



## FURON<sup>®</sup> PFA TUBING

SUPERIOR CHEMICAL  
RESISTANT TUBING

Saint-Gobain's Furon brand is well known and highly regarded in the Semiconductor industry. Furon standard grade PFA tubing serves multiple applications within a Fab and provides high-performance with excellent physical properties, superior chemical resistance and good diffusion resistance. Furon PFA tubing is also available in high purity grades for extremely critical applications.

### TYPICAL MARKETS AND APPLICATIONS

Semiconductor and Electronics

- Clean, dry air line applications
- Chemical drain line applications
- Heat Exchangers

### FEATURES AND BENEFITS

- Laser Etched for in Fab Traceability (where diameter and wall thickness allow)
- Excellent chemical resistance
- Retains higher mechanical strength at elevated temperatures
- High resistance to stress cracking
- Temperature resistant up to +500°F (+260°C)\*

\*See Graphs on page 4

## NOMENCLATURE

Furon PFA 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

**FTI6OFPRFD-001**

Product	Size Unit	Size Diameter		ID/OD Definition	Wall Thickness		Material	Packaging	Length Unit	Length	Iteration # (Non-Standard/ Specialty Item)
		inch	mm		inch	mm					
Furon Tubing = FT	Imperial = I Metric = M	1/16 = 1 1/8 = 2 3/16 = 3 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 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 10 = 10 11 = 11 12 = 12	ID = I OD = O	0.031 = D 0.047 = E 0.062 = F 0.075 = G 0.086 = H	0.5 = M 1.0 = N 1.5 = O 2.0 = P 2.18 = H	PFA = P HP PFA = H	Coil = C Reel = R Undefined = X Straight Length = S	Feet = F Meters = M Undefined = X	15 = A 30 = B 50 = C 100 = D 200 = E 250 = F 300 = G 400 = H 500 = I 1000 = J  Straight Length Tubing 10 = 0 20 = P	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 special pricing  If there is no number or dash in this position, the tubing is a standard configuration

**FTI6OFPRFD** = Standard PFA Tubing Part Number

**FTI6OFPRFD-001** = Non-Standard, Specialty, Customized PFA Tubing Part Number

### SEMI REQUIREMENTS NEEDED?

Click below to see more on our High Purity PFA Tubing\*

\*Must be connected to internet, or go to [furon.com](http://furon.com)

SEMI C90 & Low Iron Requirement Standard	SEMI F57
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Furon 400 HP PFA UC

Furon 400 HP PFA

## SPECIFICATIONS - STANDARD IMPERIAL SIZES

Part Number	Inner Diameter	Outer Diameter*	Wall Thickness Size	Min. Bend Radius	Calculated Burst Pressure at 73°F	Calculated Working Pressure at 73°F
	in	in	in	in	psi	psi
FTI20DPRFD	1/16	1/8	1/32	1/2	1200	300
FTI30DPRFD	1/8	3/16	1/32	1-7/64	800	200
FTI40FPRFD		1/4	1/16	1/2	1240	310
FTI40EPRFD	5/32		3/64	1-21/64	900	225
FTI40DPRFD	3/16	1/4	1/32	1	560	140
FTI50FPRFD			1/16	1-1/2	960	240
FTI50DPRFD	1/4	5/16	1/32	1-3/4	440	110
FTI60FPRFD		3/8	1/16	1	800	200
FTI60DPRFD	5/16		1/32	2-1/2	400	100
FTI80FPRFD	3/8	1/2	1/16	3-31/32	580	145
FTI80DPRFD	7/16		1/32	4	280	70
FTI100FPRFD	1/2	5/8	1/16	3	440	110
FTI120FPRFD	5/8	3/4	1/16	8-59/64	400	100
FTI160FPRFD	7/8	1	1/16	15-7/8	280	70
FTI160FPRFD	1.1	1-1/4	0.075	27.16	276	69

\*Part numbers listed here are based on OD, and length of 100 feet on a reel.  
[Contact Us](#) for further diameter, sizes and tolerances.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressure, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

## SPECIFICATIONS - STANDARD METRIC SIZES

Part Number	Inner Diameter*	Outer Diameter	Wall Thickness Size	Min. Bend Radius	Calculated Burst Pressure at 23°C	Calculated Working Pressure at 23°C
	mm	mm	mm	mm	bar	bar
FTM3IMPRMD	3	4	0.5	13	39	9.75
FTM4INPRMD	4	6	1	28	54	13.5
FTM6INPRMD	6	8		13	39	9.75
FTM6IOPRMD		9	1.5	33	42	13.5
FTM8INPRMD	8	10	1	25	31	7.75
FTM9IOPRMD	9	12	1.5	38	40	9.75
FTM10INPRMD	10		1	44	26	7

\*Part numbers listed here are based on ID, and length of 100 meters on a reel.  
[Contact Us](#) for further diameter, sizes and tolerances.

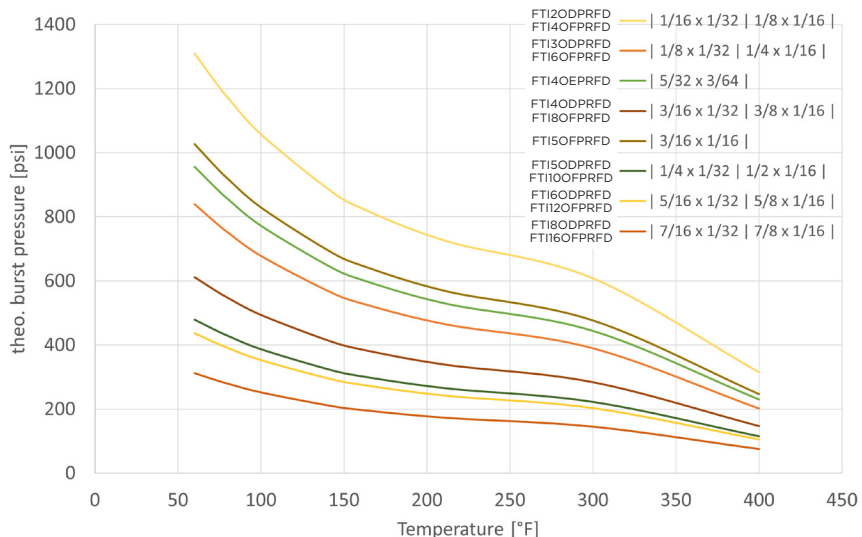
## TYPICAL PHYSICAL PROPERTIES OF FLUORINATED ETHYLENE PROPYLENE (FEP)

Property	Value
Max. Recommended Operating Temperature, °F (°C) w/ max pressure	See Graphs on following page
Minimum Recommended Operating Temperature, °F (°C)	See Graphs on following page
Color	Natural*
Flammability	UL94 V-0

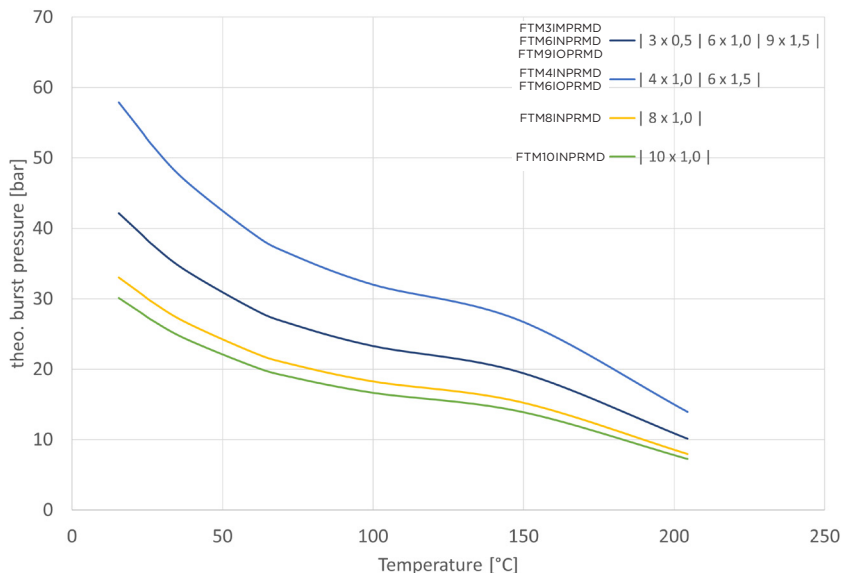
\* Additional colors upon request.  
 Unless otherwise noted, all tests were conducted at room temperature 73°F.

## TEMPERATURE VS BURST PRESSURE

### STANDARD IMPERIAL SIZES



### STANDARD METRIC SIZES



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



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**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.

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