

# *Thermoplastic Couplings*

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### Thermoplastic Couplings



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Thermoplastic Couplings

	Valving	Coupler Style	Body Size (in.)	Material	Locking Mechanism	Std. Seal Material	Temp Range**	Rate Pressure
PF Series	Flush Face Non-Spill	Push-to-Connect	1/2", 1" & 2"	Polypropylene/ Stainless	Pawl lock	Fluoro-carbon	+40° to +140° F	30 to 100 PSI
Spectrum™ Series	Valved or Unvalved	Push-to-Connect	1/8" & 3/8"	Acetal 316 SS	Finger Lock	Nitrile	0°F to 180°F	0 to 145 PSI
Spectrum™ Series	Valved or Unvalved	Push-to-Connect	1/8" & 3/8"	PVDF/SS 316 SS	Finger Lock	Fluoro-carbon	0°F to 250°F	0 to 115 PSI
Spectrum™ Series	Valved or Unvalved	Push-to-Connect	3/8"	PVDF/ PEEK™	Finger Lock	Fluoro-carbon	0°F to 250°F	15 to 115 PSI

Ordering Information

Optional Seals Suffix*			
No suffix is required when ordering products with the standard Fluorocarbon seals. When specifying an optional seal, refer to the following chart to determine the appropriate suffix.**			
Coupling Series	Ethylene Propylene	Neoprene	Perfluoro-elastomer
PF Series	E5	E12	E47

\*To select proper seal materials, see Fluid Compatibility Chart in Appendices section, or contact your Parker Quick Coupling Distributor.

\*\*N/A = Not Available; STD = Standard (No Suffix Needed)

Spectrum Series – are available with these materials	
Body Material	Seal Material
Acetal/SS	Nitrile
PVDF/SS	Fluorocarbon
PVDF/PEEK™	Fluorocarbon



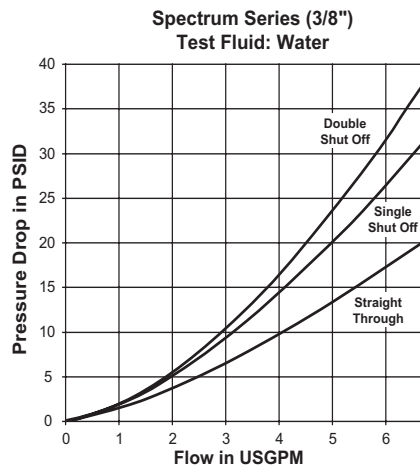
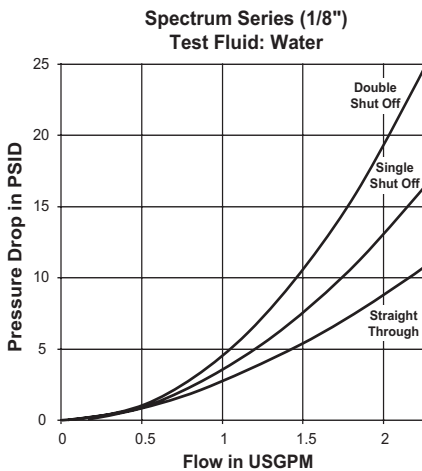
**Applications**

Parker's Spectrum™ Series couplers are the most advanced engineered thermoplastic couplings available. Spectrum Series couplings combine compact size, high flow capability, and light weight design to meet a broad range of coupling applications. Three material combinations allow the couplings to be used in markets as diverse as chemical processing, automation equipment, semi-conductor and food processing. Spectrum Series can be used in many applications previously reserved for stainless steel couplings.

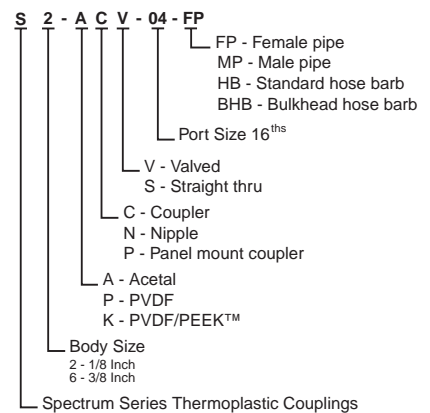
**Features**

- Excellent Chemical Compatibility
- Three Material Combinations: Acetal/SS, PVDF/SS and PVDF/PEEK™
- High Flow Capacity
- Easy Push-To-Connect Operation
- Available Valved and Unvalved
- Flexible Modular Design
- Four Point 360° Locking Mechanism
- Temperatures Up To 250° F
- Panel Mounting Option

**Performance**



**How To Order**

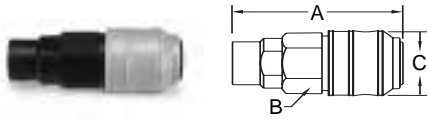


**Specifications**

	Acetal/SS (black with grey sleeve)		PVDF/SS (translucent with green sleeve)		PVDF/PEEK™ (translucent)
Body Size	1/8	3/8	1/8	3/8	3/8
Pressure Range	0-145 psi (0-10 bar)	0-145 psi (0-10 bar)	0-115 psi (0-8 bar)	0-115 psi (0-8 bar)	15-115 psi (1-8 bar)
Temperature Range	0° F to 180° F (-20° C to +80° C)	0° F to 180° F (-20° C to +80° C)	0° F to 250° F (-20° C to +120° C)	0° F to 250° F (-20° C to +120° C)	0° F to 250° F (-20° C to +120° C)
Rated Flow	1.5 GPM (5.6 lpm)	4.5 GPM (17 lpm)	1.5 GPM (5.6 lpm)	4.5 GPM (17 lpm)	4.5 GPM (17 lpm)
Body Material	Acetal	Acetal	PVDF	PVDF	PVDF
Spring Material	316 SS	316 SS	316 SS	316 SS	PEEK™
Seal Material	Nitrile	Nitrile	Fluorocarbon	Fluorocarbon	Fluorocarbon

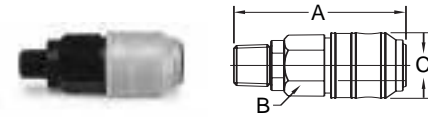
Couplers

Female Pipe



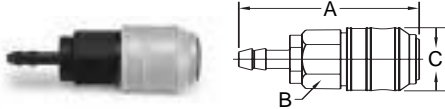
Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Port NPT	Overall Length	Hex	Largest
						Size	Diameter
					A	B	C
1/8	S2-ACV-02-FP	S2-PCV-02-FP	—	1/8-27	2.15	.67	.82
1/8	S2-ACV-04-FP	S2-PCV-04-FP	—	1/4-18	2.34	.67	.82
3/8	S6-ACV-04-FP	S6-PCV-04-FP	S6-KCV-04-FP	1/4-18	2.63	.82	1.02
3/8	S6-ACV-06-FP	S6-PCV-06-FP	S6-KCV-06-FP	3/8-18	2.63	.82	1.02
3/8	S6-ACV-08-FP	S6-PCV-08-FP	S6-KCV-08-FP	1/2-14	3.10	.82	1.02

Male Pipe



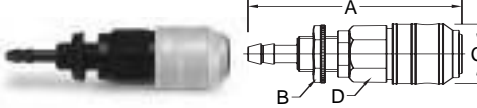
Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Port NPT	Overall Length	Hex	Largest
						Size	Diameter
					A	B	C
1/8	S2-ACV-02-MP	S2-PCV-02-MP	—	1/8-27	2.04	.67	.82
1/8	S2-ACV-04-MP	S2-PCV-04-MP	—	1/4-18	2.15	.67	.82
3/8	S6-ACV-04-MP	S6-PCV-04-MP	S6-KCV-04-MP	1/4-18	2.90	.82	1.02
3/8	S6-ACV-06-MP	S6-PCV-06-MP	S6-KCV-06-MP	3/8-18	2.77	.82	1.02
3/8	S6-ACV-08-MP	S6-PCV-08-MP	S6-KCV-08-MP	1/2-14	3.10	.82	1.02

Hose Barb



Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Hose I.D.	Overall Length	Hex	Largest
						Size	Diameter
					A	B	C
1/8	S2-ACV-03-HB	S2-PCV-03-HB	—	3/16 (4 mm)	2.34	.67	.82
1/8	S2-ACV-04-HB	S2-PCV-04-HB	—	1/4 (6 mm)	2.34	.67	.82
3/8	S6-ACV-04-HB	S6-PCV-04-HB	S6-KCV-04-HB	1/4 (6 mm)	3.19	.82	1.02
3/8	S6-ACV-06-HB	S6-PCV-06-HB	S6-KCV-06-HB	3/8 (9 mm)	3.19	.82	1.02
3/8	S6-ACV-08-HB	S6-PCV-08-HB	S6-KCV-08-HB	1/2 (13 mm)	3.31	.82	1.02

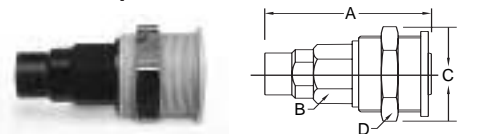
Bulkhead Hose Barb



Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Hose I.D.	Overall Length	Hex	Largest	Bulkhead
						Size	Diameter	Hex
					A	B	C	D
1/8	S2-ACV-03-BHB	S2-PCV-03-BHB	—	3/16 (4 mm)	2.89	.67	.82	.67
1/8	S2-ACV-04-BHB	S2-PCV-04-BHB	—	1/4 (6 mm)	2.89	.67	.82	.67

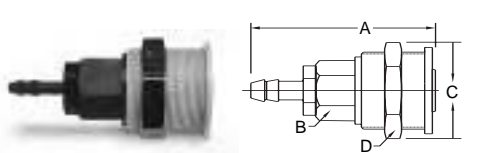
Panel Mount Couplers

Female Pipe



Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Hose I.D.	Overall Length	Hex	Largest	Bulkhead
						Size	Diameter	Hex
					A	B	C	D
1/8	S2-APV-02-FP	S2-PPV-02-FP	—	1/8-27	2.04	.67	1.10	1.06
1/8	S2-APV-04-FP	S2-PPV-04-FP	—	1/4-18	2.16	.67	1.10	1.06

Hose Barb

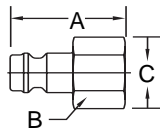


Body Size (in.)	Acetal* Part No.	PVDF* Part No.	PVDF/PEEK™* Part No.	Hose I.D.	Overall Length	Hex	Largest	Bulkhead
						Size	Diameter	Hex
					A	B	C	D
1/8	S2-APV-03-HB	S2-PPV-03-HB	—	3/16 (4 mm)	2.34	.67	1.10	1.06
1/8	S2-APV-04-HB	S2-PPV-04-HB	—	1/4 (6 mm)	2.34	.67	1.10	1.06

\* NOTE: To Order Unvalved Coupler replace "V" with an "S".

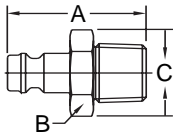
Nipples – Unvalved

Female Pipe



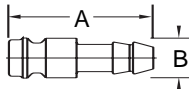
Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Port NPT	Overall Length	Hex Size	Largest Diameter
					A	B	C
1/8	S2-ANS-02-FP	S2-PNS-02-FP	—	1/8-27	1.02	.55	.62
1/8	S2-ANS-04-FP	S2-PNS-04-FP	—	1/4-18	1.18	.67	.76
3/8	S6-ANS-04-FP	S6-PNS-04-FP	—	1/4-18	1.52	.67	.73
3/8	S6-ANS-06-FP	S6-PNS-06-FP	—	3/8-18	1.52	.83	.91
3/8	S6-ANS-08-FP	S6-PNS-08-FP	—	1/2-14	1.68	.98	1.09

Male Pipe



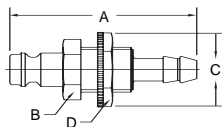
Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Port NPT	Overall Length	Hex Size	Largest Diameter
					A	B	C
1/8	S2-ANS-02-MP	S2-PNS-02-MP	—	1/8-27	1.08	.55	.62
1/8	S2-ANS-04-MP	S2-PNS-04-MP	—	1/4-18	1.24	.67	.76
3/8	S6-ANS-04-MP	S6-PNS-04-MP	—	1/4-18	1.64	.67	.73
3/8	S6-ANS-06-MP	S6-PNS-06-MP	—	3/8-18	1.64	.83	.91
3/8	S6-ANS-08-MP	S6-PNS-08-MP	—	1/2-14	1.83	.94	1.04

Hose Barb



Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Hose I.D.	Overall Length	Largest Diameter
					A	B
1/8	S2-ANS-03-HB	S2-PNS-03-HB	—	3/16 (4 mm)	1.26	.34
1/8	S2-ANS-04-HB	S2-PNS-04-HB	—	1/4 (6 mm)	1.26	.34
3/8	S6-ANS-04-HB	S6-PNS-04-HB	—	1/4 (6 mm)	1.86	.71
3/8	S6-ANS-06-HB	S6-PNS-06-HB	—	3/8 (9 mm)	1.87	.71
3/8	S6-ANS-08-HB	S6-PNS-08-HB	—	1/2 (13 mm)	1.99	.71

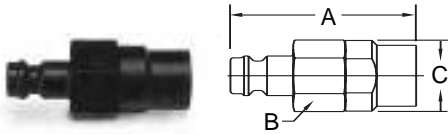
Bulkhead Hose Barb



Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Hose I.D.	Overall Length	Hex Size	Largest Diameter	Bulkhead Hex
					A	B	C	D
1/8	S2-ANS-03-BHB	S2-PNS-03-BHB	—	3/16 (4 mm)	1.97	.55	.64	.55
1/8	S2-ANS-04-BHB	S2-PNS-04-BHB	—	1/4 (6 mm)	1.97	.55	.77	.67

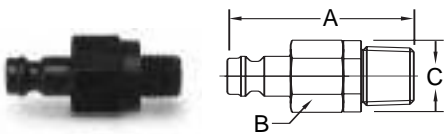
Nipples –Valved

Female Pipe



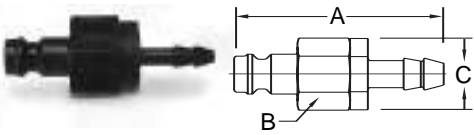
Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Port NPT	Overall Length	Hex Size	Largest Diameter
					A	B	C
1/8	S2-ANV-02-FP	S2-PNV-02-FP	—	1/8-27	1.61	.67	.76
1/8	S2-ANV-04-FP	S2-PNV-04-FP	—	1/4-18	1.80	.67	.76
3/8	S6-ANV-04-FP	S6-PNV-04-FP	S6-KNV-04-FP	1/4-18	2.02	.83	.91
3/8	S6-ANV-06-FP	S6-PNV-06-FP	S6-KNV-06-FP	3/8-18	2.02	.83	.91
3/8	S6-ANV-08-FP	S6-PNV-08-FP	S6-KNV-08-FP	1/2-14	2.49	.83	.91

Male Pipe



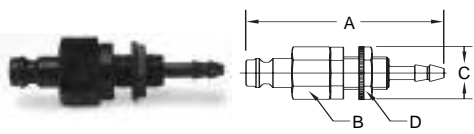
Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Port NPT	Overall Length	Hex Size	Largest Diameter
					A	B	C
1/8	S2-ANV-02-MP	S2-PNV-02-MP	—	1/8-27	1.49	.67	.76
1/8	S2-ANV-04-MP	S2-PNV-04-MP	—	1/4-18	1.80	.67	.76
3/8	S6-ANV-04-MP	S6-PNV-04-MP	S6-KNV-04-MP	1/4-18	2.24	.83	.91
3/8	S6-ANV-06-MP	S6-PNV-06-MP	S6-KNV-06-MP	3/8-18	2.16	.83	.91
3/8	S6-ANV-08-MP	S6-PNV-08-MP	S6-KNV-08-MP	1/2-14	2.49	.83	.91

Hose Barb



Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Hose I.D.	Overall Length	Hex Size	Largest Diameter
					A	B	C
1/8	S2-ANV-03-HB	S2-PNV-03-HB	—	3/16 (4 mm)	1.80	.67	.76
1/8	S2-ANV-04-HB	S2-PNV-04-HB	—	1/4 (6 mm)	1.80	.67	.76
3/8	S6-ANV-04-HB	S6-PNV-04-HB	S6-KNV-04-HB	1/4 (6 mm)	2.59	.82	.91
3/8	S6-ANV-06-HB	S6-PNV-06-HB	S6-KNV-06-HB	3/8 (9 mm)	2.59	.82	.91
3/8	S6-ANV-08-HB	S6-PNV-08-HB	S6-KNV-08-HB	1/2 (13 mm)	2.71	.82	.91

Bulkhead Hose Barb



Body Size (in.)	Acetal Part No.	PVDF Part No.	PVDF/PEEK™ Part No.	Hose I.D.	Overall Length	Hex Size	Largest Diameter	Bulkhead Hex
					A	B	C	D
1/8	S2-ANV-03-BHB	S2-PNV-03-BHB	—	3/16 (4 mm)	2.35	.67	.76	.55
1/8	S2-ANV-04-BHB	S2-PNV-04-BHB	—	1/4 (6 mm)	2.35	.67	.76	.55



**Applications**

- Chemical Dispensing Systems
- Spray Application Equipment
- Mini Bulk Tanks
- Replacement for Banjo Style Camlok Fittings & Ball Valves
- Bulk Transfer Barrels

**Specifications**

Body Size	1/2"	1"	2"
Materials:	Polypropylene		
Body	Polypropylene		
Springs	316 Stainless Steel		
Seals	Fluorocarbon <sup>(1)</sup>		
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.	54 lbs.	41 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.	1ml .06 cu. in. (1cc)	9 ml .5 cu. in.
Vacuum Rating	27.4 Hg	Contact Factory	Contact Factory <sup>1</sup>

(1) Also available in EPDM, Nitrile, Neoprene, Perfluoroelastomer

**Features**

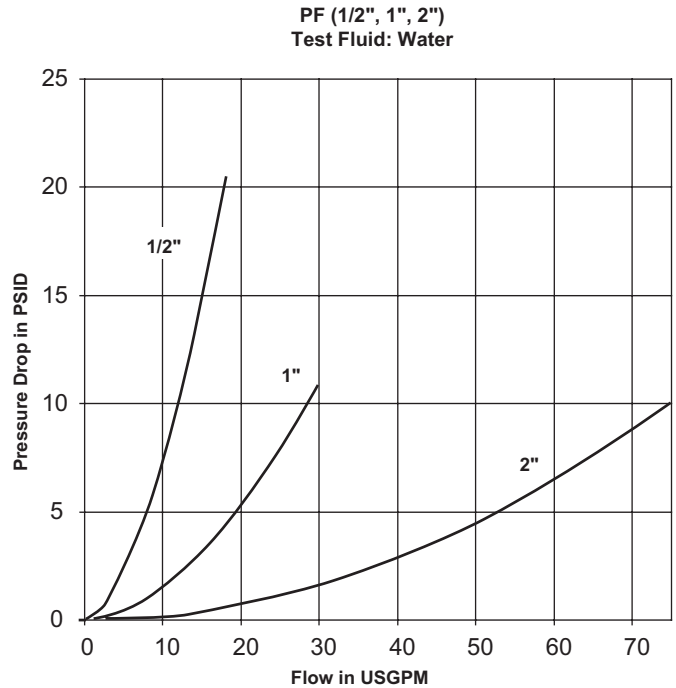
The Parker PF Series Dry Disconnect couplings virtually eliminate fluid loss upon disconnection and are designed to help meet the demand for closed system transfer and dispensing of chemicals and fluids with minimal environmental contamination. They can be used with concentrated or diluted industrial 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.

**Additional features include:**

- 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**



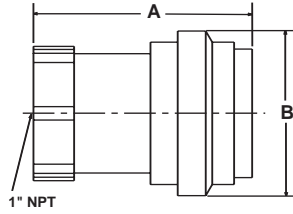


## Thermoplastic Couplings

## Non-Spill Couplings

PF Series – Non-Spill Chemical Transfer Couplings

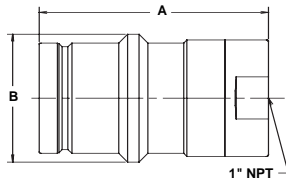
### Couplers



Body Size (in.)	Part No.	Port* Thread	Overall Length		Wrench Wt. (LB.)	
			A	B	Flats	P/Piece
1/2	PF-501-8FP	1/2" NPT	3.02	1.88	1.38	0.18
1	PF-1001-16FP	1" NPT	3.99	3.00	1.99	0.53
2	PF-2001-32FP	2" NPT	6.63	5.00	-	1.75

\* Female NPT Threads standard. For other port options contact the division.

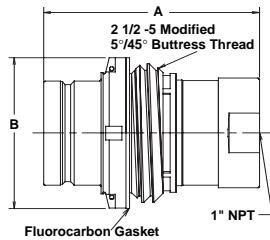
### Nipples



Body Size (in.)	Part No.	Port* Thread	Tank Mount Thread	Overall Length		Wrench Wt. (LB.)	
				A	B	Flats	P/Piece
1/2	PF-502-8FP	1/2" NPT	None	2.96	1.33	1.24	0.09
1	PF-1002-16FP	1" NPT	None	3.92	2.20	1.87	0.26
2	PF-2002-32FP	2" NPT	None	5.71	3.55	-	0.75

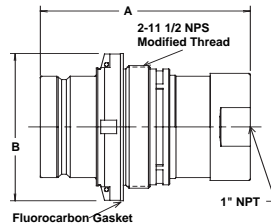
\* Female NPT Threads standard. For other port options contact the division.

### Nipples - Tank Mount



Body Size (in.)	Part No.	Port* Thread	Tank Mount Thread	Overall Length		Wrench Wt. (LB.)	
				A	B	Flats	P/Piece
1	PF-1002-32MB	1" NPT Modified	Buttress	3.92	2.75	1.87	0.33
1	PF-1002-32MP	1" NPT Modified	NPS	3.92	2.75	1.87	0.31

\* Female NPT Threads standard. For other port options contact the division.



### Dust Caps and Plugs

Coupler Dust Cap  
FR-501



Nipple Dust Cap  
FR-502

Nipple Dust Cap  
PFR-1002



Nipple Dust Cap (Tank Mount)  
PFR-1002-NS



Body Size (in.)	Coupler Dust Cap Part No.	Nipple Dust Cap Part No.	Material
1/2	FR-501	FR-502	Synthetic Rubber
1	None	PFR-1002	Ethylene Propylene
1	None	PFR-1002-NS*	Ethylene Propylene

\* For use with Tank Mount Nipples

## Thermoplastic Couplings

## Ordering Information

When ordering Parker coupler bodies and nipples, please state the part number of each type of coupler body and each type of nipple desired. List coupler bodies and nipples as separate items rather than in combinations. Be sure to double check thread or hose sizes of items required.

Many of Parker's coupling products are available with unique non-standard options well suited to very specific applications. Examples of unusual end use applications might include: high temperatures (above 250° F), extremely caustic/corrosive solutions passing through the coupling, external/environmental corrosion situations, or other high wear and tear situations such as dragging the product along the ground. Please see the Fluid Compatibility Chart at the end of the catalog for a guide in selecting material for various media. It is always recommended that the Quick Coupling Division be contacted with any questions concerning specific product application needs.

Please Note: Certain couplings series have additional "Special Order Information" which should be referred to in ordering those products. If applicable to the product, "Special Order Information" is found next to the Features and Specifications charts.

Optional Seals Suffix*			
No suffix is required when ordering products with the standard Fluorocarbon seals. When specifying an optional seal, refer to the following chart to determine the appropriate suffix.**			
Coupling Series	Ethylene Propylene	Neoprene	Perfluoro-elastomer
PF Series	E5	E12	E35*** E47****

\* To select proper seal materials, see Fluid Compatibility Chart in Appendices section, or contact your Parker Quick Coupling Distributor.

\*\* N/A = Not Available; STD = Standard (No Suffix Needed)

\*\*\* Parofluor™

\*\*\*\* DuPont Kalrez™

Spectrum Series – are available with these materials	
Body Material	Seal Material
Acetal/SS	Nitrile
PVDF/SS	Fluorocarbon
PVDF/PEEK™	Fluorocarbon