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# **Part CAPMM - Jan 18, 2019**

Item # CAPMM was discontinued on Jan 19, 2019. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

# FURCATION TUBING, SLEEVES, AND CONNECTOR CAPS

- ► Tubing Protects Fiber and Provides Easy Identification
- ► Sleeves Join Stainless Steel Tubing to Connectors
- ▶ Fiber Connector Caps Protect Polished Faces of Fiber



#### FT023SS

Ø2.3 mm Stainless Steel Tubing

# FT05SS

Ø5.0 mm

Stainless Steel Tubing

#### FT061PS

Ø6.1 mm Stainless Steel Tubing, Best Choice for Light-Sensitive Setups

# CAPE

Cap for Ø2.5 mm Ferrules, Pack of 25

CAPX1

FC Plastic Connector Cap



#### САРММ

Metal Threaded Cap for SMA Connectors, Pack of 4



FT030-BK

Ø3.0 mm, MM Standard Color



CAPF1

FC Metal Connector Cap

# FTS61A Stainless Steel Sleeve for Ø6 1 mm Tubing

#### **Hide Overview**

# OVERVIEW

# **Features**

- · Protect Fiber Optic Cables
- Colored Tubing for Quick Fiber Type Identification (See Color Choices in Table at Right)
- Black Furcation Tubing for Light-Sensitive Applications
- Stainless Steel Tubing Offers High Degree of Protection
- Sleeves Securely Join Stainless Steel Tubing to Fiber Connectors
- High-Temperature, Vacuum-Compatible Stainless Steel Sleeves Ideal for Use with Polyimide Fiber
- Connector Caps Keep Polished Fiber Tips Clean

#### **Furcation Tubing**

Furcation tubing, also commonly referred to as jacketing, is used to protect delicate optical fiber from damage. The color of tubing is typically chosen to represent the type of fiber patch cable. Yellow tubing is the industry standard for single mode fiber, orange designates multimode fiber, and blue is typically reserved for polarization-maintaining fiber. Black tubing prevents visible light from entering through the length of the fiber. For additional light blocking, FT020-BK and FT030-BK black tubing can be placed inside FT05SS or FT061PS stainless steel tubing.

	Furcatio	n Tubing Selection	Guide
Item #	Inner Diameter	Outer Diameter	Color
FT900Y	400 μm	900 μm	Yellow
FT900K <sup>a</sup>	425 µm	900 µm	Yellow, Blue, or Black
FT020 <sup>a</sup>	900 µm	2.0 mm	Orange or Black
FT023SS	1.2 mm	2.3 mm	Silver (Stainless Steel)
FT030 <sup>a</sup>	1.0 mm	3.0 mm	Orange, Yellow, Blue, or Black
FT038 <sup>a</sup>	1.8 mm	3.8 mm	Red or Black
FT05SS	3.5 mm	5.0 mm	Silver (Stainless Steel)
FT061PS	3.5 mm	6.1 mm	Black (Coated Stainless Steel)
FT080SS	6.0 mm	8.0 mm	Silver (Stainless Steel)

a. These denote item # prefixes. The item # suffix indicates the color of the tubing.

When selecting furcation tubing, please note its inner diameter, as this

dimension must be larger than the outer diameter of the fiber you are using. Custom colors for furcation tubing are available. Additionally, as an alternative to jacketing your own fiber, Thorlabs offers custom pre-made patch cables. Please contact Tech Support for further information about Thorlabs' custom jacketing capabilities.

#### Stainless Steel Furcation Tubing and Sleeves

Thorlabs offers several stainless steel furcation tubing options that provide high rigidity but with a larger bend radius. Generally, the smallest tubing that fits the fiber is ideal, but it is sometimes beneficial to use larger tubing to protect a fiber with a larger bend radius. Our stainless steel sleeves effectively serve the same function as a strain relief boot and shield the connection from dust, dirt, and other external contaminants. We also offer a 304 stainless steel sleeve that can withstand environments with temperatures up to 250 °C or vacuum down to 10<sup>-10</sup> Torr. It is intended to be used with our high-temperature, vacuum-compatible SMA905 multimode connectors and polyimide-coated fiber without furcation tubing.

#### **Fiber Connector Caps**

Dirt on the fiber tip can result in permanent damage to the fiber connector. This can result in increased coupling losses or undesirable mode structure in the output light. To prevent damage to the fiber end face, clean the tip before each use and use a fiber connector cap to protect the fiber end face when it is not in use (see our fiber optic cleaning products). Thorlabs offers caps for Ø1.25 mm, Ø2.5 mm, and Ø3.2 mm fiber connector ferrules; metal caps for FC and SMA connectors; metal caps for FC, SMA, or ST bulkheads and mating sleeves; and plastic caps for FC bulkheads and mating sleeves. See below for more information.

#### Hide Ø900 µm Furcation Tubing

## Ø900 µm Furcation Tubing

Item #	Inner Diameter	Outer Diameter	Kevlar <sup>®</sup> Threads	Color	Material	Operating Temperature
FT900Y	400 μm		Not Included	Yellow		
FT900KY		900 µm	Included	Yellow	Hytrel <sup>®</sup> (UL 94 HB)	-40 to 70 °C
FT900KB	425 µm			Blue		
FT900KK				Black		



Thorlabs' offers a wide variety of Hytrel<sup>®</sup> furcation tubing with a 900 µm outer diameter. They are most

commonly used as a jacket for single mode fiber because the inner diameter may be too small for many multimode fibers. Our FT900KY, FT900KB, and FT900KK tubing include Kevlar<sup>®</sup> threads to be used as a pull string when feeding optical fiber. The interior of the yellow FT900Y tubing is empty. The tubing can be removed after installation by using the AFS900 Adjustable Fiber Buffer and Jacket Stripping Tool.

Thorlabs also offers the 190044P and 190044B Strain Relief Boots for covering connector ends when using Ø900 µm furcation tubing.

Part Number	Description	Price	Availability
FT900Y	Yellow Ø900 μm Hytrel <sup>®</sup> Furcation Tubing	\$1.11 Per Meter Volume Pricing Available	Today
FT900KY	Yellow Ø900 μm Hytrel <sup>®</sup> Furcation Tubing with Kevlar <sup>®</sup> Threads	\$1.58 Per Meter Volume Pricing Available	Today
FT900KB	Blue Ø900 μm Hytrel <sup>®</sup> Furcation Tubing with Kevlar <sup>®</sup> Threads	\$1.58 Per Meter Volume Pricing Available	Today
FT900KK	Black Ø900 μm Hytrel <sup>®</sup> Furcation Tubing with Kevlar <sup>®</sup> Threads	\$1.58 Per Meter Volume Pricing Available	Today
190044P	Yellow Strain Relief Boot for Ø900 μm Tubing, 25 Pack	\$11.35	Today
190044B	Black Strain Relief Boot for Ø900 µm Tubing, 25 Pack	\$11.35	Today

#### Hide Ø2.0 mm Furcation Tubing

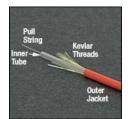
# **Ø2.0** mm Furcation Tubing

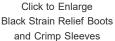
Inner	Outer		Operating	
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Item #	Diameter	Diameter	Color	Temperature
FT020	900 µm	2.0 mm	Orange	-40 to 70 °C
FT020-BK	900 μπ	2.0 111111	Black	-40 to 70 C

Our Ø2.0 mm protective tubing provides more protection than Ø900 µm tubing and fits optical fiber up to 900 µm in diameter. It has an internal structure similar to our Ø3.0 mm tubing pictured below, including a

PVC outer jacket, Kevlar® threads, a polypropylene inner protective tube, and a pull string for fiber insertion. It is ideal for constructing patch cables for optogenetics or any other application where a lightweight, flexible, and durable patch cable is needed.





Click to Enlarge

Components of Furcation Tubing

Feeding fiber through furcation tubing can be difficult, so the inner tube of the FT020(-BK) features a pull string to help guide the fiber. The furcation tubing can be removed from the fiber by using the AFS900 Adjustable Stripping Tool. We also offer connector boots and crimp sleeves to use Ø2.0 mm tubing with connectors. The 190066CP pack is for FC/PC-type connectors and the 190088CP pack is for SMA- or ST-type connectors. Our stock connectors do not include a boot compatible with Ø2.0 mm tubing. Please note that, due to the small size of this tubing, epoxy must be used after crimping a sleeve from the 190066CP or 190088CP packs to the tubing to ensure that it is properly secured to the tubing. For information on using this tubing with other connector styles, please contact Tech Support.

The orange color of the FT020 furcation tubing is the industry standard for multimode fiber, however the FT020-BK black furcation tubing is especially useful for preventing ambient visible light from entering the patch cable. For additional light blocking, the FT020-BK tubing can be placed inside FT05SS or FT061PS stainless steel tubing.

Part Number	Description	Price	Availability
FT020	Orange Reinforced Ø2 mm Furcation Tubing	\$1.38 Per Meter Volume Pricing Available	Today
FT020-BK	Customer Inspired! Black Reinforced Ø2 mm Furcation Tubing	\$1.38 Per Meter Volume Pricing Available	Today
190066CP	Black Strain Relief Boots and Crimp Sleeves for Ø2 mm Tubing and FC/PC Connectors, 25 Pack	\$24.48	Today
190088CP	Black Strain Relief Boots and Crimp Sleeves for Ø2 mm Tubing and SMA or ST Connectors, 25 Pack	\$24.48	Today

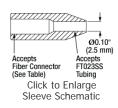
### Hide Ø2.3 mm Stainless Steel Tubing and Sleeves

# **Ø2.3 mm Stainless Steel Tubing and Sleeves**

Item #	Inner Diameter	Outer Diameter	Min Bend Radius <sup>a</sup>	Material	Color	Operating Temperature <sup>b</sup>
FT023SS	1.2 ± 0.1 mm	2.3 ± 0.1 mm	23 mm	SUS304	Silver	-60 to 527 °C (-76 to 981 °F)

- · a. Minimum Bend Radius of the empty tubing. Be sure to check the bend radius of any fiber inside the tubing prior to use.
- . b. The temperature range is specificed for straight, unflexed, static tubing.

Thorlabs' FT23SS Stainless Steel Tubing and FTS23x Sleeves provide a high degree of fiber protection. This thin, lightweight stainless steel tubing provides added protection for more rigorous optogenetics experiments. Its all-metal jacket also prevents visible and IR light from entering through the length of the patch cable. The FTS23x sleeves effectively replace the strain relief boot used with our standard furcation tubing and shield the connection from dust, dirt, and other external contaminants. Please refer to the Compatibility Guide table below to ensure the proper match between the fiber connector and sleeve.





Click to Enlarge Sleeve with Fiber Connector and Stainless Steel Tubing

To create a fiber connection, our F112 or F123 Epoxy is used to secure the sleeve along the same central axis as the fiber connector, tubing, and bare fiber. Each sleeve is engraved with a part number ending in an A, B, or D that

indicates the inner diameter of the connector side of the sleeve, as shown in the table below. When the fiber connector and tubing are fed into the sleeve, they each encounter a hard stop once they are completely inserted, making it easy to create reliable connections.

The bare fiber can be fed directly into the tubing, which does not contain an inner tube, Kevlar® threads, or a pull string.

Please note that the maximum continuous length we can provide for this tubing is 200 m.

	Compatibility Guide							
Item #	Inner Diameter of Fiber Connector Side	FC/PC Connectors	FC/APC Connectors	SMA Connectors	ST Connectors	SC Connectors <sup>a</sup>	LC Connectors <sup>b</sup>	
FTS23A	0.138" - 0.150" (3.50 - 3.81 mm)	30126C3, 30128C3, 30126C9	30126A3, 30126A9	1xxxxA	30126B1	-	-	
FTS23B	0.153" - 0.165" (3.89 - 4.19 mm)	30xxxxG3	-	-	10140G1 10127C	-	-	
FTS23D	0.178" - 0.190" (4.52 - 4.83 mm)	30xxxC1, 30125D2, 30126G2-xxxx, 30140E1	30080K2, 30127A3	-	-	-	-	

a. Our 30126G1 SC/PC connector is not compatible with any of our metal sleeves, but can be terminated directly to FT023SS tubing without using a strain relief sleeve or boot. Contact techsupport@thorlabs.com for details.

b. Our Ø2.3 mm stainless steel tubing and sleeves are not compatible with LC connectors.

Part Number	Description	Price	Availability
FT023SS	Ø2.3 mm Stainless Steel Tubing	\$23.32 Per Meter Volume Pricing Available	Today
FTS23A	Stainless Steel Sleeve for Ø2.3 mm Tubing, 0.138" - 0.150" ID	\$12.93	Today
FTS23B	Stainless Steel Sleeve for Ø2.3 mm Tubing, 0.153" - 0.165" ID	\$12.93	Today
FTS23D	Stainless Steel Sleeve for Ø2.3 mm Tubing, 0.178" - 0.190" ID	\$12.93	Today

#### Hide Ø3.0 mm & Ø3.8 mm Furcation Tubing

#### Ø3.0 mm & Ø3.8 mm Furcation Tubing

Item #	Inner Diameter	Outer Diameter	Color	Operating Temperature
FT030			Orange	
FT030-Y	1.0 mm	3.0 mm	Yellow	
FT030-BLUE	1.0 111111	3.0 111111	Blue	-20 to 70 °C (-4 to 158 °F)
FT030-BK			Black	-20 to 70 °C (-4 to 156 °F)
FT038	1.9 mm	3.8 mm	Red	
FT038-BK	1.8 mm	3.8 mm	Black	



Click to Enlarge Components of Furcation Tubing

Thorlabs' FT030 and FT038 Furcation Tubings consist of an outer PVC jacket, Kevlar<sup>®</sup> protective threads, a polypropylene inner fiber tube, and a pull string for fiber insertion, as shown in the photo to the right. The Kevlar<sup>®</sup> threads that surround the inner tube protect the fiber from damage by cushioning any impact incurred by the PVC outer jacket. Feeding fiber through furcation tubing can be difficult, so the inner tubes of the FT030 and FT038 feature a pull string to help guide the fiber. The tubing can be removed from the fiber by using the FTS3 Stripping Tool and the T186 Kevlar<sup>®</sup> Cutting Shears.

These furcation tubings can be used with SM (yellow standard), PM (blue standard), and MM (orange standard) fibers. Our FT030-BK and FT038-BK Black Furcation Tubing are especially useful for preventing ambient visible light from entering the patch cable. For additional light blocking, the FT030-BK tubing can be placed inside FT05SS or FT061PS stainless steel tubing.

Part Number	Description	Price	Availability
FT030	Orange Reinforced Ø3 mm Furcation Tubing	\$1.43 Per Meter Volume Pricing Available	Today
FT030-Y	Yellow Reinforced Ø3 mm Furcation Tubing	\$1.43 Per Meter Volume Pricing Available	Today
FT030-BLUE	Customer Inspired!&nbspBlue Reinforced Ø3 mm Furcation Tubing	\$1.43 Per Meter Volume Pricing Available	Today
FT030-BK	Black Reinforced Ø3 mm Furcation Tubing	\$1.43 Per Meter	Today

		Volume Pricing Available	
FT038	Red Reinforced Ø3.8 mm Furcation Tubing	\$1.98 Per Meter Volume Pricing Available	Today
FT038-BK	Black Reinforced Ø3.8 mm Furcation Tubing	\$1.98 Per Meter Volume Pricing Available	Today

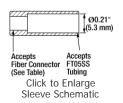
Hide Ø5.0 mm Stainless Steel Tubing and Sleeves

### Ø5.0 mm Stainless Steel Tubing and Sleeves

Item #	Inner Diameter	Outer Diameter	Min Bend Radius <sup>a</sup>	Material	Color	Operating Temperature <sup>b</sup>
FT05SS	3.5 mm	5.0 ± 0.2 mm	19 mm	SUS304	Silver	-60 to 527 °C (-76 to 981 °F)

- a. Minimum Bend Radius of the empty tubing. Be sure to check the bend radius of any fiber inside the tubing prior to use.
- b. The temperature range is specified for straight, unflexed, static tubing.

Thorlabs' FT05SS Stainless Steel Tubing and FTS50x Sleeves provide a high degree of fiber protection. The FT05SS is the same tubing used in our SMA Fiber Bundles. Its all-metal jacket prevents visible and IR light from entering through the length of the patch cable. The FTS50x sleeves effectively replace the strain relief boot used with our standard furcation tubing and shield the connection from dust, dirt, and other external contaminants. Please refer to the Compatibility Guide table below to ensure the proper match between the fiber connector and sleeve.





Click to Enlarge Sleeve with Fiber Connector and Stainless Steel Tubing

To create a fiber connection, our F112 or F123 Epoxy is used to secure the sleeve along the same central axis as the fiber connector, tubing, and bare fiber. Each sleeve is engraved with an A, B, or D that corresponds to the suffix of the part number and indicates the inner diameter of the connector side of the sleeve, as shown in the table below. When the fiber connector and tubing are fed into the sleeve, they each encounter a hard stop once they are completely inserted, making it easy to create reliable connections.

The bare fiber can be fed directly into the tubing, which does not contain an inner tube, Kevlar<sup>®</sup> threads, or a pull string. If desired, the fiber can be fed into our FT030 tubing (which does feature a pull string) before being put into the stainless steel tubing for added convenience and protection.

Please note that the maximum continuous length we can provide for this tubing is 100 m.

	Compatibility Guide								
Item #	Inner Diameter of Fiber Connector Side	FC/PC Connectors	FC/APC Connectors	SMA Connectors	ST Connectors	SC Connectors <sup>a</sup>	LC Connectors <sup>b</sup>		
FTS50A	0.138" - 0.150" (3.50 - 3.81 mm)	30126C3, 30128C3, 30126C9	30126A3, 30126A9	1xxxxA	30126B1	-	-		
FTS50B	0.153" - 0.165" (3.89 - 4.19 mm)	30xxxxG3	-	-	10140G1 10127C	-	-		
FTS50D	0.178" - 0.190" (4.52 - 4.83 mm)	30xxxC1, 30125D2, 30126G2-xxxx, 30140E1	30080K2, 30127A3	-	-	-	-		

- a. Our 30126G1 SC/PC connector is not compatible with any of our metal sleeves, but can be terminated directly to FT05SS tubing without using a strain relief sleeve or boot. Contact techsupport@thorlabs.com for details.
- b. Our Ø5.0 mm stainless steel tubing and sleeves are not compatible with LC connectors.

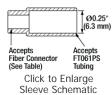
Part Number	Description	Price	Availability
FT05SS	Ø5.0 mm Stainless Steel Tubing	\$6.57 Per Meter Volume Pricing Available	Today
FTS50A	Stainless Steel Sleeve for Ø5.0 mm Tubing, 0.138" - 0.150" ID	\$7.67	Today
FTS50B	Stainless Steel Sleeve for Ø5.0 mm Tubing, 0.153" - 0.165" ID	\$7.51	Today
FTS50D	Stainless Steel Sleeve for Ø5.0 mm Tubing, 0.178" - 0.190" ID	\$7.51	Today

#### Ø6.1 mm Stainless Steel Tubing and Sleeves

Item #	Inner Diameter	Outer Diameter	Min Bend Radius <sup>a</sup>	Color	Operating Temperature <sup>b</sup>
FT061PS	3.5 mm	6.1 mm	19 mm	Black	-50 to 60 °C (-58 to 140 °F)

- a. Minimum Bend Radius of the empty tubing. Be sure to check the bend radius of any fiber inside the tubing prior to use.
- b. The temperature range is specified for straight, unflexed, static tubing.

Thorlabs' FT061PS Stainless Steel Tubing and FTS61x Sleeves provide a high degree of fiber protection. The FT061PS has a black plastic coating (olefin elastomer) that is lead-free, halogen-free, and provides chemical, water, and heat resistance. The black coating and all-metal jacket prevent visible and IR light from entering through the length of the patch cable. The FTS61x sleeves effectively replace the strain relief boot used with our standard furcation tubing and shield the connection from dust, dirt, and other external contaminants. Please refer to the Compatibility Guide table below to ensure the proper match between the fiber connector and sleeve.





Click to Enlarge Sleeve with Fiber Connector and Stainless Steel Tubing

To create a fiber connection, our F112 or F123 Epoxy is used to secure the sleeve along the same central axis as the fiber connector,

tubing, and bare fiber. Each sleeve is engraved with an A, B, or D that corresponds to the suffix of the part number and indicates the inner diameter of the connector side of the sleeve, as shown in the table below. When the fiber connector and tubing are fed into the sleeve, they each encounter a hard stop once they are completely inserted, making it easy to create reliable connections.

The bare fiber can be fed directly into the tubing, which does not contain an inner tube, Kevlar® threads, or a pull string. If desired, the fiber can be fed into our FT030 tubing (which does feature a pull string) before being put into the stainless steel tubing for added convenience and protection.

Please note that the maximum continuous length we can provide for this tubing is 100 m.

	Compatibility Guide								
Item #	Inner Diameter of Fiber Connector Side	FC/PC Connectors	FC/APC Connectors	SMA Connectors	ST Connectors	SC Connectors <sup>a</sup>	LC Connectors <sup>b</sup>		
FTS61A	0.138" - 0.150" (3.50 - 3.81 mm)	30126C3, 30128C3, 30126C9	30126A3, 30126A9	1xxxxA	30126B1	-	-		
FTS61B	0.153" - 0.165" (3.89 - 4.19 mm)	30xxxxG3	-	-	10140G1 10127C	-	-		
FTS61D	0.178" - 0.190" (4.52 - 4.83 mm)	30xxxC1, 30125D2, 30126G2-xxxx, 30140E1	30080K2, 30127A3	-	-	-	-		

a. Our 30126G1 SC/PC connector is not compatible with any of our metal sleeves, but can be terminated directly to FT061PS tubing without using a strain relief sleeve or boot. Contact Tech Support for details.

b. Our Ø6.1 mm stainless steel tubing and sleeves are not compatible with LC connectors.

Part Number	Description	Price	Availability
FT061PS	Ø6.1 mm Stainless Steel Tubing with Black Plastic Sheath	\$14.29 Per Meter Volume Pricing Available	Today
FTS61A	Stainless Steel Sleeve for Ø6.1 mm Tubing, 0.138" - 0.150" ID	\$8.93	Today
FTS61B	Stainless Steel Sleeve for Ø6.1 mm Tubing, 0.153" - 0.165" ID	\$8.93	Today
FTS61D	Stainless Steel Sleeve for Ø6.1 mm Tubing, 0.178" - 0.190" ID	\$8.93	Today

## Hide Ø8.0 mm Stainless Steel Tubing and Sleeves

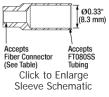
## Ø8.0 mm Stainless Steel Tubing and Sleeves

Item #	Inner Diameter	Outer Diameter	Min Bend Radius <sup>a</sup>	Material	Color	Operating Temperature <sup>b</sup>
FT080SS	6.0 ± 0.2 mm	8.0 ± 0.3 mm	140 ± 30 mm	SUS304	Silver	-60 to 527 °C (-76 to 981 °F)

- a. Minimum Bend Radius of the empty tubing. Be sure to check the bend radius of any fiber inside the tubing prior to use.
- b. The temperature range is specified for straight, unflexed, static tubing.

Thorlabs' FT080SS Stainless Steel Tubing and FTS80x Sleeves provide a high degree of fiber protection.

The FT080SS is the same tubing used in our MZ6x series fluoride fiber patch cables. Its all-metal jacket prevents visible and IR light from entering through the length of the patch cable. The FTS80x sleeves effectively replace the strain relief boot used with our standard furcation tubing and shield the connection from dust, dirt, and other external contaminants. Please refer to the Compatibility Guide table below to ensure the proper match between the fiber connector and sleeve.





Sleeve with Fiber Connector and Stainless Steel Tubing

To create a fiber connection, our F112 or F123 Epoxy is used to secure the sleeve along the same central axis as the fiber connector, tubing, and bare fiber. Each sleeve is engraved with a part number ending in an A, B, or D that indicates the inner diameter of the connector side of the sleeve, as shown in the table below. When the fiber connector and tubing are fed into the sleeve, they each encounter a hard stop once they are completely inserted, making it easy to create reliable connections.

The bare fiber can be fed directly into the tubing, which does not contain an inner tube, Kevlar<sup>®</sup> threads, or a pull string. If desired, the fiber can be fed into our FT030 tubing (which does feature a pull string) before being put into the stainless steel tubing for added convenience and protection.

Please note that the maximum continuous length we can provide for this tubing is 10 m.

	Compatibility Guide								
Item #	Inner Diameter of Fiber Connector Side	FC/PC Connectors	FC/APC Connectors	SMA Connectors	ST Connectors	SC Connectors <sup>a</sup>	LC Connectors <sup>a</sup>		
FTS80A	0.138" - 0.150" (3.50 - 3.81 mm)	30126C3, 30128C3, 30126C9	30126A3, 30126A9	1xxxxA	30126B1	-	-		
FTS80B	0.153" - 0.165" (3.89 - 4.19 mm)	30xxxxG3	-	-	10140G1 10127C	-	-		
FTS80D	0.178" - 0.190" (4.52 - 4.83 mm)	30xxxC1, 30125D2, 30126G2-xxxx, 30140E1	30080K2, 30127A3	-	-	-	-		

a. Our Ø8.0 mm stainless steel tubing and sleeves are not compatible with SC or LC connectors.

Part Number	Description	Price	Availability
FT080SS	Ø8.0 mm Stainless Steel Tubing	\$62.51 Per Meter Volume Pricing Available	Today
FTS80A	Stainless Steel Sleeve for Ø8.0 mm Tubing, 0.138" - 0.150" ID	\$11.88	Today
FTS80B	Stainless Steel Sleeve for Ø8.0 mm Tubing, 0.153" - 0.165" ID	\$11.88	Today
FTS80D	Stainless Steel Sleeve for Ø8.0 mm Tubing, 0.178" - 0.190" ID	\$11.88	Today

Hide High-Temperature, Vacuum-Compatible Stainless Steel Sleeve

# High-Temperature, Vacuum-Compatible Stainless Steel Sleeve



- Stainless Steel Sleeve for Temperatures up to 250 °C or Vacuum up to 10<sup>-10</sup>
  Torr
- Intended for Use with 353NDPK Epoxy and High-Temperature, Vacuum-Compatible SMA905 Multimode Connectors
- ldeal for Use with Polyimide-Coated Fiber

The FTSB1 Stainless Steel Sleeve fits fiber outer diameters up to 720  $\mu$ m, such as polyimide-coated fiber. It is intended to be used with our high-temperature SMA905 multimode connectors and can withstand environments with temperatures up to 250 °C or vacuum down to  $10^{-10}$  Torr.

Compatible SMA905 Connectors					
Item #	Bore Diameter				
10128V	128 +5/-0 μm				
10145V	145 +5/-0 μm				
10245V	245 +10/-0 μm				
10380V	380 +15/-0 μm				
10490V	490 +15/-0 μm				
10720V	720 +15/-0 μm				

Part Number	Description	Price	Availability
FTSB1	304 SS Sleeve for High-Temperature, Vacuum-Compatible SMA905 Connectors	\$17.51	Today

Hide Fiber Optic Connector Caps

## **Fiber Optic Connector Caps**

Cap Protects End Face of Fiber

- ▶ Options Available for LC, FC, ST, SC, and SMA Connectors
- Plastic, Nickel-Plated Brass, and Rubber Versions Available

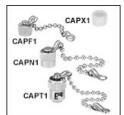
Item #	Ferrule Size	Compatible Connector Types	Material	Color	Number of Caps per Pack
CAPL	Ø1.25 mm	LC	Plastic	White	25
CAPF	Ø2.5 mm	FC, ST, SC	Plastic	Clear	25
CAPFM	-	FC (Narrow Key)	Nickel-Plated Brass	-	4
САРМ	Ø3.2 mm	SMA	Rubber	Black	10
САРММ	-	SMA	Nickel-Plated Brass	-	4



Part Number	Description	Price	Availability
CAPL	White Plastic Dust Caps for Ø1.25 mm Ferrules, 25 Pack	\$7.10	Today
CAPF	Clear Plastic Dust Caps for Ø2.5 mm Ferrules, 25 Pack	\$7.10	Today
CAPFM	Customer Inspired!&nbspMetal Threaded Caps for FC Connectors, 4 Pack	\$9.79	5-8 Days
CAPM	Customer Inspired!&nbspBlack Rubber Dust Caps for Ø3.2 mm Ferrules, 10 Pack	\$9.46	Today
САРММ	Customer Inspired!&nbspMetal Threaded Caps for SMA Connectors, 4 Pack	\$9.79	5-8 Days

# Hide Bulkhead and Mating Sleeve Caps

# **Bulkhead and Mating Sleeve Caps**



- Threaded Caps Protect Bulkheads and Mating Sleeves
- CAPX1: Plastic Caps for FC/PC and FC/APC Bulkheads and Mating Sleeves, Pack of 10
- CAPF1: Metal Cap and Chain for FC/PC and FC/APC Bulkheads and Mating Sleeves
- CAPN1: Metal Cap and Chain for SMA Bulkheads and Mating Sleeves
- CAPT1: Metal Cap and Chain for ST Bulkheads and Mating Sleeves

Part Number	Description	Price	Availability
CAPX1	Customer Inspired!&nbspPlastic Cap for FC/PC and FC/APC Bulkheads and Mating Sleeves, 10 Pack	\$5.15	Today
CAPF1	Customer Inspired!&nbspMetal Cap for FC/PC and FC/APC Bulkheads and Mating Sleeves	\$7.78	Today
CAPN1	Customer Inspired!&nbspMetal Cap for SMA Bulkheads and Mating Sleeves	\$5.30	Today
CAPT1	Customer Inspired!&nbspMetal Cap for ST Bulkheads and Mating Sleeves	\$4.56	Today