

# Furon® HP PFA Coax

## High-Purity Coax Tubing

### Low Extractables and Leachables

Furon HP PFA Coax Tubing features an inner chemical transfer tube (media) with a secondary outer containment tube providing an extra layer of protection for any critical application.

### Tubing Combinations

The media and containment tubing can be manufactured in various combinations: Smooth/Smooth or Smooth/Convolved Flexible tubing Furon ConvoFlex™ combinations.

#### Smooth/Smooth

The containment tube can be a smooth tube, made from high-purity PFA or FEP. It can be paired with a smooth inner media tubing constructed of high-purity or specific grades of PFA, with an Ultra-Clean (UC) option, for exceptional protection against media contamination.

#### Smooth/ConvoFlex Tubing

Another combination of Furon Coax Tubing can be a smooth, inner media tube paired with a containment tube of Furon ConvoFlex Tubing. ConvoFlex Tubing is robust and 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. It can be manufactured in FEP material, which may be more economical when high purity is not required. The tubing may also be manufactured in specific grades of PFA upon request.

Furon HP PFA Coax Tubing can save significant time and cost during installation of facility dual containment systems, providing value-added savings while ensuring safe installation. It is available in continuous lengths of 100', 500' and 1,000', depending on tube size. It is ideal for use in the semiconductor industry or in other applications requiring ultra-clean, high purity, superior chemical resistance and premium safety.



### Features and Benefits

- Non-destructive/non-contaminating laser scribing:
  - Positive identification of size, material and 100% lot traceability
  - Custom scribing available for identifying chemicals/process media, tool number, OEM's name/private label, etc.)
- Inner tubing manufactured with 100% virgin high-purity PFA resin
- Heat stabilized during extrusion for broadest service temperature range
- Tube ends capped to prevent I.D. contamination
- Optional ISO Class 7 cleanroom manufacturing environment
- "Clean-Pak" packaging available

ASK AN ENGINEER

## Furon HP PFA Coax Nomenclature

Furon Coax 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

**CXT6FPN12FFFH-002**

| CX            | T                           | 6   | F  | P   | N                           | 12   | F   | F                                | F                      | H  | -002  |
|---------------|-----------------------------|---|--|---|-----------------------------|--|---|----------------------------------|------------------------|--|---|
| Coax          | Tubing                      | 3/8 inch  | 0.0062   | PFA   | ConvoFlex                   | 3/4 inch   | 0.062   | FEP                              | Feet                   | 1000   | Special Item #  |
| Media - Inner |                             |   |  |   | Containment - Outer         |  |   |                                  |                        |  |   |
| Product       | Product Type                | Size (OD)   | Wall Thickness   | Material  | Product Type                | Size (OD)  | Wall Thickness  | Material                         | Length Unit            | Length   | Iteration # (Non-Standard/ Specialty Item)  |
| Coax=CX       | Tubing = T<br>ConvoFlex = N | 1/4" = 4<br>5/16" = 5<br>3/8" = 6<br>7/16" = 7<br>1/2" = 8<br>9/16" = 9<br>5/8" = 10<br>11/16" = 11<br>3/4" = 12<br>13/16" = 13<br>7/8" = 14<br>15/16" = 15<br>1" = 16<br>1-1/4" = 20<br>1-1/2" = 24<br>2" = 32 | 0.020 = A<br>0.023 = B<br>0.025 = C<br>0.030 = D<br>0.047 = E<br>0.062 = F<br>0.072 = G<br>0.075 = H<br>0.086 = I<br>0.093 = J | FEP = F<br>PFA = P<br>HP PFA = H<br>HP PFA UC = U | Tubing = T<br>ConvoFlex = N | 1/4" = 4<br>3/8" = 6<br>1/2" = 8<br>5/8" = 10<br>11/16" = 11<br>3/4" = 12<br>7/8" = 14<br>1" = 16<br>1-1/4" = 20<br>1-3/8" = 22<br>1-1/2" = 24 | 0.020 = A<br>0.023 = B<br>0.025 = C<br>0.030 = D<br>0.047 = E<br>0.062 = F<br>0.072 = G | FEP = F<br>PFA = P<br>HP PFA = H | Feet = F<br>Meters = M | 15 = A<br>30 = B<br>50 = C<br>100 = D<br>200 = E<br>250 = F<br>300 = G<br>400 = H<br>500 = I<br>1000 = J | This number will only appear on a part number if it is any of the following<br>1. Special Material<br>2. Specific to a Customer<br>3. Customer special pricing<br><br>If there is no number or dash in the part number in this position, the tubing is a standard configuration |

**CXT6FPN12FFFF** = Standard Coax Part Number for Smooth/ConvoFlex Tubing

**CXT6FPN12FFFH-002** = Non-Standard, Specialty, Customized CT-Flex Part Number for Smooth/ConvoFlex Tubing

**CXT8FPT12FFFH** = Standard Coax Part Number for Smooth/Smooth Tubing

**CXT8FPT12FFFH-002** = Non-Standard, Specialty, Customized CT-Flex Part Number for Smooth/Smooth Tubing

## Furon HP PFA Coax - Smooth Media/Smooth Containment

| Part Number    | Media - Smooth Tubing |       |       |       |                |      | Containment - Smooth Tubing |       |       |       |                |      |       |      |  |  |
|----------------|-----------------------|-------|-------|-------|----------------|------|-----------------------------|-------|-------|-------|----------------|------|-------|------|--|--|
|                | O.D.                  |       | I.D.  |       | Wall Thickness |      | O.D.                        |       | I.D.  |       | Wall Thickness |      |       |      |  |  |
|                | in                    | mm    | in    | mm    | in             | mm   | in                          | mm    | in    | mm    | in             | mm   |       |      |  |  |
| CXT4EPT8FFFH   | 1/4                   | 6.35  | 5/32  | 3.97  | 0.062          | 1.57 | 1/2                         | 12.7  | 3/8   | 9.52  | 0.062          | 1.57 |       |      |  |  |
| CXT6FPT12FFFH  | 3/8                   | 9.52  | 1/4   | 6.35  |                |      | 3/4                         | 19.05 | 5/8   | 15.87 |                |      |       |      |  |  |
| CXT8FPT12FFFH  | 1/2                   | 12.7  | 3/8   | 9.52  |                |      | 1                           | 25.4  | 7/8   | 22.22 |                |      |       |      |  |  |
| CXT8FPT16FFFG  |                       |       |       |       |                |      |                             |       |       |       |                |      |       |      |  |  |
| CXT12FPT16FFFG | 3/4                   | 19.05 | 5/8   | 15.87 |                |      | 1-1/4                       | 31.75 | 1.1   | 27.94 | 0.072          | 1.83 |       |      |  |  |
| CXT16FPT20GFFG | 1                     | 25.4  | 7/8   | 22.22 |                |      | 1.375                       | 34.92 | 1-1/4 | 31.75 | 0.062          | 1.57 |       |      |  |  |
| CXT16FPT22FFFG |                       |       |       |       |                |      |                             |       |       |       |                |      |       |      |  |  |
| CXT4EUT8FFFH   | 1/4                   | 6.35  | 0.156 | 3.96  | 0.047          | 1.19 | 1/2                         | 12.7  | 3/8   | 9.52  | 0.062          | 1.57 |       |      |  |  |
| CXT6FUT12FFFH  | 3/8                   | 9.52  | 1/4   | 6.35  | 0.062          | 1.57 | 3/4                         | 19.05 | 5/8   | 15.87 |                |      |       |      |  |  |
| CXT8FUT12FFFH  | 1/2                   | 12.7  | 3/8   | 9.52  |                |      | 1                           | 25.4  | 7/8   | 22.22 |                |      |       |      |  |  |
| CXT8FUT16FFFG  |                       |       |       |       |                |      |                             |       |       |       |                |      |       |      |  |  |
| CXT12FUT16FFFG | 3/4                   | 19.05 | 5/8   | 15.87 |                |      | 1-1/4                       | 31.75 | 1.1   | 27.94 |                |      | 0.072 | 1.83 |  |  |
| CXT16FUT20GFFG | 1                     | 25.4  | 7/8   | 22.22 |                |      | 1-3/8                       | 34.92 | 1-1/4 | 31.75 |                |      | 0.062 | 1.57 |  |  |
| CXT16FUT22FFFG |                       |       |       |       |                |      |                             |       |       |       |                |      |       |      |  |  |

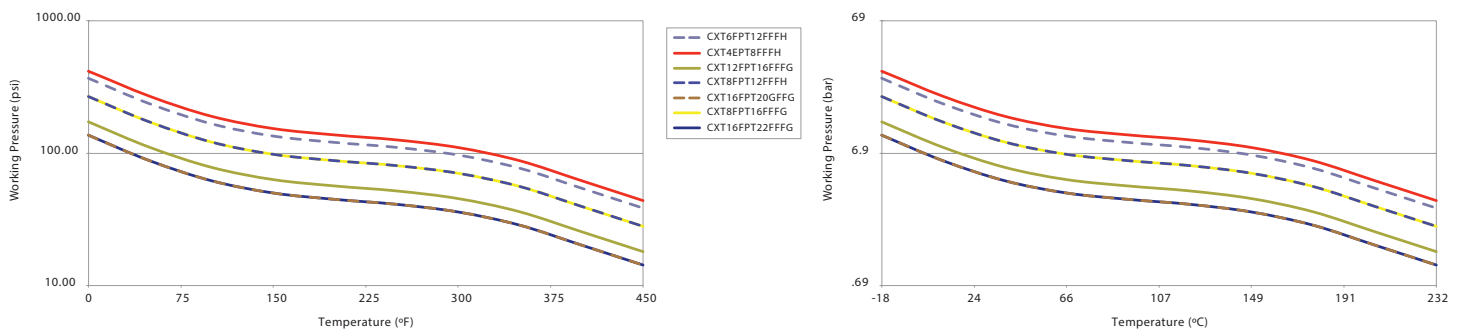
## Furon HP PFA Coax - Smooth Media/ConvoFlex™ Containment

| Part Number    | Media - Smooth Tubing |       |       |       |                |      | Containment - ConvoFlex Tubing |       |        |       |                |      |       |      |
|----------------|-----------------------|-------|-------|-------|----------------|------|--------------------------------|-------|--------|-------|----------------|------|-------|------|
|                | O.D.                  |       | I.D.  |       | Wall Thickness |      | O.D.                           |       | I.D.   |       | Wall Thickness |      |       |      |
|                | in                    | mm    | in    | mm    | in             | mm   | in                             | mm    | in     | mm    | in             | mm   |       |      |
| CXT4EPN8FFFH   | 1/4                   | 6.35  | 0.20  | 5.08  | 0.047          | 1.19 | 1/2                            | 12.7  | 7/16   | 11.17 | 0.062          | 1.57 |       |      |
| CXT6FPN12FFFH  | 3/8                   | 9.52  | 5/16  | 7.87  | 0.062          | 1.57 | 3/4                            | 19.05 | 11/16  | 17.52 |                |      |       |      |
| CXT8FPN12FFFH  | 1/2                   | 12.7  | 7/16  | 11.17 |                |      | 1                              | 25.4  | 15/16  | 23.87 |                |      |       |      |
| CXT8FPN16FFFG  |                       |       |       |       |                |      |                                |       |        |       |                |      |       |      |
| CXT12FPN16FFFG | 3/4                   | 19.05 | 11/16 | 17.52 |                |      | 1-1/4                          | 31.75 | 1-3/16 | 29.97 |                |      | 0.072 | 1.83 |
| CXT16FPN20GFFG | 1                     | 25.4  | 15/16 | 23.87 |                |      | 1-3/8                          | 34.92 | 1-5/16 | 33.27 |                |      | 0.062 | 1.57 |
| CXT16FPN22FFFG |                       |       |       |       |                |      |                                |       |        |       |                |      |       |      |
| CXT4EUN8FFFH   | 1/4                   | 6.35  | 0.20  | 5.08  | 0.047          | 1.19 | 1/2                            | 12.7  | 7/16   | 11.17 | 0.062          | 1.57 |       |      |
| CXT6FUN12FFFH  | 3/8                   | 9.52  | 5/16  | 7.874 | 0.062          | 1.57 | 3/4                            | 19.05 | 11/16  | 17.52 |                |      |       |      |
| CXT8FUN16FFFG  | 1/2                   | 12.7  | 7/16  | 11.17 |                |      | 1                              | 25.4  | 15/16  | 23.87 |                |      |       |      |
| CXT8FUN12FFFH  |                       |       |       |       |                |      |                                |       |        |       |                |      |       |      |
| CXT12FUN16FFFG | 3/4                   | 19.05 | 11/16 | 17.52 |                |      | 1-1/4                          | 31.75 | 1-3/16 | 29.97 |                |      | 0.072 | 1.83 |
| CXT16FUN20GFFG | 1                     | 25.4  | 15/16 | 23.87 |                |      | 1-3/8                          | 34.92 | 1-5/16 | 33.27 |                |      | 0.062 | 1.57 |
| CXT16FUN22FFFG |                       |       |       |       |                |      |                                |       |        |       |                |      |       |      |

## Specifications

Working pressure shown below is related only to the smooth inner tube

Furon HP PFA Coax Media Transfer Tube - Working Pressures



## Furon Coax 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. Furon Coax 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 very rigorous product challenge. They outlined a liquid application that required tubing could provide an additional layer of safety in case of leak or rupture, excellent chemical resistance, Semi standard compliance, and high flexibility. While all of these challenges are addressed with the standard Furon Coax Tubing, when they referenced the datasheet, they found their required attributes were not listed. Specifically, they needed a smooth inner tube with a Furon ConvoFlex containment tube, the inner tube required a specific raw material and the containment tube needed to have an OD of 1.75" (44.45 mm).

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, including F57 and C90 compliance testing, and was successfully completed. A purchase order was placed for their customized Coax Tubing design, which included a unique custom part number.

Specific grades of raw materials may be required (for ex. Dupont 450 HP 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.



### Saint-Gobain Performance Plastics

**China** (+8621) 5472 1568  
Sales.PPLCN@saint-gobain.com

**Europe** (+33) 3 85 20 27 00  
quotes-clm@saint-gobain.com

**Germany/Austria**  
(+49) 2131 53359-59  
sales-neuss@saint-gobain.com

**India** (+91) 80 46978888  
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® and ConvoFlex™ are registered trademarks of Saint-Gobain Performance Plastics.