



# Parflex Rapid Assembly Fitting System

Plug and Play with Quick Connect



ENGINEERING YOUR SUCCESS.

# Parflex Rapid Assembly Fittings

## Quick Connect Fittings For Thermoplastic Hose



This twinline 510D formed hose uses the 56 Series Rapid Assembly Fittings for sizes -4 and -6 that were developed for applications needing a quick connection.

The Parflex Rapid Assembly (RA) quick connect fittings offer plug and play convenience in a very compact, economical system. RA fittings, from Parker's Parflex division, consists of Parker 56 Series RA quick-connecting hose fittings, one adapter and any Parflex hose rated to 3,000 psi @ 212°F.

This system offers the advantages of reduced tools needed for equipment plumbing. Installation of the hose assembly does not require wrenches or routing orientation, thereby reducing plumbing time and improving productivity.

Since Parflex 56 RA fittings are not live swivels, care should be taken to insure that relative movement between the adapter and the hose fitting is eliminated. Sealing is achieved through the use of petroleum and synthetic hydraulic oil resistant elastomeric o-rings.

### Challenge

Tight pilot line and joystick routings require significant installation time and can be a bottle neck in the assembly process. 100R1 rubber hose does not fit in the tight channels from the operator compartment to the valves. Several special tools are required to install the elbow adapter fittings at the build up stations and different sized wrenches are required on the assembly line.



### Solution

Parflex 510D and 518D pilot lines, with Rapid Assembly fittings on the unit, eliminate elbow adapters at the build up station so all the adapters can be installed with nut runners. Routing hose becomes much easier because of the low profile hose O.D., very small minimum bend radius and low coefficient jacket. Connecting hose with the new fittings reduces installation time and eliminates the need for tools.

# Rapid Assembly Fittings Create Savings

## Money, Space & Freight

Parflex thermoplastic hoses, qualified with 56 Series Rapid Assembly Fittings feature a reduced O.D. and tighter bend radius that can transport the same flow capacity as hoses with larger outside diameters. Typically, Parflex 518D and 510D hose has at least an 1/8" smaller diameter than a standard 100R7 rubber hose. In addition, the Parflex hose is up to 5x lighter than comparable hoses.

Parflex thermoplastic hoses are exceptionally suited for routing through tight spaces while

maintaining flexibility. In fact, flexibility is one of the key features of these medium pressure hoses.

Compact hoses, (510D, 518D, 563TJ, 563LT), are often used in pilot lines or joy stick applications where multiple hoses are required to fit into a tight space. They can be formed during production to fit the specific application design.

Compact wire reinforced hoses, such as 563TJ/LT (100R17), can

also benefit from the use of a quick connect fitting in applications where multiple hoses are required to fit into a tight space. The smaller outside diameter of the hose and lower profile fittings contribute to space savings and reduced shipping costs. Not just the shipping costs from Parflex to you, but also from you to your customer.

## One Fitting, One Adapter, One Hose

### Product Features:

- Compact
- Light weight
- Quick connecting fittings
- No tools needed
- Improved assembly time
- Reduced system weight
- Easy routing
- Exceptional kink resistance
- Durable



Watch the Video



# Parflex Rapid Assembly Fittings

## Hoses Available for the Plug and Play System

PSI Thermoplastic Hose - SAE Working Pressures										PSI Thermoplastic Hose Working Pressure					
Dash Size		1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	Core Tube	Reinforcement Material	Cover Material	SAE Specification	Additional Specification
Hose	Description	psi	psi	psi	psi	psi	psi	psi	psi						

### General Hydraulic

510D	General Hydraulic		3250	3000	2500	2250	2250	2250	1250	1000	N H (-16)	Fiber	U	100R7	DNV, ISO 3949-R7-1 MSHA Compliant Cover
560TJ	General Hydraulic TOUGHJACKET™		3626	3263	3118	2750	2500	2000	1750		H	Wire	UTJ	100R1AT	MSHA Compliant Cover
563TJ	Constant Pressure TOUGHJACKET™			3045		3045	3045	3045	3045	3045	H	Wire	UTJ	100R17	MSHA Compliant Cover

### Non-Conductive

518D	Non-conductive Hydraulic	3000	3250	3000	2500	2250	2250	2250	1250	1000	N H (-16)	Fiber	U	100R7	DNV, ISO 3949-R7-1 MSHA Compliant Cover
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### Low Temperature

53DM	LT Hydraulic	3000		3000		3000	3000	3000	3000		N (-2) H	Fiber	H	100R18	-
538DM	LT Hydraulic, Non-Conductive					3000					H	Fiber	H	100R18	SAE J517
55LT	LT Hydraulic	3000	3250	3000	2500	2250	2000				N	Fiber	H	100R7	-
563LT	LT Constant Pressure			3045		3045	3045	3045	3045		H	Wire	U	100R17	-

### Hybrid

D6R	Constant Pressure Hydraulic			3045	3045	3045	3045				H	Wire	R	100R17	MSHA Compliant Cover
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#### Legend

F - Fiber

H - Copolyester

N - Nylon

U - Polyurethane

R - Smooth Synthetic Rubber

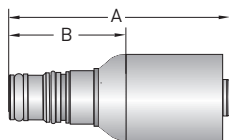
UTJ - TOUGHJACKET™ Polyurethane



# Parflex Rapid Assembly Fittings

## 56 Series

### 1WU56 Male Rapid Assembly Straight

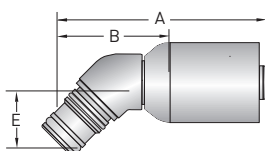


Part Number	Stem O.D.		Hose I.D.		A		Cutoff Allow. B	
	inch	mm	inch	mm	inch	mm	inch	mm
1WU56-4-4	1/4	6	1/4	6	2.18	55	1-1/8	29
1WU56-6-6	3/8	10	3/8	10	2.30	58	1-3/16	30

NOTE: Use with mating adapter PN 685RA.

Construction: Steel.  
Nitrile O-ring.

### 1WW56 Male Rapid Assembly 45° Elbow

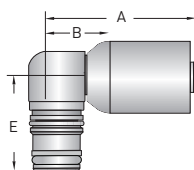


Part Number	Stem O.D.		Hose I.D.		A		Cutoff Allow. B		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1WW56-4-4	1/4	6	1/4	6	2.31	59	1-5/16	33	0.67	17
1WW56-6-6	3/8	10	3/8	10	2.35	60	1-3/8	35	0.67	17

NOTE: Use with mating adapter PN 685RA.

Construction: Steel.  
Nitrile O-ring.

### 1WY56 Male Rapid Assembly 90° Elbow

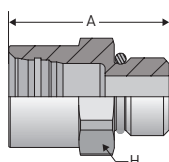


Part Number	Stem O.D.		Hose I.D.		A		Cutoff Allow. B		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1WY56-4-4	1/4	6	1/4	6	1.60	41	5/8	16	0.90	23
1WY56-6-6	3/8	10	3/8	10	1.66	42	5/8	16	1.01	26

NOTE: Use with mating adapter PN 685RA.

Construction: Steel.  
Nitrile O-ring.

### 685RA Adapter Female Rapid Assembly - Male SAE Straight Thread ORB



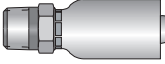
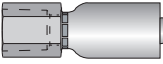
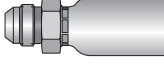
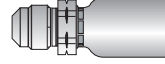
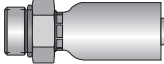
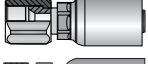


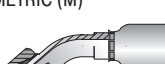


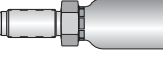
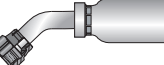
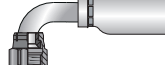
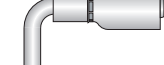
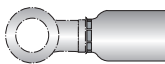

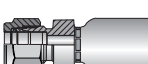
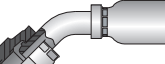
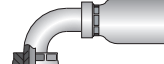
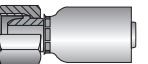
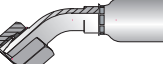
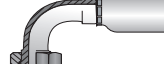
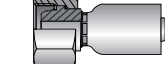
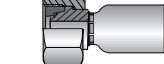
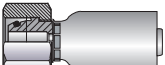
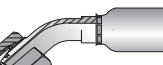
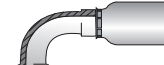
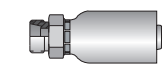
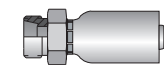
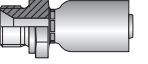
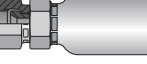
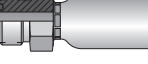
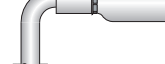

Part Number	Stem O.D.		Thread Size	A		H Hex inch
	inch	mm		inch	mm	
685RA-4-4	1/4	6	7/16-20	1.05	27	11/16
685RA-6-4	3/8	10	7/16-20	1.15	29	3/4
685RA-4-6	1/4	6	9/16-18	1.12	28	3/4
685RA-6-6	3/8	10	9/16-18	1.15	29	3/4

Construction: Steel.  
Nitrile O-ring.

View standard 56 Series Fittings next page ►

# Parflex 56 Series Fittings

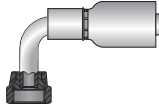
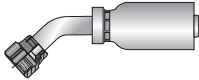
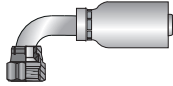
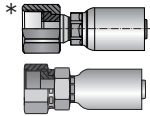
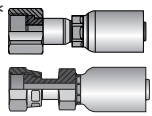
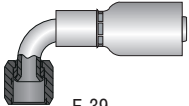
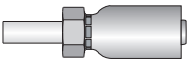
## Permanent Crimp Fittings

56 Series Permanent	101	Male Taper Pipe Rigid	102	Female Taper Pipe Rigid	103	Male (JIC) 37° Rigid	104	Male SAE 45° Rigid	105	Male Str. Thread O-ring
		E-34		E-34		E-35		E-35		E-35
	106	SAE (JIC) 37° Swivel	107	Female Pipe Swivel	108	Female SAE 45° Swivel	10C	M FM Swivel 24° O-ring 45° Elb. Lt.	11C	M FM Swivel 24° O-ring 90° Elb. Lt.
	* 	E-36		E-36		E-37	METRIC (M) 	E-43	METRIC (M) 	E-43
	113	Male Pipe Swivel	13E	Male (JIC) 37° Long	137	FM JIC 37° Swivel 45° Elbow	139	FM JIC 37° Swivel 90° Elbow	141	FM JIC 37° Swivel 90° Elbow-Lg
		E-37		E-37		E-38		E-38		E-39
	149	Banjo Union	192	FM BSP Parallel Pipe Swivel Str.	1AL	A-Lok® Compression	1B1	FM BSP Pipe Swivel 45° Elb. (60° Cone)	1B2	FM BSP Pipe Swivel 90° Elb. (60° Cone)
		E-39	METRIC (M) 	E-43		E-44		E-44		E-44
	1C3	M FM Swivel Nut Light	1C4	M FM Swivel 45° Elbow Lt.	1C5	M FM Swivel 90° Elbow Lt.	1C6	M FM Swivel DIN 20078 HW w/o O-ring	1C9	M FM Swivel DIN 20078 HW O-ring
	METRIC (M) 	E-45	METRIC (M) 	E-45	METRIC (M) 	E-45	METRIC (M) 	E-46	METRIC (M) 	E-46
	1CA	M FM Swivel 24° Lt. O-ring	1CE	M FM Swivel 24° O-ring 45° Elb.	1CF	M FM Swivel 24° O-ring 90° Elb.	1D0	M Male Stud DIN 20078 Lt.	1D2	M Male Stud 24° Heavy
	METRIC (M) 	E-47	METRIC (M) 	E-47	METRIC (M) 	E-48	METRIC (M) 	E-49	METRIC (M) 	E-49
	1D9	Male BSP - Str. (60° Cone)	1FU	JIS/BSP 30° Flare Swivel Female	1J0	Male Seal-Lok™ Rigid Str. w/O-ring	1J1	Female Seal-Lok™ 90° Elbow Long	1J2	Female Seal-Lok™ 30° Elbow
		E-49		E-48		E-40		E-40		E-41

\* **ToughShield™ Plus** ToughShield Plus, featuring Parker's Zinc Nickel Plating Standard, protects against corrosion, improving the performance of crimp hose fittings in harsh hydraulic environments, reducing both downtime and warranty costs.

# Parflex 56 Series Fittings

## Permanent Crimp Fittings

56 Series Permanent	1J5	Female Seal-Lok™ Swivel 90° Elb. Med.	1J7	Female Seal-Lok™ Swivel 45° Elbow	1J9	Female Seal-Lok™ Swivel 90° Elb Short	1JC	Female Seal-Lok™ Str. Swivel Short	1JS	Female Seal-Lok™ Straight
		E-41		E-42		E-42		E-40		E-41
	1L9	Female JIC 37° Swivel 90° Elb. Med.	1TU	Universal Inch Tube Stub End	<p><b>* ToughShield™ Plus</b></p> <p>ToughShield Plus, featuring Parker's Zinc Nickel Plating Standard, protects against corrosion, improving the performance of crimp hose fittings in harsh hydraulic environments, reducing both downtime and warranty costs.</p>					
		E-39		E-42						



Parker Hannifin Corporation

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