

FURON[®] HP PFA 400 TUBING

LOW EXTRACTABLES
AND LEACHABLES

Furon HP PFA 400 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. 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
- 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

NOMENCLATURE

Furon HP PFA 400 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

FHI4OEHXFX-001

FH Furon HP PFA 400	I Imperial	4 1/4 inch		O OD	E 0.047		H HP PFA	X Undefined	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.

FHI4OEHXFX = Standard HP PFA 400 Tubing Part Number

FHI4OEHXFX-001 = Non-Standard, Specialty, Customized HP PFA 400 Tubing Part Number

Furon® HP PFA 400 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.

SPECIFICATIONS

Part Number	O.D.		I.D.		Wall Thickness		Tolerance		Min. Bend Radius*		
	in	mm	in	mm	in	mm	in	mm	in	mm	
Standard Wall											
FHI2ODHFX	1/8	3.17	1/16	1.59	0.031	0.79	+/- 0.004	+/- 0.10	0.37	9.30	
FHI4OEHFX	1/4	6.35	5/32	3.97	0.047	1.19			1.20	30.46	
FHI6OFHFX	3/8	9.52	1/4	6.35	0.062	1.57	+/- 0.005	+/- 0.12	2.41	61.10	
FHI8OFHFX	1/2	12.7	3/8	9.52					3.73	94.84	
FHI12OFHFX	3/4	19.05	5/8	15.87					6.78	172.25	
FHI16OFHFX	1	25.4	7/8	22.22	+/- 0.006	+/- 0.15	10.23	1259.93			
FHI20OGHFX	1-1/4	31.75	1.10	27.94			0.075	1.90	14.99	380.68	
FHM40OHHFX	1.575	40	1.403	35.64	0.086	2.18	+/- 0.008	+/- 0.20	21.83	554.39	
Heavy Wall											
FHI4OFHFX	1/4	6.35	1/8	3.17	0.062	1.57	+/- 0.005	+/- 0.12	1.25	31.86	
FHI12OIHXFX	3/4	19.05	0.564	14.33	0.093	2.36			16	406.4	
FHI16OIHXFX	1	25.4	0.814	20.68			+/- 0.006	+/- 0.15	21	533.4	
FHI20OIHXFX	1-1/4	31.75	1.064	27.03			+/- 0.008	+/- 0.20	27	685.8	
FHI24OIHXFX	1-1/2	38.1	1.314	33.38			32	812.8			
Thin Wall											
FHI4ODHFX	1/4	6.35	3/16	4.76	0.031	0.79	+/- 0.003	+/- 0.08	1.09	27.69	
FHI6ODHFX	3/8	9.52	5/16	7.94					1.98	50.30	
FHI8ODHFX	1/2	12.7	7/16	11.11					2.99	75.90	
FHI12ODHFX	3/4	19.05	11/16	17.46					5.27	133.97	

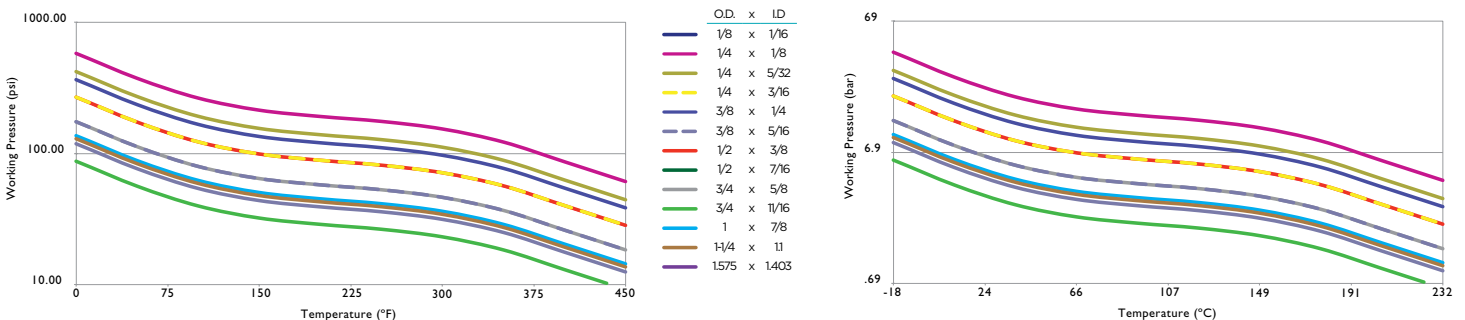
* Values are obtained either by testing or calculation. [Contact us for more detail.](#)

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

CUSTOMIZATION

Special order sizes, thicknesses and lengths are available; contact us for items not listed above. Specific grades of raw materials may be required (for ex. Dupont™ or Daikin® 231 SH); contact us for the related PN. Cleanroom-compliant plastic reels are available upon request. Coils are available based on length and are shipped in cleanroom-compliant double bags.

FURON HP PFA 400 TUBING - WORKING PRESSURES**



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



Saint-Gobain Performance Plastics

China (+86) 400 888 0198
sales.PPSCN@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.