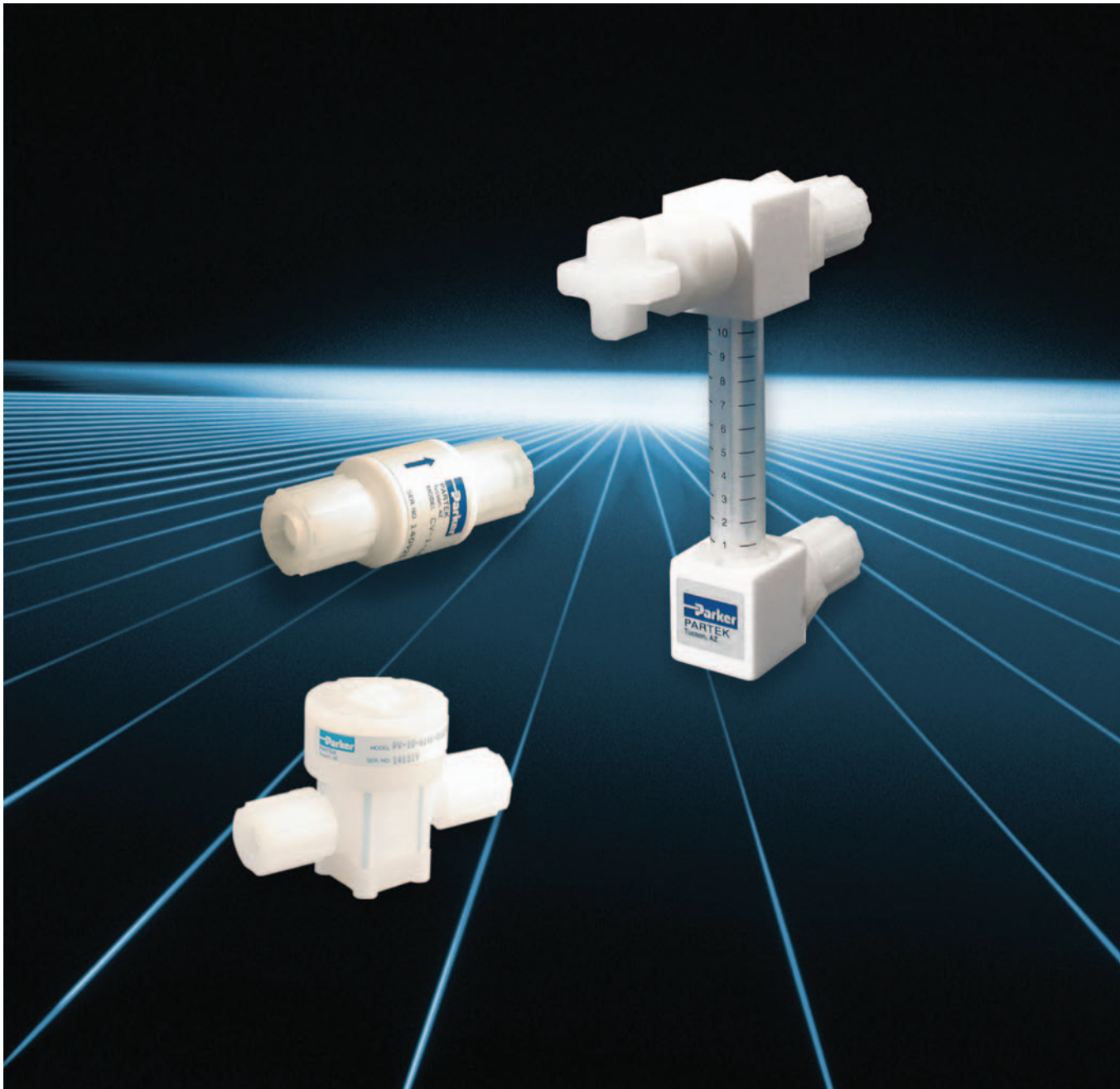


Partek **PFA/PTFE Products**

Quick Reference Guide

Bulletin 4180-QRG/USA

Revised, May 2005



Fluoropolymer Tubing Products

Fluoropolymer tubing products are offered through Atlantic Tubing Operation (ATO). ATO manufactures high quality fluoropolymer tubing that may be used in conjunction with Partek's PFA/PTFE products. A wide range of products are available in PTFE, FEP, PFA, High Purity PFA, and PVDF. Other materials are available on request. All tubing and pipe are made from 100% virgin resins.

Chemical Properties

- Resistivity to corrosive agents
- Non-solubility
- Long term weatherability
- Non-adhesiveness
- Nonflammability

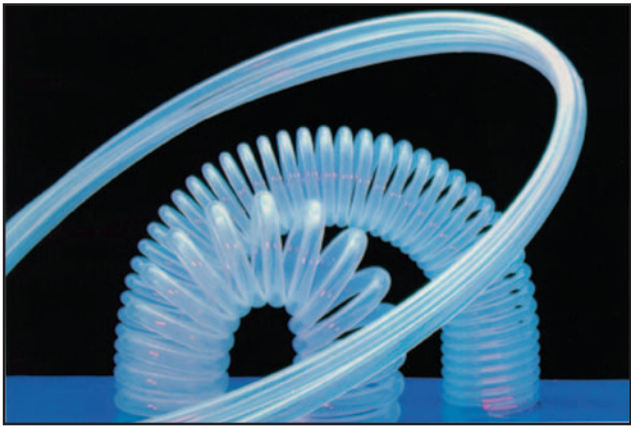
Electrical Properties

- Low dielectric constant
- Low dissipation factor
- High arc resistance
- High surface resistance
- High volume resistivity

Mechanical Properties

- Flexibility at low temperatures
- Low coefficient of friction
- Stability at high temperatures

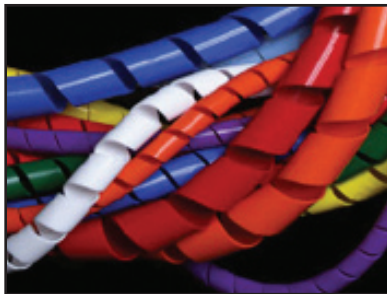
Fluid Handling Tubing and Pipe



High Purity Tubing
Retractable Coils & Formed Shapes
Fractional Industrial & Heavy Wall Tubing
Convuluted Tubing
Dual Containment Tubing
Striped Tubing
Welding & Standard Rod
Tubing for Air & Water Sampling
Schedule 40 & 80 Pipe
Metric Sizes

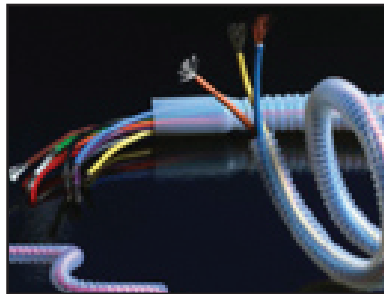
Electrical Insulation Tubing

Spiral Cut Cable Wrap



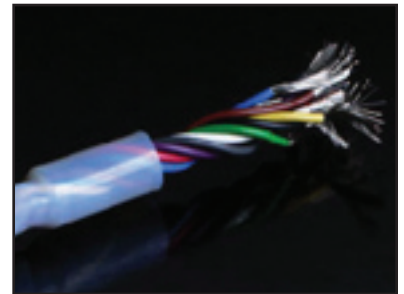
Provides harnessing for wires and cable while allowing for leads at various points. Offered in both left and right hand cuts.

Convuluted Tubing



Allows for insulation of wire bundles where sharp bends are required. Available with cuffed ends to provide sealed environment.

Heat Shrink Tubing



"Shrink to Fit" covers for wires, cables and other components where electrical, abrasion or chemical resistance is required.

Round Beading/Miniature Rod (Not Shown)

Excellent as a filler in loose bundles of cables, as a pull cord, or cut into pieces as bearings. The smoother finish, greater flexibility, and longer lengths outperform "granular" extrusions.

AWG Spaghetti Size Tubing (Not Shown)

Provides "Slip On" protection against extreme electrical or chemical exposure or applications where abrasion resistance is critical.

Partek PFA/PTFE Products

General Product Information

Parker Hannifin's Partek Operation facilities manufacture flow control products for use in fluid systems where corrosion protection is required or where media purity must be safeguarded. The wetted surfaces of all products are of chemically inert, corrosion-resistant PFA, or PTFE. External materials used are anodized aluminum, polyethylene (HDPE), polyvinylchloride (PVC), polyvinylidene fluoride (PVDF), or perfluoroalkoxy (PFA). ABS plastic knobs are used in some products.

Durable, leak-free Partek products are used in a variety of applications including semiconductor manufacturing; chemical, food, and pharmaceutical processing; and biomedical and analytical instrumentation.

Material Properties

PTFE fluorocarbon resins, among the most versatile of all plastics, are rapidly becoming the material of choice for applications involving corrosion resistance. The strong interatomic bonds between carbon and fluorine atoms, and the almost perfect shielding of the polymer's carbon backbone by fluorine atoms make the material inert to most industrial chemicals and solvents.

PFA, a close relation, has properties rivaling those of PTFE. Its excellent melt-processability permits conventional thermoplastic molding and high-speed extrusion processing.

Additionally, it has higher mechanical strength at elevated temperatures (to 500 ° F).

Custom Specifications

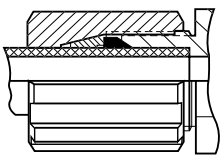
Special orders and custom configuration of standard products are available. All Partek products are cleaned, assembled, tested and bagged in a clean room environment.

Overview

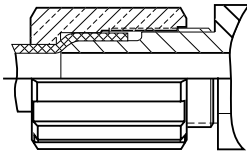
Partek serves global markets with a broad range of high-quality flow control products, which include Parflare PFA Tube Fittings, Pargrip PFA Tube Fittings, Parbond PFA Fusible Pipe Fittings, PFA Pipe Fittings, PFA Valves, PTFE Valves, PTFE Pressure Regulators, PTFE Flow Meters, PFA Gauge Protectors, PFA Spray Guns, and PTFE Vacuum Generators. Fluoropolymer tubing and pipe are manufactured and offered at the Atlantic Tubing Operation in Chestnut Ridge, New York.

This PFA/PTFE Product Digest is offered as a handy reference guide and overview of Partek products. For more information on PFA/PTFE products contact Partek Operation, the Atlantic Tubing Operation, the Parker Information Center toll-free 1-800-C-Parker (1-800-272-7537) or your local distributor.

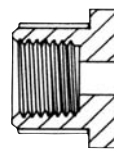
End Connections (PFA Products)



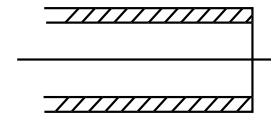
Pargrip Ferrule / Gripper Tube Connection



Parflare Tube Connection

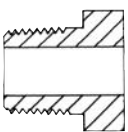


Female Pipe End

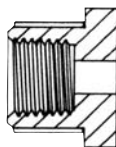


Parbond Fusible Pipe End

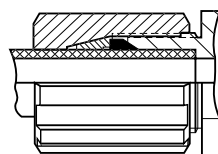
End Connections (PTFE Products)



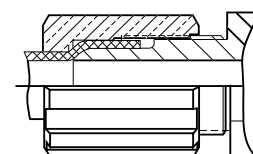
Male Pipe End



Female Pipe End



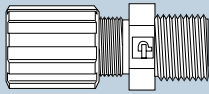
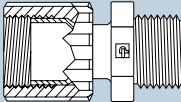
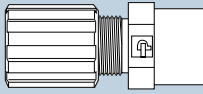
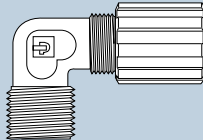
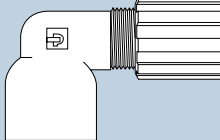
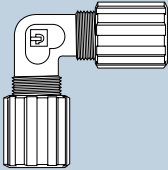
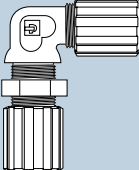
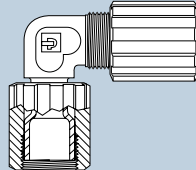
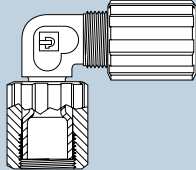
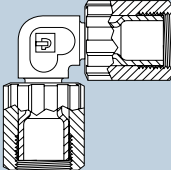
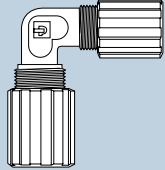
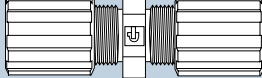
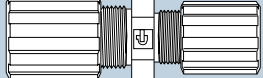
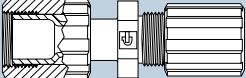
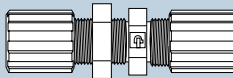
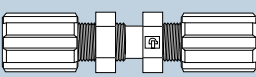
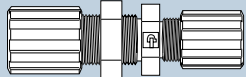
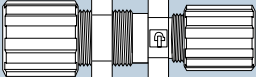
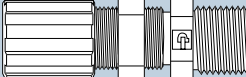
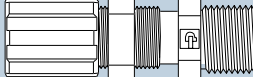
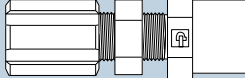
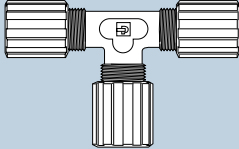
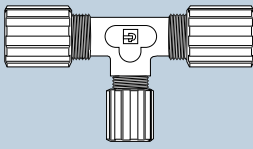
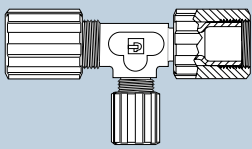
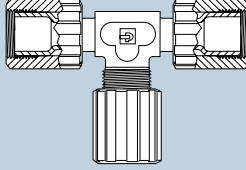
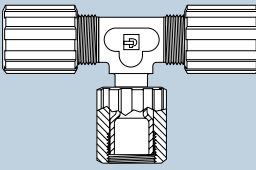
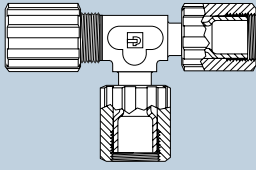
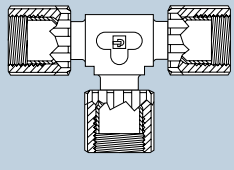
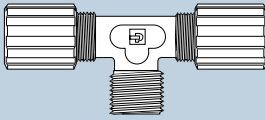
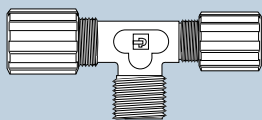
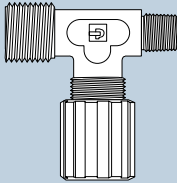
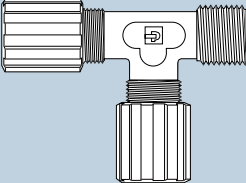




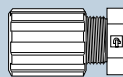
Pargrip Tube (Ferrule/Gripper) Connection



Parflare Tube Connection

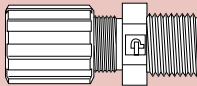
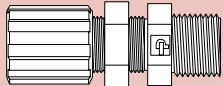
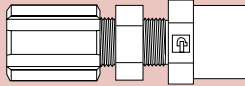
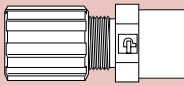
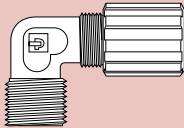
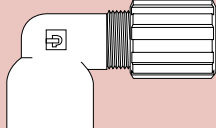
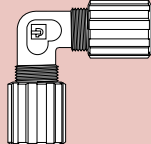
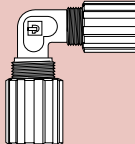
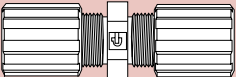
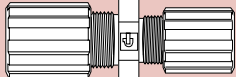
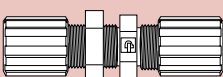
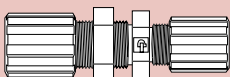
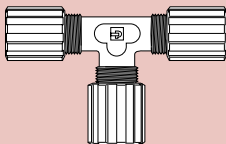
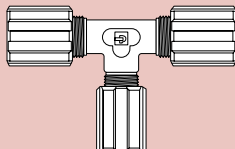
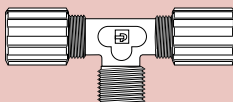
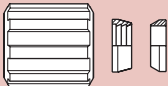
Partek Parflare PFA Tube Fittings

Provides low dead volume, which decrease the possibility of particle entrapment and bacteria growth.

Parflare Adapter Male Straight	Parflare Redi-Flare Adapter Male Straight	Parflare Adapter Female Straight	Parflare Adapter Male Elbow	Parflare Adapter Female Elbow
				
Parflare Elbow Connector	Parflare Elbow Connector Panel Mount	Parflare Redi-Flare Elbow Connector	Parflare Redi-Flare Elbow Connector Reducer	Parflare Redi-Flare Elbow Connector
				
Parflare Elbow Connector Reducer	Parflare Straight Connector	Parflare Straight Connector Reducer	Parflare Redi-Flare Straight Connector Reducer	Parflare Straight Connector Panel Mount
				
Parflare Straight Connector Extended Panel Mount	Parflare Straight Connector Reducer Panel Mount	Parflare Straight Connector Reducer Extended Panel Mount	Parflare Adapter Male Straight Panel Mount	Parflare Adapter Male Straight Extended Panel Mount
				
Parflare Adapter Female Straight Panel Mount	Parflare Tee Connector	Parflare Tee Connector Reducer	Parflare Redi-Flare Tee Connector Reducer	Parflare Redi-Flare Tee Connector Reducer
				
Parflare Redi-Flare Tee Connector Reducer	Parflare Redi-Flare Tee Connector Reducer	Parflare Redi-Flare Connector Tee	Parflare Branch Male Tee	Parflare Branch Male Tee Reducer
				
Parflare Adapter Male Tee	Parflare Adapter Male Tee	Parflare Redi-Flare Minimum Length Tube Unions	Parflare Cap	Parflare Tubing Plug [without nut]
				
			Parflare Fitting Nut	Parflare Tubing Plug [with nut]
				


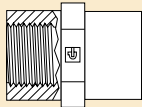
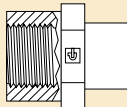
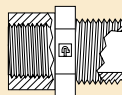
Partek Pargrip PFA Tube Fittings

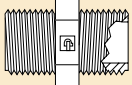
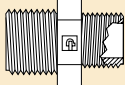
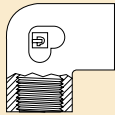
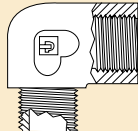
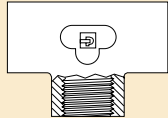
Perfect for applications where ease of assembly is a requisite.

Pargrip Adapter Male Straight	Pargrip Adapter Male Straight Panel Mount	Pargrip Adapter Female Straight Panel Mount	Pargrip Adapter Female Straight
			
Pargrip Adapter Male Elbow	Pargrip Adapter Female Elbow	Pargrip Elbow Connector	Pargrip Elbow Connector Reducer
			
Pargrip Straight Connector	Pargrip Straight Connector Reducer	Pargrip Straight Connector Panel Mount	Pargrip Straight Connector Reducer Panel Mount
			
Pargrip Tee Connector	Pargrip Tee Connector Reducer	Pargrip Branch Male Tee	Pargrip Nut Assembly <small>(includes PFA nut, ETFE gripper & PTFE ferrule)</small>
			

Partek PFA Pipe Fittings

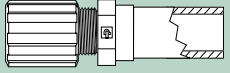
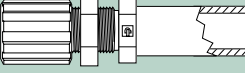

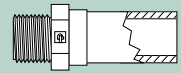

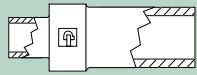
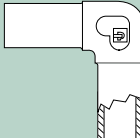
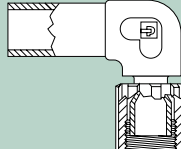
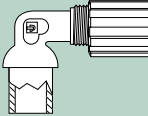
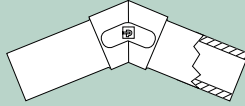
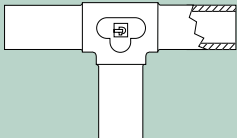
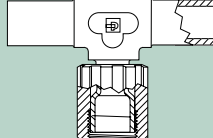
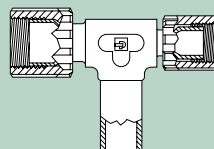
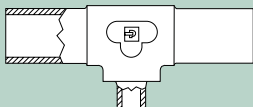
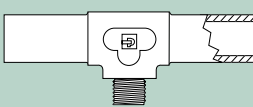
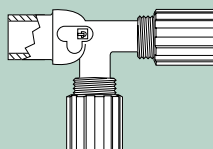
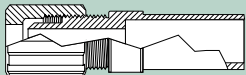
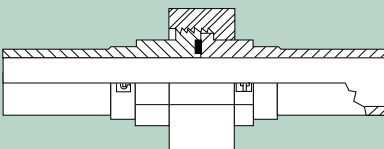
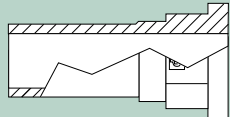
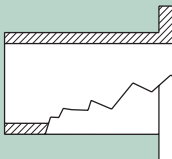
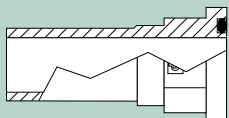

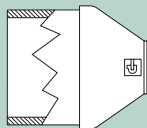
Available in a variety of configurations, all with standard NPT threads.

Pipe Plug	Pipe Coupling	Pipe Female Reducer	Pipe Bushing
			

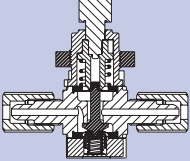
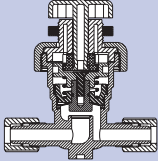
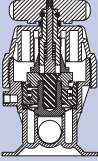
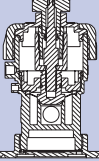
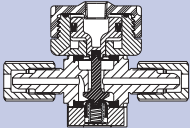
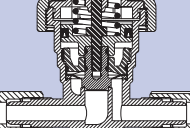
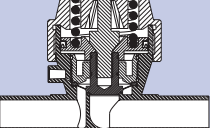
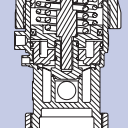


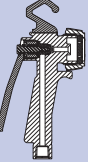
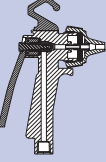
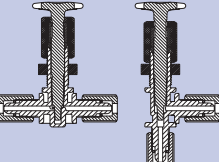
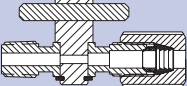
Pipe Nipple	Pipe Nipple Reducer	Pipe Elbow	Pipe Street Elbow	Pipe Tee
				

Partek Parbond PFA Fusible Pipe Fittings

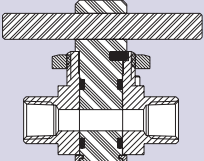
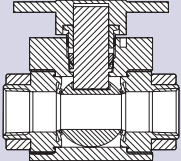
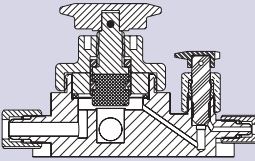
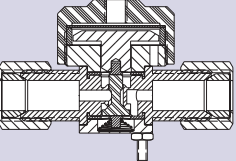
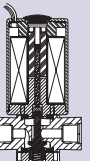
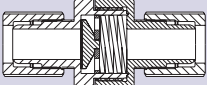

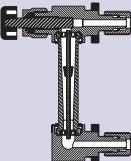
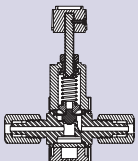
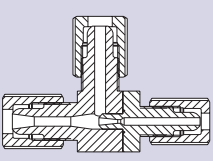
The leak-free design eliminates threaded connections.

<p>Parbond Adapter, Parflare x Pipe</p> 	<p>Parbond Adapter, Parflare x Pipe Panel Mount</p> 	<p>Parbond Adapter, Redi-Flare x Pipe</p> 	<p>Parbond Adapter, Male NPT x Pipe</p> 
<p>Parbond Adapter, Female NPT x Pipe</p> 	<p>Parbond Reducer</p> 	<p>Parbond Elbow, 90°</p> 	<p>Parbond Elbow, Pipe x Redi-Flare</p> 
<p>Parbond Elbow, Parflare x Pipe</p> 	<p>Parbond Elbow, 45°</p> 	<p>Parbond Union Tee</p> 	<p>Parbond Branch Tee, Redi-Flare x Pipe</p> 
<p>Parbond Tee, Redi-Flare x Pipe Union</p> 	<p>Parbond Union Tee Reducer</p> 	<p>Parbond Male Branch Tee, Male NPT x Pipe</p> 	<p>Parbond Adapter Tee, Parflare x Pipe</p> 
<p>Parbond Cap</p> 	<p>Parbond Union</p> 	<p>1/2" & 3/4" Parbond Flange Adapter Flat Face</p> 	
<p>1" & 2" Parbond Flange Adapter Flat Face</p> 	<p>Parbond Flange Adapter Grooved Face</p> 	<p>1/4"-1" Parbond Cap</p> 	<p>2" Parbond Cap</p> 

Partek PFA Products Field proven and high cycle life.

1/4" Manual Diaphragm Valve: MV-10 Series	1/2" Manual Diaphragm Valve: MV-11 Series	1" Manual Diaphragm Valve: MV-12 Series	3/4" Manual Diaphragm Valve: MV-16 Series
			
1/4" Pneumatic Diaphragm Valve: PV-10 Series	1/2" Pneumatic Diaphragm Valve: PV-11 Series	1" Pneumatic Diaphragm Valve: PV-12 Series	3/4" Pneumatic Diaphragm Valve: PV-16 Series
			
Gauge Protectors GP and GPDD Series	In-line Gauge Protector GPIL Series	D.I. Water Spray Gun	Nitrogen Spray Gun
			
Manual Needle Valve: MV-13 Series		Manual Stopcock: MV-14 Series	
			

Partek PTFE Products Offer unmatched corrosion protection.

Manual Stop Cock: MV-1 Series	Manual Ball Valve: MV-6 Series	Manual Sampling Valve: MV-8 Series	Miniature Pneumatic Valve: PV-1 Series
			
1/4" Solenoid Valve: SV-2 Series	Disk Check Valve: CV-1 Series	Pressure Regulator: PR/BR Series	Flowmeter: FM-3 Series
			
Pressure Relief Valve: RV Series		Venturi/Vacuum Generator: VV Series	
			

 **WARNING**

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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