.50
1/2	FA-501-8FO	.750-16 UNF	2.87	1.38	1.50
5/8	FA-621-10FO	.875-14 UNF	3.62	1.50	1.63
3/4	FA-751-12FO	1.062-12 UN	4.20	1.75	1.94
1	FA-1001-16FP	1.000-11.5 NPSF	4.68	1.87	2.23
1	FA-1001-16FO	1.312-12 UN	4.68	1.87	2.23

Nipples

Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/4	FA-252-4FP	.250-18 NPSF	1.78	1.00	1.06
3/8	FA-372-6FP	.375-18 NPSF	2.55	1.06	1.16
3/8	FA-372-6FO	.562-18 UNF	2.55	1.06	1.16
1/2	FA-502-8FP	.500-14 NPSF	3.06	1.38	1.58
1/2	FA-502-8FO	.750-16 UNF	3.06	1.38	1.58
5/8	FA-622-10FO	.875-14 UNF	3.09	1.50	1.63
3/4	FA-752-12FO	1.062-12 UN	3.51	1.75	1.87
1	FA-1002-16FP	1.000-11.5 NPSF	3.73	1.87	2.06
1	FA-1002-16FO	1.312-12 UN	3.73	1.87	2.06

Dust Plugs & Caps



Body Size (in.)	Dust Plug Part No.	Dust Cap Part No.
	Rubber	Rubber
1/4	FR-25	FR-25
3/8	NR-50	NR-37
1/2	FR-501	FR-502
3/4	FR-751	FR-752
1	FR-1001	

Materials of Construction:

Body	Aluminum with blue anodize coating
Valve	Aluminum with blue anodize coating
Seals	Fluorocarbon (standard) other options are available
Backup Washers	PTFE
Springs	Stainless steel
Lock Rings	Stainless steel
Locking Balls	Stainless steel

- chemical transfer
- bulk tank transfer
- water systems

PF Series

Non-Spill, Thermoplastic, Chemical Transfer Couplings

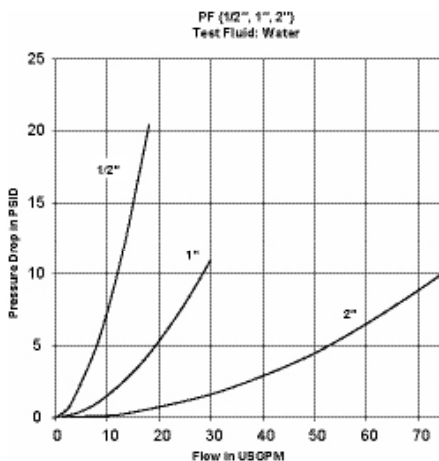
These Dry Disconnect couplings virtually eliminate fluid loss upon disconnection and are designed to help meet the demand for closed system transfer and dispensing of chemicals and fluids with minimal environmental contamination. They can be used with concentrated or diluted industrial chemicals, fertilizers, herbicides, insecticides, fungicides or pesticides when transferring from bulk storage tanks, returnable containers, applicators, etc.

The PF Series 2" body size is ideal for large bulk transfer of fluids and eliminating fluid spillage when connecting and disconnecting.

- **Rugged Glass filled Polypropylene construction for chemical compatibility and reduced cost**
- **Push-to-connect design**
- **Flush face valves exhibit minimal spillage upon connect or disconnect and air inclusion on connect, and enables ease of cleaning**
- **PTFE coated Fluorocarbon tank gasket for improved chemical compatibility**
- **1" coupler has non-wetted springs**



Performance



Specifications

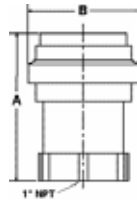
Body Size	1/2"	1"	2"
Materials:			
Body		Polypropylene	
Springs		316 Stainless Steel	
Seals		Fluorocarbon*	
Rated Pressure (at 68° F)	100 PSI	60 PSI	100 PSI
Rated Flow	12 GPM	20 GPM	50 GPM
Pressure Drop at Rated Flow	11.3 PSI	3.4 PSI	4 PSI
Force to Connect	32 lbs.	41 lbs.	54 lbs.
Force to Disconnect	12 lbs.	17 lbs.	17 lbs.
Operating Temp.	+40°F to +140°F		
Storage Temp.	-20°F to +140°F		
Maximum Spillage per Disconnect	0.14 ml .01 cu. in.	1 ml .06 cu. in. (1 cc)	9 ml .5 cu. in.
Vacuum Rating	27.4 Hg	Contact Factory	Contact Factory

* Also available in EPDM, Nitrile, Neoprene, Perfluoroelastomer

PF Series

Non-Spill, Thermoplastic, Chemical Transfer Couplings

Couplers Female Thread



Body Size (in.)	Part Number	Port* Thread	Dimensions (inches)		
			Overall Length	Largest Diameter	Wrench Flats
			A	B	
1/2	PF-501-8FP	1/2" NPT	3.02	1.88	1.38
1	PF-1001-16FP	1" NPT	3.99	3.00	1.99
2	PF-2001-32FP	2" NPT	6.63	5.00	

* Female NPT Threads standard. For other port options, contact Division.

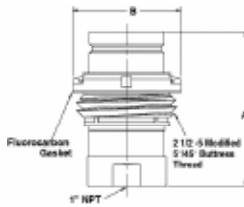
Nipples Female Thread



Body Size (in.)	Part Number	Port* Thread	Tank Mount Thread	Dimensions (inches)		
				Overall Length	Largest Diameter	Wrench Flats
				A	B	
1/2	PF-502-8FP	1/2" NPT	None	2.96	1.33	1.24
1	PF-1002-16FP	1" NPT	None	3.92	2.20	1.87
2	PF-2002-32FP	2" NPT	None	5.71	3.55	

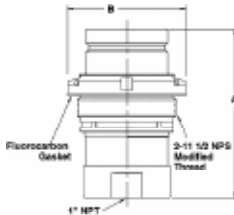
* Female NPT Threads standard. For other port options, contact Division.

Nipples - Tank Mount Female Thread



Body Size (in.)	Part Number	Port* Thread	Tank Mount Thread	Dimensions (inches)		
				Overall Length	Largest Diameter	Wrench Flats
				A	B	
1	PF-1002-32MB	1" NPT	Modified Buttress	3.92	2.75	1.87

* Female NPT Threads standard. For other port options, contact Division.



Body Size (in.)	Part Number	Port* Thread	Tank Mount Thread	Dimensions (inches)		
				Overall Length	Largest Diameter	Wrench Flats
				A	B	
1	PF-1002-32MP	1" NPT	Modified NPS	3.92	2.75	1.87

* Female NPT Threads standard. For other port options, contact Division.

Dust Plugs & Caps



Body Size (in.)	Coupler Dust Cap Part No.	Nipple Dust Cap Part No.	Material
1/2	FR-501	FR-502	Synthetic Rubber
1	-	PFR-1002	Ethylene Propylene
1	-	PFR-1002-NS*	Ethylene Propylene

* For use with Tank Mount Nipples

8200 Series

Connect Under Pressure Quick Couplings

The 8200 Series is a double shut-off, connect-under-pressure coupler designed for bracket mounted break-away applications. The valve design permits connection while the coupler, nipple, or both are under pressure.

This series features a rugged double acting sleeve, that when bracket mounted will allow easy one handed push/pull operation. The 8200 Series couplers will connect with all ISO-5675 male tips.

These couplers are the ideal choice for industrial, agricultural, mobile and other demanding break-away applications.

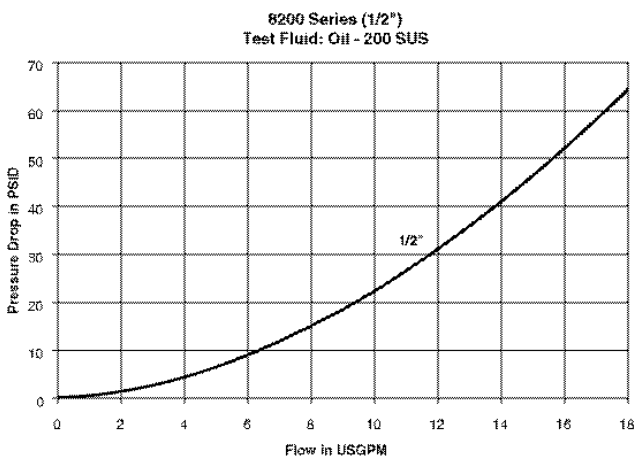
- Connects with ISO 5675 Tips
- Connect under pressure (both sides)
- Temperature range: -40 to +212° F
- Rated to 3000 PSI for all sizes
- 1/2" body size only
- Double Acting Sleeve
- Nitrile (Buna N) Seals
- Requires clamp mounting



Specifications

Body Size (in.)	1/2
Rated Pressure (PSI)	3000
Rated Flow (GPM)	12

Performance



8200 Series

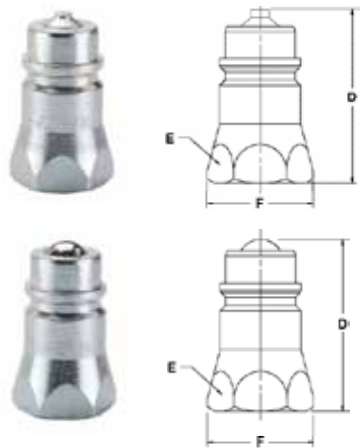
Connect Under Pressure Quick Couplings

Couplers Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
1/2	8250-4	.500-14 NPTF	3.29	0.87	1.50
1/2	8250-15	.750-16 ORB	3.29	0.87	1.50
1/2	8250-16	.875-14 ORB	3.29	0.87	1.50

Nipples Female Thread



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-4P	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-15	.750-16 ORB	2.06	1.06	1.23
1/2	8010-15P	.750-16 ORB	2.06	1.06	1.23
1/2	8010-16	.875-14 ORB	2.05	1.06	1.23
1/2	8010-16P	.875-14 ORB	2.05	1.06	1.23

* P in part number designates Poppet design; without P designates ball valve

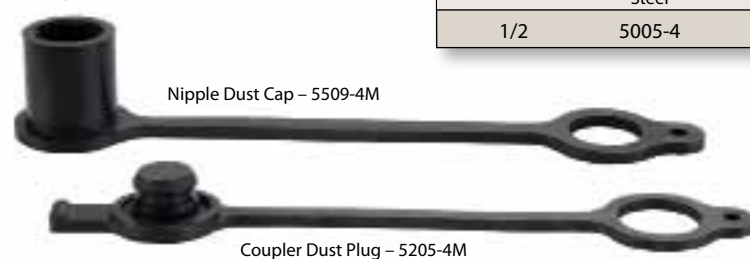
Nipples (Connect-Under-Pressure)



Body Size (in.)	Part Number*	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4P-DC	.500-14 NPTF	1.80	1.06	1.16
1/2	8010-15P-DC	.750-14 ORB	1.80	1.06	1.16

* P in part number designates Poppet design; without P designates ball valve

Dust Plugs & Caps



Nipple Dust Cap – 5509-4M

Coupler Dust Plug – 5205-4M

Body Size (in.)	Dust Plug Part No.	Dust Plug Part No.	Dust Cap Part No.	Dust Cap Part No.
	Steel	Rubber	Steel	Rubber
1/2	5005-4	5205-4M	5509-4	5209-4M

Steel Dust Cap and Dust Plug not shown

- test benches
- tractors
- implements
- ag attachments

9200 Series

Connect Under Pressure Quick Couplings

The 9200 Series is a double shut-off, lever-operated, connect-under-pressure coupler designed for bracket mounted break-away applications. The cam design permits connection while the coupler, nipple, or both are under pressure. The 9200 Series functionally replaces a double shut-off coupling and two high pressure ball valves.

This series features a rugged double acting sleeve, that when bracket mounted will allow easy one handed push/pull operation. The 9200 Series couplers will connect with all ISO-5675 male tips.

These couplers are the ideal choice for industrial, agricultural, mobile and other demanding connect-under-pressure breakaway applications.

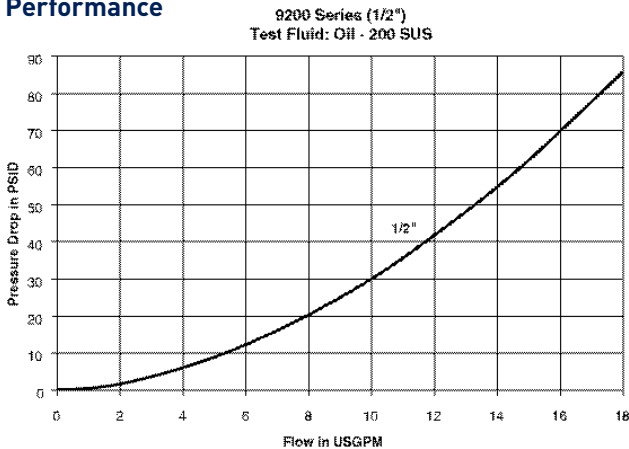
- Premier connect-under-pressure coupler
- Connect and disconnect at zero pressure
- Temperature range: -40 to +212° F
- Color coded levers for identification
- No back flow checking
- Accepts all ISO 5675 tips
- One handed operation
- For use with breakaway clamp



Specifications

Body Size (in.)	1/2
Rated Pressure (PSI)	3000
Rated Flow (GPM)	12

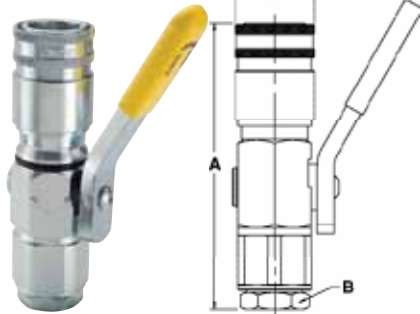
Performance



9200 Series

Connect Under Pressure Quick Couplings

Couplers Female Thread



Body Size (in.)	Part Number	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			A	B	C
1/2	9250-4-320	.500-14 NPTF	5.37	1.13	1.50
1/2	9250-6-320	.562-18 ORB	5.37	1.13	1.50
1/2	9250-15-320	.750-16 ORB	5.37	1.13	1.50
1/2	9250-16-320	.875-14 ORB	5.37	1.13	1.50
1/2	9250-334*	.562-18 ORB	5.37	1.13	1.50

* Mates with the 1/4" 60 Series Nipples.

Nipples Female Thread



Body Size (in.)	Part Number**	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-4P	.500-14 NPTF	1.95	1.06	1.23
1/2	8010-15	.750-16 ORB	2.06	1.06	1.23
1/2	8010-15P	.750-16 ORB	2.06	1.06	1.23
1/2	8010-16	.875-14 ORB	2.05	1.06	1.23
1/2	8010-16P	.875-14 ORB	2.05	1.06	1.23

* P in part number designates Poppet design; without P designates ball valve

Nipples (Connect-Under-Pressure)



Body Size (in.)	Part Number**	Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/2	8010-4P-DC	.500-14 NPTF	1.80	1.06	1.16
1/2	8010-15P-DC	.750-14 ORB	1.80	1.06	1.16

* P in part number designates Poppet design; without P designates ball valve

Dust Plugs & Caps



Body Size (in.)	Dust Cap Part No.
	Rubber
1/2	9507-4-1

Valves

Together We Can
Control the Flow



Multiple Hydraulic System Applications

Parker Check Valves are unidirectional flow control devices used primarily in hydraulic systems to eliminate potential damage caused by fluid back pressure. Offered in many configurations, Parker can satisfy most hydraulic system applications. Parker's in-line style check valves are available in a variety of sizes, shapes, pressure ratings, flow capacities and crack pressures.



Valves ©



Product Range:

- In-line check valves
- Thermal bypass valves
- Pressure/vacuum relief valves

- mobile construction
- agriculture
- transportation
- specialty
- engines

DT Series

Check Valves

The compact DT In-Line Series check valves offer the features of a compact one-piece body with pressures up to 5000 PSI. This one-piece body provides all of the dependable internal design features of the Parker check valve family with a smaller profile.

DT Series check valves are also offered with an optional orifice drilled into the valve to allow trapped air to escape or for pilot flow to actuate a system. Parker DT Series check valves offer a versatile and efficient option for all fluid applications



- Body sizes from 1/4" to 1 1/4"
- Crack pressures 0 - 200 PSI
- Orifice options upon request
- Standard seal material is nitrile with other options available
- Steel construction

Ordering Information

DT - * * * - * * * * - *



CRACK PRESSURE

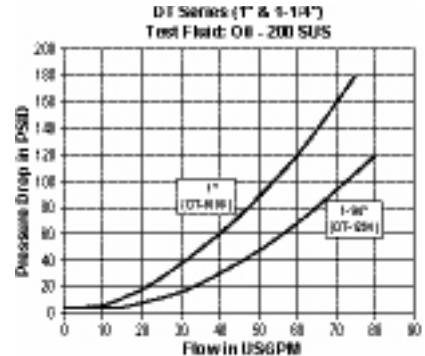
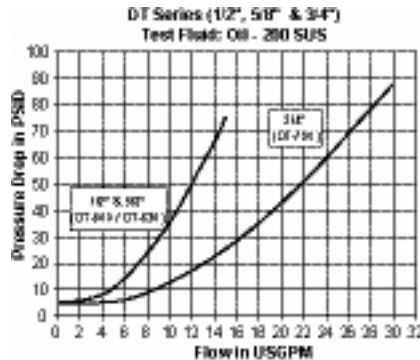
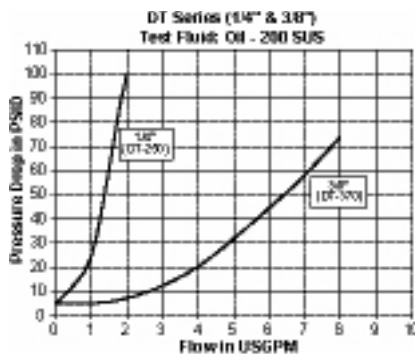
1 - 1 PSI

5 - 5 PSI

65 - 65 PSI

Other Crack Pressures up to 200 PSI in 5 PSI increments are available. Contact the Division for price and delivery on non-standard crack pressures

SERIES	SIZE	FITTING STYLE
250	1/4"	MPMF - Male Flare Inlet to Male Flare Outlet
370	3/8"	MPMO - Male Flare Inlet to Male O-Ring Boss Outlet
500	1/2"	MOMF - Male O-Ring Boss Inlet to Male Flare Outlet
620	5/8"	MOMS - Male O-Ring Boss Inlet to Male Face Seal Outlet
750	3/4"	MSMO - Male Face Seal Inlet to Male O-Ring Boss Outlet
1000	1"	MSMS - Male Face Seal Inlet to Male Face Seal Outlet
1250	1-1/4"	



- mobile construction
- agriculture
- transportation
- specialty
- engines

CV Series

Check Valves

Parker's ruggedly designed CV Series check valves are two-piece, 3000 PSI, in-line unidirectional valves. This larger body design allows lower pressure drop and high flow rates.

The CV Series features valve seats that resist damage from shock, surges, and contamination. The valve spring is isolated from the fluid stream to minimize flow turbulence.



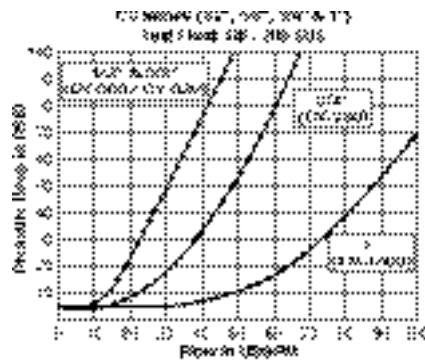
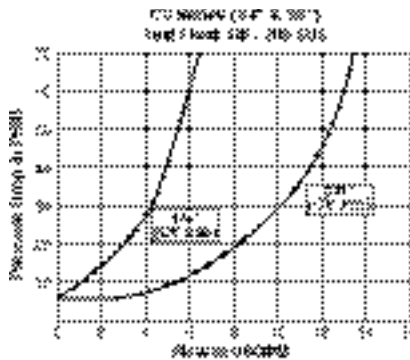
- Body sizes range from 1/4" to 1"
- Pressure ratings up to 3000 PSI
- Flow capabilities up to 100 gpm
- Crack pressures 0 -200 PSI

Ordering Information

CV-***-*****-*

SERIES	SIZE	FITTING STYLE
250	1/4"	FOFO - Female O-Ring Boss Inlet to Female O-Ring Boss Outlet
370	3/8"	MFMF - Male Flare Inlet to Male Flare Outlet
500	1/2"	MOMS - Male O-Ring Boss Inlet to Male Seal-Lok® Outlet
620	5/8"	FPPF - Female Pipe Inlet to Female Pipe Outlet
750	3/4"	
1000	1"	

CRACK PRESSURE
 5 - 5 PSI
 65 - 65 PSI
 Other Crack Pressures up to 200 PSI in 5 PSI increments are available. Contact the Division for price and delivery on non-standard crack pressures



- mobile construction
- agriculture
- transportation
- specialty
- engines

DC Series

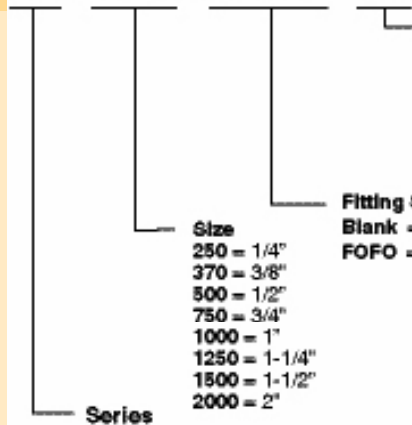
Check Valves

Rugged, and cost-competitive, the DC Series offers basic, one-piece, workhorse check valves - readily available and reasonably priced. They are in-line valves, available in sizes 1/4" to 2", with female ports, a pressure rating range up to 5000 PSI, a variety of standard and non-standard crack pressures, and flow capacities to 300 GPM.



Ordering Information

DC - * * * * - * * * * - * * *



Crack Pressure:

1 = 1 PSI

5 = 5 PSI

65 = 65 PSI

Other crack pressures up to 100 PSI (in 5 PSI increments) are available. Contact the Division for price and delivery on non-standard crack pressures.

Fitting Style:

Blank = Female pipe inlet to Female pipe outlet

FOFO = Female O-ring Boss inlet to Female O-ring Boss outlet

Size

250 = 1/4"

370 = 3/8"

500 = 1/2"

750 = 3/4"

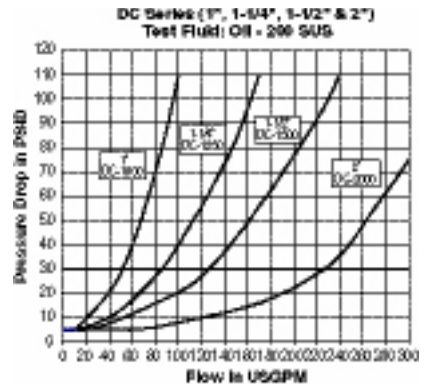
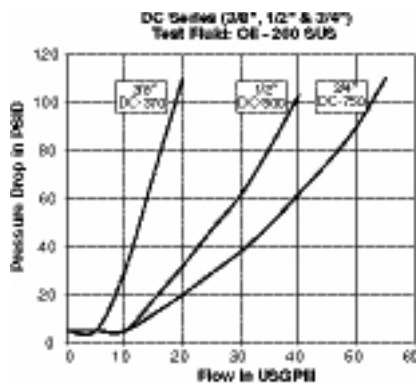
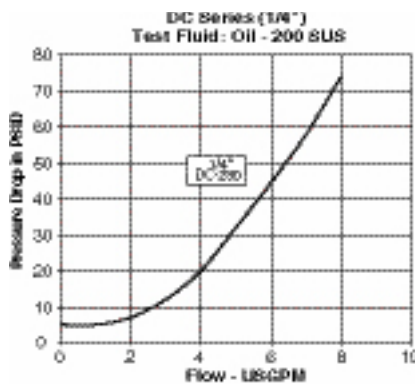
1000 = 1"

1250 = 1-1/4"

1500 = 1-1/2"

2000 = 2"

Series



- mobile construction
- agriculture
- transportation
- specialty
- engines

2600 Series

Swing Check Valves

Constructed of lightweight aluminum, the 2600 Series Swing Check Valve has a spring-loaded, trap-door style valve. The valve opens when system pressure approaches 1/2 PSI to permit full flow with low pressure drop. As system pressure is relieved, the valve closes, retaining fluids upstream.

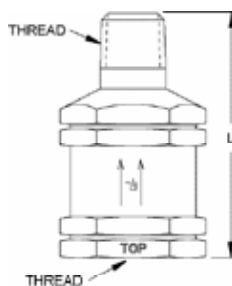
Parker's 2600 Series are in-line check valves designed especially for diesel and gasoline engine fuel lines. They are also used for externally mounted oil filters, and coolers, as well as transmission fluid lubrication lines. With a maximum of 1/2 PSI cracking pressure, these Swing Check Valves are useful in most low pressure air, liquid, or gas systems.

- **Lightweight, corrosion-resistant aluminum construction**
- **Available with 1/4" or 3/8" NPTF ports**
- **Standard nitrile or fluorocarbon seals**
- **1/2 PSI maximum crack pressure**
- **Trapdoor style valve permits full flow with low pressure drop**



Specifications

Crack Pressure	1/2 PSI Max
Weight	0.08 lbs.
Temperature Range	Nitrile: -40°F to 200°F (-40°C to 93°C) Fluorocarbon: -40°F to 400°F (-40°C to 204°C)
Static Burst Pressure	2600 PSI (179 bar)
Max Leakage	5 cc / 24 hours at 28" head



Part Number	Thread	Seal Material	Hex inch	L inch (mm)
2600	1/4 - 18NPTF	Nitrile	1-1/16	2.06 (52)
2676	1/4 - 18NPTF	Fluorocarbon	1-1/16	2.06 (52)
2650	3/8 - 18NPTF	Nitrile	1-1/16	2.12 (54)
2625	3/8 - 18NPTF	Fluorocarbon	1-1/16	2.12 (54)

- mobile construction
- heavy duty trucks
- ag equipment
- military vehicles
- off-highway
- mining and forestry equipment

TH Series

Thermal Bypass Valves

Parker's thermal bypass valve will modulate fluid temperature by shifting return line flow through the cooler, or bypassing it directly to the reservoir.

Additionally, an integral pressure relief function automatically releases excess pressure to the reservoir if the cooler becomes restricted, and the inlet pressure becomes excessive. Relief crack pressure settings range from 5 to 85 PSI.

These lightweight, aluminum valves are ideal for hydrostatic drive circuits requiring fast warm-up, controlled fluid temperatures, and low return line back pressure.

- **Lightweight, corrosion-resistant aluminum construction**
- **Available in five shift temperatures**
- **Integral relief valve to dump excessive inlet pressures to the reservoir**
- **250 PSI maximum operating pressure**
- **Up to 60 GPM flow rates**



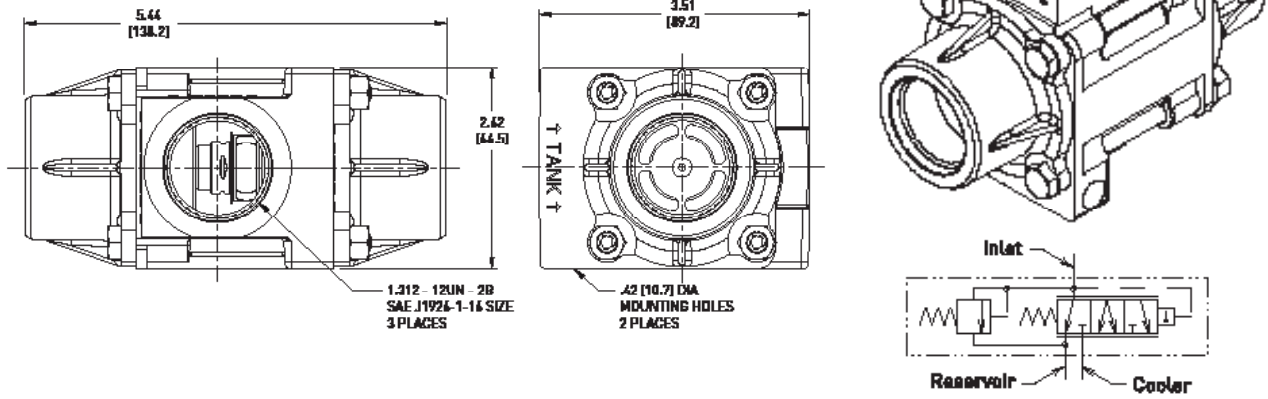
Specifications

Size	1 inch
Weight	2.00 lbs
Std. Shift Temperatures	100°F (38°C), 120°F (49°C), 140°F (60°C), 160°F (71°C), 180°F (82°C)
Full Shift Temperature (cooler port open)	Shift Temperature plus 25° F (14° C)
Relief Valve Setting	Up to 85 PSI (6 bar) in 5 PSI increments
Proof Pressure	300 PSI (21 bar)
Minimum Burst Pressure	Up to full shift temperature: 325 PSI (22 bar) Above full shift temperature: 600 PSI (41 bar)
Operating Temperature	Min.: -30° F (-34° C) Max: Shift temperature plus 75° F (24° C)
Max Flow Rate	60 GPM (227 l/m)

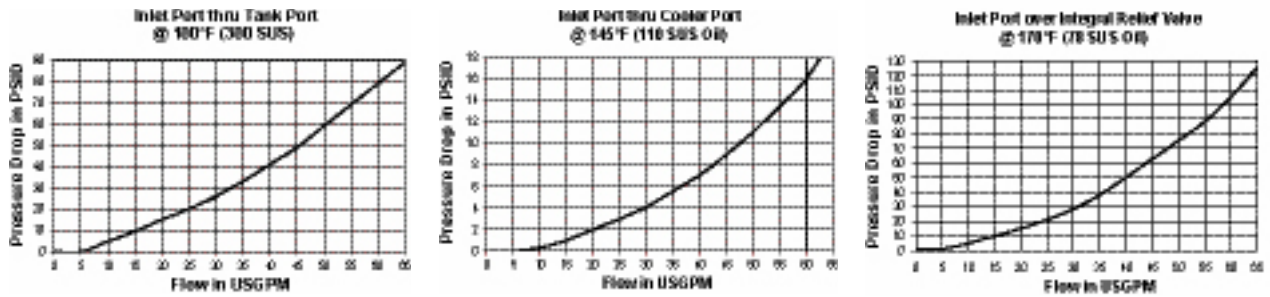
TH Series

Thermal Bypass Valves

Dimensions



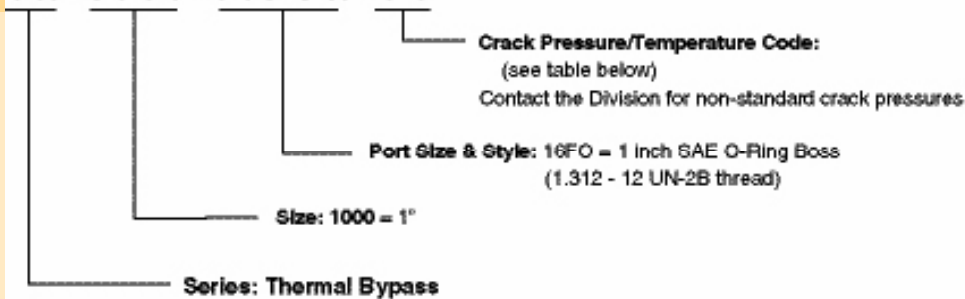
Pressure Drop (Mobil DTE 26 oil)



Note: Pressure drop shown is relief valve crack pressure until pressure drop curve increases above relief valve crack pressure.

Ordering Information

TH-1000-16FOH-**



Shift Temperature	Crack Pressure (PSI)																
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
100° F (38° C)	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
120° F (49° C)	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
140° F (60° C)	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
160° F (71° C)	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
180° F (82° C)	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97

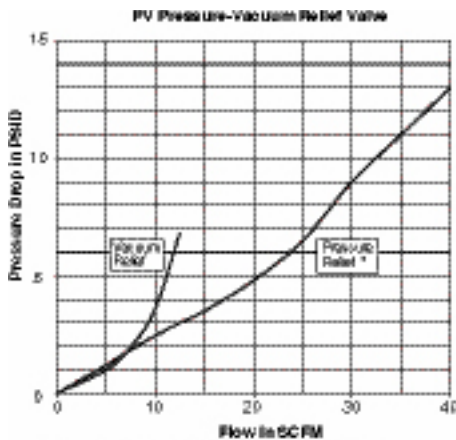
- mobile construction
- heavy duty trucks
- ag equipment
- military vehicles
- off-highway
- mining and forestry equipment

PV Series

Pressure/Vacuum Relief Valves

PV Series is an economical Pressure/Vacuum Relief Valve used to maintain positive pressure in hydraulic reservoirs. The large filter area makes this valve an ideal choice for use in heavily contaminated environments. The optional bayonet type mount allows the valve to be installed in the tank filler port, eliminating the need for an extra port. In this configuration, the valve also serves as a filler cap.

- Disposable spin-on automotive type, field replaceable filter (240 sq. inches)
- Several pressure relief settings
- Optional bayonet style allows mounting in filler port with valve also functioning as filler cap



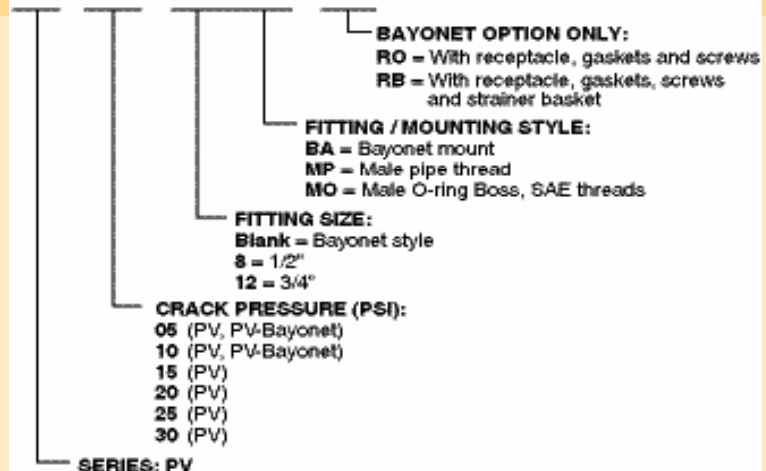
* Pressure drop in pressure relief valve rises to pressure until pressure no drop curve increases above pressure relief crack pressure.

Specifications

	PV Series	PV - Bayonet style
Filter Rating	10 micron, nominal (240 sq inches)	
Pressure Relief Setting	5 PSI through 30 PSI (in 5 PSI increments)	5 and 10 PSI
Vacuum Relief Setting	0.3 PSI	
Weight	1.0 lb	
Mounting	Male ORB, SAE threads Male pipe threads	Bayonet style with tank receptacle, gaskets & screws (optional strainer basket)
Replacement Filter	Part Number: 7312-009	

Ordering Information

PV - * * - * * * * - * *



- mobile construction
- heavy duty trucks
- ag equipment
- military vehicles
- off-highway
- mining and forestry equipment

H1/HM1 Series

Pressure/Vacuum Relief Valves

H1 Series Pressure/Vacuum Relief Valves are used to maintain positive pressure in hydraulic reservoirs. The compact size, reusable bronze filter and high flow characteristics make this valve a popular choice.

The HM1 Series offers the same features and characteristics as the H1 Series with the option of manual over ride. This feature allows the operator to relieve the reservoir pressure before opening the tank for refilling, inspection or servicing.

- Easy to remove, cleanable bronze filter
- High flow characteristics.
- Compact size
- Available with male pipe thread or male ORB threads
- Wide variety of pressure relief settings
- HM1 series has a manual pressure relief button



Specifications

Filter Rating	10 micron, nominal
Pressure Relief Setting	5 PSI through 50 PSI (in 5 PSI increments)
Vacuum Relief Setting	0.3 PSI

Ordering Information

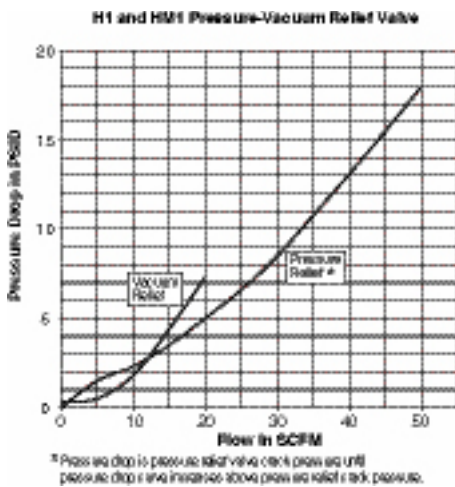
H * - * * - * * * *

FITTING STYLE:
 MP = Male pipe thread
 MO = Male O-ring Boss, SAE threads

FITTING SIZE:
 6 = 3/8"
 8 = 1/2"
 12 = 3/4"
 16 = 1"

CRACK PRESSURE (PSI):
 5 to 50
 (in 5 PSI increments)

SERIES:
 H1
 HM1 (with manual pressure relief button)



Swivels

Together, we can allow unrestricted movement.



Reduce hose twist.
Lengthen service life.

Parker Swivels allow 360° rotation under pressure in a wide range of hydraulic applications. They help extend the service life of flexible hydraulic lines by reducing stress and wear. Swivels prevent hose abrasion and aid in connecting articulating and static equipment lines.



Swivels



Swivel Product Range:

- In-Line and 90° configurations
- Full flow, pressure balanced designs
- Rated pressures up to 5000 PSI
- Various body and seal materials available

- lift trucks
- backhoes
- refuse trucks
- logging equipment
- construction equipment

PS Series Swivels

Increased Performance in a Smaller Package

The PS Series swivel combines the high quality and performance you expect from Parker with one of the most compact designs available today. They eliminate hydraulic hose twist, a leading cause of hose failure which leads to dangerous and expensive fluid leaks and unscheduled machine downtime. These flexible, in-line and 90° PS Series swivels have a bearing design that reduces damage from side loads and extends the service life of hydraulic components – saving both time and money.

Their innovative design and variety of port and seal options make the compact PS Series ideal for the most demanding, dynamic, high pressure applications.

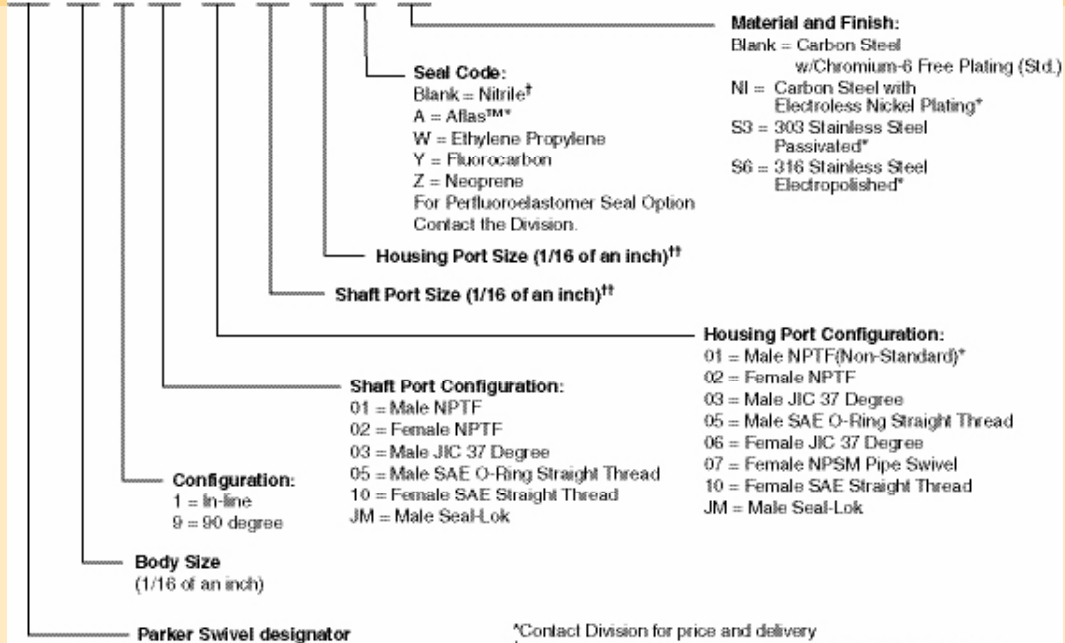


- Shorter overall length
- Full flow design minimizes pressure drop and increases performance
- Sealed bearing races help prevent contamination
- Induction hardened bearing races extend service life
- Wide range of sizes – 1/4" thru 2"
- Up to 5000 PSI
- Heavy duty design available
 - Unique three piece design
 - Polyurethane u-cup seal
 - Ball and needle bearings for greater resistance to side loads
- Repair kits available

Ordering Information

PS Part Number:

PS 16 1 02 02-16-16 Y-



*Contact Division for price and delivery

† On -24 and -32 sizes, Polyurethane U-Cup Seal is standard.

‡ For -20 Ports, -24 Body is used.

- hose reels
- palletizers
- scissors lifts

S Series Swivels

Pressure Balanced Performance in a Compact Design

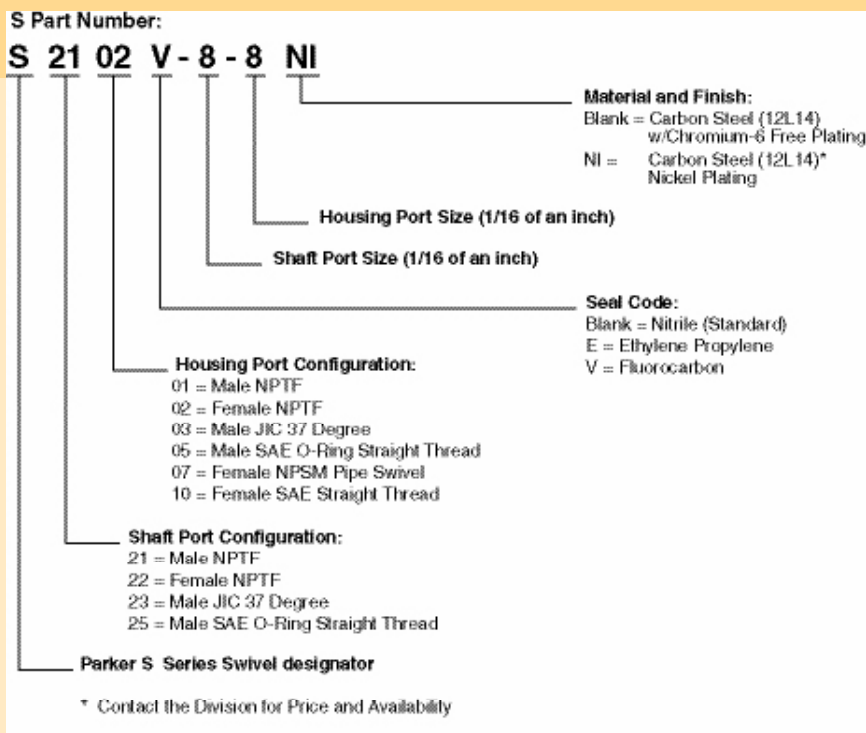
The pressure balanced design of the S Series swivel ensures that as pressures rise, there will not be a significant increase in torque - ensuring optimum performance up to 3000 PSI. The case hardened, forged bodies offer superior performance and durability in even the toughest applications. Parker's compact design helps to reduce hose twist, torque and stress caused by the movement of hydraulic components - the leading cause of hose failure resulting in costly leaks and equipment down time.

Over the life of your equipment, adding swivels to hose lines will significantly reduce repair and maintenance costs.



- Pressure balanced design - torque doesn't significantly increase with pressure
- Compact 90 ° design fits in tight areas
- One piece forged housing, no brazed joints
- Case hardened shaft improves strength and service life
- Web hole design maximizes flow and reduces media turbulence
- 1/4" through 1" body sizes rated to 3000 PSI
- Repair kits available

Ordering Information



SensoControl Industrial Products

Together We Can Monitor, Regulate and Automate Critical Processes



Vital System Control

SensoControl industrial sensors and controllers bring continuous measurement and control to hydraulic and pneumatic systems.

Designed and manufactured to the highest engineering standards, these highly accurate instruments feature solid state electronics, so there are no moving parts subject to damage from vibration or severe service applications.

Parker offers a complete line of products for pressure, temperature, and tank level condition monitoring.



Product Range:

- Pressure Sensors
- Explosion Proof Pressure Sensors
- Custom Pressure Sensors
- Temperature Sensors
- Pressure Controllers
- Temperature Controllers
- Level Controllers
- Level/Temperature Controllers



- wind turbines
- water technology
- heating systems
- climate control
- assembly packaging
- power generation
- pneumatic/industrial robotics

SensoControl

Industrial Sensors

Parker's SensoControl sensors are ideal for permanent installation in industrial and mobile hydraulic applications where continuous system monitoring is needed.

These precision engineered sensors are rugged in construction and deliver a high degree of dependability and performance with superb stability and resistance to interference.

- Pressure sensors
- Explosion resistant sensors
- Custom pressure sensors
- Temperature sensors





SCP01 Series Pressure Sensors

Designed for industrial application needs and is used for control, regulating and monitoring systems, when the requirement is for rapid pressure-dependent analogue signals.

- Stainless Steel Cell
- Small Size
- High Burst Pressure
- Resistant to Pressure Peaks
- Shock and Vibration Resistant
- Wide Media Stability
- High Linearity
- Long-term Stability



SCP-EX Series Explosion Resistant Pressure Sensors

For use in high risk areas where safety is a primary concern. They provide long-term stability and resistance to electrical interference in a compact design.

- Rugged and Reliable
- Stainless Steel
- II 2G EEx ia IIC T4 Compliant
- Resistant to Pressure Peaks
- Shock and Vibration Resistant



Custom Pressure Sensors

You configure to fit your application's specifications. Contact Parker with specifications for pressure range, electrical output and connection, port connection and seal material.

- Call 763-544-7781
- Fax 763-544-3418 or
- Send e-mail to qcd_sales@parker.com



SCT Series Temperature Sensors

Measure system media temperature quickly and precisely. Rugged steel housing, compact design; very simple to install.

- Up to 6000 PSI Working Pressure
- Temperature range: -13 to +257° F
- Accuracy +/- 2% FS

- test stands
- hydraulic power units
- material handling and lifting
- power generation
- pneumatic and hydraulic plant equipment
- general machine construction

SensoControl

Industrial Controllers

Parker's SensoControl controllers combine all of the functions of mechanical sensors, switches, and displays into a single intelligent instrument.

These simple, robust solutions will accurately regulate the critical operating parameters for hydraulic and pneumatic systems.

- Pressure controllers
- Temperature controllers
- Level controllers
- Level/temperature controllers





SCPSD Series

Pressure Controllers

Continuous monitoring and display of media pressure. Replaces display, switch and analog output with one device. Streamlines instruments, cabling and output.

- PSI/bar/MPa Unit Options
- Compact Design
- Rotatable, rugged housing (IP 67 rating)
- 2 Switching Outputs
- Hysteresis/window Function
- Analog Output Option
- Password Protection Option



SCTSD Series

Temperature Controllers

Continuous monitoring and display of media temperature. Replaces display, switch and analog output with one device. Streamlines instruments, cabling and output.

- Deg. F and Deg. C Unit Options
- Rotatable, Rugged Housing (IP 67 rating)
- Simple Operation
- Two Switching Outputs
- Hysteresis/window Function
- Password Protection Option



SCLSD Series

Level Controllers

Continuous monitoring and display of media level. Replaces display, switch and analog output with one device. Streamlines instruments, cabling and output.

- Inch/mm/% Unit Options
- Compact Design
- Rotatable, Rugged Housing (IP 67 rating)
- Two Switching Outputs
- Analog Output Option
- Hysteresis/window Function



SCLTSD Series

Level / Temperature Controllers

Monitor fluid temperature and level in one color coded device for simple operation and comprehensive functionality. A simple, programmable, robust solution.

- 290° Rotatable, rugged housing (IP 67 rating)
- Menu-controlled Setting
- Hysteresis/window Function
- Analog Output Option
- Password Protection Option

SensoControl Diagnostic Equipment

Together, We Can Measure and Record Critical Data



A Wise Investment

An ounce of prevention... Diagnosing a problem before it occurs should be your primary objective. Whether it is a piece of mobile construction equipment, or an automated industrial assembly machine, lost production is lost profits. The basic prescription for system maintenance is prevention.

Parker's SensoControl product line is a valuable tool for diagnosing problems both before and after they occur. Today's hydraulic and pneumatic systems are continuously becoming more sophisticated. Being able to identify critical information for optimizing machine efficiencies is a necessity.



Diagnostic Product Range:

- Digital pressure gauges
- Multi-functional handheld meters
- Kits and accessories
- Test port couplings



- maintenance
- assembly lines
- mobile and industrial systems
- hydraulic and pneumatic systems

The Parker Service Master Easy

Automatic Sensor Recognition – Up to 1,000,000 Data Points of Storage



The Parker Service Master Easy Includes...

- Up to Four Inputs
- On Board Memory
- Ability to Read Auxiliary Sensors
- Data Analysis – Downloadable to PC via SensoWin® Software

Fast Measuring & Analysis Capability... coupled with a more efficient and user-friendly interface. This multi-channel instrument offers accuracy, expanded memory and intuitive performance to meet your most demanding expectations.

Offering the latest in sensor recognition technology, the Parker Service Master Easy gives you the ability to measure and store data relating to pressure, flow, temperature and rotational speed simultaneously, or switch between them with ease. On site data

storage has never been easier or as powerful. The 0.25 ms scanning rate catches even the most instantaneous pressure spikes, flow surges and temperature changes. More than one million data points can be stored in the onboard memory and download to your PC for later analysis.

Plus a Complete Selection of Accessories to Expand the Functionality and Capability



Diagnostic Test Points, Hoses and Adapters



Complete Field Kits



Transducer Choices

Tachometer

- mobile and industrial systems
- hydraulic and pneumatic systems
- maintenance
- assembly lines

The Serviceman™

Monitor Pressure, Flow, Rotation Speed and Temperature – All with One Meter



The Serviceman Has...

- The Ability to Read Pressure, Flow, Temperature & RPM
- Differential Pressure Capability
- Automatic Sensor Recognition
- Fast Scanning Rate

The Serviceman is a two-input diagnostic meter that gives the technician a portable and easy to use system for collecting diagnostic information. As with all SensoControl products, the Serviceman will automatically recognize and scale any of the available pressure, temperature, flow and rotational speed sensors. The meter scans for minimum and

maximum readings 500 times per second to ensure that damaging system conditions are detected. Min and max measurements are stored in memory and can quickly be displayed.

The information provided by the Serviceman is viewed on a two line LCD display. Each input is shown on a separate line

providing accurate measurements that can easily be documented. Differential pressures can quickly be displayed to eliminate additional calculations. The meter is powered by an internal NiMH battery, or an external power supply. Additionally, Serviceman software allows on-line transfer of data to Microsoft Excel.

of Both the Parker Service Master Easy and the Serviceman



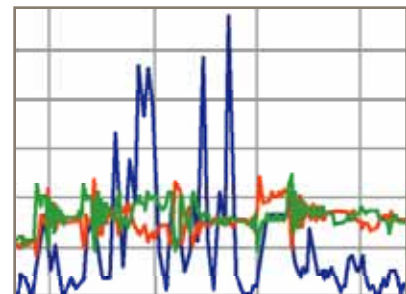
Temperature Sensor



Flow Sensors



Voltage Adapter



SensoWin® Software

- mobile and industrial systems
- hydraulic and pneumatic systems
- maintenance
- assembly lines

The ServiceJunior

Rugged and Reliable – Digital Readings
Quickly Identify Potential Problems



The ServiceJunior Provides...

- **Min/Max Pressure Memory**
- **Accurate Readings**
- **Fast Response Time**

The ServiceJunior digital pressure gauge scans 100 times per second to identify momentary pressure spikes that often go “unnoticed” by slower responding mechanical gauges. Both minimum and maximum pressures are stored in the ServiceJunior’s memory for easy retrieval by the user. Technicians who have the ability to recognize these conditions

early are best able to take actions to prevent more serious problems such as system failure and equipment shutdown.

With its large backlit display and simple 4-key menu, the ServiceJunior is a rugged pressure sensor that can provide readings in several different units of measure.

Its ability to connect to a variety of industry standard test ports allows technicians to take readings accurate within $\pm 0.5\%$.

ServiceJunior gauges are available in four different pressure ranges covering vacuum to 8700 PSI.

Product Selection Guide

The Tools You Need to Increase Productivity
Through Reduced Machine Downtime

Meter Selection Guide

Function	The Parker ServiceJunior	The Parker Serviceman	The Parker Service Master Easy
Pressure Sensing	●	●	●
Flow Sensing		● ¹	● ¹
Temperature Sensing		● ¹	● ²
Rotational Speed Sensing		● ¹	● ¹
Auxiliary Sensing			● ¹
Pressure Differential		●	●
Automatic Sensor Recognition	●	●	●
Auto Power Off	●	●	●
Battery Monitoring	●	●	●
Battery Type	AA (2 req'd)	Rechargeable Ni-MH	Rechargeable Ni-MH
PC Compatible (Windows)		● ¹	● ¹
Minimum/Maximum Memory	●	●	●
Self Contained Memory			●
On-Line Data Transfer		●	●
Text Display (Lines)	2	2	8
Inputs	1	2	4
Data Points (Maximum in Memory)			1,000,000
Graphic LCD Display	●		●
Hydraulic Power Calculations			●
Volume Calculations			●

Notes: (1) Additional accessories are required to perform this function.

(2) Transducers provide an ambient temperature signal, but additional temperature probes are required for more accurate temperature measurements.

Test Port Coupling Selection Guide

Test Port	Valving Size	Body	Material*				Locking Mechanism	Std. Seal Material	Temp Range**	Rated Pressure
			Br	SS	S	P				
PD Series	Flush Face	1/8"	●	●	●		Ball	Nitrile	-40° to +250° F	6000 PSI
PDP Series	Ball	1/8"			●		Ball	Nitrile	-40° to +250° F	6000 PSI
EMA3 Series	Poppet	1/8"		●	●		Threads	Nitrile/Fluorocarbon	-15° to +250° F	9000 PSI

* See Fluid Compatibility chart and/or consult factory for questions regarding proper material for specific applications.

CODE: Br = Brass; SS = Stainless Steel; S = Steel; P = Plastic

**Temperature Range for standard seal material.

PD Series

Test Port Couplings

PD Series couplings provide easy connection for mechanical gauges or specialized diagnostic equipment like SensoControl.

PD nipples can be permanently mounted in the system at threaded test ports, in rigid tubing, or in hose assemblies. PD Couplers attached to test instruments, gauges, transducers, and other test equipment allow quick and easy system access when connected to the test point nipples.

These couplers are the ideal choice for industrial, agricultural, mobile and other demanding break-away applications.

- **Flush poppet minimizes air inclusion and spillage**
- **Knurled sleeves make connecting and disconnecting easy**
- **PD nipples meet or exceed SAE J1502 and ISO 15171-1 design and performance requirements**



Specifications

Body Size (in.)	1/8			
Description	PD Coupler	PD Nipple	BPD Nipple	Assembly
Part Number	PD242	PD361	BPD343Y	—
Body Material (Steel)	Carbon Steel	High Tensile Steel	Brass	—
Rated Pressure (PSI)	6000	6000	300	6000
Temperature Range (STD Seals) Nitrile	-40°F to +250°F		-15°F to +400°F (Fluorocarbon)	-40°F to +250°F
Rated Flow (GPM)	—	—	—	0.8
Max. Recommended Flow (GPM)	—	—	—	4.0
Burst Pressure (PSI/Min)	23,000	40,000	—	17,000
Vacuum Data (Inches Hg)	27.5	27.5	27.5	27.5
Pressure Drop at Rated Flow (PSI) with 200 SUS Fluid	—	—	—	56
Spillage at 15 PSI (ml)-Assembly	0.1 per disconnect			
Air Inclusion (ml)-Assembly	0.02 per connect			
Connect Force-Assembly	41 Lbs. (100 PSI)			
Disconnect Force-Assembly	20 Lbs. (100 PSI)			

Dust Plugs & Caps



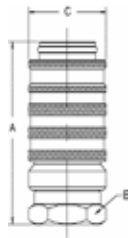
Body Size (in.)	Dust Cap Part No.
	Rubber
1/8	PD6-285

PD Series

Test Port Couplings

Couplers

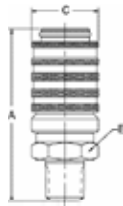
Female Thread



Body Size (in.)	Part Number	Female Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
1/8	PD222	.125-27 NPTF	1.67	0.81	0.96
1/8	PD240	.437-20 ORB	2.12	0.81	0.96
1/8	PD242	.250-18 NPTF	2.12	0.81	0.96
1/8	SSPD242Y**	.250-18 NPTF	2.12	0.81	0.96
1/8	PD260	.562-18 ORB	2.12	0.81	0.96

Couplers

Male Thread



Body Size (in.)	Part Number	Male Thread Size	Dimensions (inches)		
			Overall Length	Wrench Flats	Largest Diameter
			A	B	C
1/8	PD243	.125-18 NPTF	2.26	0.81	0.96

Note: Add -6 to part number to include dust cap, for example PD343-6
 ** SSPD designates 316SS body, Fluorocarbon seal standard

Nipples

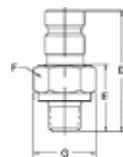
Female Pipe Thread



Body Size (in.)	Part Number	Female Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/8	PD322	.125-27 NPTF	1.48	0.56	0.65
1/8	PD342	.250-18 NPTF	1.63	0.75	0.87

Nipples

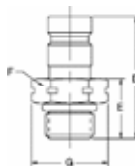
Male Pipe Thread



Body Size (in.)	Part Number	Female Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/8	PD323	.125-27 NPTF	1.55	0.69	0.79
1/8	BPD323Y*	.125-27 NPTF	1.44	0.63	0.72
1/8	BPD343Y*	.250-18 NPTF	1.48	0.69	0.79
1/8	PD3343	.250-18 NPTF	1.48	0.69	0.79
1/8	SSPD343Y**	.250-18 NPTF	1.48	0.69	0.79
1/8	PD363	.375-18 NPTF	1.50	0.81	0.96

Nipples

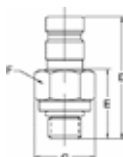
Metric Thread



Body Size (in.)	Part Number	Thread Size Metric	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/8	PD357	M10 x 1.0	1.80	0.69	0.79
1/8	PD3107	M16 x 1.5	1.54	0.88	1.01
1/8	PD3127	M18 x 1.5	1.60	0.94	1.08
1/8	PD3147	M20 x 1.5	1.50	0.75	0.87

Nipples

Male Straight Thread



Body Size (in.)	Part Number	Male Thread Size	Dimensions (inches)		
			Overall Length	Hex Size	Largest Diameter
			D	E	F
1/8	PD331	.375-24 ORB	1.80	0.69	0.79
1/8	PD341	.437-20 ORB	1.60	0.69	0.79
1/8	PD351	.500-20 ORB	1.32	0.63	0.72
1/8	PD361	.563-18 ORB	1.32	0.69	0.79

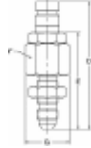
Note: Add -6 to part number to include dust cap, for example PD343-6
 * BPD designates brass body, Fluorocarbon seal standard
 ** SSPD designates 316SS body, Fluorocarbon seal standard

PD Series

Test Port Couplings

Nipples

Bulkhead Triple-Lok



Body Size (in.)	Part Number	Thread Size	Tube Size	Overall Length	Dimensions (inches)			Largest Diameter
					Exposed Length	Hex Size		
				D	E	F	G	
1/8	PD345	.437-20	.250	2.92	2.22	0.81	0.94	
1/8	PD355	.500-20	.312	2.92	2.22	0.81	0.94	
1/8	PD365	.562-18	.325	3.00	2.30	0.81	0.94	

Nipples

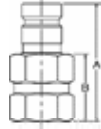
Bulkhead Seal-Lok



Body Size (in.)	Part Number	Thread Size	Tube Size	Overall Length	Dimensions (inches)			Largest Diameter
					Exposed Length	Hex Size		
				D	E	F	G	
1/8	PD346	.562-18	.250	2.98	2.27	0.81	0.94	
1/8	PD366	.687-16	.375	3.08	2.37	1.00	1.16	
1/8	PD386	.812-16	.500	3.18	2.47	1.12	1.30	

Tube End Nipples*

Triple-Lok: PD -- BTX



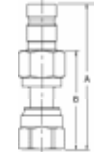
Body Size (in.)	Part Number	Tube Size (in.)	Dimensions (inches)	
			Overall Length	Exposed Length
			A	B
1/8	PD34BTX	.250	1.64	0.94
1/8	PD36BTX	.375	1.66	0.96



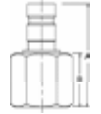
Body Size (in.)	Part Number	Tube Size (in.)	Dimensions (inches)	
			Overall Length	Exposed Length
			A	B
1/8	PD38BTX	.500	1.17	0.47
1/8	PD312BTX	.750	1.39	0.69

Tube End Nipples*

Seal-Lok: PD -- BTL



Body Size (in.)	Part Number	Tube Size (in.)	Dimensions (inches)	
			Overall Length	Exposed Length
			A	B
1/8	PD34BTL	.250	2.18	1.48
1/8	PD36BTL	.375	2.30	1.60



Body Size (in.)	Part Number	Tube Size (in.)	Dimensions (inches)	
			Overall Length	Exposed Length
			A	B
1/8	PD38BTL	.500	1.57	0.83
1/8	PD310BTL	.625	1.16	0.46

Note: Add -6 to part number to include dust cap, for example PD343-6

* Tube end nipples are designed to meet the performance standards of the tube or hose fitting connection, which may or may not meet SAE J1502 Standards.

EMA3 Series

Test Port Couplings

Although designed primarily for diagnostic applications, EMA fittings and hose assemblies are ideal for a wide range of applications that require compact high pressure connections and limited flow rates.

- **Twist-to-connect operation without the use of tools**
- **Connect under pressure – up to 5800 PSI**
- **Maximum rated working pressure of 9000 PSI exceeds the requirements of most applications**
- **Integral threaded dust cap protects the test point from damage and contamination**
- **EMA fittings are machined from solid bar stock and protected with Chromium-6 Free plating.**
- **Elastomeric interface and valve seals provide leak free operation**



Specifications

Body Size (in.)	1/8
Rated Flow (GPM)	12
Seal Material (Std.)	Nitrile/Fluorocarbon
Temperature Range (Std. Seals)	-15°F to +250°F

Male Pipe Thread



Part Number	Port Thread Size	Hex Size (mm)	Interface Thread Size	Overall Length
	A	B	C	D
EMA3/1/8NPT	1/8-27NPT	17	M16X2.0	1.81
EMA3/1/4NPT	1/4-18NPT	17	M16X2.0	1.98
EMA3/1/4NPT71 Stainless Steel	1/4-18NPT	17	M16X2.0	1.95

SAE Straight Thread



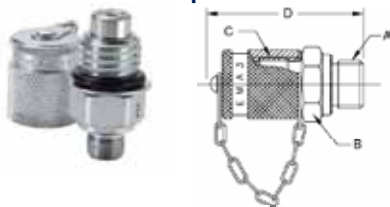
Part Number	Port Thread Size	Hex Size (mm)	Interface Thread Size	Overall Length
	A	B	C	D
EMA3/7/16-20UNF-2A*	7/16-20UHF-2A	17	M16X2.0	1.88
EMA3/9/16-18UNF-2A*	9/16-18UNF-2A	19	M16X2.0	1.88

Metric Straight Thread



Part Number	Port Thread Size	Hex Size (mm)	Interface Thread Size	Overall Length
	A	B	C	D
EMA3/M8X1OR*	M8X1	17	M16X2.0	1.81
EMA3/10X1ED**	M10X1	17	M16X2.0	1.85
EMA3/12X1.5ED**	M12X1.5	17	M16X2.0	1.94
EMA3/14X1.5ED**	M14X1.5	19	M16X2.0	1.94

British Parallel Pipe



Part Number	Port Thread Size	Hex Size (mm)	Interface Thread Size	Overall Length
	A	B	C	D
EMA31/8ED**	1/8 BSPP	19	M16X2.0	1.77
EMA31/4ED**	1/4 BSPP	19	M16X2.0	1.94
EMA33/8ED**	3/8 BSPP	21	M16X2.0	1.94

* O-Ring seal on port
** Molded seal on port

Offer of Sale

The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors ("Seller") are hereby offered for sale at prices to be established by Seller. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in its document, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer. All goods or work described will be referred to as "Products".

1. Terms and Conditions. Seller's willingness to offer Products, or accept an order for Products, to or from Buyer is expressly conditioned on Buyer's assent to these Terms and Conditions and to the terms and conditions found on-line at www.parker.com/sale-terms/. Seller objects to any contrary or additional term or condition of Buyer's order or any other document issued by Buyer.

2. Price Adjustments; Payments. Prices stated on the reverse side or preceding pages of this document are valid for 30 days. After 30 days, Seller may change prices to reflect any increase in its costs resulting from state, federal or local legislation, price increases from its suppliers, or any change in the rate, charge, or classification of any carrier. The prices stated on the reverse or preceding pages of this document do not include any sales, use, or other taxes unless so stated specifically. Unless otherwise specified by Seller, all prices are F.O.B. Seller's facility, and payment is due 30 days from the date of invoice. After 30 days, Buyer shall pay interest on any unpaid invoices at the rate of 1.5% per month or the maximum allowable rate under applicable law.

3. Delivery Dates; Title and Risk; Shipment. All delivery dates are approximate and Seller shall not be responsible for any damages resulting from any delay. Regardless of the manner of shipment, title to any products and risk of loss or damage shall pass to Buyer upon tender to the carrier at Seller's facility (i.e., when it's on the truck, it's yours). Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferral of shipment at Buyer's request beyond the respective dates indicated will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's changes in shipping, product specifications or in accordance with Section 13, herein.

4. Warranty. Seller warrants that the Products sold hereunder shall be free from defects in material or workmanship for a period of twelve months from the date of delivery to Buyer or 2,000 hours of normal use, whichever occurs first. This warranty is made only to Buyer and does not extend to anyone to whom Products are sold after purchased from Seller. The prices charged for Seller's products are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **DISCLAIMER OF WARRANTY: THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED HEREUNDER. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

5. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon delivery. No claims for shortages will be allowed unless reported to the Seller within 10 days of delivery. No other claims against Seller will be allowed unless asserted in writing within 60 days after delivery or, in the case of an alleged breach of warranty, within 30 days after the date within the warranty period on which the defect is or should have been discovered by Buyer. Any action based upon breach of this agreement or upon any other claim arising out of this sale (other than an action by Seller for any amount due to Seller from Buyer) must be commenced within thirteen months from the date of tender of delivery by Seller or, for a cause of action based upon an alleged breach of warranty, within thirteen months from the date within the warranty period on which the defect is or should have been discovered by Buyer.

6. LIMITATION OF LIABILITY. UPON NOTIFICATION, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, EVEN IF SELLER HAS BEEN NEGLIGENT, WHETHER IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.

7. Contingencies. Seller shall not be liable for any default or delay in performance if caused by circumstances beyond the reasonable control of Seller.

8. User Responsibility. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application and follow applicable industry standards and Product information. If Seller provides Product or system options, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.

9. Loss to Buyer's Property. Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

10. Special Tooling. A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

11. Buyer's Obligation; Rights of Seller. To secure payment of all sums due or otherwise, Seller shall retain a security interest in the goods delivered and this agreement shall be deemed a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect its security interest. Seller shall have a security interest in, and lien upon, any property of Buyer in Seller's possession as security for the payment of any amounts owed to Seller by Buyer.

12. Improper use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications furnished by Buyer to manufacture Product; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.

13. Cancellations and Changes. Orders shall not be subject to cancellation or change by Buyer for any reason, except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage. Seller may change product features, specifications, designs and availability with notice to Buyer.

14. Limitation on Assignment. Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.

15. Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of the agreement. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.

16. Waiver and Severability. Failure to enforce any provision of this agreement will not waive that provision nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.

17. Termination. This agreement may be terminated by Seller for any reason and at any time by giving Buyer thirty (30) days written notice of termination. In addition, Seller may by written notice immediately terminate this agreement for the following: (a) Buyer commits a breach of any provision of this agreement (b) the appointment of a trustee, receiver or custodian for all or any part of Buyer's property (c) the filing of a petition for relief in bankruptcy of the other Party on its own behalf, or by a third party (d) an assignment for the benefit of creditors, or (e) the dissolution or liquidation of the Buyer.

18. Governing Law. This agreement and the sale and delivery of all Products hereunder shall be deemed to have taken place in and shall be governed and construed in accordance with the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement. Disputes between the parties shall not be settled by arbitration unless, after a dispute has arisen, both parties expressly agree in writing to arbitrate the dispute.

19. Indemnity for Infringement of Intellectual Property Rights. Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets ("Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that a Product sold pursuant to this Agreement infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If a Product is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to Products delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any Product sold hereunder. The foregoing provisions of this Section shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

20. Taxes. Unless otherwise indicated, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of Products.

21. Equal Opportunity Clause. For the performance of government contracts and where dollar value of the Products exceed \$10,000, the equal employment opportunity clauses in Executive Order 11246, VEVRRA, and 41 C.F.R. §§ 60-1.4(a), 60-741.5(a), and 60-250.4, are hereby incorporated.

Parker Fluid Connectors Group

North American Divisions & Distribution Service Centers

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:

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)

North American Divisions

Energy Products Division

Stafford, TX
phone 281 566 4500
fax 281 530 5353

Fluid System Connectors Division

Otsego, MI
phone 269 694 9411
fax 269 694 4614

Hose Products Division

Wickliffe, OH
phone 440 943 5700
fax 440 943 3129

Industrial Hose Division

Strongsville, OH
phone 440 268 2120
fax 440 268 2230

Parflex Division

Ravenna, OH
phone 330 296 2871
fax 330 296 8433

Quick Coupling Division

Minneapolis, MN
phone 763 544 7781
fax 763 544 3418

Tube Fittings Division

Columbus, OH
phone 614 279 7070
fax 614 279 7685

Distribution Service Centers

Buena Park, CA

phone 714 522 8840
fax 714 994 1183

Conyers, GA

phone 770 929 0330
fax 770 929 0230

Lakeville, MN

phone 952 469 5000
fax 952 469 5729

Louisville, KY

phone 502 937 1322
fax 502 937 4180

Portland, OR

phone 503 283 1020
fax 503 283 2201

Toledo, OH

phone 419 878 7000
fax 419 878 7001
fax 419 878 7420
(FCG Kit Operations)



Parker Hannifin Corporation

Quick Coupling Division

8145 Lewis Road
Minneapolis, MN 55427

phone 763 544 7781
fax 763 544 3418

www.parker.com/quickcouplings