

FURON[®] HP PFA 400 STRAIGHT LENGTH TUBING

LOW EXTRACTABLES
AND LEACHABLES

Furon HP PFA 400 Straight Length tubing is specifically designed to be used with the harshest chemicals, while offering an excellent level of purity ideal for use in the semiconductor industry. Its conditioning makes it easy to install, especially in tool/equipment, as you do not have to overcome the bending generated by reel and coil conditioning. Saint-Gobain selects specific validated raw HP PFA material that meets our industry requirement needs.

FEATURES AND BENEFITS

- Non-destructive/non-contaminating laser scribing for positive identification of size, material and 100% lot traceability*
- 100% virgin, high-purity, ultra-clean PFA resin
 - Specific material grades available
- Custom laser scribing available (for identifying chemicals/process media, tool number, OEM's name/private label, etc.)
- Optional ISO Class 7 cleanroom manufacturing environment
- Tube ends capped to prevent I.D. contamination
- "Clean-Pak" packaging available
- Straight length up to 10 feet (3 m) to facilitate product integration in your equipment
- Fixed interval testing, per Saint Gobain SOP, is in place to ensure product meets SEMI F57 standard

* 1/8" (3.17 mm) OD tubing cannot accommodate scribing

Furon® HP PFA 400 Straight Length Tubing

NOMENCLATURE

Furon HP PFA 400 Straight Length Tubing part numbers are created depending upon various properties of the tube. It is based on selected options available for each property.

Example Part Number

FHI4OEHSFX-001

FH Furon HP PFA 400	I Imperial	4 1/4 inch		O OD	E 0.047		H HP PFA	S Straight	F Feet	X Unit Length	-001 Special Item #
Furon Tubing Product	Size Unit	Size Diameter		ID/OD Definition	Wall Thickness		Material	Packaging	Length Unit	Length	Iteration # (Non-Standard/ Specialty Item)
		in	mm		in	mm					
Furon HP PFA 400 = FH	Imperial = I Metric = M	1/8 = 2 1/4 = 4 5/16 = 5 3/8 = 6 7/16 = 7 1/2 = 8 9/16 = 9 5/8 = 10 11/16 = 11 3/4 = 12 13/16 = 13 7/8 = 14 15/16 = 15 1 = 16 1-1/4 = 20 1-1/2 = 24 2 = 32	3 mm = 3 4 mm = 4 5 mm = 5 6 mm = 6 7 mm = 7 8 mm = 8 9 mm = 9 10 mm = 10 11 mm = 11 12 mm = 12 40 mm = 40	ID = I OD = O	0.026 = C 0.031 = D 0.047 = E 0.062 = F 0.075 = G 0.086 = H 0.093 = I	0.5 mm = M 1 mm = N 1.5 mm = O 2 mm = P 2.18 mm = H	HP PFA = H HP PFA UC = U Material is dependant upon tubing selected	Coil = C Reel = R Straight = S Undefined = X	Feet = F Meters = M	1 - 9 for single digit length in ft 10 = O 15 = A 20 = P 30 = B 50 = C 100 = D 200 = E 250 = F 300 = G 400 = H 500 = I 1000 = J Unit Length = X Note: Length availability dependent upon diameter. Contact us for verification. If length is unknown at time of quote, default to "standard" length for that diameter	This number will only appear on a part number if it is any of the following 1. Special material 2. Specific to a customer 3. Customer configuration Daikin 231SH = 231 Chemours 450HP = 450 Chemours 451HP = 451 Chemours 950HP = 950 Chemours 951HP = 951 Other iterations are present when other material or customization is used. If there is no number or dash in the part number in this position, the tubing is a standard configuration.

FHI4OEHSFX = Standard HP PFA 400 Straight Length Tubing Part Number

FHI4OEHSFX-001 = Non-Standard, Specialty, Customized HP PFA 400 Straight Length Tubing Part Number

Furon® HP PFA 400 Straight Length Tubing

High-purity, all-virgin, thermoplastic fluoropolymer (PFA) material regularly has the ability to withstand a wide range of temperatures from -60°F (-50°C) up to +450°F (232°C). Please **Contact Us** for any temperature inquiries. Conditioned in straight lengths of 10 ft (3 m), each length being single bagged and then bulk packaged by packs of 10 in an outer bag.

SPECIFICATIONS

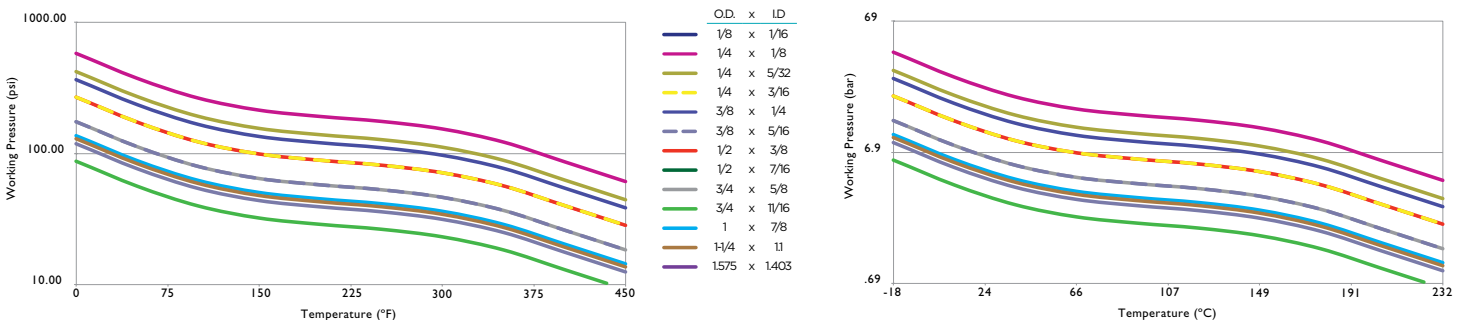
Part Number	O.D.		I.D.		Wall Thickness		Tolerance		
	in	mm	in	mm	in	mm	in	mm	
Standard Wall									
FHI2ODHSFX	1/8	3.17	1/16	1.59	0.031	0.79	+/- 0.004	+/- 0.1	
FHI4OEHSFX	1/4	6.35	5/32	3.97	0.047	1.19			
FHI6OFHSFX	3/8	9.52	1/4	6.35	0.062	1.57	+/- 0.005	+/- 0.12	
FHI8OFHSFX	1/2	12.7	3/8	9.52					
FHI12OFHSFX	3/4	19.05	5/8	15.87					
FHI16OFHSFX	1	25.4	7/8	22.22					
FHI20OGHSFX	1-1/4	31.75	1.10	27.94	0.075	1.90	+/- 0.008	+/- 0.20	
FHM40OHHSFX	1.575	40	1.403	35.64	0.086	2.18			
Heavy Wall									
FHI4OFHSFX	1/4	6.35	1/8	3.17	0.062	1.57	+/- 0.005	+/- 0.12	
FHI12OIHSFX	3/4	19.05	0.564	14.33	0.093	2.36			
FHI16OIHSFX	1	25.4	0.814	20.68					
FHI20OIHSFX	1-1/4	31.75	1.064	27.03					
FHI24OIHSFX	1-1/2	38.1	1.314	33.38					
Thin Wall									
FHI4ODHSFX	1/4	6.35	3/16	4.76	0.031	0.79	+/- 0.003	+/- 0.08	
FHI6ODHSFX	3/8	9.52	5/16	7.94					
FHI8ODHSFX	1/2	12.7	7/16	11.11					
FHI12ODHSFX	3/4	19.05	11/16	17.46					

Using previous part numbers? [Click here](#) to see Part Number Comparison Guide for Furon HP PFA 400 Straight Length Tubing

CUSTOMIZATION

Special order sizes, packaging, thicknesses and lengths are available; contact us for items not listed above. Specific grades of raw materials may be required (for ex. Dupont™ 450 HP or Daikin® 231 SH); contact us for the related PN.

FURON HP PFA 400 STRAIGHT LENGTH TUBING - WORKING PRESSURES**



** For pressure curves not represented on this graph, [contact us for more detail](#).



Saint-Gobain Performance Plastics

China (+8621) 5472 1568
Sales.PPLCN@saint-gobain.com

Europe (+49) 2131 53359-59
sales-neuss@saint-gobain.com

India (+91) 76208 22999
pplindia.hc@saint-gobain.com

Japan (+81) 3 6256 9703
ls-japan@saint-gobain.com

Korea (+82) 2 6098 0180
LS-Korea@saint-gobain.com

Southeast Asia (+66) 38 667 800
cs.sgplsea@saint-gobain.com

Taiwan (+886) 2 2503 4201
Taiwan.ppl@saint-gobain.com

United States (+1) 856-423-6630
DL-NA-MickletonCustomerService@saint-gobain.com

All Other Regions
www.furon.com

NOTE: This document is intended to provide information about the product to enable you to consider whether generally the Product meets your application need and is not intended to provide product specification. This document should not be considered a Product warranty or guaranty. To the extent this document mentions any tests done by Saint-Gobain, such tests are done under controlled laboratory circumstances and hence other factors in your use and application may impact such values. Saint-Gobain strongly recommends that you conduct practical tests simulating the conditions of your application to ensure that the product meets your requirements for your specific application.

Furon® is a registered trademark of Saint-Gobain Performance Plastics. Dupont™ is a registered trademark of DuPont de Nemours, Inc. Daikin® is a registered trade of Daikin Industries, Ltd.