



## Parflex Integrated Fluid Transfer System for Diagnostic Applications



**Parker**

ENGINEERING YOUR SUCCESS.

# Maximize Signal Response Minimize Installation Time

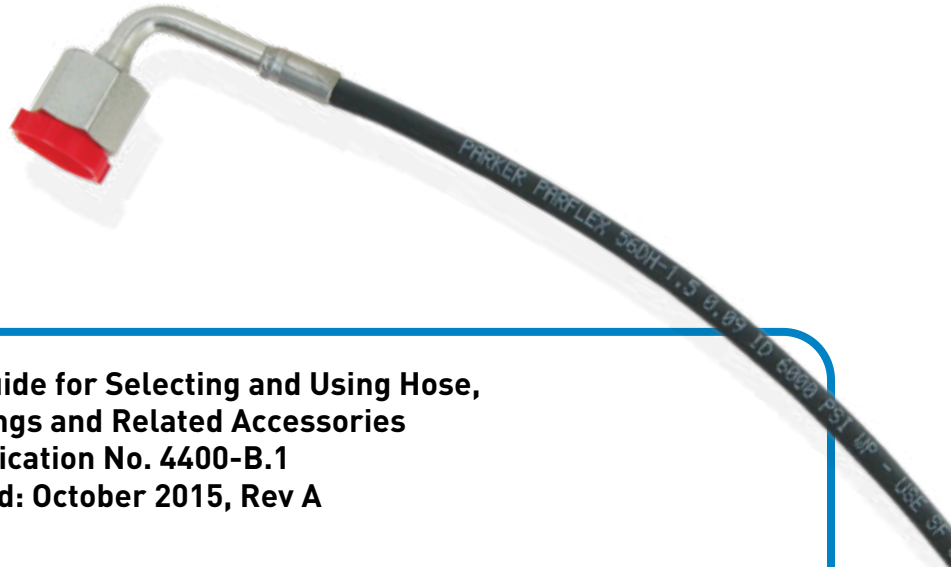
Are you using the best hose for the job?

Parker Parflex offers an integrated fluid transfer system for diagnostic applications that provides the best performance and response in a minimal package size. Unlike rubber hose, thermoplastic hose can be made in microbore sizes. The compact size reduces the amount of fluid in the system, providing the quickest response and lowest accumulator effect. Routing is made easier by the tight bend radius, ranging from 0.79" down to

0.50", depending on hose size. The 56DH and high pressure hoses offer a polyamide core tube for superior chemical resistance and compatibility with many harsh oils. The high tensile aramid reinforcement limits volumetric expansion, allowing excellent response time while minimizing signal loss. The bonded thermoplastic jacket gives the hose one of the highest levels of abrasion resistance in a Parker hose.

Parflex Diagnostic hoses are used on heavy construction, agriculture, material handling and other mobile equipment where it is necessary for hydraulic systems to be monitored. Parflex Diagnostic hoses can also be found in laboratories and on industrial equipment where high pressures and low flow are required.

**Parflex offers a complete line of fittings to be used on diagnostic hoses. Fitting tables are located after the hose.**



## **Parker Safety Guide for Selecting and Using Hose, Tubing, Fittings and Related Accessories Publication No. 4400-B.1 Revised: October 2015, Rev A**

**WARNING:** Failure or improper selection or improper use of hose, tubing, fittings, assemblies, valves, connectors, conductors or related accessories ("Products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocutation from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- Dangerously whipping Hose.
- Tube or pipe burst.
- Weld joint fracture.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

Before selecting or using any of these Products, it is important that you read and follow the instructions below. No product from any division in Parker Fluid Connectors Group is approved for in-flight aerospace applications. For hoses and fittings used in in-flight aerospace applications, please contact Parker Aerospace Group.

## Parflex offers the only diagnostic hose with a diagnostic bulkhead fitting.



Parflex Diagnostic Hose (Actual Size)

Competitor Hose (Actual Size)

### Parflex Diagnostic Hoses vs. Competitive Diagnostic Hoses

- Improved signal response due to smaller I.D. and low volumetric expansion
- 100x - 30,000x more abrasion resistance than rubber hose
- Better flexibility
- Ease of routing due to flexibility and small O.D.
- Lightweight - weighs up to 70% less than other diagnostic hoses
- 6,000 to 7,252 psi
- Superior chemical resistance
- Twin and multi-line constructions available



### Diagnostic Hose & Fittings

- Saves space
- Improves signal response
- Easy routing
- High abrasion resistance

# 56DH – Diagnostic Hose

## Nylon Core Tube



### Features

- Improved signal response due to smaller I.D. and low volumetric expansion
- Excellent flexibility
- Ease of routing due to flexibility and small O.D.
- Light weight - up to 70% less than other diagnostic hoses
- Twin and multi-line constructions available

### Construction

- Tube: Nylon
- Reinforcement: Aramid Fiber
- Cover: Polyurethane

### Operating Parameters

- Temperature Range:  
-40°F (-40°C) to 200°F (93°C)
- Vacuum Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

### Compliance

- MSHA compliant cover

### Fittings

- CY Series SF Series
- For most Parker products, Crimp Die Selection charts are found online at [www.parker.com/crimpsource](http://www.parker.com/crimpsource)

### Notes

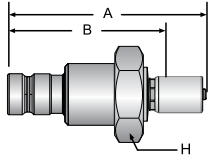
- Perforated cover

### Series 56DH

Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs./ft.	kg/mtr	
56DH-1.5	0.09	2.3	0.21	5.3	6,000	41.4	1/4	6.4	0.01	0.02	SF
56DH-2	0.14	3.6	0.32	8.1	6,000	41.4	1/2	13.0	0.03	0.05	CY

# CY Series

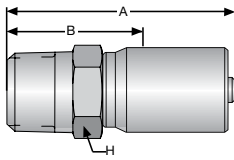
## 1PDCY Integrated Bulkhead Diagnostic Nipple



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
1PDCY-2-2	3/4"-16 UNF	1/8	3	2.40	61	1.875	48	1

Construction: Steel. Add "C" for Stainless Steel.

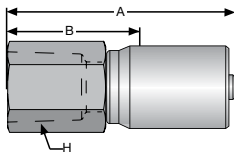
## 101CY Male Taper Pipe Rigid



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
101CY-2-2	1/8-27	1/8	3	1.31	33	13/16	21	7/16
101CY-2-3	1/8-27	3/16	5	1.74	44	7/8	22	1/2
101CY-4-2	1/4-18	1/8	3	1.51	38	1	25	9/16
101CY-4-3	1/4-18	3/16	5	1.97	50	1-1/8	28	9/16

Construction: Steel. Add "C" for Stainless Steel.

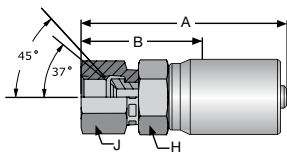
## 102CY Female Pipe Thread



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
102CY-2-3	1/8-27	3/16	5	1.97	50	1-1/16	27	1/2

Construction: Steel. Add "C" for Stainless Steel.

## 106CY Female SAE (JIC) 37° Swivel

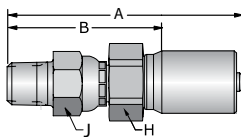


Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
		inch	mm	inch	mm	inch	mm	inch	inch
106CY-2-2	5/16-24	1/8	3	1.52	39	15/16	24	7/16	7/16
106CY-3-2	3/8-24	1/8	3	1.53	39	1	25	1/2	1/2
106CY-4-2	7/16-20	1/8	3	1.59	40	1	25	9/16	9/16
106CY-4-3	7/16-20	3/16	5	1.99	50	1-1/8	29	9/16	9/16

NOTE: Size -4 incorporates a dual seat.

Construction: Steel. Add "C" for Stainless Steel.

## 113CY Male Pipe Swivel\*



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
		inch	mm	inch	mm	inch	mm	inch	inch
113CY-2-2	1/8-27	1/8	3	1.89	48	1-5/16	33	1/2	1/2
113CY-2-3	1/8-27	3/16	3	2.29	58	1-7/16	36	1/2	1/2

NOTE: \*Nitrile O-ring.

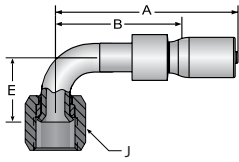
WARNING: Fittings allow minor movement to relieve stress on hose but are not recommended for continued or extensive swiveling.

Construction: Steel. Add "C" for Stainless Steel.



# CY Series

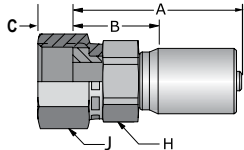
## 139CY Female JIC 37° Swivel 90° Elbow Short Drop



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		E		J Hex inch
		inch	mm	inch	mm	inch	mm	inch	mm	
139CY-4-2	7/16-20	1/8	3	1.61	41	1-1/8	29	0.83	21	9/16
139CY-4-3	7/16-20	3/16	5	1.90	48	1	25	0.83	21	9/16

Construction: Steel. Add "C" for Stainless Steel.

## 1JCCY Female Seal-Lok™ Swivel Straight Short

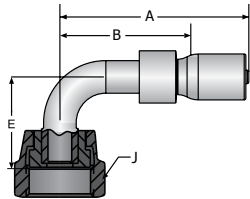


Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		C		H Hex inch	J Hex inch
		inch	mm	inch	mm	inch	mm	inch	mm		
1JCCY-4-2	9/16-18	1/8	3	1.29	33	3/4	19	0.32	8	9/16	11/16

NOTE: When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

Construction: Steel. Add "C" for Stainless Steel.

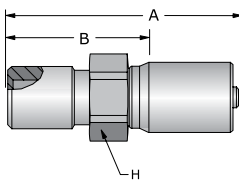
## 1J9CY Female Seal-Lok™ 90° Elbow Short Drop



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		E		J Hex inch
		inch	mm	inch	mm	inch	mm	inch	mm	
1J9CY-4-2	9/16-18	1/8	3	1.81	46	1-1/4	32	.83	21	11/16

Construction: Steel. Add "C" for Stainless Steel.

## 1GKCY Bulkhead with Integrated Zerk Port Bulkhead Nut and Grease Zerk

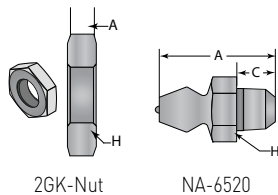


Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex inch
		inch	mm	inch	mm	inch	mm	
1GKCY-2-2*	1/8-27 NPSM Male with 1/4-28 UNF Female	1/8	3	1.45	37	7/8	22	1/2
1GKCY-2-3*	1/8-27 NPSM Male with 1/4-28 UNF Female	3/16	5	1.86	47	1	25	1/2
1GKCY-2-L77**	1/8-27 NPSM Male with 1/4-28 UNF Female	1/8	3	1.71	43	1-1/4	32	1/2

NOTE: \*Standard bulkhead for use with plates up to 1/4" thick. Uses 2GK-NUT, sold separately.

\*\*Long bulkhead for use with plates under 3/4" thick. Uses 2GK-NUT, sold separately.

Construction: Steel. Add "C" for Stainless Steel.



2GK-Nut

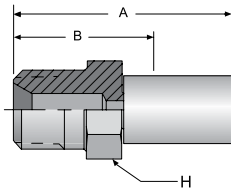
NA-6520

Part Number	Description	Thread Size	A		C		H Hex inch
			inch	mm	inch	mm	
2GK-Nut	Bulk-head Nut	1/8-27 NPSM	0.188	4.8	na	na	11/16
NA-6520	Grease Zerk Fit-ting	1/4-28 UNF	0.540	13.7	0.18	4.6	5/16
CY02-652317	HLB02 Spring Guard	-	-	-	-	-	-
3PSG-4	HLB03 Spring Guard	-	-	-	-	-	-

Construction: Steel.

# SF Series Visual Index

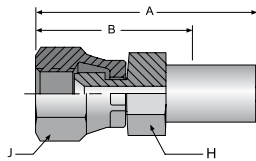
## 101SF Male Taper Pipe Rigid



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
101SF-2-1	1/8-27	0.090	2.3	1.13	29	3/4	19	7/16

Construction: Steel. Add "C" for Stainless Steel.

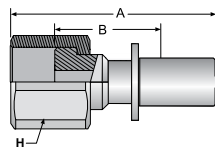
## 106SF JIC 37° Swivel



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
		inch	mm	inch	mm	inch	mm	inch	inch
106SF-2-1	5/16-24	0.090	2.3	1.37	35	15/16	24	7/16	1/2

Construction: Steel. Add "C" for Stainless Steel.

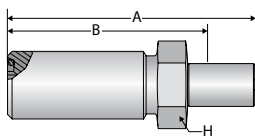
## 1JSSF Female Seal-Lok™ Swivel Long



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
1JSSF-4-1	9/16-18	0.090	2.3	1.18	29.8	3/4	19	11/16

Construction: Steel. Add "C" for Stainless Steel.

## 1JBSF Male Seal-Lok™ Bulkhead with O-ring



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
1JBSF-4-1	9/16-18	0.090	2.3	2.06	52	1-11/16	43	5/8

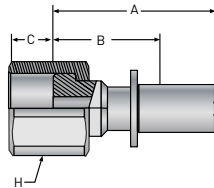
Construction: Steel. Add "C" for Stainless Steel.

NOTE: Bulkhead Locknut sold separately.

WLNL Locknuts are manufactured by the Tube Fittings Division. Refer to Catalog 4300 for information.

# High Pressure Fittings

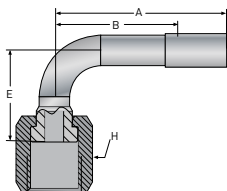
## TS916F/TS1116F Female



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
TSF916F	9/16/2018	0.79	2	25.2	0.992	15	0.591	8
TSF916F-04	9/16/2018	0.157	4	28.8	1.13	15	0.591	8
TS1116F	11/16/2018	0.79	2	27.3	1.07	17	0.669	9.8
TS1116F-04	11/16/2018	0.157	4	29	1.14	15	0.591	9.8

Construction: Steel. Add "C" for Stainless Steel.

## TS916F Elbow



Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
TS916F90	9/16/2018	0.79	2	40	1.57	30	1.18	23.5
TS916F-90-04	11/16/2018	0.157	4	44.7	1.76	23	0.91	1204

Construction: Steel. Add "C" for Stainless Steel.

# Parker Fluid Connectors Group

## North American Divisions & Distribution Service Centers

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

### **Fittings:**

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

### **Hose, Tubing and Bundles:**

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

### **Worldwide Availability:**

Parker operates Fluid Connectors manufacturing locations and sales offices throughout North America, South America, Europe and Asia-Pacific.

**For information, call toll free...**

**1-800-C-PARKER  
(1-800-272-7537)**

### **North American Divisions**

#### **Fluid System Connectors Division**

Otsego, MI  
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fax 269 694 4614

#### **Hose Products Division**

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phone 440 943 5700  
fax 440 943 3129

#### **Industrial Hose Division**

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fax 419 878 7001  
fax 419 878 7420  
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fax 905 945 3945  
(Contact Grimsby for other Service Center locations.)

