



WWW.TEESING.COM

# Partek

PFA Fittings

*Catalog 4181/USA*  
*December 2005*



# Table of Contents

<b>Parflare Series PFA Tube Fittings</b>	
Product Overview .....	3
Flaring and Assembly Procedure .....	4
Straight Connectors .....	5-11
Elbow Connectors .....	11-14
Tee Connectors .....	15-19
Rediflare Tubing Unions .....	20
Tubing Plugs .....	20
Fitting Caps .....	20
Fitting Nuts .....	20
<b>Pargrip Series PFA Tube Fittings</b>	
Product Overview .....	21
Assembly Procedure .....	22
Straight Connectors .....	22-24
Elbow Connectors .....	24-26
Tee Connectors .....	26-27
Tubing Plugs .....	28
Fitting Caps .....	28
Fitting Nuts .....	28
Ferrules & Grippers .....	28
<b>Parbond Series PFA Fusible Pipe Fittings</b>	
Product Overview .....	29
Weld Examples .....	30
Straight Adaptors .....	30-32
Flange Adaptors .....	32
Bond Reducers .....	33
Union Adaptors .....	33
Bond Caps .....	33
PVDF Transition Adaptors .....	34
Elbow Connectors .....	34-35
Tee Connectors .....	35-36
<b>Pipe Series PFA Schedule 40 Pipe Fittings</b>	
Product Overview .....	37
Pipe Plugs .....	38
Pipe Nipples .....	38
Pipe Bushings .....	38
Pipe Couplings .....	39
Pipe Female Reducers .....	39
Pipe Elbows .....	39
Pipe Tees .....	39
<b>Tools and Accessories</b>	
NW Nut Wrench .....	40
MFT Manual Flaring Tool .....	41
FG Electronic Flare Gun .....	42-43
<b>Offer of Sale</b> .....	46

 **WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS 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 and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

© Copyright 2003, Parker Hannifin Corporation, All Rights Reserved

**Product Overview**

The Parflare Fittings are ideally suited for any ultra-pure or corrosive chemical application. The fitting design yields a leak tight connection with minimal dead volume and can be used in side loading and vibrational applications. The connection is achieved by a heated flaring process utilizing an external heat source (HG Heat Gun) and PTFE mandrel (MFT Manual Flaring Tool), or by using Partek's optional FG Series Electronic Flare Gun. Parflare PFA fittings are supplied with PVDF nuts as standard. For PFA nuts add -T suffix to part number. For High Temperature nut assemblies add -HT suffix to part number (1/4" - 1" sizes only). Please consult factory for other available configurations, materials, and custom assemblies.



**Features**

**PFA body manufactured from virgin High Purity PFA materials.**

**Ease of assembly.**

**Leak tight seal.**

**Numerous configurations including Redi-flare end connections.**

**Benefits**

**Less surface particulates, TOC, and anions resulting in cleaner operation.**

**Reduced assembly time, and costs.**

**Less downtime.**

**Reduced system complexity and cost.**

**Specifications**

**Materials of Construction:**

Wetted Surfaces: PFA Body  
 External Surfaces: PVDF Nut (standard); PFA Nut (add -T suffix to part number); Titanate Filled PFA Nut & Titanate Filled ETFE Gripper (For High Temperature nut assemblies, add -HT suffix to part number, 1/4" - 1" sizes only).

**Pressure Ranges:**

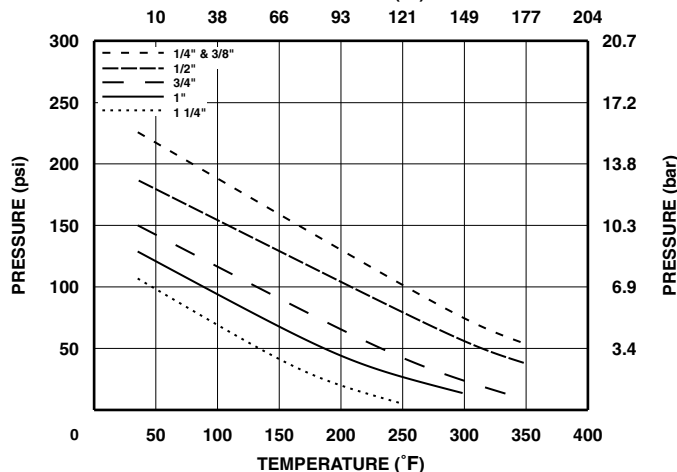
125 PSIG (8.6 bar) and see Pressure/Temperature Charts.

**Temperature Ranges:**

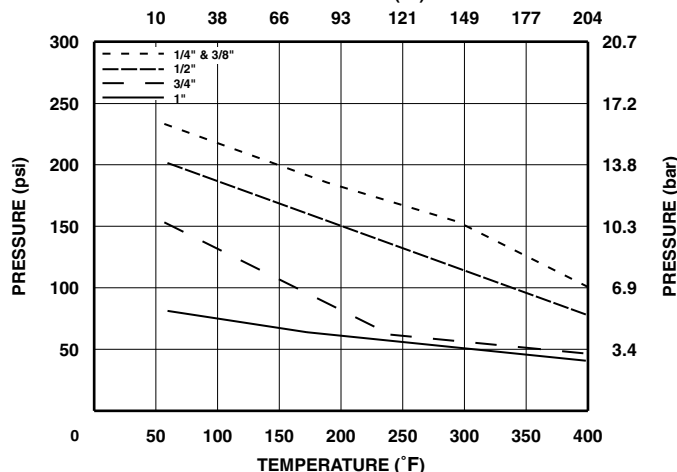
PVDF Nuts: Up to 212°F (100°C); PFA Nuts: Up to 266°F (130°C); HT Nut Assemblies: > 266°F (130°C); See Pressure/Temperature Charts.

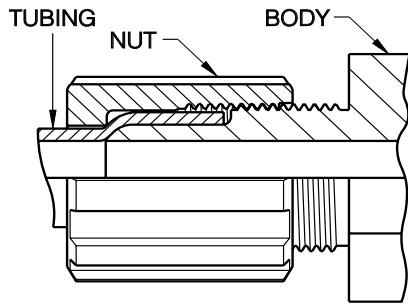
Fitting Size	Tube Size
4	1/4" O.D. X 5/32" I.D.
6	3/8" O.D. X 1/4" I.D.
8	1/2" O.D. X 3/8" I.D.
12	3/4" O.D. X 5/8" I.D.
16	1" O.D. X 7/8" I.D.
20	1-1/4" O.D. X 1.10" I.D.

**PARFLARE FITTINGS WITH PVDF AND PFA NUTS  
 PRESSURE VS. TEMPERATURE**

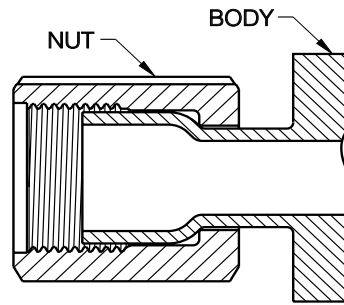


**PARFLARE FITTINGS WITH HT NUT ASSEMBLIES  
 PRESSURE VS. TEMPERATURE**





**Parflare**



**Redi-flare**

## MFT Manual Flaring Tool 1/4" - 1 1/4" Tubing Sizes\*

1. Cut tubing evenly using a tube cutter:  
TCTR-1 for 1/8" - 1/2"  
TCTR-2 for 1/8" - 3/4"  
TCTR-3 for 1/8" - 1 1/2"
2. For PVDF or PFA nuts slip small end over tubing. For HT nut assemblies slip small end of nut & small end of gripper over tubing.
3. Using the HG-1\*\* Heat Gun on high setting, hold the end of tubing approximately 1/2" from gun and rotate tubing slowly until a fine whitish line appears around tube. Alternately, tubing can be heated for a timed period corresponding to Table 1.
4. Remove tubing from heat source and immediately push over the appropriate flaring mandrel until end of tubing reaches the mandrel stop shoulder.
5. Maintain tubing on mandrel together until cool. Refer to Table 1 for appropriate cooling times.
6. Allow tubing to cool on mandrel for an additional 2 to 3 minutes. Alternately the tubing can be assembled as per step 7 below immediately completing step 5 above.
7. Push flared tubing end over desired fitting body until it stops. Make sure that gap between end of tubing and fitting body shoulder is not more than .125" (3.2mm).
8. For PVDF or PFA nuts tighten onto fitting body as per Table 1. For HT nut assemblies tighten onto fitting body per Table 1. Once desired temperature has been reached, re-tighten per Table 1.

\* HT nut assemblies are for 1/4" - 1" sizes only.

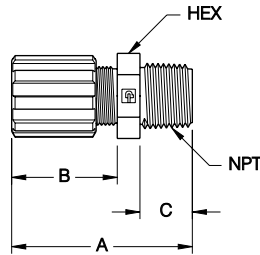
## FG Electronic Flare Gun 1/4" - 1" Tubing Sizes

1. Cut tubing evenly using a tube cutter:  
TCTR-1 for 1/8" - 1/2"  
TCTR-2 for 1/8" - 3/4"  
TCTR-3 for 1/8" - 1 1/2"
2. For PVDF or PFA nuts slip small end over tubing. For HT nut assemblies slip small end of nut and small end of gripper over tubing.
3. Holding the flare gun, push lever to the most forward position.
4. Squeeze trigger 12 to 14 times to reset the mandrel to the start position.
5. Move top lever to the most rear position.
6. Insert the correct sized tubing. See page 56.
7. Click trigger until resistance is lost.
8. Plug in tool and put the lever in the center position.
9. After 30 seconds you will hear a beep.
10. Ratchet the trigger until resistance is felt and note the amber LED coming on to indicate that cooling has begun.
11. After this light goes out, move the lever into the most forward position.
12. Remove the flared tubing.
13. Push flared tubing end over desired fitting body until it stops. Make sure that gap between end of tubing and fitting body shoulder is not more than .125" (3.2mm).
14. For PVDF or PFA nuts tighten onto fitting body as per Table 1 below. For HT nut assemblies tighten onto fitting body per Table 1. Once desired temperature has been reached, re-tighten per Table 1.

**Table 1**

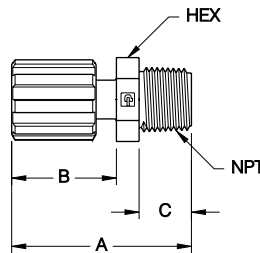
Fitting Size	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"
Heating time (sec.) for PFA Tubing	15	25	25	25	25	25
Holding time on mandrel	20	20	20	20	25	25
Additional cooling time (min.)	2	2	3	3	3	3
PVDF & PFA Nuts minimum tightening torque (inch lbs./Nm)	5 / .6	8 / .9	11 / 1.2	14 / 1.6	30 / 3.4	75 / 8.4
HT Nut Assemblies minimum tightening torque (inch lbs./Nm)	14 / 1.6	14 / 1.6	18 / 2.0	18 / 2.0	50 / 5.7	NA

**Adaptor  
Male Straight**



Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
FAMS-42	1/4	1/8	0.13	3.30	2.01	51.05	1.16	29.46	0.55	13.97	5/8
FAMS-44	1/4	1/4	0.13	3.30	2.01	51.05	1.16	29.46	0.55	13.97	5/8
FAMS-46	1/4	3/8	0.12	3.05	2.01	51.05	1.16	29.46	0.55	13.97	11/16
FAMS-48	1/4	1/2	0.12	3.05	2.15	54.61	1.16	29.46	0.66	16.76	13/16
FAMS-412	1/4	3/4	0.12	3.05	2.11	53.59	1.16	29.46	0.67	17.02	1 3/16
FAMS-62	3/8	1/8	0.20	5.08	2.08	52.83	1.24	31.50	0.55	13.97	13/16
FAMS-64	3/8	1/4	0.25	6.35	2.08	52.83	1.24	31.50	0.55	13.97	13/16
FAMS-66	3/8	3/8	0.25	6.35	2.08	52.83	1.24	31.50	0.55	13.97	13/16
FAMS-68	3/8	1/2	0.25	6.35	2.20	55.88	1.24	31.50	0.66	16.76	15/16
FAMS-612	3/8	3/4	0.25	6.35	2.18	55.37	1.24	31.50	0.65	16.51	1 3/16
FAMS-616	3/8	1	0.24	6.10	2.35	59.69	1.24	31.50	0.83	21.08	1 7/16
FAMS-82	1/2	1/8	0.20	5.08	2.19	55.63	1.37	34.80	0.55	13.97	15/16
FAMS-84	1/2	1/4	0.28	7.11	2.18	55.37	1.34	34.04	0.55	13.97	15/16
FAMS-86	1/2	3/8	0.38	9.65	2.17	55.12	1.33	33.78	0.55	13.97	15/16
FAMS-88	1/2	1/2	0.38	9.65	2.30	58.42	1.34	34.04	0.66	16.76	15/16
FAMS-812	1/2	3/4	0.38	9.65	2.28	57.91	1.34	34.04	0.66	16.76	1 3/16
FAMS-816	1/2	1	0.37	9.40	2.43	61.72	1.34	34.04	0.85	21.59	1 7/16
FAMS-128	3/4	1/2	0.53	13.46	2.42	61.47	1.46	37.08	0.66	16.76	1 3/16
FAMS-1212	3/4	3/4	0.62	15.75	2.42	61.47	1.46	37.08	0.66	16.76	1 3/16
FAMS-1216	3/4	1	0.62	15.75	2.62	66.55	1.48	37.59	0.85	21.59	1 7/16
FAMS-168	1	1/2	0.53	13.46	2.72	69.09	1.78	45.21	0.66	16.76	1 7/16
FAMS-1612	1	3/4	0.66	16.76	2.72	69.09	1.76	44.70	0.67	17.02	1 7/16
FAMS-1616	1	1	0.88	22.35	2.92	74.17	1.78	45.21	0.85	21.59	1 7/16
FAMS-1620	1	1 1/4	0.88	22.35	2.97	75.43	1.80	45.72	0.88	22.35	1 3/4
FAMS-2016	1 1/4	1	1.09	27.68	3.51	89.15	2.16	54.86	0.85	21.59	N/A
FAMS-2020	1 1/4	1 1/4	1.09	27.68	3.54	89.92	2.16	54.86	0.88	22.35	N/A

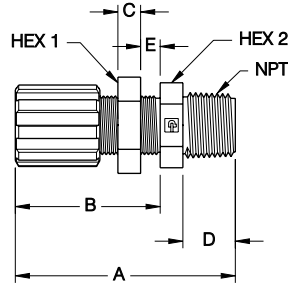
**Adaptor  
Male Straight  
Redi-flare**



Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
FAMS-8RF4	1/2	1/4	0.38	9.65	2.18	55.37	1.34	34.04	0.55	13.97	15/16
FAMS-8RF6	1/2	3/8	0.38	9.65	2.18	55.37	1.34	34.04	0.55	13.97	15/16
FAMS-12RF8	3/4	1/2	0.62	15.75	2.53	64.26	1.55	39.37	0.67	17.01	15/16
FAMS-12RF12	3/4	3/4	0.62	15.75	2.48	62.99	1.55	39.37	0.65	16.51	1 3/16

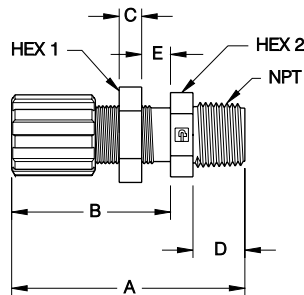
# Parflare PFA Tube Fittings

## Adaptor Male Straight Panel Mount



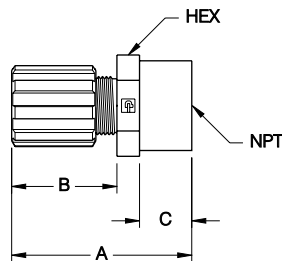
Part Number	Tube Size	NPT Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FAMS-42-P	1/4	1/8	0.13	3.30	2.54	64.52	1.70	43.18	0.29	7.37	0.55	13.97	0.25	6.35	0.50	12.70	11/16	11/16
FAMS-44-P	1/4	1/4	0.13	3.30	2.54	64.52	1.71	43.43	0.29	7.37	0.55	13.97	0.25	6.35	0.50	12.70	11/16	11/16
FAMS-64-P	3/8	1/4	0.25	6.35	2.56	65.02	1.72	43.67	0.55	13.97	0.55	13.97	0.50	12.70	0.63	16.00	15/16	13/16
FAMS-66-P	3/8	3/8	0.25	6.35	2.57	65.28	1.73	43.94	0.29	7.37	0.55	13.97	0.25	6.35	0.63	16.00	15/16	13/16
FAMS-84-P	1/2	1/4	0.28	7.11	2.66	67.56	1.82	46.23	0.29	7.37	0.55	13.97	0.25	6.35	0.75	19.05	1 1/16	15/16
FAMS-86-P	1/2	3/8	0.37	9.40	2.65	67.31	1.81	45.97	0.29	7.37	0.54	13.72	0.25	6.35	0.75	19.05	1 1/16	15/16
FAMS-88-P	1/2	1/2	0.38	9.65	2.78	70.61	1.83	46.48	0.29	7.37	0.66	16.76	0.25	6.35	0.75	19.05	1 1/16	15/16
FAMS-1212-P	3/4	3/4	0.63	16.00	3.08	78.23	2.12	53.85	0.29	7.37	0.66	16.76	0.50	12.70	1.00	25.40	1 5/16	1 3/16
FAMS-1616-P	1	1	0.87	22.10	3.18	80.77	2.05	52.07	0.29	7.37	0.85	21.59	0.50	12.70	1.44	36.58	1 3/4	1 3/4

## Adaptor Male Straight Panel Mount, Extended



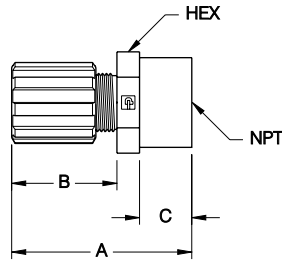
Part Number	Tube Size	NPT Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FAMS-44-PX	1/4	1/4	0.12	3.05	2.69	68.33	1.85	46.99	0.29	7.37	0.55	13.97	0.50	12.70	0.50	12.70	11/16	11/16
FAMS-66-PX	3/8	3/8	0.25	6.35	2.73	69.34	1.90	48.26	0.29	7.37	0.55	13.97	0.50	12.70	0.63	16.00	15/16	13/16
FAMS-86-PX	1/2	3/8	0.38	9.65	2.87	72.90	2.03	51.56	0.29	7.37	0.55	13.97	0.50	12.70	0.75	19.05	1 1/16	15/16
FAMS-88-PX	1/2	1/2	0.37	9.40	2.99	75.95	2.05	52.07	0.29	7.37	0.66	16.76	0.50	12.70	0.75	19.05	1 1/16	15/16
FAMS-1212-PX	3/4	3/4	0.63	16.00	3.10	78.74	2.10	54.40	0.30	7.62	0.67	17.02	0.50	12.70	1.00	25.40	1 5/16	1 3/16

## Adaptor Female Straight



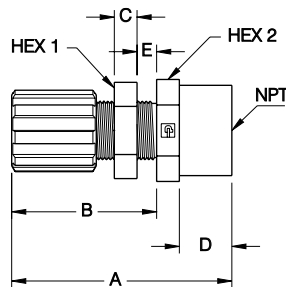
Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
FAFS-42	1/4	1/8	0.12	3.11	2.03	52.58	1.18	30.56	0.56	14.50	5/8
FAFS-44	1/4	1/4	0.12	3.11	2.03	52.58	1.18	30.56	0.56	14.50	3/4
FAFS-46	1/4	3/8	0.12	3.11	2.04	52.84	1.20	31.08	0.56	14.50	15/16
FAFS-48	1/4	1/2	0.12	3.11	2.11	54.65	1.16	30.04	0.67	17.35	1 3/16

**Adaptor  
Female Straight  
cont.**



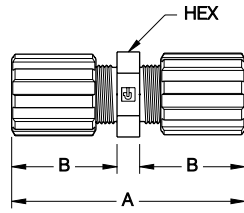
Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
FAFS-62	3/8	1/8	0.25	6.48	2.08	53.87	1.23	31.86	0.56	14.50	5/8
FAFS-64	3/8	1/4	0.25	6.48	2.10	54.39	1.25	32.38	0.56	14.50	3/4
FAFS-66	3/8	3/8	0.25	6.48	2.07	53.61	1.22	31.60	0.56	14.50	15/16
FAFS-68	3/8	1/2	0.25	6.35	2.17	56.20	1.21	31.34	0.67	17.35	1
FAFS-84	1/2	1/4	0.31	8.03	2.20	56.98	1.33	34.45	0.56	14.50	3/4
FAFS-86	1/2	3/8	0.37	9.58	2.19	56.72	1.34	34.71	0.63	16.32	15/16
FAFS-88	1/2	1/2	0.37	9.58	2.31	59.83	1.34	34.71	0.67	17.35	1 1/8
FAFS-812	1/2	3/4	0.37	9.58	2.36	61.12	1.40	36.26	0.67	17.35	1 3/16
FAFS-816	1/2	1	0.37	9.58	2.56	66.30	1.40	36.26	0.86	22.27	1 5/8
FAFS-128	3/4	1/2	0.57	14.76	2.45	63.46	1.50	38.85	0.66	17.09	1 3/16
FAFS-1212	3/4	3/4	0.62	16.06	2.43	62.94	1.46	37.81	0.67	17.35	1 3/16
FAFS-1216	3/4	1	0.62	16.06	2.63	68.12	1.48	38.33	0.86	22.27	1 5/8
FAFS-168	1	1/2	0.55	14.25	2.74	70.97	1.79	46.36	0.67	17.35	1 5/8
FAFS-1612	1	3/4	0.76	19.68	2.74	70.97	1.78	46.10	0.68	17.61	1 5/8
FAFS-1616	1	1	0.87	22.53	2.93	75.89	1.78	46.10	0.86	22.27	1 5/8

**Adaptor  
Female Straight  
Panel Mount**



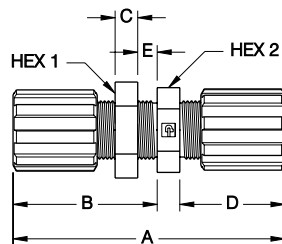
Part Number	Tube Size	NPT Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FAFS-44-P	1/4	1/4	0.12	3.05	2.52	64.01	1.67	42.42	0.29	7.37	0.56	14.22	0.25	6.35	0.50	12.70	11/16	3/4
FAFS-64-P	3/8	1/4	0.12	3.05	2.58	65.53	1.72	43.69	0.29	7.37	0.57	14.48	0.25	6.35	0.63	16.00	15/16	3/4
FAFS-66-P	3/8	3/8	0.25	6.35	2.63	66.80	1.72	43.69	0.29	7.37	0.62	15.75	0.25	6.35	0.63	16.00	15/16	15/16
FAFS-88-P	1/2	1/2	0.38	9.65	2.81	71.37	1.85	46.99	0.29	7.37	0.67	17.02	0.25	6.35	0.75	19.05	1 1/16	1 1/8
FAFS-1212-P	3/4	3/4	0.63	16.00	3.16	80.26	2.11	53.59	0.29	7.37	0.76	19.30	0.50	12.70	1.00	25.40	1 5/16	1 3/16
FAFS-1616-P	1	1	0.88	22.35	3.50	88.90	2.35	59.69	0.29	7.37	0.86	21.84	0.50	12.70	1.44	36.58	1 3/4	1 3/4

## Straight Connector



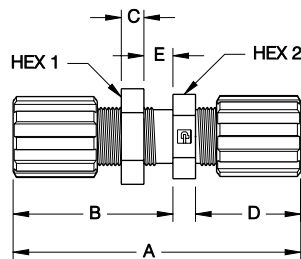
Part Number	Tube Size	Orifice		A		B		Hex Size
		inch	mm	inch	mm	inch	mm	
FSC-4	1/4	0.12	3.05	2.59	65.79	1.14	28.96	11/16
FSC-6	3/8	0.25	6.35	2.79	70.87	1.25	31.75	13/16
FSC-8	1/2	0.38	9.65	2.96	75.18	1.33	33.78	15/16
FSC-12	3/4	0.62	15.75	3.20	81.28	1.45	36.83	1 3/16
FSC-16	1	0.87	22.10	3.83	97.28	1.77	44.96	1 7/16
FSC-20	1 1/4	1.10	27.94	4.83	122.68	2.16	54.86	N/A

## Straight Connector Panel Mount



Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FSC-4-P	1/4	0.12	3.05	3.21	81.53	1.70	43.18	0.29	7.37	1.21	30.73	0.25	6.45	0.50	12.70	11/16	11/16
FSC-6-P	3/8	0.25	6.35	3.29	83.57	1.75	44.45	0.29	7.37	1.25	31.75	0.25	6.35	0.63	16.00	15/16	13/16
FSC-8-P	1/2	0.38	9.65	3.46	87.88	1.83	46.48	0.29	7.37	1.34	34.04	0.25	6.35	0.75	19.05	1 1/16	15/16
FSC-12-P	3/4	0.62	15.75	3.84	97.54	2.08	52.83	0.29	7.37	1.46	37.08	0.25	6.35	1.00	25.40	1 3/16	1 3/16
FSC-16-P	1	0.87	22.10	4.43	112.52	2.37	60.20	0.29	7.37	1.78	45.21	0.50	12.70	1.44	36.58	1 3/4	1 3/4

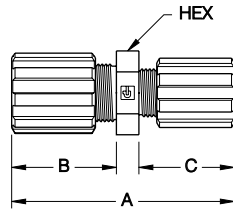
## Straight Connector Panel Mount, Extended



Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FSC-4-PX	1/4	0.12	3.05	3.29	83.57	1.86	47.24	0.29	7.37	1.14	28.96	0.50	12.70	0.50	12.70	11/16	11/16
FSC-6-PX	3/8	0.25	6.35	3.47	88.14	1.94	49.28	0.29	7.37	1.24	31.50	0.50	12.70	0.63	16.00	15/16	13/16
FSC-8-PX	1/2	0.38	9.65	3.67	93.22	2.04	51.82	0.29	7.37	1.36	34.54	0.50	12.70	0.75	19.05	1 1/16	15/16
FSC-12-PX	3/4	0.62	15.75	3.85	97.80	2.11	53.59	0.29	7.37	1.45	36.83	0.50	12.70	1.00	25.40	1 3/16	1 3/16

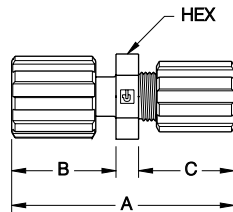


**Straight Connector  
Reducer**



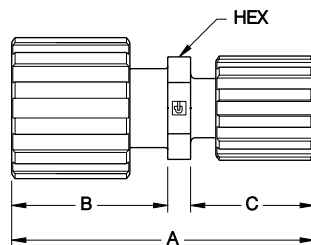
Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
FSCR-64	3/8 X 1/4	0.12	3.05	2.69	68.33	1.21	30.73	1.18	29.97	13/16
FSCR-84	1/2 X 1/4	0.13	3.30	2.82	71.63	1.38	35.05	1.15	29.21	15/16
FSCR-86	1/2 X 3/8	0.25	6.35	2.84	72.14	1.34	34.04	1.22	30.99	15/16
FSCR-124	3/4 X 1/4	0.12	3.05	2.69	68.33	1.43	36.32	1.14	28.96	1 3/16
FSCR-126	3/4 X 3/8	0.25	6.35	2.93	74.42	1.43	36.32	1.21	30.73	1 3/16
FSCR-128	3/4 X 1/2	0.38	9.65	3.08	78.23	1.45	36.83	1.33	33.78	1 3/16
FSCR-168	1 X 1/2	0.37	9.40	3.39	86.11	1.77	44.96	1.33	33.78	1 7/16
FSCR-1612	1 X 3/4	0.62	15.75	3.51	89.15	1.78	45.21	1.45	36.83	1 7/16
FSCR-2016	1 1/4 X 1	0.87	22.10	4.43	112.52	2.16	54.86	1.77	44.96	N/A

**Straight Connector  
Reducer,  
Redi-flare**



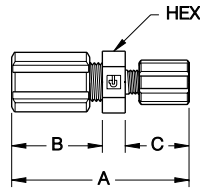
Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
FSCR-6RF4	3/8 RF X 1/4 F	0.12	3.05	2.68	68.07	1.23	31.24	1.16	29.46	11/16
FSCR-8RF4	1/2 RF X 1/4 F	0.12	3.05	2.78	70.61	1.32	33.53	1.15	29.21	11/16
FSCR-8RF6	1/2 RF X 3/8 F	0.25	6.35	2.71	68.83	1.20	30.48	1.22	30.99	5/8
FSCR-86RF	1/2 F X 3/8 RF	0.25	6.35	2.89	73.41	1.25	31.75	1.35	34.29	15/16
FSCR-12RF4	3/4 RF X 1/4 F	0.12	3.05	2.97	75.44	1.52	38.61	1.16	29.46	15/16
FSCR-12RF6	3/4 RF X 3/8 F	0.25	6.35	3.10	78.74	1.59	40.39	1.22	30.99	15/16
FSCR-12RF8	3/4 RF X 1/2 F	0.38	9.65	3.18	80.77	1.54	39.12	1.35	34.29	15/16
FSCR-128RF	3/4 F X 1/2 RF	0.38	9.65	3.09	78.49	1.34	34.04	1.46	37.08	1 3/16
FSCR-16RF8	1 RF X 1/2 F	0.38	9.65	3.67	93.22	2.03	51.56	1.35	34.29	1 7/16
FSCR-168RF	1 F X 1/2 RF	0.38	9.65	3.43	87.12	1.34	34.04	1.80	45.72	1 7/16
FSCR-16RF12	1 RF X 3/4 F	0.63	16.00	3.87	98.30	2.03	51.56	1.55	39.37	1 3/16
FSCR-1612RF	1 F X 3/4 RF	0.63	16.00	3.66	92.96	1.57	39.88	1.80	45.72	1 7/16

**Straight Connector  
Reducer,  
Redi-flare**



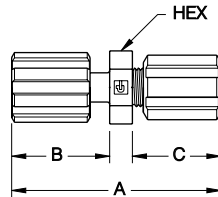
Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
FSCR-16RF12RF	1 X 3/4	0.63	16.00	3.84	97.54	1.98	50.29	1.57	39.88	1 1/8

## Straight Connector Reducer, Pargrip



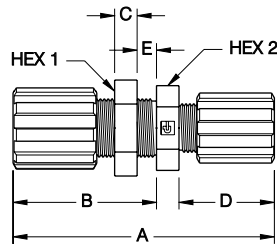
Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
FSCR-42G	1/4 X 1/8	0.09	2.29	2.19	55.63	1.15	29.21	0.75	19.05	11/16

## Straight Connector Reducer, Redi-flare Pargrip



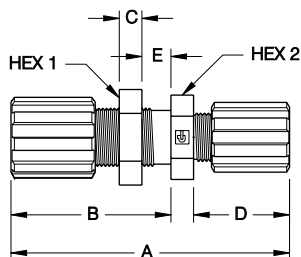
Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
FSCR-4RF2G	1/4 X 1/8	0.09	2.29	2.22	56.39	1.18	29.97	0.75	19.05	11/16
FSCR-6RF4G	3/8 X 1/4	0.13	3.30	2.67	67.82	1.25	31.75	1.13	28.70	11/16

## Straight Connector Reducer Panel Mount



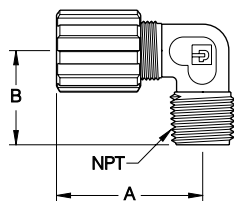
Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FSCR-64-P	3/8 X 1/4	0.12	3.05	3.18	80.77	1.73	43.94	0.29	7.37	1.16	29.46	0.25	6.35	0.63	16.00	15/16	13/16
FSCR-84-P	1/2 X 1/4	0.12	3.05	3.25	82.55	1.83	46.48	0.29	7.37	1.13	28.70	0.25	6.35	0.75	19.05	1 1/16	15/16
FSCR-86-P	1/2 X 3/8	0.25	6.35	3.37	85.60	1.86	47.24	0.29	7.37	1.22	30.99	0.25	6.35	0.75	19.05	1 1/16	15/16
FSCR-126-P	3/4 X 3/8	0.25	6.35	3.63	92.20	2.11	53.59	0.29	7.37	1.23	31.24	0.50	12.7	1.00	25.40	1 5/16	1 3/16
FSCR-128-P	3/4 X 1/2	0.38	9.65	3.71	94.23	2.09	53.09	0.29	7.37	1.33	33.78	0.25	6.35	1.00	25.40	1 5/16	1 3/16
FSCR-1216-P	3/4 X 1	0.63	16.00	4.15	105.41	2.10	53.34	0.29	7.37	1.76	44.70	0.25	6.35	1.00	25.40	1 5/16	1 7/16
FSCR-1612-P	1 X 3/4	0.62	15.85	4.08	103.63	2.34	59.44	0.29	7.37	1.46	37.08	0.50	12.7	1.44	36.58	1 3/4	1 3/4

**Straight Connector  
Reducer  
Panel Mount,  
Extended**



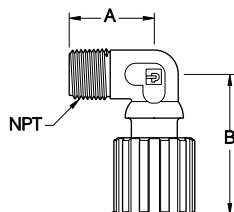
Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
FSCR-86-PX	1/2 X 3/8	0.25	6.35	3.55	90.17	2.04	51.82	0.29	7.37	1.22	30.99	0.50	12.7	0.75	19.05	1 1/16	15/16

**Adaptor Male  
Elbow**



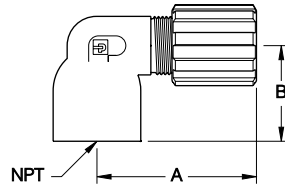
Part Number	Tube Size	NPT Size	Orifice		A		B	
			inch	mm	inch	mm	inch	mm
FAME-42	1/4	1/8	0.12	5.08	1.70	43.18	1.08	27.43
FAME-44	1/4	1/4	0.12	3.05	1.68	42.67	1.08	27.43
FAME-46	1/4	3/8	0.12	3.05	1.67	42.42	1.08	27.43
FAME-48	1/4	1/2	0.12	3.05	1.68	42.67	1.20	30.48
FAME-62	3/8	1/8	0.25	6.35	1.77	44.96	1.08	27.43
FAME-64	3/8	1/4	0.25	6.35	1.74	44.20	1.08	27.43
FAME-66	3/8	3/8	0.25	6.35	1.75	44.45	1.08	27.43
FAME-68	3/8	1/2	0.25	6.35	1.77	44.96	1.18	29.97
FAME-612	3/8	3/4	0.25	6.35	1.89	48.01	1.36	34.54
FAME-84	1/2	1/4	0.38	9.65	1.86	47.24	1.07	27.18
FAME-86	1/2	3/8	0.38	9.65	1.93	49.02	1.08	27.43
FAME-88	1/2	1/2	0.38	9.65	1.86	47.24	1.19	30.23
FAME-812	1/2	3/4	0.38	9.65	2.04	51.82	1.37	34.80
FAME-128	3/4	1/2	0.54	13.72	2.17	55.12	1.37	34.80
FAME-1212	3/4	3/4	0.63	16.00	2.16	54.86	1.37	34.80
FAME-1216	3/4	1	0.63	16.00	2.30	58.42	1.81	45.97
FAME-1612	1	3/4	0.66	16.76	2.78	70.61	1.64	41.66
FAME-1616	1	1	0.88	22.35	2.75	69.85	1.82	46.23

**Adaptor Male  
Elbow,  
Redi-flare**



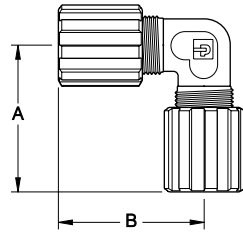
Part Number	Tube Size	NPT Size	Orifice		A		B	
			inch	mm	inch	mm	inch	mm
FAME-4RF4	1/4	1/4	0.12	3.30	1.07	27.18	1.70	43.18
FAME-12RF12	3/4	3/4	0.63	16.00	1.36	34.54	2.27	57.66
FAME-16RF16	1	1	0.88	22.35	1.87	47.50	2.95	74.93

## Adaptor Female Elbow



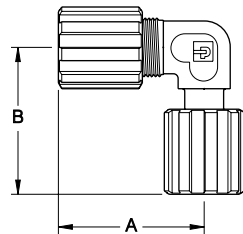
Part Number	Tube Size	NPT Size	Orifice		A		B	
			inch	mm	inch	mm	inch	mm
FAFE-42	1/4	1/8	0.12	3.05	1.89	48.01	0.84	21.34
FAFE-44	1/4	1/4	0.12	3.05	1.87	47.50	0.98	24.89
FAFE-64	3/8	1/4	0.25	6.35	1.96	49.78	0.98	24.89
FAFE-66	3/8	3/8	0.25	6.35	1.77	44.96	0.98	24.89
FAFE-68	3/8	1/2	0.25	6.35	1.96	49.78	1.24	31.50
FAFE-84	1/2	1/4	0.31	7.87	2.10	53.34	0.98	24.89
FAFE-86	1/2	3/8	0.38	9.65	2.11	53.59	0.99	25.15
FAFE-88	1/2	1/2	0.38	9.65	2.05	52.07	1.25	31.75
FAFE-128	3/4	1/2	0.63	16.00	2.38	60.45	1.69	42.93
FAFE-1212	3/4	3/4	0.63	16.00	2.47	62.74	2.19	55.63
FAFE-1616	1	1	0.88	22.35	2.74	69.60	1.60	40.64

## Elbow Connector



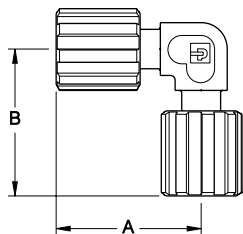
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
FEC-4	1/4	0.12	3.05	1.69	42.93	1.69	42.93
FEC-6	3/8	0.25	6.35	1.77	44.96	1.77	44.96
FEC-8	1/2	0.38	9.65	1.91	48.51	1.91	48.51
FEC-12	3/4	0.63	16.00	2.14	54.36	2.14	54.36
FEC-16	1	0.87	22.10	2.75	69.85	2.75	69.85
FEC-20	1 1/4	1.09	27.69	3.42	86.87	3.42	86.87

## Elbow Connector Redi-flare



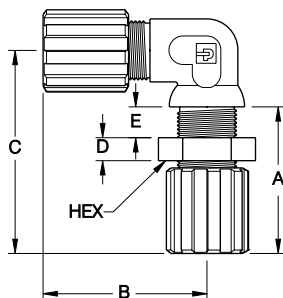
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
FEC-44RF	1/4 X 1/4	0.12	3.05	1.73	43.94	1.60	40.64
FEC-66RF	3/8 X 3/8	0.25	6.35	1.76	44.70	1.70	43.18
FEC-88RF	1/2 X 1/2	0.38	9.65	1.86	47.24	1.80	45.72
FEC-1212RF	3/4 X 3/4	0.63	16.00	2.15	54.61	2.20	55.88
FEC-1616RF	1 X 1	0.87	22.10	2.56	65.02	2.99	75.95
FEC-2020RF	1 1/4 X 1 1/4	1.10	27.94	3.42	86.87	3.67	93.22

**Elbow Connector  
Redi-flare**



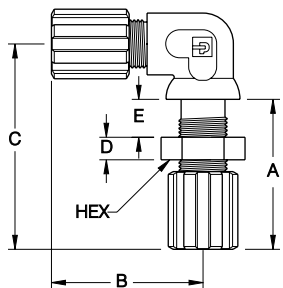
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
FEC-4RF	1/4	0.16	4.06	1.70	43.18	1.70	43.18
FEC-6RF	3/8	0.25	6.35	1.76	44.70	1.76	44.70
FEC-8RF	1/2	0.38	9.65	1.74	44.20	1.74	44.20
FEC-12RF	3/4	0.62	15.75	2.30	58.42	2.30	58.42
FEC-16RF	1	0.87	22.10	2.99	75.95	2.99	75.95

**Elbow Connector  
Panel Mount**



Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
FEC-4-P	1/4	0.12	3.05	1.68	42.67	1.70	43.18	2.21	56.13	0.29	7.37	0.25	6.35	0.50	12.70	11/16
FEC-6-P	3/8	0.25	6.35	1.75	44.45	1.95	49.53	2.45	62.23	0.29	7.37	0.25	6.35	0.63	16.00	15/16
FEC-8-P	1/2	0.38	9.65	1.85	46.99	1.90	48.26	2.56	65.02	0.29	7.37	0.25	6.35	0.75	19.05	1 1/16

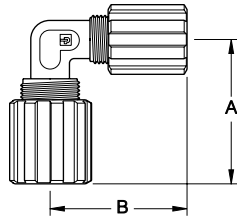
**Elbow Connector  
Panel Mount,  
Extended**



Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
FEC-4-PX	1/4	0.12	3.05	1.86	47.24	1.66	42.16	2.38	60.45	0.29	7.37	0.50	12.70	0.50	12.70	11/16
FEC-6-PX	3/8	0.25	6.35	1.89	48.01	1.88	47.75	2.60	66.04	0.29	7.37	0.50	12.70	0.63	16.00	15/16

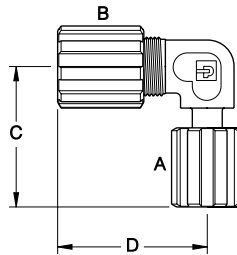
# Parflare PFA Tube Fittings

## Elbow Connector Reducer



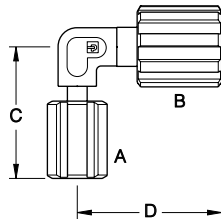
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
FECR-64	3/8 X 1/4	0.12	3.05	1.75	44.45	1.71	43.43
FECR-84	1/2 X 1/4	0.13	3.30	1.87	47.50	1.68	42.67
FECR-86	1/2 X 3/8	0.25	6.35	1.87	47.50	1.77	44.96
FECR-124	3/4 X 1/4	0.12	3.05	2.18	55.37	1.89	48.01
FECR-126	3/4 X 3/8	0.25	6.35	2.16	54.86	1.95	49.53
FECR-128	3/4 X 1/2	0.38	9.65	2.17	55.12	2.10	53.34
FECR-1612	1 X 3/4	0.62	15.75	2.75	69.85	2.39	60.71
FECR-2016	1 1/4 X 1	0.88	22.35	2.80	71.12	3.42	86.87

## Elbow Connector Reducer, Redi-flare



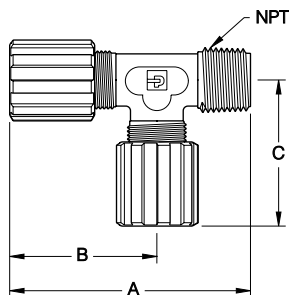
Part Number	A	B	Orifice		C		D	
	Tube Size	Tube Size	inch	mm	inch	mm	inch	mm
FECR-6RF4	3/8	1/4	0.13	3.30	1.76	44.70	1.66	42.16
FECR-64RF	1/4	3/8	0.15	3.81	1.69	42.93	1.74	44.20
FECR-8RF6	1/2	3/8	0.25	6.35	1.77	44.96	1.80	45.72
FECR-86RF	3/8	1/2	0.38	9.65	1.86	47.24	1.88	47.75
FECR-12RF8	3/4	1/2	0.38	9.65	2.28	57.91	2.07	52.58
FECR-128RF	1/2	3/4	0.38	9.65	2.04	51.82	2.16	54.86

## Elbow Connector Reducer, Redi-flare



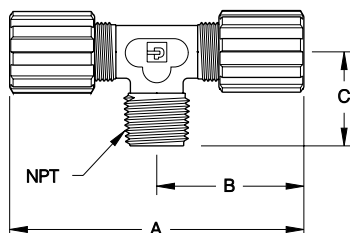
Part Number	A	B	Orifice		C		D	
	Tube Size	Tube Size	inch	mm	inch	mm	inch	mm
FECR-6RF4RF	1/4	3/8	0.15	3.81	1.69	42.93	1.76	44.70
FECR-8RF4RF	1/4	1/2	0.15	3.81	1.69	42.93	1.85	46.99

**Adaptor Male Tee**



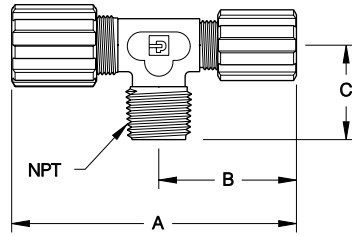
Part Number	Tube Size	NPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
FAMT-424	1/4 X 1/4	1/8	0.12	3.05	2.78	70.61	1.70	43.18	1.68	42.67
FAMT-444	1/4 X 1/4	1/4	0.12	3.05	2.77	70.36	1.68	42.67	1.68	42.67
FAMT-626	3/8 X 3/8	1/8	0.20	5.08	2.82	71.63	1.73	43.94	1.73	43.94
FAMT-646	3/8 X 3/8	1/4	0.25	6.35	2.80	71.12	1.73	43.94	1.73	43.94
FAMT-666	3/8 X 3/8	3/8	0.25	6.35	2.82	71.63	1.73	43.94	1.73	43.94
FAMT-686	3/8 X 3/8	1/2	0.25	6.35	2.91	73.91	1.72	43.69	1.73	43.94
FAMT-848	1/2 X 1/2	1/4	0.29	7.37	2.94	74.68	1.87	47.50	1.88	47.75
FAMT-868	1/2 X 1/2	3/8	0.38	9.65	2.89	73.41	1.83	46.48	1.83	46.48
FAMT-888	1/2 X 1/2	1/2	0.38	9.65	3.04	77.22	1.84	46.74	1.84	46.74
FAMT-12812	3/4 X 3/4	1/2	0.53	13.46	3.45	87.63	2.08	52.83	2.08	52.83
FAMT-12128	3/4 X 1/2	3/4	0.38	9.65	3.48	88.39	2.14	54.36	2.03	51.56
FAMT-121212	3/4 X 3/4	3/4	0.61	15.49	3.43	87.12	2.06	52.32	2.07	52.58

**Branch Male Tee**



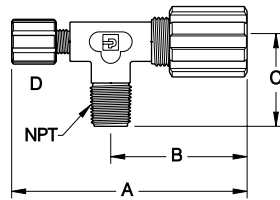
Part Number	Tube Size	NPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
FBMT-442	1/4 X 1/4	1/8	0.12	3.05	3.47	88.14	1.73	43.94	1.08	27.43
FBMT-444	1/4 X 1/4	1/4	0.12	3.05	3.35	85.09	1.67	42.42	1.07	27.18
FBMT-662	3/8 X 3/8	1/8	0.20	5.08	3.52	89.41	1.76	44.70	1.07	27.18
FBMT-664	3/8 X 3/8	1/4	0.25	6.35	3.48	88.39	1.74	44.20	1.07	27.18
FBMT-666	3/8 X 3/8	3/8	0.25	6.35	3.46	87.88	1.73	43.94	1.07	27.18
FBMT-668	3/8 X 3/8	1/2	0.25	6.35	3.48	88.39	1.73	43.94	1.18	29.97
FBMT-884	1/2 X 1/2	1/4	0.29	7.37	3.72	94.49	1.86	47.24	1.08	27.43
FBMT-886	1/2 X 1/2	3/8	0.38	9.65	3.71	94.23	1.85	46.99	1.07	27.18
FBMT-888	1/2 X 1/2	1/2	0.38	9.65	3.70	93.98	1.85	46.99	1.18	29.97
FBMT-12124	3/4 X 3/4	1/4	0.29	7.24	4.17	105.92	2.08	52.83	1.26	32.00
FBMT-12128	3/4 X 3/4	1/2	0.52	13.21	4.19	106.43	2.09	53.09	1.37	34.80
FBMT-121212	3/4 X 3/4	3/4	0.62	15.75	4.20	106.68	2.10	53.34	1.37	34.80
FBMT-16164	1 X 1	1/4	0.28	7.11	5.50	139.70	2.75	69.85	1.55	39.37

## Branch Male Tee Reducer



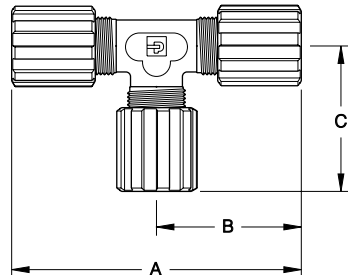
Part Number	Tube Size	NPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
FBMTR-644	3/8 X 1/4	1/4	0.12	3.05	3.44	87.38	1.69	42.93	1.08	27.43
FBMTR-646	3/8 X 1/4	3/8	0.12	3.05	3.43	87.12	1.69	42.93	1.08	27.43
FBMTR-866	1/2 X 3/8	3/8	0.25	6.35	3.59	91.19	1.76	44.70	1.08	27.43
FBMTR-848	1/2 X 1/4	1/2	0.12	3.05	3.52	89.41	1.64	41.66	1.19	30.23

## Branch Male Tee Reducer, Pargrip



Part Number	Tube Size	NPT Size	D Pargrip Size	Orifice		A		B		C	
				inch	mm	inch	mm	inch	mm	inch	mm
FBMTR-2G64	3/8	1/4	1/8	0.09	2.29	3.03	76.96	1.76	44.70	1.08	27.43
FBMTR-2G66	3/8	3/8	1/8	0.13	3.30	3.40	86.36	1.12	28.45	1.08	27.43

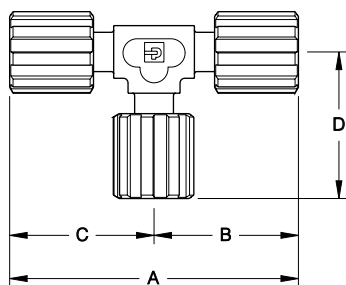
## Tee Connector



Part Number	Tube Size	Orifice		A		B		C	
		inch	mm	inch	mm	inch	mm	inch	mm
FTC-4	1/4	0.12	3.05	3.36	85.34	1.68	42.67	1.68	42.67
FTC-6	3/8	0.25	6.35	3.52	89.41	1.76	44.70	1.76	44.70
FTC-8	1/2	0.38	9.65	3.69	93.73	1.84	46.74	1.84	46.74
FTC-12	3/4	0.63	16.00	4.30	109.22	2.15	54.61	2.15	54.61
FTC-16	1	0.87	22.10	5.48	139.19	2.74	69.60	2.74	69.60
FTC-20	1 1/4	1.10	27.94	6.85	173.99	3.42	86.87	3.42	86.87

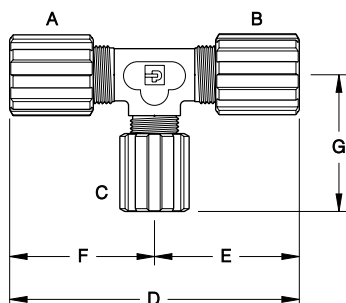


**Tee Connector,  
Redi-flare**



Part Number	Tube Size	Orifice		A		B		C		D	
		Inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTC-4RF	1/4	0.15	3.81	3.42	86.86	1.71	43.43	1.71	43.43	1.70	43.18
FTC-6RF	3/8	0.25	6.35	3.56	90.42	1.78	45.21	1.78	45.21	1.78	45.21
FTC-8RF	1/2	0.38	9.65	3.70	93.98	1.85	46.99	1.85	46.99	1.85	46.99
FTC-12RF	3/4	0.63	16.00	4.80	121.92	2.40	60.96	2.40	60.96	2.40	60.96
FTC-16RF	1	0.88	22.35	6.00	152.40	3.00	76.20	3.00	76.20	2.99	75.95

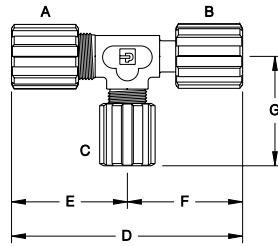
**Tee Connector  
Reducer**



Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTCR-446	1/4	1/4	3/8	0.12	3.05	3.36	85.34	1.68	42.67	1.68	42.67	1.74	44.20
FTCR-466	1/4	3/8	3/8	0.12	3.05	3.46	87.88	1.74	44.20	1.72	43.69	1.74	44.20
FTCR-448	1/4	1/4	1/2	0.12	3.05	3.30	83.82	1.65	41.91	1.65	41.91	1.86	47.24
FTCR-644	3/8	1/4	1/4	0.12	3.05	3.44	87.37	1.68	42.67	1.76	44.70	1.68	42.67
FTCR-664	3/8	3/8	1/4	0.12	3.05	3.52	89.41	1.76	44.70	1.76	44.70	1.68	42.67
FTCR-668	3/8	3/8	1/2	0.25	6.35	3.48	88.39	1.74	44.20	1.74	44.20	1.85	46.99
FTCR-6612	3/8	3/8	3/4	0.25	6.35	3.80	96.52	1.90	48.26	1.90	48.26	2.18	55.37
FTCR-844	1/2	1/4	1/4	0.12	3.05	3.65	92.71	1.73	43.94	1.92	48.77	1.73	43.94
FTCR-848	1/2	1/4	1/2	0.12	3.05	3.52	89.41	1.69	42.93	1.83	46.48	1.83	46.48
FTCR-884	1/2	1/2	1/4	0.12	3.30	3.72	94.49	1.86	47.24	1.86	47.24	1.67	42.42
FTCR-866	1/2	3/8	3/8	0.25	6.35	3.65	92.71	1.73	43.94	1.92	48.77	1.73	43.94
FTCR-868	1/2	3/8	1/2	0.25	6.35	3.67	93.22	1.78	45.21	1.89	48.01	1.89	48.01
FTCR-886	1/2	1/2	3/8	0.25	6.35	3.70	93.98	1.85	46.99	1.85	46.99	1.73	43.94
FTCR-8812	1/2	1/2	3/4	0.37	9.40	4.12	104.65	2.06	52.32	2.06	52.32	2.19	55.63
FTCR-12412	3/4	1/4	3/4	0.12	3.05	4.01	101.85	1.85	46.99	2.16	54.86	2.14	54.36
FTCR-1288	3/4	1/2	1/2	0.38	9.65	4.11	104.39	2.03	51.56	2.08	52.83	2.03	51.56
FTCR-12124	3/4	3/4	1/4	0.12	3.05	4.20	106.68	2.10	53.34	2.10	53.34	1.85	46.99
FTCR-12126	3/4	3/4	3/8	0.25	6.35	4.32	109.73	2.16	54.86	2.16	54.86	1.92	48.77
FTCR-12128	3/4	3/4	1/2	0.38	9.65	4.30	109.22	2.15	54.61	2.15	54.61	2.04	51.82
FTCR-12612	3/4	3/8	3/4	0.25	6.35	3.99	101.35	1.89	48.01	2.10	53.34	2.10	53.34
FTCR-12812	3/4	1/2	3/4	0.38	9.53	4.17	105.92	2.02	51.31	2.15	54.61	2.15	54.61
FTCR-1688	1	1/2	1/2	0.38	9.65	5.07	128.78	2.31	58.67	2.76	70.10	2.31	58.67
FTCR-161212	1	3/4	3/4	0.63	16.00	5.20	132.08	2.43	61.72	2.77	70.36	2.42	61.47
FTCR-161216	1	3/4	1	0.63	16.00	5.20	132.08	2.43	61.72	2.77	70.36	2.76	70.10
FTCR-16164	1	1	1/4	0.12	3.05	5.52	140.21	2.76	70.10	2.76	70.10	2.11	53.59
FTCR-16166	1	1	3/8	0.25	6.35	5.50	139.70	2.75	69.85	2.75	69.85	2.24	56.90
FTCR-16168	1	1	1/2	0.38	9.65	5.52	140.21	2.76	70.10	2.76	70.10	2.31	58.67
FTCR-161612	1	1	3/4	0.62	15.75	5.48	139.20	2.74	69.60	2.74	69.60	2.42	61.47

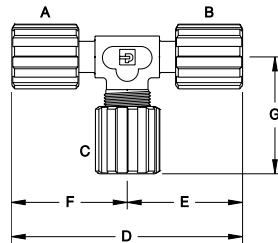
# Parflare PFA Tube Fittings

## Tee Connector Reducer, Redi-flare



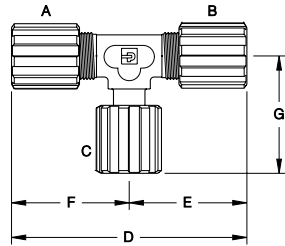
Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTCR-66RF4	3/8	3/8	1/4	0.12	3.05	3.50	88.90	1.72	43.69	1.78	45.21	1.71	43.43
FTCR-66RF6	3/8	3/8	3/8	0.25	6.35	3.50	88.90	1.74	44.20	1.76	44.70	1.78	45.21
FTCR-8RF68	3/8	1/2	1/2	0.25	6.35	3.61	91.69	1.86	47.24	1.75	44.45	1.88	47.75
FTCR-88RF4	1/2	1/2	1/4	0.12	3.05	3.66	92.96	1.86	47.24	1.80	45.72	1.67	42.42
FTCR-88RF8	1/2	1/2	1/2	0.37	9.40	3.54	89.92	1.84	46.74	1.70	43.18	1.84	46.74
FTCR-128RF12	3/4	1/2	3/4	0.38	9.65	4.12	104.65	2.12	53.85	2.00	50.80	2.12	53.85
FTCR-1212RF4	3/4	3/4	1/4	0.12	3.05	4.45	113.03	2.17	55.12	2.28	57.91	1.83	46.48
FTCR-1212RF6	3/4	3/4	3/8	0.38	9.65	4.22	107.19	2.12	53.85	2.10	53.34	1.91	48.51
FTCR-1212RF8	3/4	3/4	1/2	0.38	9.65	4.45	113.03	2.17	55.12	2.28	57.91	2.03	51.56
FTCR-1212RF12	3/4	3/4	3/4	0.61	15.49	4.47	113.54	2.18	55.37	2.29	58.17	2.18	55.37
FTCR-164RF16	1	1/4	1	0.16	4.06	4.93	125.22	2.78	70.61	2.15	54.61	2.76	70.10
FTCR-1616RF16	1	1	1	0.88	22.35	5.47	138.94	2.77	70.36	2.70	68.58	2.77	70.36

## Tee Connector Reducer, Redi-flare



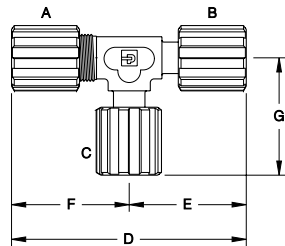
Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTCR-4RF4RF4	1/4	1/4	1/4	0.12	3.05	3.42	86.86	1.71	43.43	1.71	43.43	1.67	42.42
FTCR-6RF6RF4	3/8	3/8	1/4	0.12	3.05	3.56	90.42	1.78	45.21	1.78	45.21	1.68	42.67
FTCR-6RF6RF6	3/8	3/8	3/8	0.25	6.35	3.40	86.36	1.70	43.18	1.70	43.18	1.70	43.18
FTCR-8RF8RF4	1/2	1/2	1/4	0.12	3.05	3.72	94.48	1.86	47.24	1.86	47.24	1.68	42.67
FTCR-8RF8RF8	1/2	1/2	1/2	0.37	9.40	3.66	92.96	1.83	46.48	1.83	46.48	1.86	47.24
FTCR-8RF8RF12	1/2	1/2	3/4	0.38	9.65	4.00	101.60	2.00	50.80	2.00	50.80	2.16	54.86
FTCR-12RF12RF12	3/4	3/4	3/4	0.61	15.49	4.52	114.80	2.26	57.40	2.26	57.40	2.12	53.85
FTCR-16RF16RF16	1	1	1	0.88	22.35	6.01	152.65	3.01	76.45	3.00	76.20	2.77	70.36

**Tee Connector  
Reducer,  
Redi-flare**



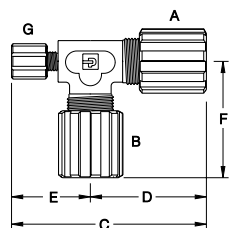
Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTCR-444RF	1/4	1/4	1/4	0.12	3.05	3.40	86.36	1.70	43.18	1.70	43.18	1.60	40.64
FTCR-466RF	1/4	3/8	3/8	0.12	3.05	3.44	87.37	1.76	44.70	1.68	42.67	1.78	45.21
FTCR-664RF	3/8	3/8	1/4	0.15	3.81	3.52	89.40	1.76	44.70	1.76	44.70	1.70	43.18
FTCR-666RF	3/8	3/8	3/8	0.25	6.35	3.52	89.40	1.76	44.70	1.76	44.70	1.78	45.21
FTCR-884RF	1/2	1/2	1/4	0.15	3.81	3.74	95.00	1.87	47.50	1.87	47.50	1.71	43.43
FTCR-888RF	1/2	1/2	1/2	0.37	9.40	3.70	93.98	1.85	46.99	1.85	46.99	1.83	46.48
FTCR-12124RF	3/4	3/4	1/4	0.15	3.81	4.34	110.24	2.17	55.12	2.17	55.12	1.80	45.72
FTCR-12128RF	3/4	3/4	1/2	0.37	9.40	4.30	109.22	2.15	54.61	2.15	54.61	2.00	50.80
FTCR-121212RF	3/4	3/4	3/4	0.62	15.75	4.24	107.70	2.12	53.85	2.12	53.85	2.24	56.90
FTCR-161612RF	1	1	3/4	0.62	15.75	5.52	140.20	2.76	70.10	2.76	70.10	2.53	64.26
FTCR-161616RF	1	1	1	0.88	22.35	5.52	140.20	2.76	70.10	2.76	70.10	2.99	75.95

**Tee Connector  
Reducer,  
Redi-flare**



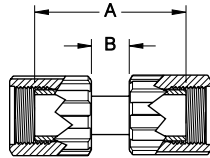
Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FTCR-44RF4RF	1/4	1/4	1/4	0.13	3.30	3.40	86.36	1.70	43.18	1.70	43.18	1.71	43.43
FTCR-66RF4RF	3/8	3/8	1/4	0.15	3.81	3.53	89.66	1.78	45.21	1.76	44.70	1.71	43.43
FTCR-66RF6RF	3/8	3/8	3/8	0.25	6.35	3.53	89.66	1.78	45.21	1.76	44.70	1.78	45.21
FTCR-88RF4RF	1/2	1/2	1/4	0.15	3.81	3.73	94.74	1.86	47.24	1.87	47.50	1.71	43.43
FTCR-88RF8RF	1/2	1/2	1/2	0.38	9.65	3.80	96.52	1.80	45.72	2.00	50.80	2.00	50.80
FTCR-812RF12RF	1/2	3/4	3/4	0.38	9.65	4.44	112.78	2.39	60.71	2.05	52.07	2.40	60.96
FTCR-1212RF8RF	3/4	3/4	1/2	0.37	9.40	4.37	111.00	2.20	55.88	2.07	52.58	2.02	51.31
FTCR-1212RF12RF	3/4	3/4	3/4	0.62	15.75	4.45	113.03	2.28	57.91	2.17	55.12	2.25	57.15
FTCR-1616RF8RF	1	1	1/2	0.38	9.65	5.78	146.81	3.00	76.20	2.78	70.61	2.30	58.42
FTCR-1616RF16RF	1	1	1	0.88	22.35	5.77	146.56	3.00	76.20	2.78	70.61	2.99	75.95

**Tee Connector  
Reducer,  
Pargrip**



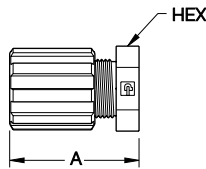
Part Number	A	B	G	Orifice		C		D		E		F	
	Tube Size			Pargrip Size	inch	mm	inch	mm	inch	mm	inch	mm	
FTCR-2G66	3/8	3/8	1/2	0.09	3.30	3.41	86.61	1.76	44.70	1.65	41.91	1.76	44.70
FTCR-2G88	1/2	1/2	1/8	0.09	2.29	3.14	79.76	1.87	47.50	1.27	32.26	1.88	47.75

## Redi-flare Tubing Union



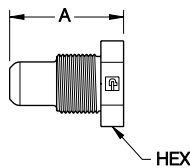
Part Number	Tube Size	A		B	
		inch	mm	inch	mm
RFM-4119	1/4	1.19	30.22	.15	3.81
RFM-4161	1/4	1.61	40.89	.50	12.70
RFM-4344	1/4	3.46	87.88	2.38	60.45
RFM-6133	3/8	1.40	35.56	.15	3.81
RFM-6188	3/8	1.88	47.75	.50	12.70
RFM-8151	1/2	1.52	38.61	.19	4.83
RFM-8201	1/2	2.01	51.05	.50	12.70
RFM-8389	1/2	3.86	98.04	2.31	58.67
RFM-8500	1/2	4.91	124.71	3.44	87.38
RFM-12162	3/4	1.62	41.15	.29	7.37
RFM-12209	3/4	2.09	53.09	.50	12.70
RFM-12489	3/4	4.91	124.71	3.31	84.07
RFM-16223	1	2.23	56.64	.50	12.70
RFM-16380	1	3.91	99.31	2.19	55.63

## Tubing Plug, With Nut



Part Number	Tube Size	A		Hex Size
		inch	mm	
FTPG-4	1/4	1.46	37.08	11/16
FTPG-6	3/8	1.43	36.32	13/16
FTPG-8	1/2	1.62	41.15	15/16
FTPG-12	3/4	1.73	43.94	1 3/16
FTPG-16	1	1.96	49.78	1 7/16

## Tubing Plug, Body Only



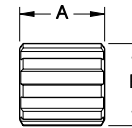
Part Number	Tube Size	A		Hex Size
		inch	mm	
1217-0250	1/4	1.29	32.77	11/16
1217-0251	3/8	1.55	39.37	13/16
1217-0252	1/2	1.44	36.58	15/16
1217-0253	3/4	1.54	39.12	1 3/16
1217-0254	1	1.78	45.21	1 7/16

## Fitting Cap



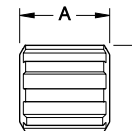
Part Number	Tube Size	A	
		inch	mm
FCAP-4	1/4	0.91	23.11
FCAP-6	3/8	1.02	25.91
FCAP-8	1/2	1.02	25.91
FCAP-12	3/4	1.09	27.69
FCAP-16	1	1.29	32.77
FCAP-20	1 1/4	1.57	39.88

## Fitting Nut PVDF



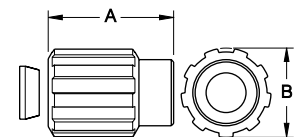
Part Number	Tube Size	A		B	
		inch	mm	inch	mm
1213-0004	1/4	0.99	25.15	0.79	20.07
1213-0006	3/8	1.00	25.40	0.92	23.37
1213-0008	1/2	1.08	27.43	1.05	26.67
1213-0012	3/4	1.25	31.75	1.34	34.04
1213-0016	1	1.50	38.10	1.81	45.97
1213-0020	1 1/4	1.88	47.75	2.31	58.67

## Fitting Nut PFA



Part Number	Tube Size	A		B	
		inch	mm	inch	mm
1213-0204	1/4	0.97	24.64	0.84	21.34
1213-0206	3/8	0.98	24.89	0.94	23.88
1213-0208	1/2	1.14	28.96	1.10	27.94
1213-0212	3/4	1.23	31.24	1.41	35.81
1213-0216	1	1.46	37.08	1.87	47.50
1213-0220	1 1/4	1.91	48.51	2.40	60.96

## Fitting Nut High Temperature Assembly



Part Number	Tube Size	A		B	
		inch	mm	inch	mm
1202-0007	1/4	1.20	30.48	0.79	20.07
1202-0008	3/8	1.25	31.75	0.94	23.88
1202-0009	1/2	1.60	40.64	1.15	29.21
1202-0010	3/4	1.70	43.18	1.41	35.81
1202-0011	1	2.00	50.80	1.81	45.97

**Product Overview**

The Pargrip Fittings are ideally suited for use in corrosive environments and chemical applications. The fitting design yields a leak-tight connection and requires no special tools to assemble. The connection is achieved by merely inserting the tubing into the fitting assembly and tightening the nut.



**Features**

**PFA body manufactured from virgin High Purity materials.**

**Ease of assembly.**

**Leak tight seal.**

**Numerous configurations available.**

**Benefits**

**Less surface particulates resulting in cleaner operation.**

**Reduced assembly time, and costs.**

**Less downtime.**

**Reduced system complexity and cost.**

**Specifications**

**Materials of Construction:**

Wetted: PFA Body, PTFE Ferrule  
Non-wetted: PFA Nut, Titanate Filled ETFE Gripper

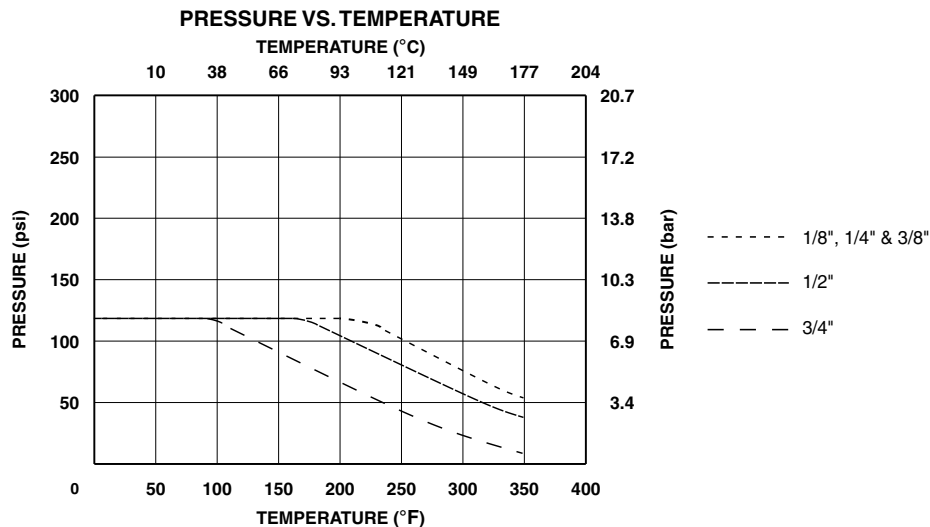
**Pressure Ranges:**

125 PSIG (8.6 bar) See Pressure/Temperature Chart below.

**Temperature Ranges:**

See Pressure/Temperature Chart below.

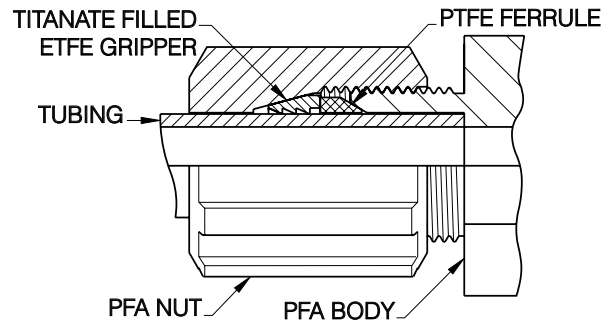
Pargrip PFA fittings are supplied with PFA nuts as standard. Please consult factory for other available configurations, materials, and custom assemblies. See pages 53-57 for assembly tools.



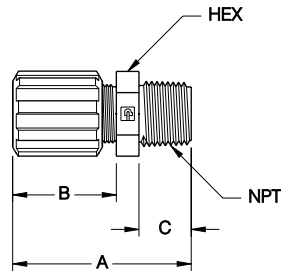
Fitting Size	Tubing Size
2	1/8" O.D. X 1/16" I.D.
4	1/4" O.D. X 5/32" I.D.
6	3/8" O.D. X 1/4" I.D.
8	1/2" O.D. X 3/8" I.D.
12	3/4" O.D. X 5/8" I.D.

## Assembly Procedure

1. Cut tubing evenly using a tube cutter:  
TCTR-1 for 1/8" - 1/2"  
TCTR-2 for 1/8" - 3/4".
2. Slip small end of the fitting nut over tubing.
3. Slip small end of the gripper onto tubing.
4. Slip large end of the ferrule onto tubing.
5. Slip tubing into the fitting body until bottomed out.
6. Tighten nut finger tight while assuring that tubing remains seated in bottom of fitting body.
7. Tighten nut at least one additional turn.

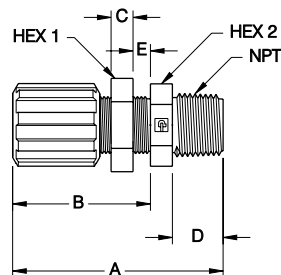


## Adaptor Male Straight



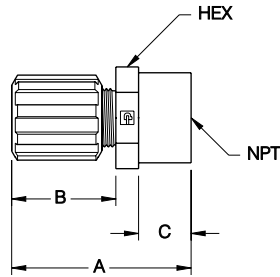
Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
GAMS-22	1/8	1/8	0.09	2.29	1.59	40.39	0.75	19.05	0.55	13.97	1/2
GAMS-24	1/8	1/4	0.09	2.29	1.59	40.39	0.75	19.05	0.55	13.97	5/8
GAMS-42	1/4	1/8	0.18	4.57	2.06	52.32	1.22	30.99	0.55	13.97	5/8
GAMS-44	1/4	1/4	0.18	4.57	2.04	51.82	1.22	30.99	0.55	13.97	5/8
GAMS-46	1/4	3/8	0.18	4.57	2.09	53.09	1.26	32.00	0.55	13.97	13/16
GAMS-48	1/4	1/2	0.18	4.57	2.15	54.61	1.20	30.48	0.66	16.76	13/16
GAMS-412	1/4	3/4	0.18	4.57	2.08	52.83	1.13	28.70	0.67	17.02	1 3/16
GAMS-62	3/8	1/8	0.25	6.35	2.00	50.80	1.16	29.46	0.55	13.97	13/16
GAMS-64	3/8	1/4	0.25	6.35	1.93	49.02	1.11	28.19	0.55	13.97	13/16
GAMS-66	3/8	3/8	0.25	6.35	1.96	49.78	1.13	28.70	0.55	13.97	13/16
GAMS-68	3/8	1/2	0.25	6.35	2.06	52.32	1.11	28.19	0.65	16.51	15/16
GAMS-84	1/2	1/4	0.29	7.37	2.06	52.32	1.23	31.24	0.55	13.97	15/16
GAMS-86	1/2	3/8	0.38	9.65	2.07	52.58	1.23	31.24	0.55	13.97	15/16
GAMS-88	1/2	1/2	0.38	9.65	2.18	55.37	1.23	31.24	0.66	16.76	15/16
GAMS-812	1/2	3/4	0.38	9.65	2.15	54.61	1.23	31.24	0.65	16.51	1 3/16
GAMS-128	3/4	1/2	0.54	13.72	2.39	60.71	1.44	36.58	0.67	17.02	1 3/16
GAMS-1212	3/4	3/4	0.63	15.88	2.38	60.45	1.44	36.58	0.66	16.76	1 3/16

## Adaptor Male Straight, Panel Mount



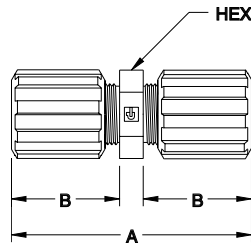
Part Number	Tube Size	NPT Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
GAMS-44-P	1/4	1/4	0.18	4.57	2.49	63.25	1.69	42.93	0.29	7.37	0.55	13.97	0.25	6.35	0.50	12.70	11/16	11/16
GAMS-66-P	3/8	3/8	0.25	6.35	2.40	60.96	1.56	39.62	0.29	7.37	0.55	13.97	0.25	6.35	0.63	16.00	15/16	13/16
GAMS-88-P	1/2	1/2	0.38	9.65	2.64	67.06	1.69	42.93	0.29	7.37	0.66	16.76	0.25	6.35	0.75	19.05	1 1/16	15/16
GAMS-1212-P	3/4	3/4	0.63	15.88	3.08	78.23	2.07	52.58	0.29	7.37	0.65	16.51	0.5	12.70	1.00	25.40	1 5/16	1 3/16

**Adaptor  
Female Straight**



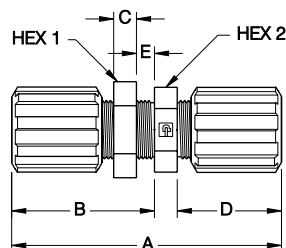
Part Number	Tube Size	NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
GAFS-22	1/8	1/8	0.09	2.29	1.60	40.64	0.75	19.05	0.56	14.22	5/8
GAFS-24	1/8	1/4	0.09	2.29	1.61	40.89	0.75	19.05	0.57	14.48	3/4
GAFS-42	1/4	1/8	0.18	4.57	1.98	50.29	1.13	28.70	0.56	14.22	5/8
GAFS-44	1/4	1/4	0.18	4.57	1.98	50.29	1.13	28.70	0.56	14.22	3/4
GAFS-46	1/4	3/8	0.18	4.57	1.97	50.04	1.13	28.70	0.55	13.97	15/16
GAFS-48	1/4	1/2	0.18	4.57	2.08	52.83	1.13	28.70	0.66	16.76	1 3/16
GAFS-64	3/8	1/4	0.25	6.35	1.96	49.78	1.13	28.70	0.56	14.22	3/4
GAFS-66	3/8	3/8	0.25	6.35	1.97	50.04	1.13	28.70	0.55	13.97	15/16
GAFS-68	3/8	1/2	0.25	6.35	2.06	52.32	1.11	28.19	0.67	17.02	1
GAFS-84	1/2	1/4	0.31	7.87	2.04	51.82	1.21	30.73	0.56	14.22	3/4
GAFS-86	1/2	3/8	0.38	9.65	2.03	51.56	1.21	30.73	0.55	13.97	15/16
GAFS-88	1/2	1/2	0.37	9.40	2.16	54.86	1.22	30.99	0.66	16.76	1 1/16
GAFS-812	1/2	3/4	0.38	9.65	2.15	54.61	1.23	31.24	0.67	17.02	1 3/16
GAFS-816	1/2	1	0.38	9.65	2.35	59.69	1.23	31.24	0.85	21.59	1 5/8
GAFS-1212	3/4	3/4	0.62	15.75	2.39	60.71	1.43	36.32	0.67	17.02	1 3/16

**Straight Connector**



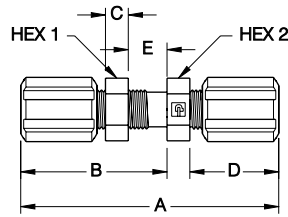
Part Number	Tube Size	Orifice		A		B		Hex Size
		inch	mm	inch	mm	inch	mm	
GSC-2	1/8	0.09	2.29	1.79	45.47	0.75	19.05	1/2
GSC-4	1/4	0.18	4.57	2.55	64.77	1.13	28.70	5/8
GSC-6	3/8	0.25	6.35	2.53	64.26	1.12	28.45	13/16
GSC-8	1/2	0.38	9.65	2.75	69.85	1.23	31.24	15/16
GSC-12	3/4	0.63	15.88	3.16	80.26	1.43	36.32	1 3/16

**Straight Connector,  
Panel Mount**



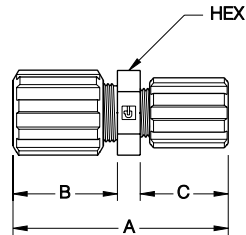
Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
GSC-2-P	1/8	0.09	2.29	2.28	57.91	1.24	31.50	0.19	4.83	0.75	19.05	0.25	6.35	0.32	8.13	1/2	1/2
GSC-4-P	1/4	0.18	4.57	3.11	78.99	1.67	42.42	0.29	7.37	1.15	29.21	0.25	6.35	0.50	12.70	11/16	11/16
GSC-6-P	3/8	0.25	6.35	2.95	74.93	1.54	39.12	0.29	7.37	1.12	28.45	0.25	6.35	0.63	16.00	15/16	13/16
GSC-8-P	1/2	0.38	9.65	3.21	81.53	1.72	43.69	0.29	7.37	1.21	30.73	0.25	6.35	0.75	19.05	1 1/16	15/16
GSC-12-P	3/4	0.63	16.00	3.82	97.03	2.08	52.83	0.29	7.37	1.45	36.83	0.25	6.35	1.00	25.40	1 5/16	1 3/16

## Straight Connector Panel Mount, Extended



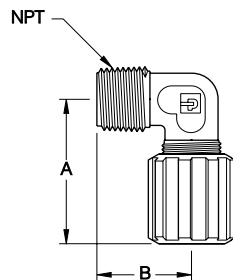
Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex 1 Size	Hex 2 Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
GSC-4-PX	1/4	0.18	4.57	3.28	83.31	1.86	47.24	0.29	7.37	1.13	28.70	0.50	12.70	0.50	12.70	11/16	11/16

## Straight Connector Reducer



Part Number	Tube Size	Orifice		A		B		C		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
GSCR-42	1/4 X 1/8	0.09	2.29	2.17	55.12	1.13	28.70	0.75	19.05	5/8
GSCR-64	3/8 X 1/4	0.18	4.57	2.54	64.52	1.12	28.45	1.13	28.70	11/16
GSCR-82	1/2 X 1/8	0.09	2.29	2.37	60.20	1.33	33.78	0.75	19.05	15/16
GSCR-84	1/2 X 1/4	0.18	4.57	2.67	67.82	1.23	31.24	1.15	29.21	15/16
GSCR-86	1/2 X 3/8	0.25	6.35	2.55	64.77	1.19	30.23	1.07	27.18	15/16
GSCR-128	3/4 X 1/2	0.37	9.40	2.92	74.17	1.42	36.07	1.21	30.73	1 3/16

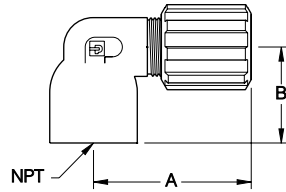
## Adaptor Male Elbow



Part Number	Tube Size	NPT Size	Orifice		A		B	
			inch	mm	inch	mm	inch	mm
GAME-24	1/8	1/4	0.09	2.29	1.27	32.26	1.07	27.18
GAME-42	1/4	1/8	0.18	4.57	1.66	42.16	1.08	27.43
GAME-44	1/4	1/4	0.18	4.57	1.64	41.66	1.07	27.18
GAME-46	1/4	3/8	0.18	4.57	1.71	43.43	1.08	27.43
GAME-48	1/4	1/2	0.18	4.57	1.66	42.16	1.19	30.23
GAME-62	3/8	1/8	0.20	5.08	1.63	41.40	1.07	27.18
GAME-64	3/8	1/4	0.25	6.35	1.62	41.15	1.07	27.18
GAME-66	3/8	3/8	0.25	6.35	1.63	41.40	1.07	27.18
GAME-68	3/8	1/2	0.25	6.35	1.63	41.40	1.18	29.97
GAME-84	1/2	1/4	0.29	7.37	1.74	44.20	1.08	27.43
GAME-86	1/2	3/8	0.38	9.65	1.71	43.43	1.08	27.43
GAME-88	1/2	1/2	0.38	9.65	1.74	44.20	1.18	29.97
GAME-812	1/2	3/4	0.38	9.65	1.89	48.01	1.36	34.54
GAME-128	3/4	1/2	0.54	13.72	2.15	54.61	1.37	34.80
GAME-1212	3/4	3/4	0.63	16.00	2.13	54.10	1.35	34.29

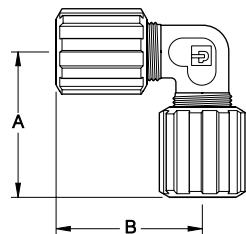


**Adaptor Female Elbow**



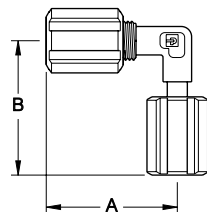
Part Number	Tube Size	NPT Size	Orifice		A		B	
			inch	mm	inch	mm	inch	mm
GAFE-22	1/8	1/8	0.09	2.29	1.45	36.83	0.83	21.08
GAFE-24	1/8	1/4	0.09	2.29	1.42	36.07	0.97	24.64
GAFE-44	1/4	1/4	0.16	4.06	1.82	46.23	0.97	24.64
GAFE-64	3/8	1/4	0.25	6.35	1.81	45.97	0.94	23.88
GAFE-66	3/8	3/8	0.25	6.35	1.81	45.97	1.00	25.40
GAFE-68	3/8	1/2	0.25	6.35	1.77	44.96	1.23	31.24
GAFE-88	1/2	1/2	0.38	9.55	1.93	49.02	1.23	31.24

**Elbow Connector**



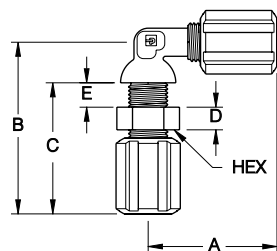
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
GEC-2	1/8	0.09	2.29	1.27	32.26	1.27	32.26
GEC-4	1/4	0.18	4.57	1.66	42.16	1.66	42.16
GEC-6	3/8	0.25	6.22	1.61	40.89	1.61	40.89
GEC-8	1/2	0.37	9.47	1.74	44.20	1.74	44.20
GEC-12	3/4	0.62	15.75	2.11	53.59	2.11	53.59

**Elbow Connector, Redi-flare**



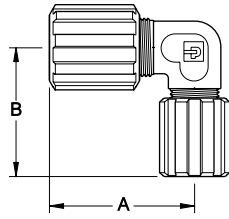
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
GEC-4RF4	1/4 X 1/4	0.13	3.30	1.65	41.91	1.70	43.18

**Elbow Connector, Panel Mount**



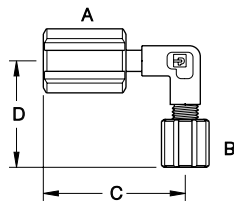
Part Number	Tube Size	Orifice		A		B		C		D		E (max.)		Hole Size		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
GEC-4-P	1/4	0.18	4.57	1.63	41.40	2.20	55.88	1.68	42.67	0.29	7.37	0.25	6.35	0.50	12.70	11/16

## Elbow Connector Reducer



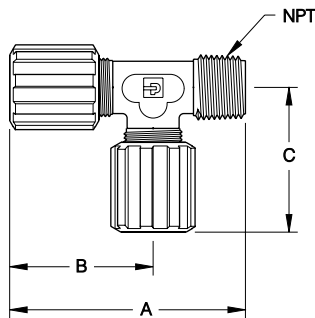
Part Number	Tube Size	Orifice		A		B	
		inch	mm	inch	mm	inch	mm
GECR-42	1/4 X 1/8	0.09	2.29	1.64	41.66	1.26	32.00
GECR-64	3/8 X 1/4	0.18	4.50	1.65	41.91	1.61	40.89
GECR-84	1/2 X 1/4	0.17	4.42	1.67	42.42	1.73	43.94
GECR-86	1/2 X 3/8	0.25	6.22	1.70	43.18	1.59	40.39

## Elbow Connector Reducer, Redi-flare



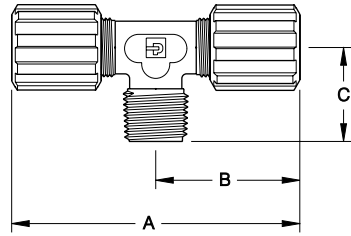
Part Number	A	B	Orifice		C		D	
	Tube Size Redi-flare X Pargrip	inch	mm	inch	mm	inch	mm	
GECR-4RF2	1/4	1/8	0.09	2.29	1.70	43.18	1.27	32.26

## Adaptor Male Tee



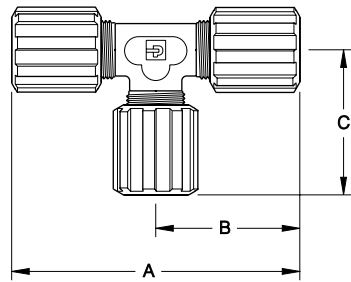
Part Number	Tube Size	NPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
GAMT-222	1/8 X 1/8	1/8	0.09	2.29	2.35	59.69	1.27	32.26	1.26	32.00
GAMT-242	1/8 X 1/8	1/4	0.09	2.29	2.35	59.69	1.27	32.26	1.26	32.00
GAMT-424	1/4 X 1/4	1/8	0.18	4.57	2.74	69.60	1.66	42.16	1.66	42.16
GAMT-444	1/4 X 1/4	1/4	0.18	4.57	2.74	69.60	1.66	42.16	1.65	41.91
GAMT-646	3/8 X 3/8	1/4	0.25	6.35	2.73	69.34	1.65	41.91	1.65	41.91
GAMT-848	1/2 X 1/2	1/4	0.29	7.37	2.81	71.37	1.74	44.20	1.74	44.20
GAMT-888	1/2 X 1/2	1/2	0.37	9.40	2.93	74.42	1.76	44.70	1.73	43.94

**Branch Male Tee**



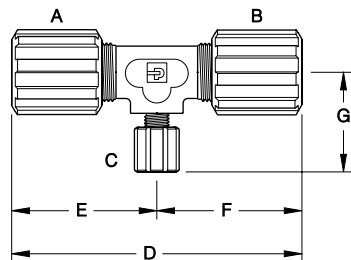
Part Number	Tube Size	NPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
GBMT-222	1/8 X 1/8	1/8	0.09	2.29	2.55	64.77	1.28	32.51	1.07	27.18
GBMT-224	1/8 X 1/8	1/4	0.09	2.29	2.55	64.77	1.28	32.51	1.07	27.18
GBMT-442	1/4 X 1/4	1/8	0.18	4.57	3.39	86.11	1.69	42.93	1.08	27.43
GBMT-444	1/4 X 1/4	1/4	0.18	4.57	3.39	86.11	1.69	42.93	1.08	27.43
GBMT-662	3/8 X 3/8	1/8	0.25	6.35	3.26	82.80	1.63	41.40	1.07	27.18
GBMT-664	3/8 X 3/8	1/4	0.25	6.35	3.22	81.79	1.61	40.89	1.07	27.18
GBMT-666	3/8 X 3/8	3/8	0.25	6.35	3.26	82.80	1.63	41.40	1.07	27.18
GBMT-668	3/8 X 3/8	1/2	0.25	6.35	3.26	82.80	1.63	41.40	1.18	29.97
GBMT-884	1/2 X 1/2	1/4	0.29	7.37	3.47	88.14	1.74	44.20	0.88	22.35
GBMT-886	1/2 X 1/2	3/8	0.38	9.65	3.49	88.65	1.74	44.20	1.08	27.43
GBMT-888	1/2 X 1/2	1/2	0.37	9.47	3.48	88.39	1.74	44.20	1.17	29.72

**Tee Connector**



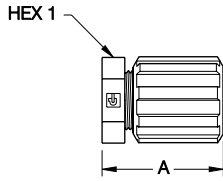
Part Number	Tube Size	Orifice		A		B		C	
		inch	mm	inch	mm	inch	mm	inch	mm
GTC-2	1/8	0.09	2.29	2.55	64.77	1.28	32.51	1.27	32.26
GTC-4	1/4	0.17	4.32	3.30	83.82	1.65	41.91	1.65	41.91
GTC-6	3/8	0.25	6.35	3.27	83.06	1.63	41.40	1.63	41.40
GTC-8	1/2	0.37	9.40	3.51	89.15	1.75	44.45	1.74	44.20
GTC-12	3/4	0.63	16.00	4.28	108.71	2.14	54.36	2.14	54.36

**Tee Connector Reducer**



Part Number	A	B	C	Orifice		D		E		F		G	
	Tube Size	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
GTCR-224	1/8	1/8	1/4	0.09	2.29	2.56	65.02	1.28	32.51	1.28	32.51	1.65	41.91
GTCR-442	1/4	1/4	1/8	0.09	2.29	3.32	84.32	1.66	42.16	1.66	42.16	1.27	32.26
GTCR-466	1/4	3/8	3/8	0.18	4.45	3.31	83.82	1.66	41.91	1.65	41.91	1.65	41.91
GTCR-664	3/8	3/8	1/4	0.18	4.45	3.22	81.78	1.61	40.89	1.61	40.89	1.69	42.93
GTCR-882	1/2	1/2	1/8	0.09	2.29	3.70	93.98	1.85	46.99	1.85	46.99	1.28	32.51

## Tubing Plug



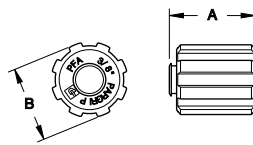
Part Number	Tube Size	A		Hex Size
		inch	mm	
GTPG-2	1/8	1.04	26.42	1/2
GTPG-4	1/4	1.42	36.07	11/16
GTPG-6	3/8	1.41	35.81	13/16
GTPG-8	1/2	1.56	39.62	3/4
GTPG-12	3/4	1.73	43.94	1 3/16

## Gripper



Part Number	Tube Size
1207-0023	1/8
1207-0001	1/4
1207-0002	3/8
1207-0003	1/2
1207-0004	3/4

## Fitting Cap



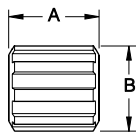
Part Number	Tube Size	A		B	
		inch	mm	inch	mm
GCAP-4	1/4	1.13	28.70	0.84	21.34
GCAP-6	3/8	1.09	27.69	0.97	24.64

## Ferrule



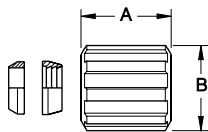
Part Number	Tube Size
1022-0002	1/8
1022-0004	1/4
1022-0006	3/8
1022-0008	1/2
1022-0012	3/4

## Fitting Nut PFA



Part Number	Tube Size	A		B	
		inch	mm	inch	mm
1213-0302	1/8	0.57	14.48	0.57	14.48
1213-0304	1/4	0.97	24.64	0.84	21.34
1213-0306	3/8	0.98	24.89	0.94	23.88
1213-0308	1/2	1.13	28.70	1.10	27.94
1213-0312	3/4	1.23	31.24	1.41	35.81

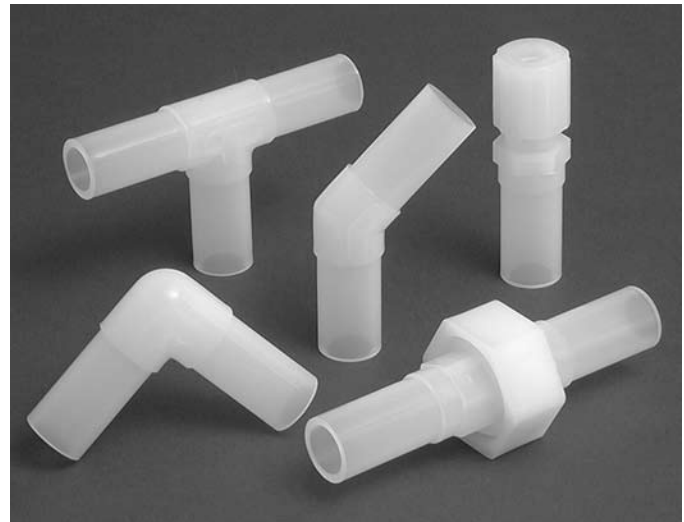
## Fitting Nut Assembly



Part Number	Tube Size	A		B	
		inch	mm	inch	mm
1202-0012	1/8	0.56	14.22	0.56	14.22
1202-0001	1/4	0.97	24.64	0.84	21.34
1202-0002	3/8	0.98	24.89	0.94	23.88
1202-0003	1/2	1.13	28.70	1.10	27.94
1202-0004	3/4	1.23	31.24	1.41	35.81

**Product Overview**

The Parbond Fittings are ideally suited for any ultra-pure or corrosive chemical application. The fitting design yields a leak-tight, permanent connection that is ideal for high flow, minimal pressure drop applications. The connection is achieved by fusion welding the two ends together.



**Features**

**PFA body manufactured from virgin High Purity materials.**

**High integrity fused weld connections.**

**Numerous configurations including reducers.**

**Benefits**

**Less surface particulates resulting in cleaner operation.**

**Less down time, fewer leaks.**

**Reduced system complexity and cost.**

**Specifications**

**Materials of Construction:**

- Wetted Surfaces - PFA
- External Surfaces - PFA, PVDF

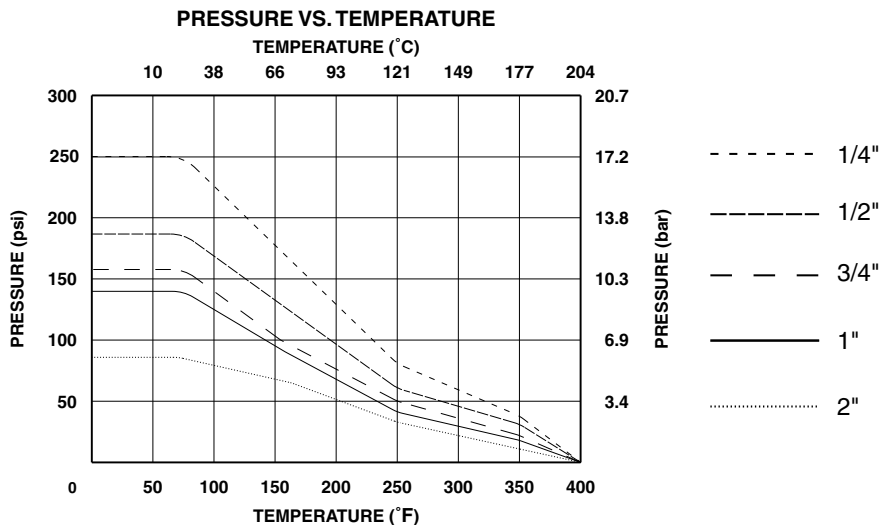
**Pressure Ranges:**

See Pressure/Temperature Chart below.

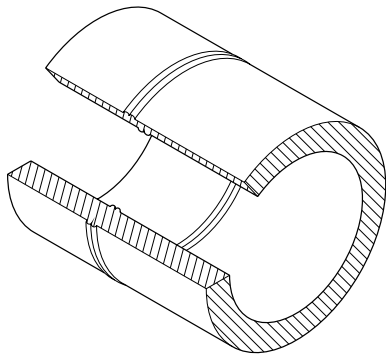
**Temperature Ranges:**

See Pressure/Temperature Chart below.

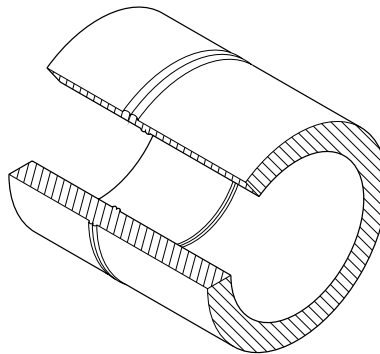
Parbond PFA fittings with Parflare ends are supplied with PVDF nuts as standard. For PFA nuts add -T to model number. Please consult factory for other available configurations and custom assemblies.



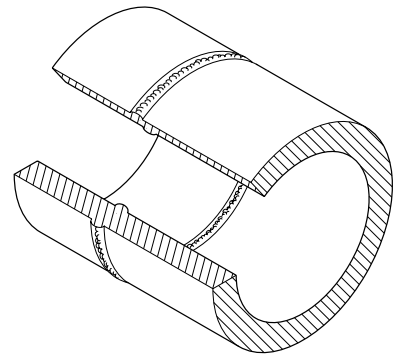
Bonding of Parbond fittings is accomplished by heating the two surfaces with a non-contact heat source to a molten state, pressing the two surfaces together, and allowing sufficient time to cool. Proper technique results in a permanent connection being made without introducing foreign matter or contamination. Below are examples of a correct and incorrect weld joints.



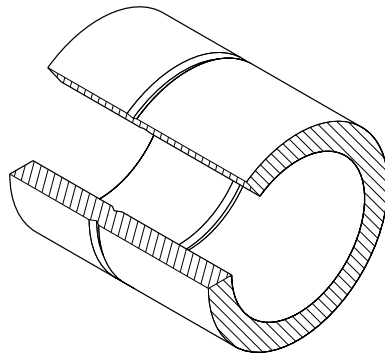
Correct Weld



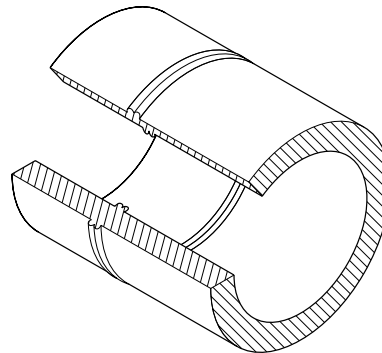
*Condition-* Weld bead uneven.  
*Causes-* Incomplete facing operation.  
Uneven heating.



*Condition-* Bubbles in weld joint.  
*Causes-* Overheating of material prior to joining.

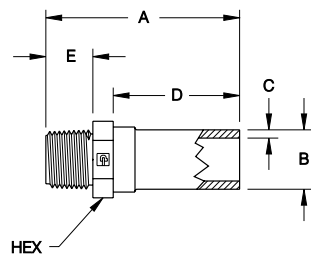


*Condition-* Lack of raised bead.  
*Causes-* Insufficient joining force.  
Joint weld distance too far apart.



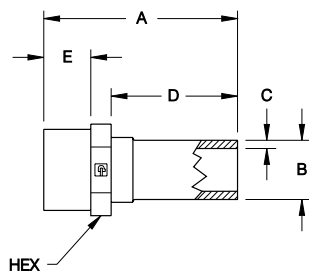
*Condition-* Weld bead too large.  
*Causes-* Excessive joining force.  
Joint weld distance too close.

## Adaptor Male Straight



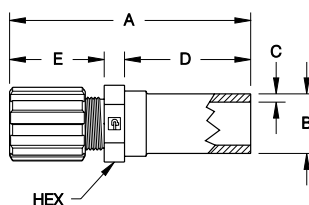
Part Number	MNPT Size	Parbond Size	Orifice		A		B		C		D		E		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
BA-4MP4	1/4	1/4	0.29	7.37	1.41	35.81	0.54	13.72	0.08	2.03	0.56	14.22	0.55	13.97	11/16
BA-8MP8	1/2	1/2	0.52	13.21	2.75	69.85	0.84	21.34	0.11	2.79	1.80	45.72	0.66	16.76	15/16
BA-12MP12	3/4	3/4	0.65	16.51	2.77	70.36	1.05	26.67	0.12	3.05	1.80	45.72	0.66	16.76	1 3/16
BA-12MP8	3/4	1/2	0.65	16.51	2.75	69.85	0.84	21.34	0.11	2.79	1.80	45.72	0.66	16.76	1 3/16
BA-16MP12	1	3/4	0.85	21.59	2.62	66.55	1.05	26.67	0.12	3.05	1.49	44.96	0.85	21.59	1 7/16
BA-16MP16	1	1	0.94	23.88	2.92	74.17	1.32	33.40	0.13	3.30	1.78	45.21	0.85	21.59	1 7/16

**Adaptor  
Female Straight**



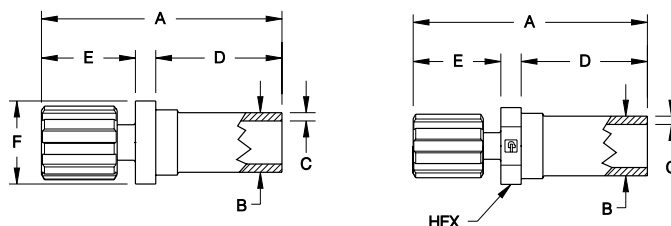
Part Number	FNPT Size	Parbond Size	Orifice		A		B		C		D		E		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
BA-4FP4	1/4	1/4	0.38	9.65	1.41	35.81	0.54	13.74	0.08	2.01	0.56	14.22	0.56	14.22	3/4
BA-6FP4	3/8	1/4	0.38	9.65	1.41	35.81	0.54	13.72	0.08	2.03	0.56	14.22	0.62	15.75	15/16
BA-8FP8	1/2	1/2	0.57	14.48	2.75	69.85	0.84	21.41	0.10	2.60	1.68	42.67	0.67	17.02	1 1/8
BA-12FP12	3/4	3/4	0.85	21.59	2.45	62.10	1.05	26.67	0.11	2.83	1.48	37.59	.68	17.27	1 7/16
BA-16FP16	1	1	0.97	24.64	2.94	74.68	1.32	33.40	0.13	3.24	1.78	45.21	0.96	24.38	1 5/8

**Adaptor,  
Parflare**



Part Number	Parflare Size	Parbond Size	Orifice		A		B		C		D		E		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
BA-4F4	1/4	1/4	0.13	3.30	2.05	52.07	0.56	14.22	0.09	2.16	0.56	14.22	1.16	29.46	11/16
BA-4F8	1/4	1/2	0.13	3.30	3.28	83.31	0.84	21.44	0.10	2.54	1.68	42.67	1.16	29.46	15/16
BA-4F12	1/4	3/4	0.13	3.30	3.28	83.31	1.05	26.67	0.11	2.79	1.77	44.96	1.16	29.46	1 3/16
BA-6F4	3/8	1/4	0.25	6.35	1.98	50.29	0.54	13.79	0.08	1.91	0.56	14.22	1.24	31.50	13/16
BA-6F8	3/8	1/2	0.25	6.35	3.26	82.80	0.84	21.41	0.10	2.54	1.80	45.72	1.24	31.50	15/16
BA-6F12	3/8	3/4	0.25	6.35	3.30	83.82	1.06	26.80	0.12	2.92	1.77	44.96	1.24	31.50	1 3/16
BA-8F4	1/2	1/4	0.38	9.65	2.20	55.88	0.55	13.97	0.10	2.41	0.56	14.22	1.34	34.04	15/16
BA-8F8	1/2	1/2	0.38	9.65	3.40	86.36	0.84	21.41	0.10	2.64	1.80	45.72	1.34	34.04	15/16
BA-8F12	1/2	3/4	0.38	9.65	3.34	84.84	1.06	26.80	0.11	2.79	1.77	44.96	1.34	34.04	1 3/16
BA-8F16	1/2	1	0.38	9.65	3.36	85.34	1.32	33.53	0.13	3.30	1.78	45.21	1.34	34.04	1 7/16
BA-12F8	3/4	1/2	0.63	16.00	3.55	90.17	0.85	21.49	0.11	2.67	1.80	45.72	1.46	37.08	1 3/16
BA-12F12	3/4	3/4	0.63	16.00	3.55	90.17	1.05	26.67	0.11	2.79	1.77	44.96	1.46	37.08	1 3/16
BA-12F16	3/4	1	0.63	16.00	3.55	90.17	1.32	33.40	0.14	3.43	1.78	45.21	1.46	37.08	1 7/16
BA-16F12	1	3/4	0.88	22.35	3.79	96.27	1.06	26.80	0.11	2.79	1.77	44.96	1.76	44.70	1 7/16
BA-16F16	1	1	0.88	22.35	3.79	96.27	1.32	33.40	0.13	3.24	1.77	44.96	1.76	44.70	1 7/16

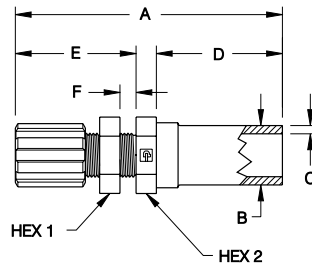
**Adaptor,  
Redi-flare**



Part Number	Redi-flare Size	Parbond Size	Orifice		A		B		C		D		E		F		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm			
BA-4RF4	1/4	1/4	0.13	3.30	2.04	51.82	0.55	13.89	0.08	2.03	0.56	14.22	1.16	29.46	-	-	11/16
BA-6RF4	3/8	1/4	0.25	6.35	2.10	53.34	0.55	13.89	0.09	2.29	0.56	14.22	1.24	31.50	-	-	11/16
BA-8RF8	1/2	1/2	0.38	9.65	3.42	86.87	0.84	21.39	0.10	2.59	1.80	45.72	1.37	34.80	1.17	29.72	-
BA-8RF12	1/2	3/4	0.38	9.65	3.11	78.99	1.05	26.67	0.11	2.87	1.77	44.96	1.37	34.80	1.41	35.81	-
BA-12RF8	3/4	1/2	0.63	16.00	3.74	95.00	0.84	21.34	0.10	2.54	1.80	45.72	1.46	37.08	1.17	29.72	-
BA-12RF12	3/4	3/4	0.63	16.00	3.35	85.09	1.05	26.67	0.11	2.79	1.48	37.59	1.46	37.08	1.41	35.81	-
BA-12RF16	3/4	1	0.63	16.00	3.61	91.69	1.31	33.27	0.13	3.30	1.78	45.21	1.46	37.08	1.42	36.07	-
BA-16RF12	1	3/4	0.88	22.35	3.96	100.6	1.05	26.67	0.11	2.78	1.77	44.96	1.76	44.70	1.39	35.31	-
BA-16RF16	1	1	0.88	22.35	3.85	97.79	1.31	33.27	0.13	3.18	1.78	45.21	1.76	44.70	1.41	35.81	-

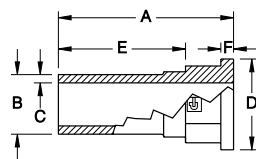
# Parbond PFA Fusible Pipe Fit-

## Adaptor, Parflare, Panel Mount



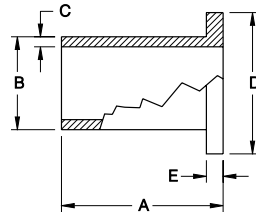
Part Number	Redi-flare Size	Parbond Size	Orifice		A		B		C		D		E		F		Hole Size		Hex 1 Size	Hex 2 Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
BA-4F4-P	1/4	1/4	0.13	3.30	2.50	63.50	0.54	13.72	0.08	1.91	0.56	14.22	1.65	41.91	0.25	6.35	0.50	12.70	11/16	11/16
BA-6F4-P	3/8	1/4	0.25	6.35	2.39	60.71	0.54	13.72	0.08	1.91	0.56	14.22	1.62	41.15	0.25	6.35	0.63	16.00	15/16	13/16
BA-8F4-P	1/2	1/4	0.38	9.65	2.56	65.02	0.55	13.87	0.08	2.03	0.56	14.22	1.74	44.20	0.25	6.35	0.75	19.05	1 1/16	15/16
BA-12F8-P	3/4	1/2	0.63	16.00	4.22	107.2	0.85	21.46	0.11	2.67	1.80	45.72	2.13	54.10	0.50	12.70	1.00	25.40	1 5/16	1 3/16

## Adaptor, Flange, Flat Face



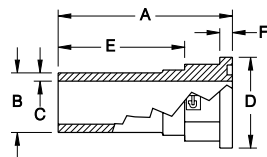
Part Number	Parbond Size	A		B		C		D		E		F	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BA-8FL-0	1/2	2.49	63.25	0.84	21.34	0.12	2.96	1.29	32.77	1.49	37.85	0.22	5.59
BA-12FL-0	3/4	2.48	62.99	1.05	26.67	0.11	2.87	1.46	37.08	1.49	37.85	0.22	5.59

## Adaptor, Flange, Flat Face



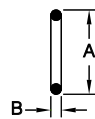
Part Number	Parbond Size	A		B		C		D		E	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BA-16FL-0	1	2.28	57.91	1.32	33.53	0.14	3.56	2.00	50.80	0.24	6.10
BA-32FL-0	2	2.37	60.20	2.40	60.96	0.17	4.41	3.47	88.14	0.25	6.35

## Adaptor, Flange, O-Ring Face



Part Number	Parbond Size	A		B		C		D		E		F	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BA-8FL-1	1/2	2.48	62.99	0.85	21.49	0.11	2.68	1.28	32.51	1.49	37.85	0.18	4.57

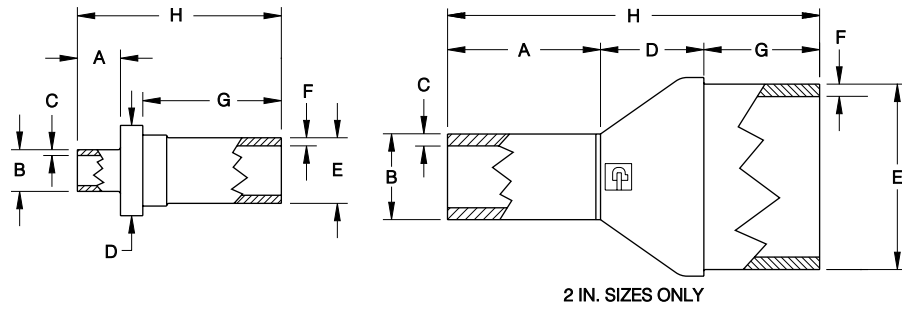
## O-Ring, PFA Encapsulated Viton



Part Number	Parbond Size	A		B	
		inch	mm	inch	mm
2000-0118EV	1/2	1.068	27.13	.103	2.62

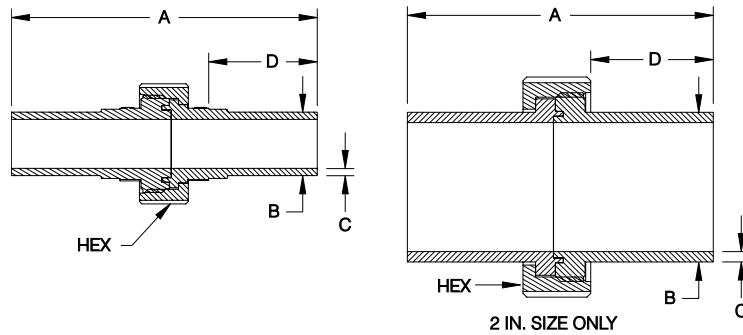


**Reducer**



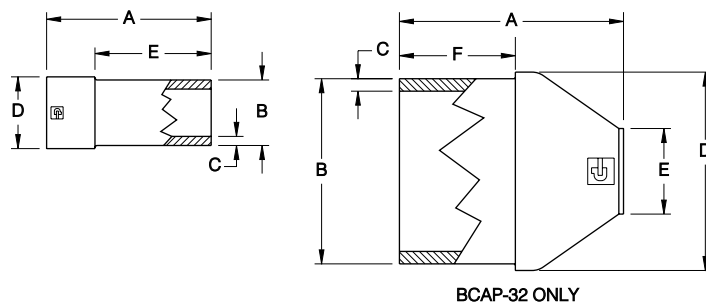
Part Number	Parbond Size	A		B		C		D		E		F		G		H	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BR-84	1/2 X 1/4	0.56	14.22	0.54	13.72	0.08	1.91	0.93	23.62	0.85	21.59	0.11	2.79	1.80	45.72	2.64	67.06
BR-128	3/4 X 1/2	1.49	38.10	0.84	21.34	0.10	2.54	1.16	29.46	1.05	26.67	0.11	2.67	1.49	37.85	3.58	90.93
BR-168	1 X 1/2	1.49	37.85	0.84	21.41	0.10	2.60	1.41	35.81	1.32	33.40	0.13	3.24	1.78	45.21	3.57	90.68
BR-1612	1 X 3/4	1.49	37.59	1.05	26.67	0.11	2.79	1.41	35.81	1.32	33.53	0.14	3.43	1.78	45.21	3.57	90.68
BR-328	2 X 1/2	1.50	38.10	0.84	21.34	0.11	2.79	2.55	64.77	2.38	60.45	0.16	4.06	1.50	38.10	4.38	111.3
BR-3212	2 X 3/4	1.50	37.59	1.05	26.67	0.12	3.05	2.55	64.77	2.39	60.71	0.16	4.06	1.50	38.10	4.37	111.0
BR-3216	2 X 1	1.50	37.59	1.32	33.53	0.14	3.56	2.54	64.52	2.38	60.45	0.16	4.06	1.50	38.10	4.38	111.3

**Union**



Part Number	Parbond Size	A		B		C		D		Hex Size
		inch	mm	inch	mm	inch	mm	inch	mm	
BU-4	1/4	2.49	63.25	0.54	13.79	0.08	2.01	0.76	19.30	1 1/4
BU-8	1/2	5.07	128.78	0.85	21.46	0.11	2.69	1.80	45.72	1 5/8
BU-12	3/4	5.07	128.78	1.05	26.75	0.11	2.86	1.80	45.72	1 7/8
BU-16	1	5.62	142.75	1.32	33.53	0.13	3.31	1.50	38.10	2 7/8

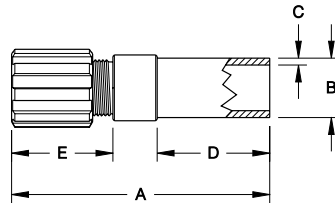
**Cap**



Part Number	Parbond Size	A		B		C		D		E		F	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BCAP-4	1/4	0.84	21.34	0.54	13.82	0.08	2.02	0.62	15.75	0.55	13.97	N/A	N/A
BCAP-8	1/2	2.09	53.09	0.84	21.41	0.11	2.67	0.91	23.11	1.49	37.85	N/A	N/A
BCAP-12	3/4	2.08	52.83	1.05	26.67	0.11	2.79	1.16	29.46	1.49	37.85	N/A	N/A
BCAP-16	1	2.06	52.32	1.32	33.40	0.13	3.24	1.42	36.07	1.48	37.59	N/A	N/A
BCAP-32	2	2.88	73.15	2.38	60.45	0.16	4.06	2.55	64.77	1.10	27.94	1.49	37.85

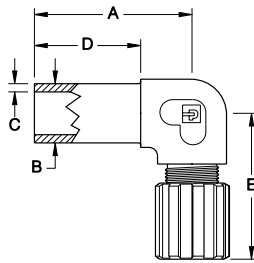
# Parbond PFA Fusible Pipe Fit-

## Adaptor, Parflare, PVDF Transition



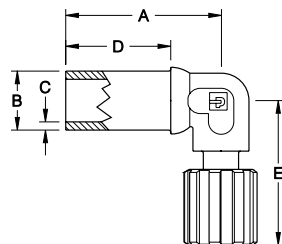
Part Number	Parflare Size	Parbond Size	Orifice		A		B		C		D		E	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BA-4F20MM-PVDF	1/4	20 mm	0.13	3.30	3.38	85.85	0.79	20.07	0.08	1.91	1.49	37.85	1.24	31.50
BA-4F25MM-PVDF	1/4	25 mm	0.13	3.30	3.40	86.36	0.99	25.15	0.08	1.91	1.49	37.85	1.24	31.50
BA-6F20MM-PVDF	3/8	20 mm	0.25	6.35	3.40	86.36	0.79	20.07	0.08	1.91	1.49	37.85	1.26	32.00
BA-6F25MM-PVDF	3/8	25 mm	0.25	6.35	3.40	86.36	0.98	24.89	0.07	1.78	1.49	37.85	1.26	32.00
BA-8F20MM-PVDF	1/2	20 mm	0.38	9.65	3.49	88.65	0.79	20.07	0.08	1.91	1.49	37.85	1.35	34.29
BA-8F25MM-PVDF	1/2	25 mm	0.38	9.65	3.51	89.15	0.98	24.89	0.07	1.78	1.49	37.85	1.35	34.29
BA-8F32MM-PVDF	1/2	32 mm	0.38	9.65	3.53	89.66	1.26	32.00	0.10	2.41	1.49	37.85	1.40	35.56
BA-12F20MM-PVDF	3/4	20 mm	0.63	16.00	3.67	93.22	0.79	20.07	0.08	1.91	1.49	37.85	1.50	38.10
BA-12F25MM-PVDF	3/4	25 mm	0.63	16.00	3.68	93.47	0.98	24.89	0.07	1.78	1.49	37.85	1.53	38.86
BA-12F32MM-PVDF	3/4	32 mm	0.63	16.00	3.66	92.96	1.26	32.00	0.10	2.41	1.49	37.85	1.53	38.86
BA-12F40MM-PVDF	3/4	40 mm	0.63	16.00	3.68	93.47	1.58	40.13	0.10	2.41	1.49	37.85	1.54	39.12
BA-16F25MM-PVDF	1	25 mm	0.88	22.35	3.88	98.55	0.98	24.89	0.07	1.78	1.49	37.85	1.72	43.69
BA-16F32MM-PVDF	1	32 mm	0.88	22.35	3.86	98.04	1.26	32.00	0.10	2.41	1.49	37.85	1.73	43.94
BA-16F40MM-PVDF	1	40 mm	0.88	22.35	3.86	98.04	1.57	39.88	0.09	2.29	1.49	37.85	1.73	43.94

## Elbow Connector, Parflare



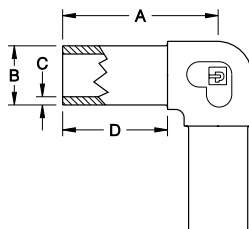
Part Number	Parflare Size	Parbond Size	Orifice		A		B		C		D		E	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BE-4F4	1/4	1/4	0.13	3.30	1.08	27.43	0.54	13.72	0.08	1.97	0.56	14.22	1.69	42.93
BE-6F4	3/8	1/4	0.25	6.35	1.09	27.69	0.55	13.97	0.09	2.29	0.56	14.22	1.84	46.74
BE-8F8	1/2	1/2	0.38	9.65	2.21	56.13	0.84	21.34	0.10	2.59	1.49	37.85	2.09	53.09
BE-8F12	1/2	3/4	0.38	9.65	2.19	55.63	1.05	26.67	0.11	2.79	1.48	37.59	2.03	51.56
BE-12F8	3/4	1/2	0.63	16.00	2.21	56.13	0.84	21.34	0.12	3.05	1.48	37.59	2.03	51.56
BE-12F12	3/4	3/4	0.63	16.00	2.20	55.88	1.05	26.67	0.11	2.79	1.48	37.59	2.12	53.85
BE-16F16	1	1	0.88	22.35	2.45	62.23	1.32	33.53	0.14	3.56	1.48	37.59	2.12	53.85

## Elbow Connector, Redi-flare



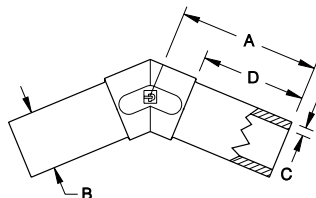
Part Number	Redi-flare Size	Parbond Size	Orifice		A		B		C		D		E	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BE-88RF	1/2	1/2	0.38	9.65	2.21	56.13	0.84	21.34	0.11	2.67	1.49	37.85	2.03	51.56
BE-1212RF	3/4	3/4	0.63	16.00	2.35	59.69	1.05	26.67	0.12	3.05	1.50	38.10	2.42	61.47
BE-1612RF	3/4	1	0.63	16.00	2.45	62.23	1.32	33.53	0.14	3.56	1.50	38.10	2.53	64.26

**Elbow Connector,  
90°**



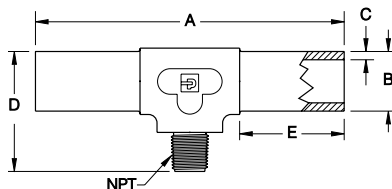
Part Number	Parbond Size	A		B		C		D	
		inch	mm	inch	mm	inch	mm	inch	mm
BE-4	1/4	1.09	27.69	0.55	13.87	0.08	2.08	0.57	14.48
BE-8	1/2	2.19	55.63	0.84	21.41	0.11	2.67	1.48	37.59
BE-12	3/4	2.36	59.94	1.06	26.90	0.11	2.86	1.49	37.85
BE-16	1	2.45	62.23	1.32	33.45	0.13	3.30	1.49	37.85
BE-32	2	3.29	83.57	2.39	60.66	0.16	4.04	1.50	38.10

**Elbow Connector,  
45°**



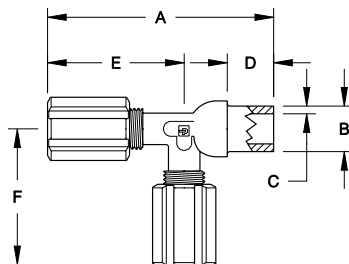
Part Number	Parbond Size	A		B		C		D	
		inch	mm	inch	mm	inch	mm	inch	mm
BE-445	1/4	0.94	23.88	0.54	13.77	0.08	1.98	0.69	17.53
BE-845	1/2	2.00	50.80	0.85	21.49	0.11	2.68	1.50	38.10
BE-1245	3/4	1.98	50.29	1.05	26.75	0.11	2.77	1.49	37.85
BE-1645	1	1.94	49.28	1.32	33.58	0.13	3.40	1.48	37.59
BE-3245	2	2.49	63.25	2.39	60.81	0.17	4.25	1.48	37.59

**Tee Connector,  
Male Pipe**



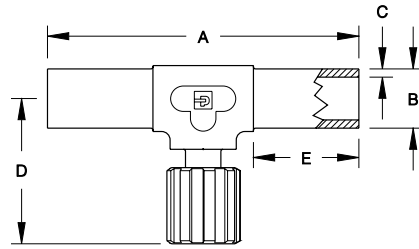
Part Number	MNPT Size	Parbond Size	Orifice		A		B		C		D		E	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BT-884MP	1/4	1/2	0.29	7.37	4.44	112.78	0.85	21.54	0.11	2.74	1.27	32.26	1.50	38.10

**Tee Connector,  
Parflare**



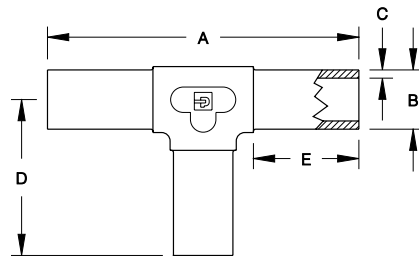
Part Number	Parflare Size	Parbond Size	Orifice		A		B		C		D		E		F	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BT-4F44F	1/4	1/4	0.13	3.30	2.82	71.63	0.55	13.97	0.08	2.11	0.56	14.22	1.70	43.18	1.72	43.69

## Tee Connector, Redi-flare



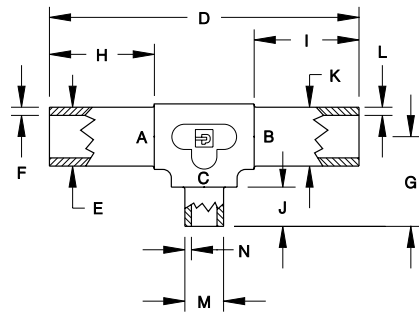
Part Number	Parflare Size	Parbond Size	Orifice		A		B		C		D		E	
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BT-888RF	1/2	1/2	0.25	6.35	4.41	112.01	0.84	21.34	0.11	2.67	2.00	50.80	1.50	38.10
BT-121212RF	3/4	3/4	0.63	16.00	4.67	118.62	1.05	26.67	0.11	2.79	2.20	55.88	1.49	37.85

## Tee Connector



Part Number	Parbond Size	A		B		C		D		E	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BT-4	1/4	2.17	55.12	0.55	13.97	0.08	2.11	1.10	27.94	0.56	14.22
BT-8	1/2	4.39	111.51	0.84	21.41	0.11	2.68	2.18	55.37	1.49	37.85
BT-12	3/4	4.69	119.13	1.06	26.92	0.11	2.86	2.34	59.44	1.50	38.10
BT-16	1	4.87	123.70	1.31	33.15	0.12	2.98	2.43	61.72	1.48	37.59
BT-32	2	6.58	167.13	2.39	60.58	0.16	3.99	3.29	83.57	1.50	38.10

## Tee Connector Reducer



Part Number	A	B	C	D		E		F		G		H		I		J		K		L		M		N	
	Parbond Size	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BTR-848	1/2	1/4	1/2	3.47	88.1	0.84	21.3	0.10	2.6	2.19	55.6	1.49	37.8	0.56	14.2	1.49	37.8	0.56	14.2	0.09	2.3	0.84	21.3	0.10	2.5
BTR-884	1/2	1/2	1/4	4.42	112	0.84	21.3	0.12	3.0	1.28	32.5	1.49	37.8	1.49	37.8	0.56	14.2	0.84	21.3	0.10	2.5	0.56	14.2	0.09	2.3
BTR-12412	3/4	1/4	3/4	3.75	95.3	1.05	26.7	0.11	2.8	2.34	59.4	1.50	38.1	0.56	14.2	1.50	38.1	0.56	14.2	0.10	2.5	1.05	26.7	0.11	2.8
BTR-12812	3/4	1/2	3/4	4.67	119	1.05	26.7	0.12	3.0	2.34	59.4	1.50	38.1	1.49	37.8	1.50	38.1	0.84	21.3	0.10	2.5	1.05	26.7	0.11	2.8
BTR-12124	3/4	3/4	1/4	4.70	119	1.05	26.7	0.11	2.8	1.42	36.1	1.50	38.1	1.50	38.1	0.56	14.2	1.05	26.7	0.11	2.8	0.56	14.2	0.09	2.3
BTR-12128	3/4	3/4	1/2	4.66	118	1.05	26.7	0.11	2.8	2.33	59.2	1.50	38.1	1.50	38.1	1.49	37.8	1.05	26.7	0.11	2.8	0.84	21.3	0.10	2.5
BTR-121216	3/4	3/4	1	4.90	124	1.05	26.7	0.11	2.8	2.47	62.7	1.50	38.1	1.50	38.1	1.50	38.1	1.05	26.7	0.11	2.8	1.32	33.5	0.14	3.6
BTR-16164	1	1	1/4	4.88	124	1.32	33.5	0.13	3.4	1.53	38.9	1.50	38.1	1.50	38.1	0.56	14.2	1.32	33.5	0.14	3.6	0.56	14.2	0.09	2.3
BTR-16168	1	1	1/2	4.91	124	1.32	33.5	0.14	3.6	2.46	62.5	1.50	38.1	1.50	38.1	1.49	37.8	1.32	33.5	0.14	3.6	0.84	21.3	0.10	2.5

**Product Overview**

The Pipe Fittings are ideally suited for any ultra-pure or corrosive chemical application. The all PFA design yields maximum corrosion resistance. The fittings are available in a wide variety of configurations and sizes. Please consult factory for other available configurations, materials, and custom assemblies.



**Features**

PFA body manufactured from virgin High Purity PFA materials.

Numerous configurations.

**Benefits**

Less surface particulates resulting in cleaner operation.

Reduced system complexity and cost.

**Specifications**

Materials of Construction:

Wetted Surfaces - PFA

Pressure Ranges:

See Pressure/Temperature Chart below.

Temperature Ranges:

See Pressure/Temperature Chart below.

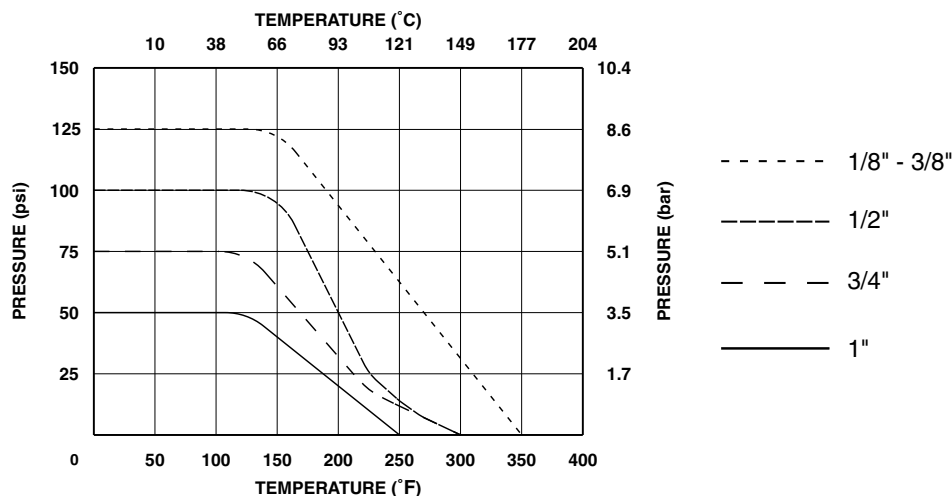
**Assembly Procedure**

1. Apply PTFE tape to male NPT threads starting one thread back from end of fitting and in direction of threads to conform tape to shape of threads.
  - a. Use 3 1/2 to 4 wraps of tape when assembling to fluoropolymer material.
  - b. Use 4 to 5 wraps of tape when assembling to material other than fluoropolymer.
2. Thread the fitting onto the mating component until hand-tight.
3. Using a wrench, tighten fitting about 4 turns past hand-tight.

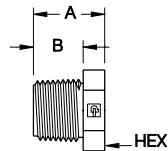
**Torque**

Fitting Size	in/lbs	Newtons/m
1/8"	7.0	.79
1/4"	16	1.81
3/8"	23	2.60
1/2"	30	3.39
3/4"	54	6.10
1"	78	8.81

**PRESSURE VS. TEMPERATURE**

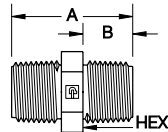


## Plug



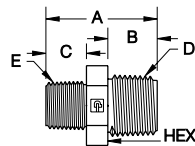
Part Number	NPT Size	A		B		Hex Size
		inch	mm	inch	mm	
P-2-P	1/8	0.84	21.33	0.55	13.97	1/2
P-4-P	1/4	0.84	21.33	0.55	13.97	5/8
P-6-P	3/8	0.84	21.33	0.55	13.97	13/16
P-8-P	1/2	0.94	23.88	0.65	16.51	15/16
P-12-P	3/4	0.94	23.88	0.65	16.51	1 3/16
P-16-P	1	1.11	28.19	0.82	20.83	1 7/16

## Nipple



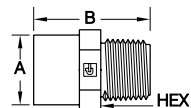
Part Number	NPT Size	Orifice		A		B		Hex Size
		inch	mm	inch	mm	inch	mm	
PN-2-P	1/8	0.20	5.10	1.39	35.30	0.55	13.97	1/2
PN-4-P	1/4	0.29	7.36	1.39	35.30	0.55	13.97	5/8
PN-6-P	3/8	0.41	10.41	1.39	35.30	0.55	13.97	13/16
PN-8-P	1/2	0.53	13.46	1.61	40.89	0.66	16.76	15/16
PN-12-P	3/4	0.65	16.51	1.61	40.89	0.66	16.76	1 3/16
PN-16-P	1	0.96	24.38	1.97	50.04	0.84	21.33	1 7/16

## Nipple Reducer



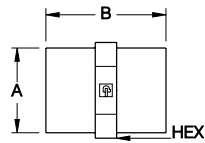
Part Number	D NPT Size	E NPT Size	Orifice		A		B		C		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	
PNR-42-P	1/4	1/8	0.20	5.08	1.34	34.04	0.55	13.97	0.55	13.97	5/8
PNR-64-P	3/8	1/4	0.28	7.11	1.38	35.05	0.55	13.97	0.55	13.97	13/16
PNR-84-P	1/2	1/4	0.28	7.11	1.50	38.10	0.65	10.51	0.55	13.97	13/16
PNR-86-P	1/2	3/8	0.41	10.41	1.50	38.10	0.65	10.51	0.55	13.97	15/16
PNR-128-P	3/4	1/2	0.53	13.46	1.60	40.64	0.65	10.51	0.65	10.51	1 3/16
PNR-1612-P	1	3/4	0.65	16.51	1.78	45.21	0.84	21.33	0.65	10.51	1 7/16

## Bushing



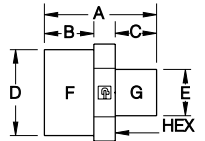
Part Number	FNPT Size	MNPT Size	Orifice		A		B		Hex Size
			inch	mm	inch	mm	inch	mm	
PB-24-P	1/8	1/4	0.25	6.35	0.63	16.00	1.40	35.56	5/8
PB-26-P	1/8	3/8	0.25	6.35	0.63	26.00	1.40	35.56	3/4
PB-42-P	1/4	1/8	0.25	6.35	0.75	19.05	1.40	35.56	3/4
PB-44-P	1/4	1/4	0.25	6.35	0.75	19.05	1.40	35.56	3/4
PB-46-P	1/4	3/8	0.31	7.87	0.75	19.05	1.40	35.56	3/4
PB-48-P	1/4	1/2	0.31	7.87	0.75	19.05	1.50	38.10	15/16
PB-412-P	1/4	3/4	0.31	7.87	0.75	19.05	1.50	38.10	1 3/16
PB-64-P	3/8	1/4	0.25	6.35	0.94	23.87	1.40	35.56	15/16
PB-68-P	3/8	1/2	0.42	10.67	0.94	23.87	1.50	38.10	15/16
PB-612-P	3/8	3/4	0.42	10.67	0.94	23.87	1.50	38.10	1 3/16
PB-84-P	1/2	1/4	0.25	6.35	1.12	28.45	1.50	38.10	1 3/16
PB-812-P	1/2	3/4	0.53	13.46	1.12	28.45	1.63	41.40	1 3/16
PB-816-P	1/2	1	0.53	13.46	1.12	28.45	1.94	49.28	1 3/8
PB-128-P	3/4	1/2	0.53	13.46	1.41	35.81	1.63	41.40	1 3/16
PB-1212-P	3/4	3/4	0.65	16.51	1.41	35.81	1.63	41.40	1 3/16
PB-1216-P	3/4	1	0.75	19.05	1.41	35.81	1.80	45.72	1 7/16

**Coupling**



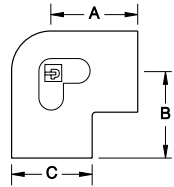
Part Number	NPT Size	Orifice		A		B		Hex Size
		inch	mm	inch	mm	inch	mm	
PC-2-P	1/8	0.25	6.35	0.63	16.00	1.40	35.56	5/8
PC-4-P	1/4	0.31	7.87	0.75	19.05	1.40	35.56	3/4
PC-6-P	3/8	0.42	10.67	0.95	24.13	1.40	35.56	15/16
PC-8-P	1/2	0.57	14.48	1.15	29.21	1.64	41.66	1 1/8
PC-12-P	3/4	0.75	19.05	1.41	35.81	1.64	41.66	1 7/16

**Female Reducer**



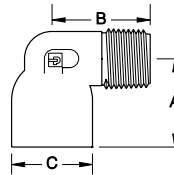
Part Number	F NPT Size	G NPT Size	Orifice		A		B		C		D		E		Hex Size
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
PFR-42-P	1/4	1/8	.25	6.35	1.41	35.81	.56	14.22	.55	13.97	.75	19.05	.62	15.75	3/4
PFR-82-P	1/2	1/8	.25	6.35	1.50	38.10	.66	16.76	.55	13.97	1.14	28.96	.62	15.75	1 1/8

**Elbow**



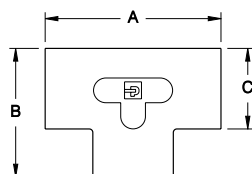
Part Number	NPT Size	Orifice		A		B		C	
		inch	mm	inch	mm	inch	mm	inch	mm
PE-2-P	1/8	0.25	6.35	0.83	21.08	0.83	21.08	0.63	16.00
PE-4-P	1/4	0.31	7.87	0.97	24.64	0.97	24.64	0.75	19.05
PE-6-P	3/8	0.42	10.67	0.97	24.64	0.97	24.64	0.94	23.88
PE-8-P	1/2	0.56	14.22	1.24	31.50	1.24	31.50	1.16	29.46
PE-12-P	3/4	0.75	19.05	1.32	33.53	1.32	33.53	1.44	36.58

**Street Elbow**



Part Number	FNPT Size	MNPT Size	Orifice		A		B		C	
			inch	mm	inch	mm	inch	mm	inch	mm
PSE-22-P	1/8	1/8	0.20	5.08	0.84	21.33	1.25	31.75	0.63	16.00
PSE-44-P	1/4	1/4	0.29	7.36	0.99	25.15	1.25	31.75	0.77	19.56
PSE-66-P	3/8	3/8	0.42	10.67	0.99	25.15	1.25	31.75	0.94	23.87
PSE-88-P	1/2	1/2	0.54	13.71	1.25	31.75	1.25	31.75	1.15	29.21
PSE-1212-P	3/4	3/4	0.66	16.76	1.38	35.05	1.74	44.20	1.35	34.29

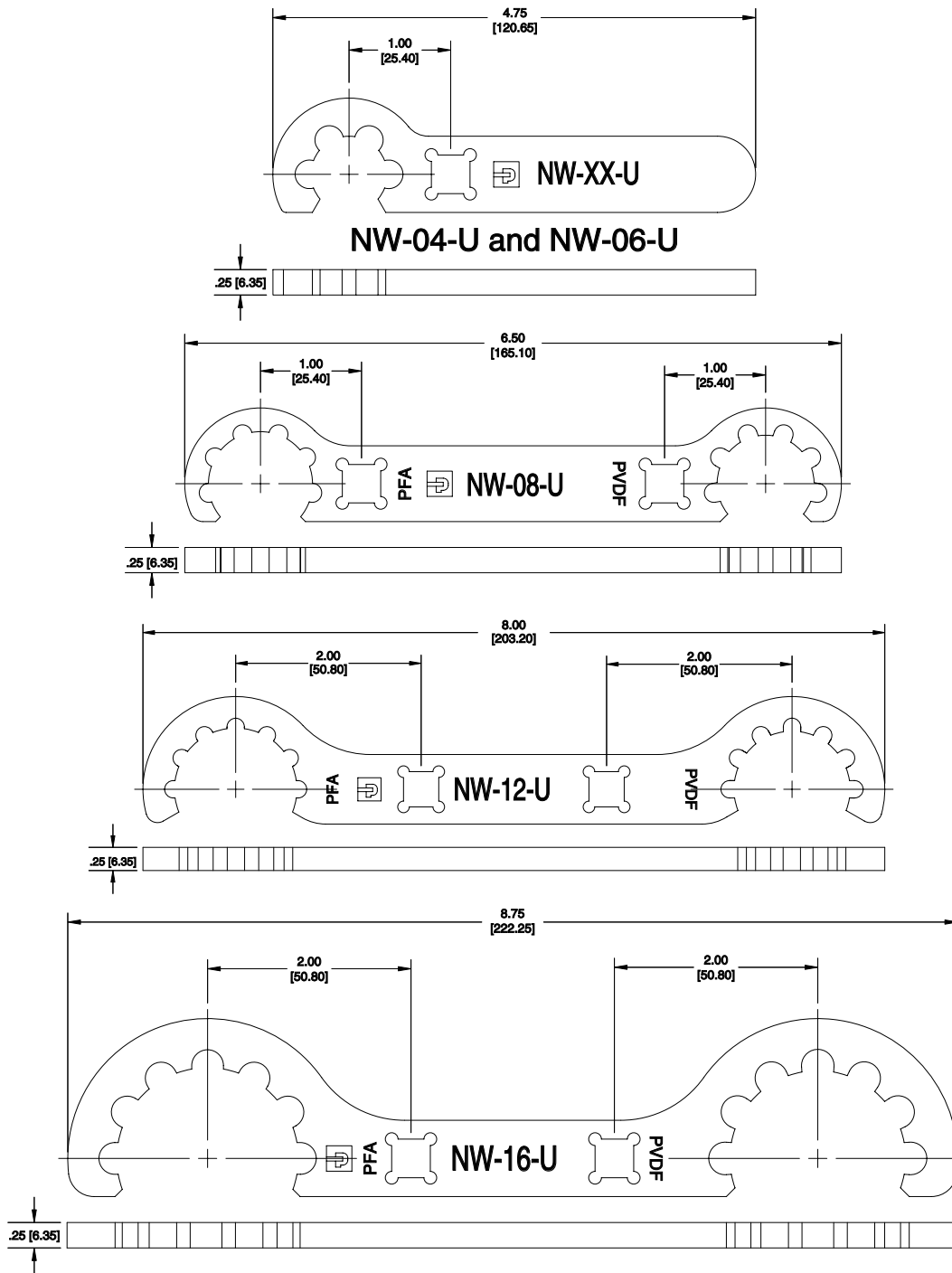
**Tee**



Part Number	NPT Size	Orifice		A		B		C	
		inch	mm	inch	mm	inch	mm	inch	mm
PT-2-P	1/8	0.25	6.25	1.68	42.16	1.15	29.21	0.63	16.00
PT-4-P	1/4	0.35	8.89	1.97	50.03	1.35	34.29	0.75	19.05
PT-6-P	3/8	0.44	11.17	1.97	50.03	1.46	37.08	0.94	23.87
PT-8-P	1/2	0.56	14.22	2.48	62.99	1.80	45.72	1.14	28.95
PT-12-P	3/4	0.75	19.05	2.61	66.29	2.02	51.31	1.42	36.07
PT-16-P	1	1.00	25.40	3.22	81.79	2.46	62.48	1.70	43.18

## Product Overview

The NW Nut Wrench is designed to aid in the assembly of the Parflare and Pargrip fittings.



Model No.	Fitting Nut Size	Nut Material	Fitting Style
NW-04-U	1/4"	PVDF & PFA	Parflare & Pargrip
NW-06-U	3/8"	PVDF & PFA	Parflare & Pargrip
NW-08-U	1/2"	PVDF & PFA	Parflare & Pargrip
NW-12-U	3/4"	PVDF & PFA	Parflare & Pargrip
NW-16-U	1"	PVDF & PFA	Parflare & Pargrip

Standard Parflare fitting has PVDF nut. Standard Pargrip fitting has PFA nut.



**Product Overview**

Flare end connections have been established as the preferred connection in high purity and corrosive applications. Because poorly flared Fluoropolymer tubing can cause leaks and costly downtime, Partek recommends the heat flaring procedure. In this procedure HG Heat Gun, MFT Manual Flaring Tools and TCTR Tube Cutters are utilized.

**Flaring and Assembly Procedure**

**1/4" - 1 1/4" Tubing Sizes\***

1. Cut tubing evenly using a tube cutter:  
 TCTR-1 for 1/8" - 1/2"  
 TCTR-2 for 1/8" - 3/4"  
 TCTR-3 for 1/8" - 1 1/2"
2. For PVDF or PFA nuts slip small end over tubing. For HT nut assemblies slip small end of nut & small end of gripper over tubing.
3. Using the HG-1\*\* Heat Gun on high setting, hold the end of tubing approximately 1/2" from gun and rotate tubing slowly until a fine whitish line appears around tube. Alternately, tubing can be heated for a timed period corresponding to Table 1.
4. Remove tubing from heat source and immediately push over the appropriate flaring mandrel until end of tubing reaches the mandrel stop shoulder.
5. Maintain tubing on mandrel together until cool. Refer to Table 1 for appropriate cooling times.
6. Allow tubing to cool on mandrel for an additional 2 to 3 minutes. Alternately the tubing can be assembled as per step 7 below immediately completing step 5 above.
7. Push flared tubing end over desired fitting body until it stops. Make sure that gap between end of tubing and fitting body shoulder is not more than .125" (3.2mm).
8. For PVDF or PFA nuts tighten onto fitting body as per Table 1. For HT nut assemblies tighten onto fitting body per Table 1. Once desired temperature has been reached, re-tighten per Table 1.

\* HT nut assemblies are for 1/4" - 1" sizes only.

\*\* HG-1 Specifications

Temperature Range: 750° - 1000° F (400° - 540° C)

Voltage: 120 VAC

Cycle: 60 HZ

Amperage: 14.5 amps

Wattage: 1,740 watts



Model No.	Tubing OD	Tubing ID
MFT-U	1/4" - 1"	see below
MFT-04	1/4"	5/32"
MFT-06	3/8"	1/4"
MFT-08	1/2"	3/8"
MFT-12	3/4"	5/8"
MFT-16	1"	7/8"
MFT-20	1 1/4"	1.10"

**Table 1**

Fitting Size	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"
Heating time (sec.) for PFA Tubing	15	25	25	25	25	25
Holding time on mandrel	20	20	20	20	25	25
Additional cooling time (min.)	2	2	3	3	3	3
PVDF & PFA Nuts minimum tightening torque (inch lbs./Nm)	5 / .6	8 / .9	11 / 1.2	14 / 1.6	30 / 3.4	75 / 8.4
HT Nut Assemblies minimum tightening torque (inch lbs./Nm)	14 / 1.6	14 / 1.6	18 / 2.0	18 / 2.0	50 / 5.7	NA

# FG Electronic Flare Gun

## Product Overview

The FG Electronic Flare Gun is designed to flare PFA and HP PFA tubing perfectly, every time. It is ideal for connections that need to be made in clean rooms, in equipment cabinets or other hard to reach places where conventional flaring tools are not suitable. The complete process of heating, flaring and cooling is all contained within the gun. Compact, portable and easy to use, the gun is offered in 5 sizes, 1/4" to 1".



## Features

Tubing snaps into jaws of the flare gun.

Indicator lights on the flare gun guide the operator during the heating, flaring and cooling operations.

Compact and portable, it is offered in 5 sizes, 1/4" to 1".

## Benefits

Holds tubing so that mandrel travel depth is consistent.

Perfect flare every time reduces potential leaks and downtime.

Ideal for working in areas where space is limited. Faster set up of new equipment is possible.

## Specifications

Heating Cycle: 380° F to 420° F (193° C to 216° C) for 17-20 sec.

Cooling Cycle: 45-60 sec.

Voltage: 120 VAC

Cycle: 60 HZ

Amperage: 2 amps

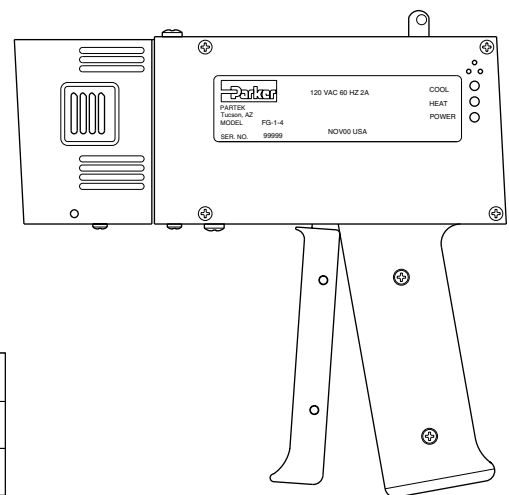
Wattage: 240 watts

Types of Tubing: Catalog 4150

Model No.	Tubing OD	Tubing ID
FG-1-4C	1/4"	5/32"
FG-1-6C	3/8"	1/4"
FG-1-8C	1/2"	3/8"
FG-1-12C	3/4"	5/8"
FG-1-16C	1"	7/8"

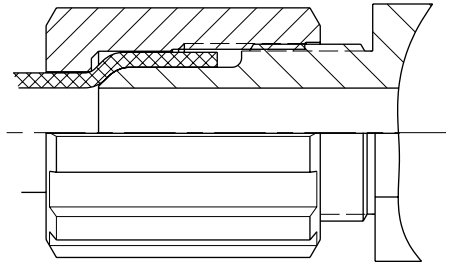
\*C Denotes Flare gun is shipped in carrying case

Model No.	Flare guns included in Kit				
FG-1K-2	FG-1-12	FG-1-16			
FG-1K-3	FG-1-4	FG-1-6	FG-1-8		
FG-1K-4	FG-1-4	FG-1-6	FG-1-8	FG-1-12	
FG-1K-5	FG-1-4	FG-1-6	FG-1-8	FG-1-12	FG-1-16



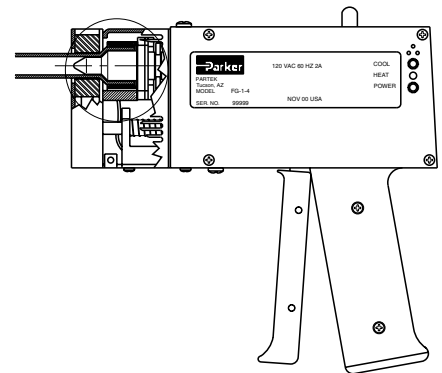
**Tube Flaring**

There are many advantages to making connections with flared fittings. The flared fitting is the cleanest breakable connection available because of its low dead volume. This decreases the chance for particle entrapment in the fitting. From the cross section it is evident that the tube is supported on the inside. This prevents the tubing from ovalizing or bottoming out, therefore allowing the flared fitting to perform well in vibration and side loading applications.



**Flaring and Assembly Procedure**  
**1/4" - 1" Tubing Sizes**

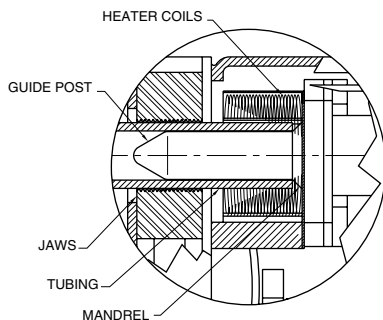
1. Cut tubing evenly using a tube cutter:  
TCTR-1 for 1/8" - 1/2"  
TCTR-2 for 1/8" - 3/4"  
TCTR-3 for 1/8" - 1 1/2"
2. For PVDF or PFA nuts slip small end over tubing. For HT nut assemblies slip small end of nut and small end of gripper over tubing.
3. Holding the flare gun, push lever to the most forward position.
4. Squeeze trigger 12 to 14 times to reset the mandrel to the start position.
5. Move top lever to the most rear position.
6. Insert the correct sized tubing. See page 42.
7. Click trigger until resistance is lost.
8. Plug in tool and put the lever in the center position.
9. After 30 seconds you will hear a beep.
10. Ratchet the trigger until resistance is felt and note the amber LED coming on to indicate that cooling has begun.
11. After this light goes out, move the lever into the most forward position.
12. Remove the flared tubing.
13. Push flared tubing end over desired fitting body until it stops. Make sure that gap between end of tubing and fitting body shoulder is not more than .125" (3.2mm).
14. For PVDF or PFA nuts tighten onto fitting body as per Table 1 below. For HT nut assemblies tighten onto fitting body per Table 1. Once desired



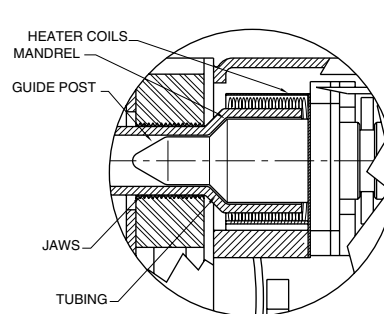
**Table 1**

Fitting Size	1/4"	3/8"	1/2"	3/4"	1"
PVDF & PFA Nuts minimum tightening torque (inch lbs./Nm)	5 / .6	8 / .9	11 / 1.2	14 / 1.6	30 / 3.4
HT Nut Assemblies minimum tightening torque (inch lbs./Nm)	14 / 1.6	14 / 1.6	18 / 2.0	18 / 2.0	50 / 5.7

**HEATING CYCLE**



**COOLING CYCLE**



The tubing is inserted into the gun, and the jaws bite down on the tubing. The gun heats the tubing to the ideal temperature and alerts the user when the cycle is complete. At this time the flare mandrel is pushed into the tubing in the flare position where it is held for the cooling cycle