



## **FURON**<sup>®</sup> **CONVOFLEX**<sup>™</sup> **TUBING**

PROTECTIVE  
FLEXIBLE TUBING

Furon ConvoFlex (Convoluted Flexible) Tubing can be used for a multitude of semiconductor solutions. The robust tubing is resistant to highly aggressive chemicals and optimal for any fluid handling system. It features outstanding flexibility with a compact bend radius and is ideal in tortuous path installations. With this feature, ConvoFlex is exceptional for wire conduit protection and for products that may need a chemical resistant shield in moving, automated systems. ConvoFlex can be utilized for dual containment to provide an extra layer to protect an installation.

Because of its chemical resistance and high surface area, it is ideal tubing for heat exchangers. The heat transfer is magnified and increased by the turbulent flow generated inside the tube convolution.

Furon ConvoFlex Tubing is manufactured in PVDF, PFA, HP PFA and specific grades of material upon request. It is also available in FEP material, which can be more economical when high purity is not required.

### FEATURES AND BENEFITS

- Highly flexible due to convoluted construction
- Available in PVDF, FEP, PFA and HP PFA\*
- Helical design
- Self-flushing
- Read-through transparency
- Excellent chemical resistance

\* Contact us for a specific grade material

## NOMENCLATURE

Furon ConvoFlex 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

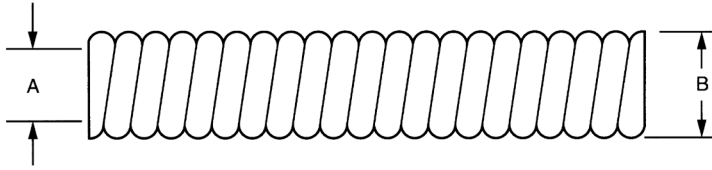
**CONI6IPFJ-001**

CON ConvoFlex	I Imperial	6 3/8 inch	I ID	P PFA	F Feet	J 50 Feet	-001 Special Item #
Product	Size Unit	Size Diameter (inch)	ID/OD Definition	Material	Convolution Length Unit	Convolution Length	Iteration # (Non-Standard/ Specialty Item)
ConvoFlex = CON	Imperial = I Metric = M	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	ID = I OD = O	FEP = F PFA = P HP PFA = H PVDF = V	Feet = F	Length in Feet 5 = A 10 = B 15 = C 20 = D 25 = E 30 = F 35 = G 35 = H 45 = I 50 = J 100 = M	This number will only appear on a part number if it is any of the following <ol style="list-style-type: none"> <li>1. Special material</li> <li>2. Specific to a customer</li> <li>3. Customer configuration</li> </ol> <p>If there is no number or dash in the part number in this position, the tubing is a standard configuration</p>

**CONI6IPFJ** = Standard ConvoFlex Part Number

**CONI6IPFJ-001** = Non-Standard, Specialty, Customized ConvoFlex Part Number

## SPECIFICATIONS



### I.D. CENTRIC

Part Number	A I.D.		Wall Thickness		Length		Room Temp. Burst Pressure*		Bend Radius	
	in	mm	in	mm	ft	m	psig	MPa	in	mm
CONI4IPFJ	1/4	6.35	0.020	0.5	50	15.24	100	0.69	1/2	12.7
CONI4IPFM					100	30.48				
CONI6IPFJ	3/8	9.52	0.023	0.58	50	15.24	70	0.48	3/4	19.05
CONI6IPFM					100	30.48				
CONI8IPFJ	1/2	12.7	0.025	0.63	50	15.24	60	0.41	1	25.4
CONI8IPFM					100	30.48				
CONI10IPFJ	5/8	15.87	0.025	0.63	50	15.24	50	0.34	1-1/2	38.1
CONI10IPFM					100	30.48				
CONI12IPFJ	3/4	19.05	0.025	0.63	50	15.24	40	0.27	2	50.8
CONI12IPFM					100	30.48				
CONI14IPFJ	7/8	22.22	0.025	0.63	50	15.24	38	0.26	2-1/2	63.5
CONI14IPFM					100	30.48				

Note:  
\* Each individual application should be evaluated to determine the degree of safety factor to be used with these values.

### O.D. CENTRIC

Part Number	B O.D.		Wall Thickness		Length		Room Temp. Burst Pressure*		Bend Radius	
	in	mm	in	mm	ft	m	psig	MPa	in	mm
CONI6OPFJ	3/8	9.52	0.020	0.5	50	15.24	100	0.69	1/2	12.7
CONI6OPFM					100	30.48				
CONI8OPFJ	1/2	12.7	0.023	0.58	50	15.24	70	0.48	3/4	19.05
CONI8OPFM					100	30.48				
CONI10OPFJ	5/8	15.87	0.025	0.63	50	15.24	60	0.41	1	25.4
CONI10OPFM					100	30.48				
CONI12OPFJ	3/4	19.05	0.025	0.63	50	15.24	50	0.34	1-1/2	38.1
CONI12OPFM					100	30.48				
CONI14OPFJ	7/8	22.22	0.025	0.63	50	15.24	40	0.27	2	50.8
CONI14OPFM					100	30.48				
CONI16OPFJ	1	25.4	0.025	0.63	50	15.24	38	0.26	2-1/2	63.5
CONI16OPFM					100	30.48				

## FURON CONVOFLEX CUSTOMIZATION

Saint-Gobain operates with a global approach to meet our customers' specific needs. To be solutions-oriented means combining products and services, and to adapt to local challenges. In an effort to continuously innovate and advance, Saint-Gobain is eager to co-develop with customers for their custom needs and applications.

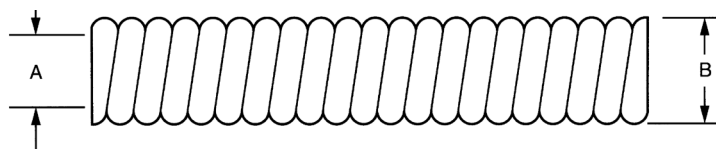
We offer a wide range of standard products but excel in customization. ConvoFlex Tubing can be manufactured from various raw materials and in special sizes, and lengths.

Please [contact your Saint-Gobain Business Development Manager](#) to discuss your custom needs.

### CUSTOMIZATION SCENARIO

A Saint-Gobain customer contacted their Business Development Manager with a product challenge. They presented a rigorous liquid application that required tubing with excellent chemical resistance, nitrogen flush compatibility, high flexibility, a self-draining attribute, and the need for easy end connections. All these challenges are addressed with the standard ConvoFlex tubing. However, when they referenced the datasheet, they found their required dimensions were not listed. Specifically, they needed a 2.25" (57.15 mm) OD tube with a unique convolution pitch.

The Saint Gobain commercial team quickly gathered the specifics of the opportunity, discussed the details with engineering and production and determined custom tooling and a trial were required to prove capability. A trial cost was agreed upon and was successfully completed. A purchase order was placed for their customized ConvoFlex design, which included a unique custom part number.



### TUBING EXTREME VALUES

	A I.D.		B O.D.		Wall Thickness		Length	
	in	mm	in	mm	in	mm	ft	m
Minimum	1/4	6.35	3/8	9.52	0.020	0.5	50	15.24
Maximum	2	50.8	2	50.8	0.025	0.63	100	30.48



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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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