



Furon[®] ConvoFlex[™]

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

ASK AN ENGINEER

Furon ConvoFlex 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

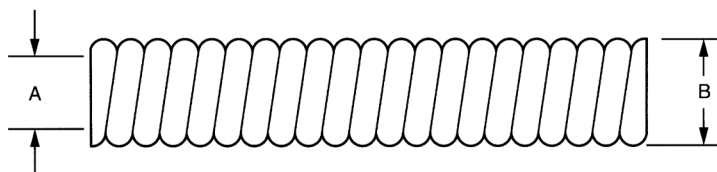
CON6IPF50-001

Product	Size Diameter (inch)	ID/OD Definition	Material	Convolution Length Unit	Convolution Length	Iteration # (Non-Standard/ Specialty Item)
ConvoFlex = CON	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 (50 or 100-foot lengths)	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 the part number in this position, the tubing is a standard configuration

CON6IPF50 = Standard ConvoFlex Part Number

CON6IPF50-001 = Non-Standard, Specialty, Customized ConvoFlex Part Number

Furon ConvoFlex



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
CON4IPF50	1/4	6.35	0.020	0.5	50	15.24	100	0.69	1/2	12.7
CON4IPF100					100	30.48				
CON6IPF50	3/8	9.52	0.023	0.58	50	15.24	70	0.48	3/4	19.05
CON6IPF100					100	30.48				
CON8IPF50	1/2	12.7	0.025	0.63	50	15.24	60	0.41	1	25.4
CON8IPF100					100	30.48				
CON10IPF50	5/8	15.87	0.025	0.63	50	15.24	50	0.34	1-1/2	38.1
CON10IPF100					100	30.48				
CON12IPF50	3/4	19.05	0.025	0.63	50	15.24	40	0.27	2	50.8
CON12IPF100					100	30.48				
CON14IPF50	7/8	22.22	0.025	0.63	50	15.24	38	0.26	2-1/2	63.5
CON14IPF100					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
CON6OPF50	3/8	9.52	0.020	0.5	50	15.24	100	0.69	1/2	12.7
CON6OPF100					100	30.48				
CON8OPF50	1/2	12.7	0.023	0.58	50	15.24	70	0.48	3/4	19.05
CON8OPF100					100	30.48				
CON10OPF50	5/8	15.87	0.025	0.63	50	15.24	60	0.41	1	25.4
CON10OPF100					100	30.48				
CON12OPF50	3/4	19.05	0.025	0.63	50	15.24	50	0.34	1-1/2	38.1
CON12OPF100					100	30.48				
CON14OPF50	7/8	22.22	0.025	0.63	50	15.24	40	0.27	2	50.8
CON14OPF100					100	30.48				
CON16OPF50	1	25.4	0.025	0.63	50	15.24	38	0.26	2-1/2	63.5
CON16OPF100					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.

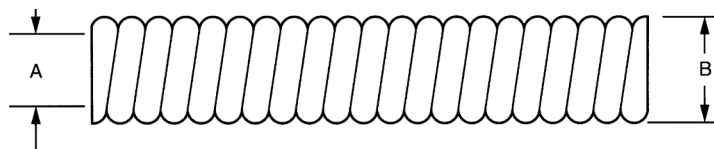
We offer a wide range of standard products but excel in customization. ConvoFlex Tubing can be manufactured from various raw materials and in special sizes, and lengths.

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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