

Furon[®] CT-Flex[™]

Corrugated Fluoropolymer Tubing for Ultimate Flexibility

Furon CT-Flex Corrugated PFA Tubing shapes and flexes easily and is able to conform to tight fitting paths. It features a bend radius of nearly zero, can be extended or compressed without affecting the inner diameter, and resists chemicals, elevated temperatures, cut-through and strain. Furon CT-Flex Tubing can be made from PFA or HP PFA with an outer diameter (OD) sized straight cuff. It can be used with standard connection logic, such as flare or similar logic, using insert technology found in the semiconductor industry. The cuff performs well with fitting technology based on an OD sealing technology.

Furon CT-Flex Tubing is available in other materials such as FEP, which can be more economical when high purity is not required. FEP may be utilized in draining or waste applications.



Features and Benefits

- Unique chemical, electrical and thermal properties
- Compression/Extension ratio: Typically a 2:1 ratio may be seen however, tubing diameter and configuration impact the actual value
- Maximum temperature 200°F (93.3°C)
- Tubing available in PFA, HP PFA and FEP
- Cuff outer diameters available from 1/4" (6.35 mm) to 2" (50.8 mm)*
- Overall length can be up to 144 in (350 cm)*

* Special order sizes, thicknesses and lengths are available.

[Contact Us](#) for more information

Typical Applications

- Semiconductor
 - Tote Hook Up
 - IBC Hook Up
 - Protection for high flow or high movement items

ASK AN ENGINEER

Furon CT-Flex Nomenclature

Furon CT-Flex Tubing part numbers are created depending upon various properties of the tube. It is based on selected options available for each property.

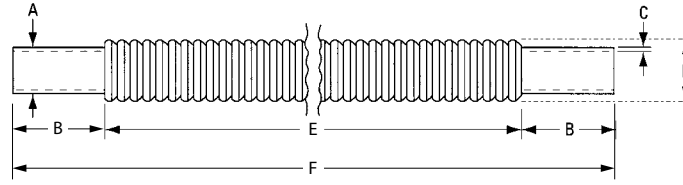
Example Part Number

CT6OP1-58-001

CT CT-Flex	6 3/8 inch	O OD	P PFA	1 1 inch	58 58 inches	-001 Special Item #
Product	Size Diameter (inch)	Cuff ID/OD Definition	Material	Cuff Length	Corrugation Length	Iteration # (Non-Standard/ Specialty Item)
CT-Flex = CT	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	Length in inch (if cuff is < than 1 inch utilize a period as place holder. Example .5 or .75)	Rounded down to the nearest inch	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

CT6OP1-58 = Standard CT-Flex Part Number

CT6OP1-58-001 = Non-Standard, Specialty, Customized CT-Flex Part Number



Furon CT-Flex - Standard Dimensions

Part Number	A Cuff OD		B Cuff Length		C Cuff Wall Thickness		D Corrugation OD (ref only)		E Corrugation Length		F Overall Length*	
	in	mm	in	mm	in	mm	in	mm	in	cm	in	cm**
CT4OP.75-38									38	96.52	40	100
CT4OP.75-58	1/4	6.35	3/4	19.05	0.017	0.43	3/8	9.53	58	147.32	60	150
CT4OP.75-78									78	198.12	80	200
CT4OP.75-118									118	299.72	120	300
CT6OP1-38									38	96.52	40	100
CT6OP1-58	3/8	9.525			0.020	0.51	9/16	14.29	58	147.32	60	150
CT6OP1-78									78	198.12	80	200
CT6OP1-118									118	299.72	120	300
CT8OP1-38									38	96.52	40	100
CT8OP1-58	1/2	12.7	1	25.4	0.025	0.64	3/4	19.05	58	147.32	60	150
CT8OP1-78									78	198.12	80	200
CT8OP1-118									118	299.72	120	300
CT10OP1-38									38	96.52	40	100
CT10OP1-58	5/8	15.875					15/16	23.81	58	147.32	60	150
CT10OP1-78									78	198.12	80	200
CT10OP1-118									118	299.72	120	300
CT12OP1.5-37									37	93.98	40	100
CT12OP1.5-57	3/4	19.05			0.030	0.76	1-1/16	26.99	57	144.78	60	150
CT12OP1.5-77									77	195.58	80	200
CT12OP1.5-117									117	297.18	120	300
CT14OP1.5-37									37	93.98	40	100
CT14OP1.5-57	7/8	22.22	1-1/2	38.1			1-1/4	31.75	57	144.78	60	150
CT14OP1.5-77									77	195.58	80	200
CT14OP1.5-117									117	297.18	120	300
CT16OP2-36									36	91.44	40	100
CT16OP2-56	1	25.4					1-3/8	34.93	56	142.24	60	150
CT16OP2-76									76	193.04	80	200
CT16OP2-116									116	294.64	120	300
CT20OP2-36									36	91.44	40	100
CT20OP2-56	1-1/4	31.75					1-5/8	41.28	56	142.24	60	150
CT20OP2-76									76	193.04	80	200
CT20OP2-116									116	294.64	120	300
CT24OP2-36									36	91.44	40	100
CT24OP2-56	1-1/2	38.1	2	50.8			1-13/16	46.04	56	142.24	60	150
CT24OP2-76									76	193.04	80	200
CT24OP2-116									116	294.64	120	300
CT32OP2-36									36	91.44	40	100
CT32OP2-56	2	50.8			0.040	1.02	2-5/8	66.68	56	142.24	60	150
CT32OP2-76									76	193.04	80	200
CT32OP2-116									116	294.64	120	300

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

* F Overall Length = (B Cuff Length x 2) + (E Corrugation Length)

** F Overall Length cm value is rounded to the nearest 50 or 100 cm

Technical Specifications for Standard Items

Max. Operating Temperature	Ambient: 200°F (93.3°C) Media: 200°F (93.3°C)
Burst Pressure*	70 - 225 psi (482.6 - 1551.3 kPa)
Tubing Material**	PFA

* Burst Pressure is based on smooth tubing before corrugation. The pressure depends on diameter size and material of tubing. Please [Contact Us](#) for more information

** FEP and specific grades of High-Purity PFA available upon request

Furon CT-Flex 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. CT-Flex 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 liquid application that required tubing with high flexibility and the need for smooth end cuffs. While these attributes are addressed with the standard Furon CT-Flex tubing, when they referenced the product datasheet, they found their required specifications were not listed. They needed a tube made from a specific raw material with a unique compression/extension ratio.

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

	A Cuff OD*		B Cuff Length		C Cuff Wall Thickness		D Corrugation OD (ref only)		E Corrugation Length		F Overall Length [Ⓛ]	
	in	mm	in	mm	in	mm	in	mm	in	cm	in	cm [Ⓛ]
Minimum	1/4	6.35	1/2	12.7	0.015	0.38	3/8	9.53	See note ** below		1	2.54
Maximum	2	50.8	See note ** below		0.04	1.016	2-5/8	66.68	See note ** below		144	360

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

* Cuff (A) dimension can be customized by ID as well

Ⓛ Overall Length (F) = (Cuff Length (B) x 2) + (Corrugation Length (E))

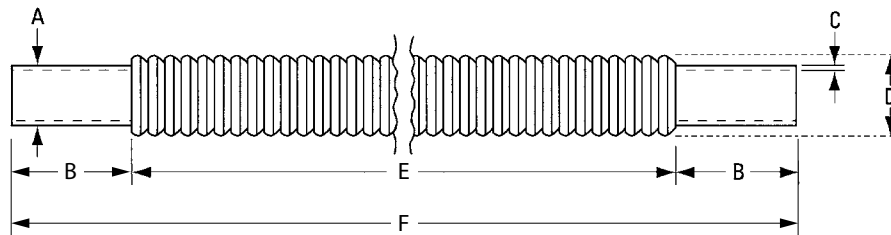
** (Cuff Length (B) x 2) + (Corrugation Length (E)) can be a variety of dimension combinations up to a 144 in (360 cm) length

Ⓛ Overall Length (F) cm value is rounded to the nearest 10 cm

Special order sizes, thicknesses and lengths are available. [Contact Us](#) for items not listed.

IMPORTANT ORDERING REQUIREMENT: In order to inquire on custom tubing, it is necessary to provide your representative with the dimensions for the following:

1. Cuff Diameter (A)
2. Cuff Length (B)
3. Cuff Wall Thickness (C)
4. Overall Length (F)



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 pressures, 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.

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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.

Furon® is a registered trademark and CT-Flex™ is a trademark of Saint-Gobain Performance Plastics.