



Parflex Integrated Fluid Transfer System for Diagnostic Applications



ENGINEERING YOUR SUCCESS.

Maximize Signal Response Minimize Installation Time

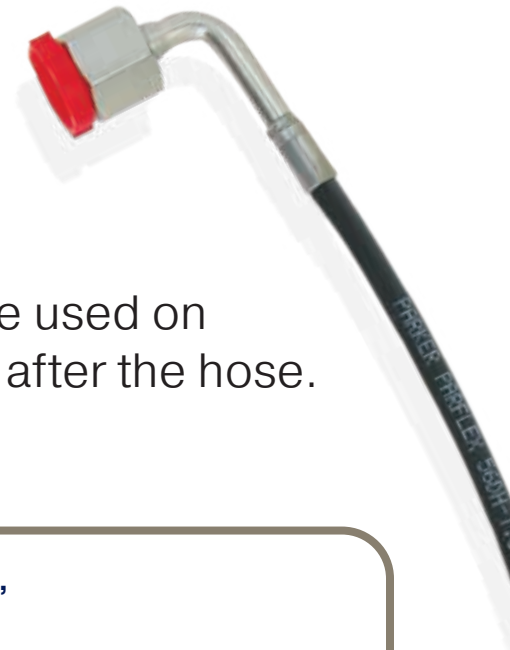
Are you using the best hose for the job?

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

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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 power lines.
- 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 Hose 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

Compliance

- MSHA compliant cover

Series 56DH

[Visit the webpage](#)

Part Number	Nominal I.D.		Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent 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	0.03	0.05	CY

Construction

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

Fittings

- CY Series SF Series
- For most Parker products, Crimp Die Selection charts are found online at www.parker.com/crimpsource

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)

Notes

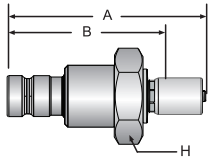
- Perforated cover

Color

- ● Black

CY Series Fittings - Permanent

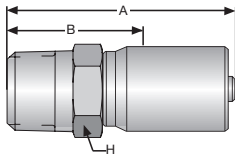
1PDCY Integrated Bulkhead Diagnostic Nipple



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.

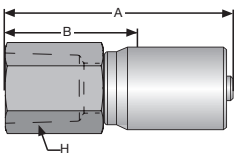
101CY Male Taper Pipe Rigid



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.

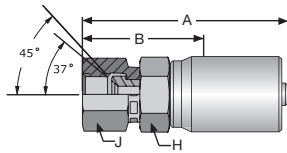
102CY Female Pipe Thread



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

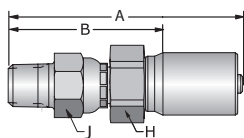


Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
		inch	mm	inch	mm	inch	mm	inch	inch
106CY-2-2	5/16-24	1/8	3	1.52	39	15/16	24	7/16	7/16
106CY-3-2	3/8-24	1/8	3	1.53	39	1	25	1/2	1/2
106CY-4-2	7/16-20	1/8	3	1.59	40	1	25	9/16	9/16
106CY-4-3	7/16-20	3/16	5	1.99	50	1-1/8	29	9/16	9/16

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

NOTE: Size -4 incorporates a dual seat.

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

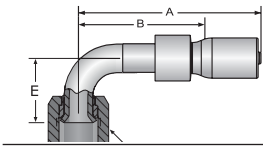
Construction: Steel. Add "C" for Stainless Steel.

NOTE: *Nitrile O-ring. See O-ring Material Selection section, Catalog 4660.

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

CY Series Fittings - Permanent

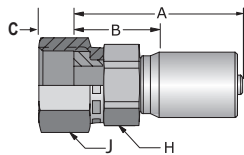
139CY Female JIC 37° Swivel 90° Elbow



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

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		E		J Hex
		inch	mm	inch	mm	inch	mm	inch	mm	inch
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

1JCCY Female Seal-Lok™ Swivel Straight Short

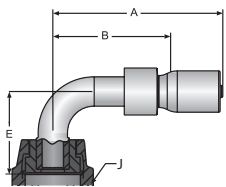


Construction: Steel. Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		C		H Hex	J Hex
		inch	mm	inch	mm	inch	mm	inch	mm	inch	inch
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.

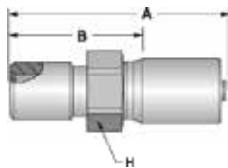
1J9CY Female Seal-Lok™ 90° Elbow Short Drop



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

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

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

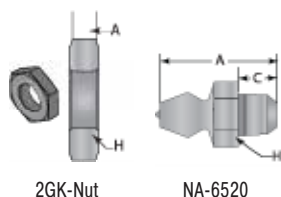


Construction: Steel. Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
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.



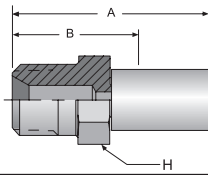
2GK-Nut

NA-6520

Part Number	Description	Thread Size	A		C		H Hex
			inch	mm	inch	mm	inch
2GK-Nut	Bulk-head Nut	1/8-27 NPSM	0.125	4.8	na	na	9/16
NA-6520	Grease Zerk	1/4-28 UNF	0.540	13.7	0.18	4.6	5/16
CY02-652317	HLB02 Spring Guard	-	-	-	-	-	-
3PSG-4	HLB03 Spring Guard	-	-	-	-	-	-

SF Series Fittings - Permanent

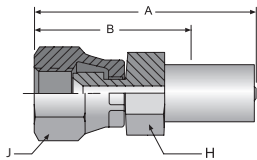
101SF Male Taper Pipe Rigid



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

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
101SF-2-1	5/16-24	0.090	2.3	1.13	29	3/4	19	7/16

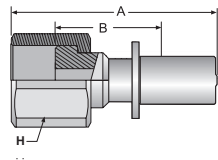
101SF Male Taper Pipe Rigid



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

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	36	15/16	24	7/16	1/2

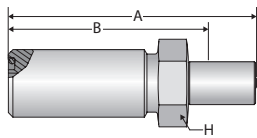
1JSSF Female Seal-Lok™ Swivel Long



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

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
1JSSF-2-1	9/16-18	0.090	2.3	1.18	29.8	3/4	19	11/16

1JBSF Female Seal-Lok™ Swivel Long



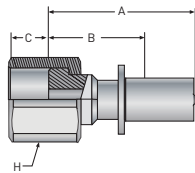
Construction: Steel. Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
1JBSF-2-1	9/16-18	0.090	2.3	2.06	52	1-11/16	43	5/8

NOTE: Bulkhead Locknut sold separately. WLNL Locknuts are manufactured by the Tube Fittings Division. Refer to Catalog 4300 for information.

High Pressure Fittings - Permanent

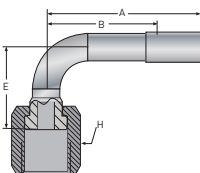
TS916F/TS1116F Female



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

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	inch	mm	inch	mm	inch
TSF916F	9/16-18	0.790	2	25.2	0.99	15	43	8
TSF916F-04	9/16-18	0.157	4	28.8	1.13	15	25	8
TS1116F	11/16-18	0.790	2	27.3	1.07	17	43	9.8
TS1116F-04	11/16-18	0.157	4	29.0	1.14	15	25	9.8

TS916F Elbow



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

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
		inch	mm	mm	inch	mm	inch	mm
TS916F90	11/16-18	0.790	2	40	1.57	30	1.18	23.5
TS916F-90-04	11/16-18	0.157	4	44.7	1.76	23	0.91	1204

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...

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