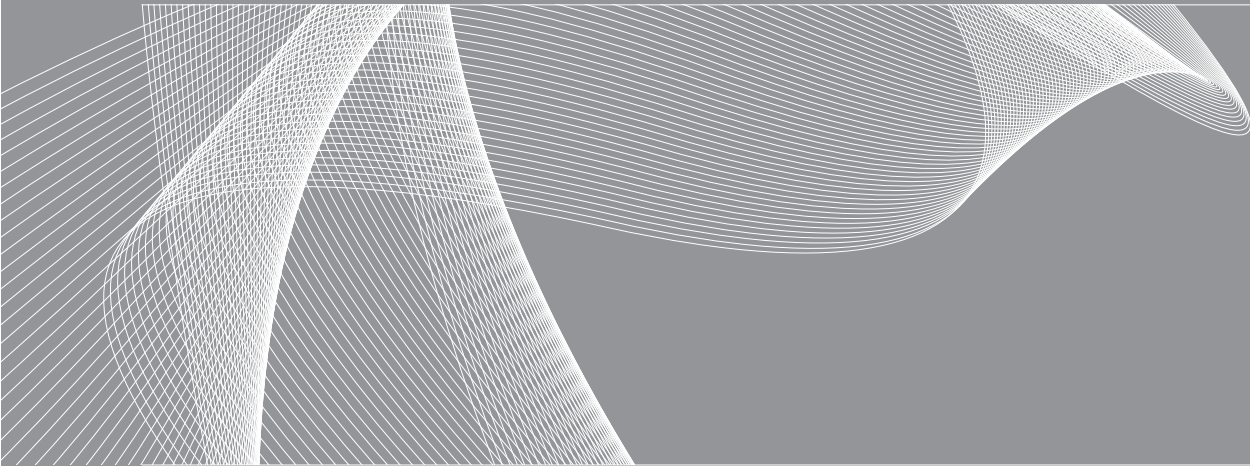


SENKO Advanced Components is a recognized leader in the design, manufacturing, sales, marketing and distribution of over 1000 fiber optic products for the global telecom and datacom industries. Our experience in fiber optics dates back to the earliest days of development for this superior communications technology. We currently maintain a number of strategically located manufacturing centers, offices, and warehouses, which serve the demanding requirements of today's rapidly changing fiber optic markets throughout the Americas, Europe, Asia and Asia-Pacific.

SENKO offers its customers a full range of standard products, the technical expertise to liaise with engineers, and the capability to develop customized products for unique applications. We back our products with long-term warranties together with extensive mechanical and environmental testing. Moreover, SENKO is able to provide sourcing, inspection, packaging, and logistic services to manufacturers of high-tech communications systems.

An ISO-9001 registered company, we maintain one of the largest product portfolios of its kind—at a level of quality that is second to none. For more information about SENKO, please visit our website at [www.senko.com](http://www.senko.com).

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SMALL FORM FACTORS	pg. 24
SPECIALTY PRODUCTS	pg. 38
CONNECTOR & ADAPTER SUBCOMPONENTS	pg. 44
POLISHING SYSTEMS	pg. 50



# STANDARD CONNECTOR SERIES

SC-PC	Premium Connector	DIN	Connector & Adapter
SC-APC	Premium Connector	D4	Connector
SC	Standard Connector	D4	Adapter
SC	Connector Kit	E 2000	Connector
SC	Duplex Clip	E 2000	Lever
SC	XP Fit Plus Connector	E 2000	Crimpset
SC	Simplified	E 2000	Accessories
SC	Crimp Tool	E 2000	Adapters & Frames
SC	Adapter Series	SMA	Connector
FC	Premium Connector	SMA	Adapter
FC	APC Premium Connector		Connector Boots
FC	Standard Connector		
FC	Adapters		
ST	Premium Connector		
ST	Standard Connector		
ST	Adapter		

# SC Connector

The SC or Subscription Channel connector uses a push-pull system and have become known as an industry standard connector because of their many advantages.

The SC connector push pull system was originally developed by NTT, and is characterized by an audible click heard when the connector is mated with the adapter, signaling it is locked and preventing rotational misalignment.

Made of mostly plastic components, the SC offers a less expensive option that is just as durable and can be used in a variety of applications including CATV, Active Device Terminations, LANs, Telecommunication networks and WAN's. The SC connectors are available with single mode physical contact (PC), angled physical contact (APC), and Multi-mode physical contact (PC) ferrules. The SC connector and adapter come in a variety of colors including industry standard blue green, and beige.

SPECIFICATION		SINGLEMODE	MULTIMODE
Insertion Loss	Premium Connector UPC	0.08dB Typical	0.15dB
	Premium Connector APC	0.10dB Typical	
	Standard Connector	0.12dB Typical	0.20dB
Return Loss		≥ 55dB typical (PC) ≥ 68dB typical (APC)	
Durability		<0.1dB typical change, 500 matings*	<0.1dB typical change, 500 matings*
Operating Temperature		-40°C to +75°C	-40°C to +75°C
Ferrule Hole Sizes (Custom sizes available)		126µm +1/-0    Concentricity: ≤ 1µm 125µm +1/-0    Concentricity: ≤ 1µm 125.5µm +1/-0    Concentricity: ≤ 1µm	127µm (MM) 144µm (MM) 230µm (MM)

\* Using SM fiber cable assembly. Specifications shown above were obtained using SENKO recommended products and procedures.

## APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Data processing networks
- Premise installations
- Wide Area Networks (WANs)
- Industrial, medical & military

## FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS
- interface specifications
- Low insertion loss & back reflection\*
- Tunable with Senko tuning tool
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL-rated plastic housing and boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal or plastic housing, mount styles & flange options

## SC Premium

## 1 PC Connector



900 µm Premium

2.0mm Premium

3.0mm Premium

CONNECTOR	FERRULE I.D.	HOUSING	BOOT	BOOT COLOR
254 Premium	191 SM: 125.5µm	6 Blue	1 3.0mm Cable Standard	1 Blue
	192 SM: 126µm	7 Black	2 900µm Fiber Short	2 Black
	193 SM: 125µm	8 Red	3 2.0mm Fiber	3 Green
	291 MM: 127µm	9 Beige	4 3.0mm Cable Short	4 Red
	292 MM: 230µm		5 2.4mm Cable Short	5 Gray
	293 MM: 144µm		6 2.0mm Cable Short	6 Yellow
			7 <b>3.0mm Premium (Telcordia)</b>	7 White
			8 <b>900µm Premium (Telcordia)</b>	8 Beige
		9 2.0mm Cable Standard		
		A <b>2.0mm Premium (Telcordia)</b>		
		B 900µm Fiber Boot		

ORDER CODE example:.

**254 - 191 - 671**

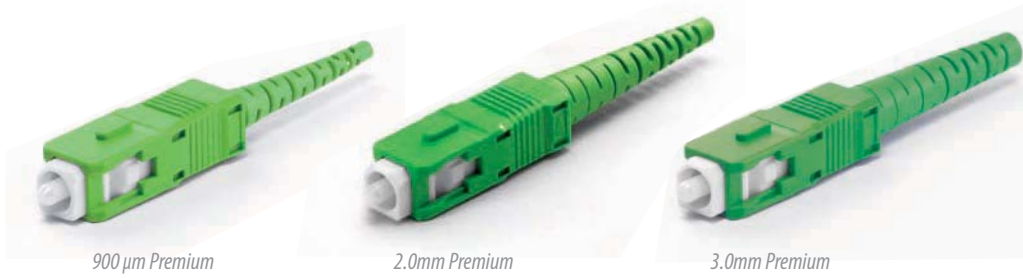
Note:

Add 1.6 to order code to specify crimp ring for 1.6mm cable option. Custom configurations available upon request. SC Connectors come standard with SENKO logo housing unless otherwise noted.



# SC-APC Premium

## 1 PC Connector



900 μm Premium

2.0mm Premium

3.0mm Premium

FERRULE TYPE	FERRULE I.D.	POLISH	BOOT
291 Step	191 SM: 125.5μm	1 No Angle	1 3.0mm Cable Standard
294 Conical	192 SM: 126μm	2 8° Pre-Angle	2 900μm Fiber Short
	193 SM: 125μm		3 2.0mm Fiber
			4 3.0mm Cable Short
			5 2.4mm Cable Short
			6 2.0mm Cable Short
			7 <b>3.0mm Premium (Telcordia)</b>
			8 <b>900μm Premium (Telcordia)</b>
			9 2.0mm Cable Standard
			A <b>2.0mm Premium (Telcordia)</b>
			B 900μm Fiber Boot

ORDER CODE example: **294 - 191 - 24**

### APPLICATIONS

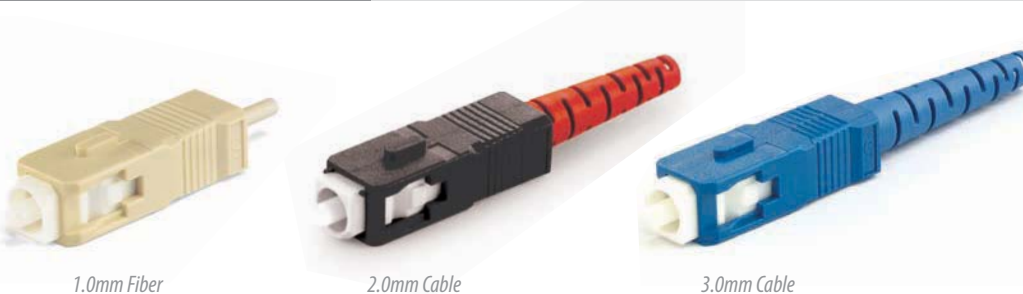
- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Data processing networks
- Premise installations
- Wide Area Networks (WANs)
- Industrial, medical & military

### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS
- interface specifications
- Low insertion loss & back reflection\*
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- The SC-APC Premium is tunable with Senko tuning tool
- UL-rated plastic housing and boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal or plastic housing, mount styles & flange options

# SC Standard

## 1 PC Connector



1.0mm Fiber

2.0mm Cable

3.0mm Cable

CONNECTOR	FERRULE I.D.	HOUSING	BOOT	BOOT COLOR
231 Pre-assembled	191 SM: 125.5μm	6 Blue	1 3.0mm Cable Standard	1 Blue
232 Unassembled	291 MM: 127μm	7 Black	2 1.0mm Fiber (Buffer) Boot	2 Black
		9 Beige	9 2.0mm Cable Standard	4 Red
				6 Yellow
				8 Beige

ORDER CODE example: **231 - 191 - 621**

*Note:*  
 Custom configurations available upon request. SC Connectors come standard with SENKO logo housing unless otherwise noted.

## SC Connector Kit

NTT Style



900µm Fiber

2.0mm Cable

3.0mm Cable

CODE	OUTER HOUSING	BOOT TYPE	BOOT COLOR
132	A11 Blue with White line	7 3mm Cable Long	1 Blue
	B11 Black with White Line	9 2mm Cable Long	2 Black
	C11 Beige with White Line	D 900µm Slotted Fiber Boot	3 Green
	D11 Green with White Line		4 Red
			8 Beige

ORDER CODE example: **132 - A11 - D1**

### APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Data processing networks
- Premise installations
- Wide Area Networks (WANs)
- Industrial, medical & military

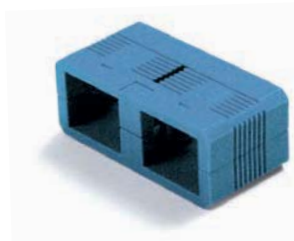
### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS
- interface specifications
- Low insertion loss & back reflection\*
- Pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL-rated plastic housing and boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal or plastic housing, mount styles & flange options

## SC Duplex Clip



SC Duplex Clip Premium



SC Duplex Clip Standard

CODE	COLOR
224 SC Duplex Clip for Premium Connector	591 Black
274 SC Duplex Clip for Standard Connector	592 Green
	593 Blue
	594 Beige
	595 Red

ORDER CODE example: **274 - 595**

Note:  
The outer housing will come with a SENKO logo.

Note:  
SC Duplex Clip Premium works only with connectors 254, 291, and 294. The Standard works with all others SC

# XP Fit Plus

# SC Field Installable Connector

The XP Fit Plus is a pre-polished, pre-assembled connector compatible with the standard SC connector. In place of epoxy, an internal mechanical grip gently but effectively holds the fiber in place and can be installed in under two minutes. Without polishing or adhesives, the XP Fit Plus makes field installations quick and easy, eliminating the need for epoxy curing and hand polishing at the work site. The XP Fit Plus comes with an assembling jig and fiber holder, making for an accurate alignment and fiber cleave when terminating the connector.

## ASSEMBLY PROCEDURE

- NO EPOXY
- NO POLISHING

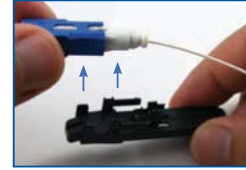
1 - Cutting Fiber



2 - Inserting Fiber



3 - Take out Connector



SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.2dB typical (PC) and 0.3dB typical (APC)	0.1dB typical
<b>Return Loss</b>	55dB typical (PC) 60dB typical (APC)	35dB typical
<b>Durability</b>	<0.1dB typical change, 500 matings*	<0.1dB typical change, 500 matings*
<b>Operating Temperature</b>	-40°C to +75°C	-40°C to +75°C
<b>Tensile</b>	TIA/EIA 568-B.3	
<b>Intermateability</b>	IEC 61754-4	

\* Using SM fiber cable assembly. Specifications shown above were obtained using SENKO recommended products and procedures.

## APPLICATIONS

- Data Centers
- LAN
- Telecommunications
- Network Monitoring
- FTTX

## FEATURES

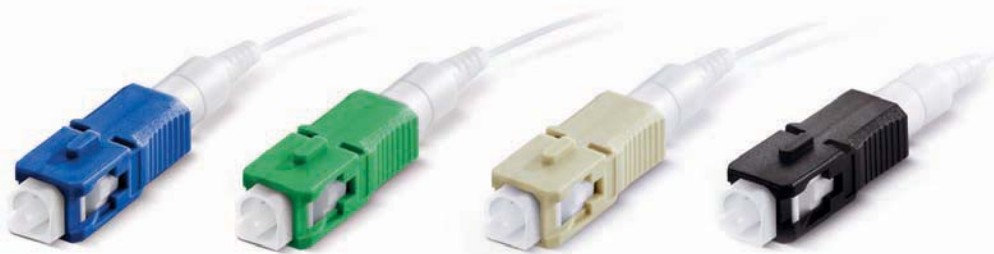
- Mechanical Splice (index matching gel)
- Highly Stable & Reliable
- Perfect Performance
- Compact Package
- RoHS Compliant
- Finished Connector meets UL94-V0 Flammability Rated

Note:

1. The connector performance specifications include an internal mechanical splice.
2. Typical specification values are at 23°C ±5°C.

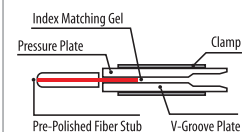
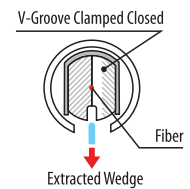
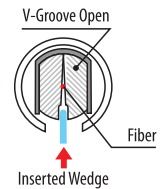
# XP Fit Plus

# SC Field Installable Connector



PART NUMBER	DESCRIPTION	HOUSING	BOOT COLOR
<b>318-191-627</b>	XPFit Plus SC Connector SM PC 900µm	Blue	White
<b>318-091-427</b>	XPFit Plus SC Connector SC APC 900µm	Green	White
<b>318-291-727</b>	XPFit Plus SC Connector MM 50/125 900µm	Black	White
<b>318-391-927</b>	XPFit Plus SC Connector MM 62.5/125 900µm	Beige	White
<b>318-491-527</b>	XPFit Plus SC Connector MM 50/125 10G OM3 900µm	Aqua	White

PART NUMBER	DESCRIPTION	HOUSING	BOOT COLOR
<b>318-191-617</b>	XPFit Plus SC Connector SM PC 250µm	Blue	White
<b>318-091-417</b>	XPFit Plus SC Connector SM APC 250µm	Green	White
<b>318-291-717</b>	XPFit Plus SC Connector MM 50/125 250µm	Black	White
<b>318-391-917</b>	XPFit Plus SC Connector MM 62.5/125 250µm	Beige	White
<b>318-491-517</b>	XPFit Plus SC Connector MM 50/125 10G OM3 250µm	Aqua	White



# SC Simplified

## Connector and Adapter



Note:  
Custom configuration  
available upon request

CONNECTOR CODE	FERRULE	BOOT TYPE	BOOT COLOR
<b>774</b>	191 SM: 125.5µm	2 1.0 mm Fiber	2 Black
	192 SM: 126µm		
	193 SM: 125µm		

ORDER CODE example: **774 - 191 - 22**

ADAPTER CODE	TYPE	SLEEVE	HOUSING COLOR
<b>229</b>	1 Simplex	1 Zirconia Straight Split	1 Blue
	2 Duplex	2 Phosphor Bronze Sleeve	
	3 8 ways		
	4 10 ways		

ORDER CODE example: **229 - 111**

STANDARD CONNECTOR SERIES

8

# SC Crimp Tool



CODE	CONNECTOR TYPE
<b>CRT</b>	401 SC, FC, ST One Piece Connectors
	501 SC Connector Kit

Note:  
Other termination tools and  
accessories are available  
upon request. Assembly  
instructions are provided  
with all connector kit



# SC Adapter Series

SENKO offers a broad range of SC adapter that incorporate a hook which performs well under high temperatures, maintaining plug retention strength.

Simplex, duplex and quad adapters are available in plastic, with or without flange, and in horizontal and vertical mount styles. All come with a choice of zirconia split sleeves (diagonal or straight split options available), or with phosphor bronze straight split sleeves. Housing are available in a variety of colors. The SC simplex plastic adapter has an optional shutter. The SC adapter series is also available in a metal housing, with square or rectangular flange types. Custom hook color and mount housings are available.

SPECIFICATION	SINGLEMODE
<b>Insertion Loss</b>	$\leq 0.20\text{dB}$ Max for Zr Sleeve $\leq 0.30\text{dB}$ Max for Pb Sleeve (Note: Measured using JDSU meter and Master Jump)
<b>Sleeve/Ferrule Withdrawal Force</b>	2.0N ~ 5.9N (200gf ~ 600gf)
<b>Meets GR-326</b>	Sections 3.4 CR3-15 3.4.1 CO3-16

Specifications shown above were obtained using SENKO recommended products and procedures.

## APPLICATIONS

- CATV
- Telecommunication networks
- Local Area Networks (LANs)
- Metro networks
- Data processing networks
- Industrial, military and medical

## FEATURES

- Compact design
- Telcordia, TIA/IEA, IEC and JIS compliance\*
- High precision alignment
- Low insertion and return loss and back reflection\*
- Choice of metal or plastic housing, mount styles & flange options

*Note:*  
 Custom configuration available upon request

## SC Adapter

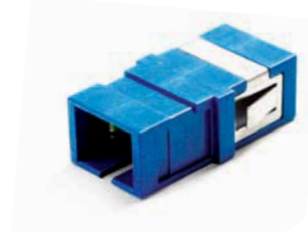
## Simplex



SC Simplex, w/Flange



SC Simplex, w/Flange



SC Simplex, w/o Flange

## APPLICATIONS

- CATV
- Telecommunication networks
- Local Area Networks (LANs)
- Metro networks
- Data processing networks
- Industrial, military and medical

## FEATURES

- Compact design
- Telcordia, TIA/IEA, IEC and JIS compliance\*
- High precision alignment
- Low insertion and return loss and back reflection\*
- Choice of metal or plastic housing, mount styles & flange options

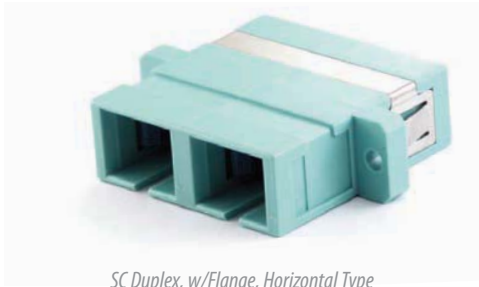
*Note:*  
 Custom configuration available upon request

CODE	TYPE	COLOR	SLEEVE TYPE	HOOK MATERIAL	SHUTTER			
222	Flange	1	Simplex	0 Blue	1 Zirconia	1 High Tg	N	No Shutter
227	No Flange	1		Green	2 Phosphor Bronze	2 PBT		
		2		Beige		3 PPS		
		3		Black				
		4		Red				
		5		Yellow				
		9		Aqua				
		T		Clear				

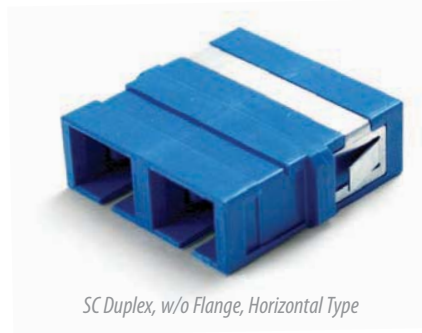
ORDER CODE example: **222 - 101 - 1N**

# SC Adapter

## Duplex



SC Duplex, w/Flange, Horizontal Type



SC Duplex, w/o Flange, Horizontal Type

### APPLICATIONS

- CATV
- Telecommunication networks
- Local Area Networks (LANs)
- Metro networks
- Data processing networks
- Industrial, military and medical

### FEATURES

- Compact design
- Telcordia, TIA/IEA, IEC and JIS compliance\*
- High precision alignment
- Low insertion and return loss and back reflection\*
- Choice of metal or plastic housing, mount styles & flange options

CODE	TYPE	COLOR	SLEEVE TYPE	HOOK MATERIAL	SHUTTER
222	Flange	2 Dup. Horizontal	0 Blue	1 Zirconia	1 High Tg
227	No Flange	3 Dup. Vertical	1 Green	2 Phosphor Bronze	2 PBT
		2 Beige		3 PPS	
		3 Black			
		4 Red			
		5 Yellow			
		9 Aqua			
		T Clear			

ORDER CODE example: **222 - 2 01 - 1N**

# SC One Piece Adapter



SC One Piece Adapter  
No Weld Type



SC One Piece Adapter  
No Weld Type

The new one piece housing design prevents breaking of the adapter due to the absence of ultrasonic weld type construction.



SC One Piece Adapter  
No Weld Type



SC Standard Adapter  
Welded Type

CODE	TYPE	COLOR	SLEEVE TYPE	HOOK MATERIAL	SHUTTER
242	Flange	1 Simplex	0 Blue	1 Zirconia	1 High Tg
247	No Flange		1 Green	2 Phosphor Bronze	2 PBT
		2 Beige			
		3 Black			
		4 Red			
		5 Yellow			
		9 Aqua			
		T Clear			

ORDER CODE example: **242 - 1 01 - 1N**

# SC Shutter

## Internal and External

SENKO offers both an external and internal shutters for adapters to shield potentially harmful light. SENKO's external shutters are made from special materials designed to attenuate a broad range of visible and invisible light, fit easily over existing adapters and provide a guard against debris such as dust and dirt. SENKO's patented internal shutter is a retractable shutter inside the adapter body and is only actuated by inserting the connector in to the body, designed specifically to prevent end face damage of the ferrule. The internal shutter is fully automatic and provides an alternative to external shutter solutions.



SC Simplex, w/Flange and Internal Shutter



SC Simplex w/o Flange and External Shutter



SC Duplex, with Internal Shutter

CODE	TYPE	COLOR	SLEEVE TYPE	HOOK MATERIAL	SHUTTER			
222	Flange	1	Simplex	0 Blue	1 Zirconia	1 High Tg	A	Internal Shutter (w/o mark)
227	No Flange	2	Dup. Horizontal	1 Green	2 Phosphor Bronze	2 PBT	B	Internal Shutter (w/mark)
		2		Beige		3 PPS		
		3		Black				
		4		Red				
		5		Yellow				
		9		Aqua				
		T		Clear				

ORDER CODE example: **222 - 201 - 1A**

CODE	DESCRIPTION
222-2-05	External shutter for SC Adapter

# SC Metal Adapter



SC Simplex Horizontal Adapter  
Rectangular Flange with Metal Housing



SC Duplex Horizontal Adapter  
Rectangular Flange with Metal Housing

CODE	HOOK COLOR	SLEEVE
226	1 High Tg	01 Zirconia Straight Split
228	2 Blue (PBT)	02 Phosphor Bronze
	3 Brown (PPS)	

ORDER CODE example: **226 - 101**

# FC Connector

Best used in single mode applications and known for exceptionally accurate positioning, the FC or Fixed Connection Connector is designed for use in unstable environments because of their threaded barrel housing which provides a secure connection. As one of the most popular connectors used today its applications include CATV, Active device termination, Telecommunication networks, Metro networks, test equipment, multimedia, industrial, and military applications. SENKO carries three different versions of the FC; FC/APC, FC/PC and FC Connector Kits.

The FC Connector Kit is also available for those who prefer to assemble the FC connector from its component parts.

SPECIFICATION		SINGLEMODE	MULTIMODE
Insertion Loss	Premium Connector	0.08dB Typical	0.15dB Typical
	Standard Connector	0.12db Typical	0.20db Typical
Return Loss		≥55dB typical for SM PC ≥65dB typical SM PC	
Durability		<0.1dB typical change, 500 matings	<0.1dB typical change, 500 matings
Operating Temperature		-40°C to +75°C	-40°C to +75°C
Ferrule Hole Sizes (Custom sizes available)		125.5µm +1/-0 (SM)    Concentricity: ≤ 1µm	127µm (MM)
		126µm +1/-0 (SM)    Concentricity: ≤ 1µm	144µm (MM)
		125µm +1/-0 (SM)    Concentricity: ≤ 1µm	230µm (MM)
		Custom Sizes	

Specifications shown above were obtained using SENKO recommended products and procedures.

## FC Premium

## 1 PC Connector



900µm Premium

2.0mm Premium

3.0mm Premium

CODE	FERRULE I.D.	BOOT	COLOR	
351	Nickel Plated Brass Body	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
		102 SM: 126µm	2 900µm Fiber Buffer	2 Black
		103 SM: 125µm	3 2.0mm Fiber	3 Green
		201 SM: 127µm	4 3.0mm Cable Short	4 Red
		202 SM: 230µm	5 2.4mm Cable Short	5 Gray
		203 SM: 144µm	6 2.0mm Cable Short	6 Yellow
			7 <b>3.0mm Premium (Telcordia)</b>	7 White
			8 <b>900µm Premium (Telcordia)</b>	8 Beige
			9 2.0mm Cable Standard	
			A <b>2.0mm Premium (Telcordia)</b>	
	B 900µm Fiber Boot			

ORDER CODE example: **351 - 201 - 28**

### APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Wide Area Networks (WANs)
- Data processing networks
- Premise installations
- Industrial and military

### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS interface specifications\*
- Low insertion loss & back reflection\*
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL 94 V-0 boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal & flange options

Note:

1. When terminated using SENKO recommended procedures.
2. Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request.



## FC-APC Premium

### 1 PC Connector



900µm Premium

2.0mm Premium

3.0mm Premium

CONNECTOR	FERRULE I.D.	FERRULE POLISH	BOOT
292 Step Ferrule	201 SM: 125.5µm	1 No Angle	1 3.0mm Cable Standard
293 Conical Ferrule	202 SM: 126µm	2 8° Pre-Angle	2 900µm Fiber Short
	203 SM: 125µm		3 2.0mm Fiber
			4 3.0mm Cable Short
			5 2.4mm Cable Short
			6 2.0mm Cable Short
			7 <b>3.0mm Premium (Telcordia)</b>
			8 <b>900µm Premium (Telcordia)</b>
			9 2.0mm Cable Standard
			A <b>2.0mm Premium (Telcordia)</b>
			B 900µm Fiber Boot

ORDER CODE example:.

**293 - 203 - 16**

### APPLICATIONS

- CATV
- Metro
- Active device termination
- Test equipment
- Telecommunication networks
- Local Area Networks (LANs)
- Wide Area Networks (WANs)
- Data processing networks
- Premise installations
- Industrial and military

### FEATURES

- Compliance with Telcordia, TIA/IEA, IEC and JIS interface specifications\*
- Low insertion loss & back reflection\*
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL 94 V-0 boots in a variety of colors
- Telcordia style boots
- Adapters with choice of metal & flange options

## FC Standard



900µm Fiber

2.0mm Cable

3.0mm Cable

CODE	FERRULE I.D.	BOOT	BOOT COLOR
341 Preassembled Key Ring	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
331 Unassembled Key Ring	201 MM: 127µm	2 900µm Fiber (Buffer) Boot	2 Black
		9 2.0mm Cable Standard	4 Red
			6 Yellow
			8 Beige

ORDER CODE example:.

**341 - 101 - 11**

Note:

1. When terminated using SENKO recommended procedures.
2. Custom configurations available upon request.

## FC Square Adapter

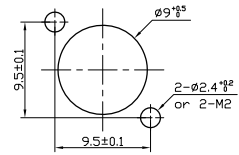


FC Square Adapter, Standard Body



FC Square Adapter, Solid Body

### MOUNTING HOLE DIMENSIONS



FC Square Adapter, Standard Body

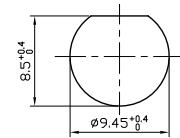
ADAPTER TYPE	SLEEVE	KEYWIDTH
<b>259</b> Standard Body - MM/SM	1 Zirconia Straight Split	<b>01</b> For PC Connector 2.15 +0.05/-0
<b>297</b> Solid Body - MM/SM	2 Phosphor Bronze	<b>02</b> For APC Connector 2.05 +/- 0.02

ORDER CODE example: **297 - 2 01**

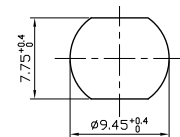
## FC Round Adapter



FC Round Adapter, D Style



FC Round Adapter D Style



FC Round Adapter DD Style

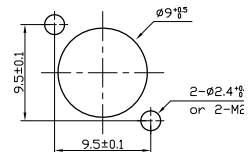
CODE	SLEEVE	KEYWIDTH	FLANGE
<b>253</b> FC Round Adapter "D" & "DD"	1 Zirconia Straight Split	<b>0</b> For PC Connector 2.15 +0.05/-0	<b>3</b> D: Ø8.85mm x 7.95mm
	2 Phosphor Bronze	<b>2</b> For APC Connector 2.05 +/- 0.02	<b>4</b> DD: Ø9.35mm x 7.65mm

ORDER CODE example: **253 - 103**

## FC Oval Adapter



FC Oval Adapter, HD Style



FC Oval Adapter, HD Style

CODE	SLEEVE	KEYWIDTH
<b>298</b> FC Oval Adapter "HD"	1 Zirconia Straight Split	<b>01</b> For PC Connector 2.15 +0.05/-0
	2 Phosphor Bronze	<b>02</b> For APC Connector 2.05 +/- 0.02

ORDER CODE example: **298 - 1 01**

# ST Connector

A straight tip or ST connector is characterized by its quick release bayonet style lock and spring loaded ferrule to hold the fiber. Most commonly used in network applications such as LANs, and Data Processing Networks, they are also found in Premise installations and Instrumentations applications. Horizontally mounted simplex and duplex adapters are available with metal or plastic housings.

SPECIFICATION		SINGLEMODE	MULTIMODE
Insertion Loss	Premium ST Connector	0.20dB	0.25dB
	Standard ST Connector	0.25dB	0.35dB
Return Loss		≥ 55dB typical for SM PC	
Durability		<0.25dB typical change,500 matings	
Operating Temperature		-40°C to +75°C	
Ferrule Hole Sizes (Custom sizes available)		125.5µm +1/-0 (SM)    Concentricity: ≤ 1µm	127µm (MM)
		126µm +1/-0 (SM)    Concentricity: ≤ 1µm	144µm (MM)
		125µm +1/-0 (SM)    Concentricity: ≤ 1µm	230µm (MM)
		Custom	Custom

Specifications shown above were obtained using SENKO recommended products and procedures.

## APPLICATIONS

- Local Area Networks (LANs)
- Data Processing Networks
- Premise Installations
- Instrumentation

## FEATURES

- Bayonet style housing for easy termination
- Epoxy and epoxy free versions
- High Precision alignment
- Low insertion and return loss and back reflection

# ST Premium

# 1 PC Connector



900 µm Premium

2.0mm Premium

3.0mm Premium

CODE	FERRULE	BOOT TYPE	BOOT COLOR
<b>215</b>	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	102 SM: 126µm	2 900µm Fiber Short	2 Black
	103 SM: 125µm	3 2.0mm Fiber	3 Green
	201 SM: 127µm	4 3.0mm Cable Short	4 Red
	202 SM: 230µm	5 2.4mm Cable Short	5 Gray
	203 SM: 144µm	6 2.0mm Cable Short	6 Yellow
		7 <b>3.0mm Premium (Telcordia)</b>	7 White
		8 <b>900µm Premium (Telcordia)</b>	8 Beige
		9 2.0mm Cable Standard	
		A <b>2.0mm Premium (Telcordia)</b>	
	B 900µm Fiber Boot		

ORDER CODE example:.

**215 - 101 - 35**

Note:

Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request.

## ST Standard

## 1 PC Connector



### APPLICATIONS

- Local Area Networks (LANs)
- Data Processing Networks
- Premise Installations
- Instrumentation

### FEATURES

- Bayonet style housing for easy termination
- Epoxy and epoxy free versions
- High Precision alignment
- Low insertion and return loss and back reflection

CODE	FERRULE	BOOT TYPE	BOOT COLOR				
233	ST Standard	101	SM: 125.5µm	1	3.0mm Cable Standard	1	Blue
		201	MM: 127µm	2	900µm Fiber Buffer	2	Black
			9	2.0mm Cable Standard	4	Red	
					6	Yellow	
				8	Beige		

ORDER CODE example: **233 - 101 - 96**

## ST Adapter



CODE	SLEEVE		
216	Simplex Metal Housing	101	Zirconia Straight Split
316	Duplex Horizontal Metal Housing	102	Phosphor Bronze
317	Duplex Horizontal Plastic Housing		

ORDER CODE example: **316 - 101**



## DIN Premium

## 1 PC Connector



SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Ferrule Hole Sizes</b> (Custom sizes available)	125.5µm +1/-0 (SM) 126µm +1/-0 (SM) 125µm +1/-0 (SM) Custom Sizes	Concentricity: ≤ 1µm Concentricity: ≤ 1µm Concentricity: ≤ 1µm Custom
		127µm (MM) 144µm (MM) 230µm (MM) Custom

CODE	FERRULE	BOOT TYPE	BOOT COLOR
213 DIN Connector PC	101 SM: 125.5µm	1 3.0mm Cable Standard	1 Blue
	102 SM: 126µm	2 900µm Fiber Short	2 Black
	103 SM: 125µm	9 2.0mm Cable Standard	3 Green
	201 MM: 127µm		4 Red
			5 Gray
			6 Yellow
			7 White
			8 Beige

ORDER CODE example:.

**213 - 103 - 21**

CODE	FERRULE I.D.	FERRULE POLISH	BOOT
203 DIN Connector APC Step Ferrule	201 SM: 125.5µm	1 No Angle	1 3.0mm Cable Standard
209 DIN Connector APC Conical Ferrule	202 SM: 126µm	2 8° Pre-Angle	2 900µm Fiber Short
	203 SM: 125µm		9 2.0mm Cable Standard

ORDER CODE example:.

**203 - 203 - 11**

## DIN Adapter



DIN Adapter

CODE	SLEEVE
214	101 Zirconia Straight Split
	102 Phosphor Bronze

ORDER CODE example:.

**214 - 101**

### APPLICATIONS

- CATV & multimedia
- Metro applications, premise installations
- Active device termination
- Test equipment
- Telecommunication networks
- Local & Wide Area Networks (LANs, WANs)
- Data processing networks
- Industrial, medical & military

### FEATURES

- Compatible with DIN 47256
- Spring-loaded free floating ferrule piece construction
- Free-floating ceramic ferrule design
- Corrosion resistant body
- Compact design
- Low insertion loss & back reflection\*

Note:

1. When terminated using SENKO recommended procedures.
2. Add 1.6 to order code to specify 1.6 mm cable option. Custom configurations available upon request

## D4 Connector



### APPLICATIONS

- Telecommunications networks
- Local Area Networks (LAN)

### FEATURES

- Corrosion resistant body (Nickel Plated Brass)
- Choice of crimp style or epoxy-free, crimp free termination
- Variety of boot types and colors

*Note:*  
Add 1.6 to order code to specify 1.6 mm cable option.  
Custom configurations available upon request

CODE	FERRULE	BOOT TYPE	BOOT COLOR
272 D4 Crimp Style	102 SM: 126µm	1 3.0mm Cable Standard	1 Blue
		2 900µm Fiber Short	2 Black
	103 SM: 125µm	9 2.0mm Cable Standard	3 Green
			4 Red
			5 Gray
			6 Yellow
			7 White
			8 Beige

ORDER CODE example: **272 - 102 - 21**

CODE	FERRULE	BOOT TYPE	BOOT COLOR
271 D4 Crimp Free Connector	102 SM: 126µm	1 3.0mm Cable Short	1 Blue
			2 Black
	103 SM: 125µm		4 Red
			7 White

ORDER CODE example: **271 - 103 - 17**

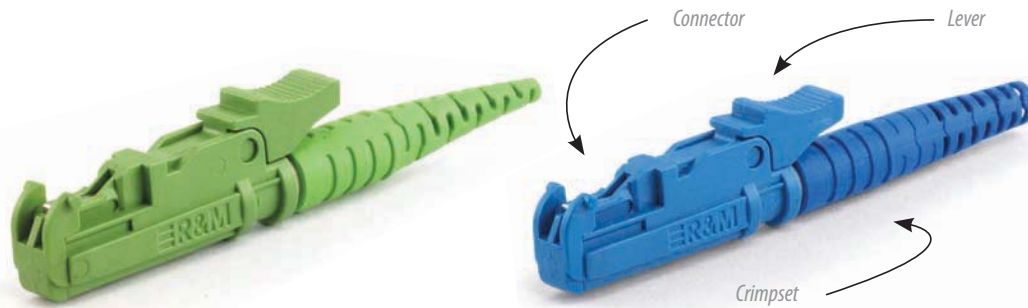
## D4 Adapter



D4 Adapter

CODE	SLEEVE
273 D4 Adapter	201 Phosphor Bronze Split

# E-2000™ Connector



E 2000 Connector

INSERTION LOSS	UNIT	TYPICAL	MAX
<b>Multimode</b>	dB	0.2	0.3
<b>Singlemode, PC</b>	dB	0.2	0.4
<b>Singlemode, APC 8°</b>	dB	0.2	0.4
RETURN LOSS	UNIT	TYPICAL	MINIMUM
<b>Singlemode, PC</b>	dB	50	45
<b>Singlemode, APC 8°</b>	dB	80*	60
MECHANICAL PROPERTIES	UNIT		
<b>Mating Cycles</b>	n/a	1000	
<b>Temperature Cycling</b>	°C	-25 to +70, 12 cycles	
MATERIALS			
<b>Housing, Protective Cap and Tension Relief</b>	PBT/UL94 V-0		

CONNECTOR CODE	DESCRIPTION
<b>R304378</b>	Simplex, PC, Multimode, Black
<b>R304379</b>	Simplex, PC, Singlemode, Blue
<b>R305290</b>	Simplex, APC, Singlemode, Green

CONNECTOR LEVER CODE	DESCRIPTION	CONNECTOR LEVER CODE	DESCRIPTION
<b>R304403</b>	White	<b>R304407</b>	Orange
<b>R307017</b>	Blue	<b>R304408</b>	Red
<b>R304405</b>	Brown	<b>R309210</b>	Black
<b>R307018</b>	Green	<b>R304832</b>	Yellow
<b>R308035</b>	Violet	<b>R308034</b>	Turquoise

CRIMPSET CODE	DESCRIPTION	CRIMPSET CODE	DESCRIPTION
<b>R304385</b>	For Pigtail, Black	<b>R306363</b>	For 2.0 ~ 2.2 Cable, Green
<b>R304386</b>	For Pigtail, Blue	<b>R306738</b>	For 2.6 ~ 2.9 Cable, Black
<b>R304387</b>	For Pigtail, Green	<b>R306736</b>	For 2.6 ~ 2.9 Cable, Blue
<b>R306359</b>	For 1.7 ~ 2.0 Cable, Black	<b>R306737</b>	For 2.6 ~ 2.9 Cable, Green
<b>R306358</b>	For 1.7 ~ 2.0 Cable, Blue	<b>R306365</b>	For 2.9 ~ 3.2 Cable, Black
<b>R306360</b>	For 1.7 ~ 2.0 Cable, Green	<b>R306364</b>	For 2.9 ~ 3.2 Cable, Blue
<b>R309215</b>	For 1.7 ~ 2.0 Cable, Red	<b>R306366</b>	For 2.9 ~ 3.2 Cable, Green
<b>R306362</b>	For 2.0 ~ 2.2 Cable, Black	<b>R309214</b>	For 2.9 ~ 3.2 Cable, Red
<b>R306361</b>	For 2.0 ~ 2.2 Cable, Blue		

## APPLICATIONS

- WANs, LANs, CATV
- Metrology, Railway, Industry

## FEATURES

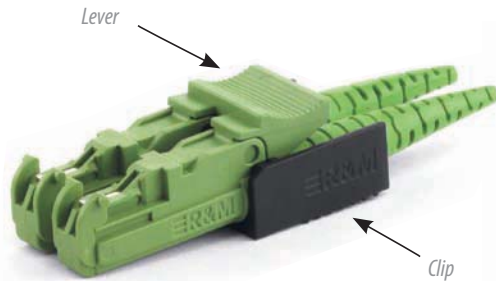
- Secure transmission of high bit-rate protocols
- Zirconia ceramic ferrule fully protected by spring loaded shutter
- Push-pull locking mechanism for easy installation
- Color coded release levers
- Compliant with European (EN 186270) and International (IEC 61754-15) standards
- Tested and approved by Swisscom

### Note:

1. Levers with mechanical coding also available
2. Each E2000 is made by the following sub components:
  - Connector
  - Lever
  - Crimpsset

## E-2000™

### Compact (Duplex) Accessories



E-2000™ Compact APC Connector



E-2000™ Compact MM Connector

COMPACT (RJ) CONNECTOR LEVER AND HOUSING CLIP CODE	DESCRIPTION	COMPACT (RJ) CONNECTOR LEVER AND HOUSING CLIP CODE	DESCRIPTION
R305513	Blue	R305517	Black
R305514	Green	R305518	White
R305515	Orange	R305542	Compact (RJ) Clip for Connector Housing
R309004	Turquoise		

#### APPLICATIONS

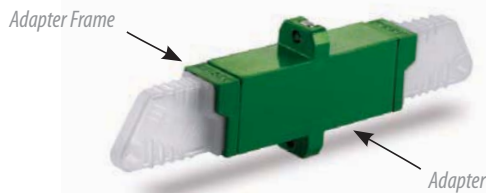
- WANs, LANs, CATV
- Metrology, Railway, Industry

#### FEATURES

- Secure transmission of high bit-rate protocols
- Zirconia ceramic ferrule fully protected by spring loaded shutter
- Push-pull locking mechanism for easy installation
- Color coded release levers
- Compliant with European (EN 186270) and International (IEC 61754-15) standards
- Tested and approved by Swisscom

## E-2000™

### Adapters and Adapter Frames



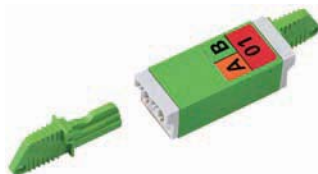
E-2000™ APC Simplex Adapter

SIMPLEX ADAPTER CODE	DESCRIPTION	SIMPLEX ADAPTER FRAME CODE	DESCRIPTION
R508019	Black	R304410	Blue
R504511	Blue	R304411	Brown
R504512	Green	R304412	Green
R517677	Quick mounting clip	R304413	Red
R504981	Black without frames	R304414	Black
R504831	Blue without frames	R304415	Orange
R505612	Green without frames	R304416	White
		R304833	Yellow
		R308036	Violet
		R308037	Turquoise

Note:  
Levers with mechanical coding also available



E-2000™ Simplex Adapter Frames



E-2000™ APC Compact Adapter



E-2000™ Snap in Frame

COMPACT (RJ) ADAPTER FRAME CODE	DESCRIPTION	COMPACT (RJ) ADAPTER WITH SNAP IN FRAME CODE	DESCRIPTION
R305519	Blue	R313001	Adapter and Snap In Frame-PhBr black/black
R305520	Green	R313002	Adapter and Snap In Frame-PhBr black/orange
R305524	Black	R313010	Adapter and Snap In Frame-PhBr black/turquoise
R305521	Orange	R313011	Adapter and Snap In Frame-Ceramics blue/blue
R305525	White	R313009	Adapter and Snap In Frame-Ceramics green/white
R308986	Turquoise		



## SMA Connector



CONNECTOR	FERRULE I.D.	BOOT	COLOR
211 SMA with Hex Nut	201 MM: 127µm	1 3.0mm Cable Standard	1 Blue
	202 MM: 230µm		2 Black
	203 MM: 144µm		3 Green
	204 MM: 245µm		4 Red
	205 MM: 250µm		5 Gray
	206 MM: 360µm		6 Yellow
	207 MM: 460µm		7 White
	208 MM: 240µm		8 Beige
			X Custom

ORDER CODE example:..

211 - 201 - 11

### APPLICATIONS

- Medical
- Surgical
- Aesthetic lasers
- Spectrometers
- Industrial
- Military
- Lasers

### FEATURES

- Threaded nut connector
- One piece construction
- TIA and IEC compliant
- Simple termination
- Single crimp design
- Non-contact connector
- Hex coupling nut

*Note:*  
 When terminated using  
 SENKO recommended  
 procedures.

## SMA Adapter



SMA Adapter

CODE	ADAPTER TYPE
212	101 SMA Adapter

# Connector

# Boots

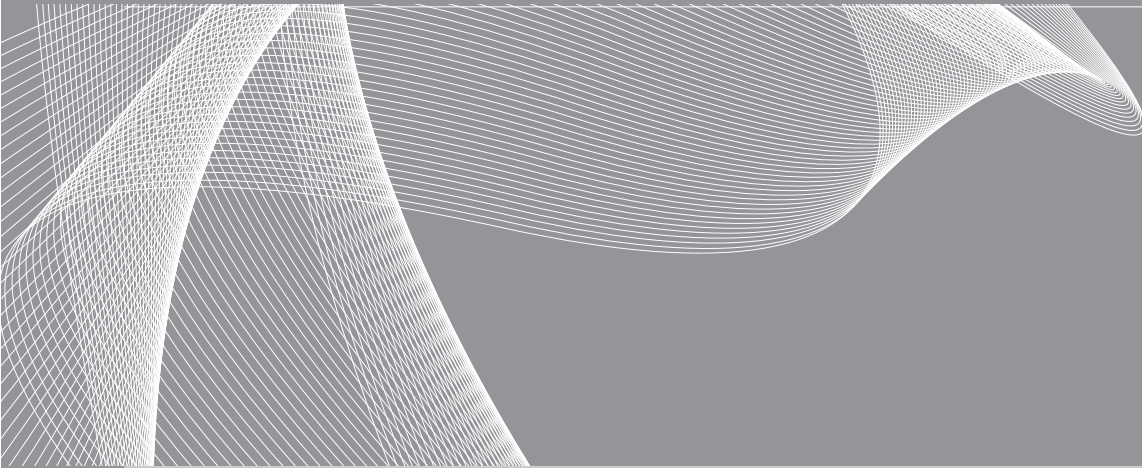
## FEATURES

- Compatible with Pre-Assembled Connector Series SC, FC, SC/APC, FC/APC, DIN, D4

*Note:*  
 These boots will only fit the SC, FC, ST, DIN, D4 Premium and Standard connectors

CRIMP RING TYPE	CRIMP RING	BOOT	BOOT TYPE	ORDER CODE	BOOT COLOR (X)	
HW-20001 3.0 mm			3.0 mm Cable Standard	HW-20008-0X	1	Blue
HW-20026 2.0 mm			2.0 mm Cable Standard	HW-20053-0X	2	Black
N/A	N/A		900µm Fiber Short	HW-20013-0X	3	Green
N/A	N/A		2.0 mm Fiber	HW-20022-0X	4	Red
HW-2001 3.0 mm			3.0 mm Cable Short Boot	HW-20024-30X	5	Gray
HW-20025 2.4 mm			2.4 mm Cable Short Boot	HW-20024-24X	6	Yellow
HHW-20026 2.0 mm			2.0 mm Cable Short Boot	HW-20024-20X	7	White
HW-20001 3.0 mm			3.0mm Premium (Telcordia) for SC Connector	HW-20036-0X	8	Beige
HW-20001 3.0 mm			3.0mm Premium (Telcordia) for FC and ST Connector	HW-20037-0X		
N/A	N/A		900µm Premium (Telcordia)	HW-20038-0X		
HW-20026 2.0 mm			2.0mm Premium (Telcordia) for SC Connector	HW-20057-0X		
HW-20026 2.0 mm			2.0mm Premium (Telcordia) for FC and ST Connector	HW-20058-0X		
HW-20061 1.6 mm		N/A	1.6 mm Crimp Sleeve	HW-20061		

STANDARD CONNECTOR SERIES	pg. 04
SMALL FORM FACTORS	pg. 24
SPECIALTY PRODUCTS	pg. 38
CONNECTOR & ADAPTER SUBCOMPONENTS	pg. 44
POLISHING SYSTEMS	pg. 50



## SMALL FORM FACTORS

LC -UPC Unibody	MT-RJ Connector
LC-APC Unibody	MT-RJ Adapter
LC Connector	MT-RJ Ferrule
LC Uniboot	MT-RJ Crimp Tool
LC XP Fit Plus Connector	
LC Adapter Series	
MU Connector	
MU Connector Kit	
MU Clip	
MU Crimp Tool	
MU Adapter	
MPO Connector	
MPO/MT Ferrule	
MPO Adapter	
MPO Crimp Tool	

# LC-UPC Unibody

## Connector

SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.08dB typical UPC 0.10dB typical APC 0.04dB typical Super Low Loss	0.15dB typical
<b>Return Loss</b>	≥55dB typical UPC ≥65dB typical APC	
<b>Durability</b>	< 0.2dB typical change, 500 matings	
<b>Operating Temperature</b>	-40 to +75°C	
<b>Ferrule Hole Sizes</b>	125.5µm +1/-0 Concentricity: ≤ 1µm 126µm +1/-0 Concentricity: ≤ 1µm 125µm +1/-0 Concentricity: ≤ 1µm	127µm

Specifications shown above were obtained using SENKO recommended products and procedures.



BTW Boot



2.0mm Round



2.0mm Round Duplex

CODE	TYPE	FERRULE I.D.	HOUSING	BOOT	COLOR	
93	LC Unibody	1 Simplex	151 SM 125.5µm	1 SM Blue	1 BTW Boot	1 White
		2 Duplex	152 SM 126µm	2 MM Beige	4 2.0mm Round	2 Blue
		153 SM 125µm		5 2.0mm Boot, SHORT type (L=14mm)	3 Black	
		251 MM 127µm		6 3.0mm Boot	4 Yellow	
		159 SM 125µm Super Low Loss ferrule 35°			5 Red	

ORDER CODE example:.

931 - 153 - 141

### APPLICATIONS

- Telecom / Datacom
- Local Area Networks (LANs)
- CATV
- FTTX
- Premise Installation
- Gigabit applications (Ethernet, ATM, SONET, etc.)

### FEATURES

- Compact, pull-proof design with RJ-45 style interface
- Fully compatible with standard LC products
- Optional anti-sag simplex collar and duplex clip can be used on same connector body, eliminating need to purchase different housing styles
- Boot, housing, strength member, and simplex collar / duplex clip made from V-0 UL-rated material

*Note:*  
 As part of the Quality LC Certification Program, established by OFS, the singlemode and multimode LC Unibody Jumper connectors have been independently tested and successfully met pre-screening requirements as well as optical, environmental, mechanical, and end of test criteria for insertion loss, return loss, and ferrule geometry and damage. With this achievement, SENKO became the first member of the LC Connector Alliance authorized by OFS to use the LC Quality Mark.

# LC-APC Unibody

## Connector



BTW Boot



2.0mm Boot Short



3.0mm boot

CODE	TYPE	FERRULE I.D.	HOUSING	BOOT	COLOR	
93	LC Unibody	1 Simplex	151 SM 125.5µm	3 APC Green	1 BTW Boot	6 Green
		2 Duplex	152 SM 126µm		4 2.0mm Round	
		153 SM 125µm		5 2.0mm Boot, SHORT type (L=14mm)		
		159 SM 125µm Super Low Loss ferrule 35°		6 3.0mm Boot		

ORDER CODE example:.

931 - 153 - 366

## LC Connector

The SENKO LC family of singlemode and multimode connectors, adapters and associated components are manufactured under a worldwide license from OFS. The LC is a small form factor (SFF) connector and is ideal for high density applications. A Behind the Wall (BTW) version is available with short connector and boot for ultra-compact requirements.

The LC connector has a zirconia ceramic ferrule measuring 1.25mm O.D. and provides optimum insertion and return loss.\* The LC connector is used on small diameter mini-cordage (1.6/1.8/2.0mm) as well as 3.0mm cable. LC Connectors are available in pre-assembled or kit (unassembled) formats. The LC connector family is Telcordia, ANSI/EIA/TIA and IEC compliant.

SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.10dB typical	0.20dB typical
<b>Return Loss</b>	≥ 55dB typical for singlemode PC	
<b>Durability</b>	< 0.2dB typical change, 500 matings	
<b>Operating Temperature</b>	-40 to +75°C	
<b>Ferrule Hole Sizes</b>	125.5µm +1/-0 Concentricity: ≤ 1µm 126µm +1/-0 Concentricity: ≤ 1µm 125µm +1/-0 Concentricity: ≤ 1µm	127µm

Specifications shown above were obtained using SENKO recommended products and procedures.

### APPLICATIONS

- Gigabit ethernet
- Video
- Active device termination
- Premise installations
- Telecommunications networks
- Multimedia
- Industrial
- Military

### FEATURES

- Compact, pull-proof design
- RJ-45 style interface
- Low insertion loss and low back reflection\*
- Polarized and color coded (TIA 568-A & ISO 11801)
- UL-rated plastic housing and boot
- Behind the Wall (BTW) style short connector & boot available
- High precision alignment

## LC Connector



Note:

When terminated using SENKO recommended procedures.

CODE	TYPE	FERRULE I.D.	HOUSING	BOOT	COLOR	
91	Pre-Assembled, 1pc	1 Simplex	151 SM 125.5µm 35 degree chamfer	1 SM Blue	1 1.0mm BTW Boot	1 White
92	Unassembled Kit	2 Duplex	152 SM 126µm 35 degree chamfer	2 MM Beige	2 2.0mm Jumper Boot	2 Blue
			153 SM 125µm 35 degree chamfer	6	3 3.0mm Boot	3 Black
			251 MM 127µm 35 degree chamfer			4 Yellow
			159 SM 125µm Low Loss ferrule 35°			5 Red

ORDER CODE example: **911 - 153 - 121**

Note:

1. When terminated using SENKO recommended procedures.

2. Specification for the Low Loss ferrule:

- IL 0.03dB typical (mated with master connector)
- IL 0.05dB typical (mated with random connector)



# LC Uniboot

## Connector

### APPLICATIONS

- Datacenters
- Gigabit ethernet
- Video
- Active device termination
- Premise installations
- Telecommunications networks
- Multimedia
- Industrial
- Military

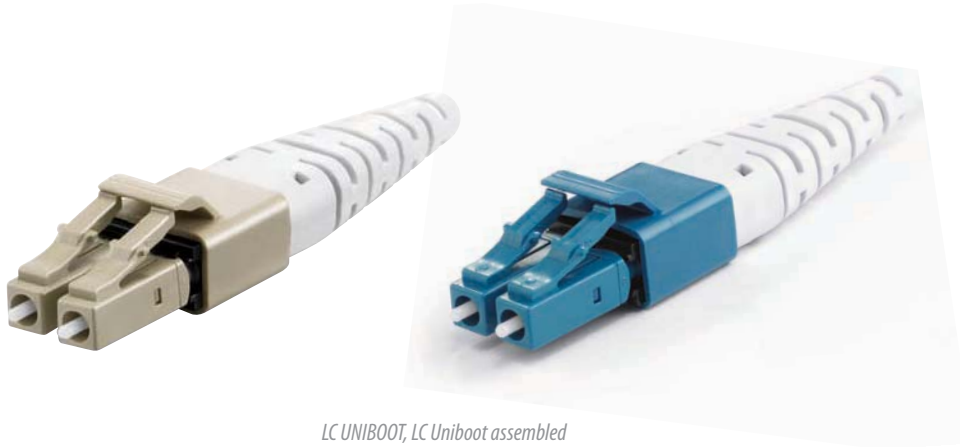
### FEATURES

- Compact, pull-proof design
- RJ-45 style interface
- Low insertion loss and low back reflection\*
- Polarized and color coded (TIA 568-A & ISO 11801)
- UL-rated plastic housing and boot
- High precision alignment

The SENKO LC Uniboot is unique design that allows a single round duplex fiber 3mm cable to be used for duplex connector. This compact, easy to terminate connector kit has a simple round crimp design and incorporates standard SENKO 900 $\mu$ m LC connectors, so you will experience the normal optical performance of our proven LC design.

SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.10dB typical	0.20dB typical
<b>Return Loss</b>	$\geq 55$ dB typical for singlemode PC	
<b>Durability</b>	$< 0.2$ dB typical change, 500 matings	
<b>Operating Temperature</b>	-40 to +75°C	
<b>Ferrule Hole Sizes</b>	125.5 $\mu$ m +1/-0 Concentricity: $\leq 1\mu$ m 126 $\mu$ m +1/-0 Concentricity: $\leq 1\mu$ m 125 $\mu$ m +1/-0 Concentricity: $\leq 1\mu$ m	127 $\mu$ m

Specifications shown above were obtained using SENKO recommended products and procedures.



LC UNIBOOT, LC Uniboot assembled

*Note:*  
When terminated using  
SENKO recommended  
procedures.

CODE	TYPE
<b>942-251-221</b>	LC Uniboot Conn MM (ID127 $\mu$ m 35d) White Boot
<b>942-151-121</b>	LC Uniboot Conn SM (ID125.5 $\mu$ m 35d) White Boot



LC UNIBOOT



LC Standard

# XP Fit Plus

## LC Field Installable Connector

The XP Fit Plus is a pre-polished, pre-assembled connector compatible with the standard LC connector. In place of epoxy, an internal mechanical grip gently but effectively holds the fiber in place and can be installed in under two minutes. Without polishing or adhesives, the XP Fit Plus makes field installations quick and easy, eliminating the need for epoxy curing and hand polishing at the work site. The XP Fit Plus comes with an assembling jig and fiber holder, making for an accurate alignment and fiber cleave when terminating the connector.

SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.2dB typical (PC) and 0.3dB typical (APC)	0.1dB typical
<b>Return Loss</b>	55dB typical (PC) 60dB typical (APC)	35dB typical
<b>Durability</b>	<0.1dB typical change, 500 matings*	<0.1dB typical change, 500 matings*
<b>Operating Temperature</b>	-40°C to +75°C-	-40°C to +75°C
<b>Tensile</b>	TIA/EIA 568-B.3	
<b>Intermateability</b>	IEC 61754-4	

\* Specifications shown above were obtained using SENKO recommended products and procedures.

### APPLICATIONS

- Data Centers
- LAN
- Telecommunications
- Network Monitoring
- FTTH

### FEATURES

- Mechanical Splice (index matching gel)
- Highly Stable & Reliable
- Perfect Performance
- Compact Package
- RoHS Compliant
- Finished Connector meets UL94-V0 Flammability Rated

Note:

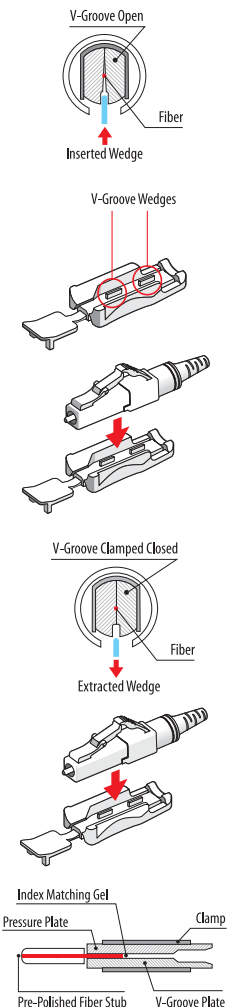
The connector performance specifications include an internal mechanical splice.

# XP Fit Plus

## LC Connector



PART NUMBER	DESCRIPTION	HOUSING	BOOT COLOR
951-191-111	XPFit Plus LC Connector SM PC 900µm	Blue	White
951-091-311	XPFit Plus LC Connector SM APC 900µm	Green	White
951-291-811	XPFit Plus LC Connector MM 50/125 900µm	Black	White
951-391-211	XPFit Plus LC Connector MM 62.5/125 900µm	Beige	White
951-491-911	XPFit Plus LC Connector MM 50/125 10G OM3 900µm	Aqua	White



# LC Adapter

## Standard



LC Adapter Simplex



LC Adapter Simplex



LC Adapter Duplex



LC Adapter Duplex

### FEATURES

- Compact design
- Telcordia, ANSI, TIA/EIA, and ISO compliance\*
- Color coding
- High precision alignment

Note:  
 When following procedures recommended by SENKO Advanced Components, Inc.

CODE	TYPE	COLOR	SLEEVE TYPE
999	1 Simplex	1 Blue	1 Zirconia Straight Split
	2 Duplex	2 Black	2 Phosphor Bronze (SM,MM)
		3 APC Green	
		8 Beige	
		9 Aqua	

ORDER CODE example: **999 - 191**

# LC Adapter

## SC Footprint SNR/JUN



LC Quad Adapter, with SC Footprint, with Flange, Junior-Senior



LC Quad Adapter, with SC Footprint, without Flange, Junior-Senior



LC Duplex Adapter, with SC Footprint, with Flange, Junior-Senior



LC Duplex Adapter, with SC Footprint, without Flange, Junior-Senior

CODE	TYPE	COLOR	SLEEVE TYPE
999	3 Duplex with Flange	1 Blue	1 Zirconia Straight Split
	4 Duplex with No Flange	2 Black	2 Phosphor Bronze (SM,MM)
	5 Quad with Flange	3 APC Green	
	6 Quad with No Flange	8 Beige	
		9 Aqua	

ORDER CODE example: **999 - 611**

# LC Adapter

## Symmetrical with SC Footprint - SNR/SNR



LC Quad Adapter, with SC Footprint, with Flange, Senior-Senior



LC Quad Adapter, with SC Footprint, without Flange, Senior-Senior



LC Duplex Adapter, with SC Footprint, with Flange, Senior-Senior



LC Duplex Adapter, with SC Footprint, No flange, Senior-Senior, Singlemode

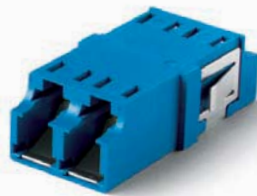
CODE	TYPE	COLOR	SLEEVE TYPE
999	3S Duplex with Flange	1 Blue	1 Zirconia Straight Split
	4S Duplex with No Flange	2 Black	2 Phosphor Bronze (SM,MM)
	5S Quad with Flange	3 APC Green	
	6S Quad with No Flange	8 Beige	
		9 Aqua	

ORDER CODE example: **999 - 5S31**

## LC One Piece Adapter

SNR/SNR

SENKO offers both an external and internal shutters for adapters to shield potentially harmful light. SENKO's external shutters are made from special materials designed to attenuate a broad range of visible and invisible light, fit easily over existing adapters and provide a guard against debris such as dust and dirt. SENKO's patented internal shutter is a retractable shutter inside the adapter body and is only actuated by inserting the connector in to the body, designed specifically to prevent end face damage of the ferrule. The internal shutter is fully automatic and provides an alternative to external shutter solutions.



LC One Piece Adapter Duplex, with SC Footprint, without flange, Senior-Senior



LC One Piece Adapter Duplex with Inner Shutter, with SC Footprint, without flange, Senior-Senior

CODE	TYPE	COLOR	SLEEVE TYPE	SHUTTER
988	3S Duplex with Flange	1 Blue	1 Zirconia	N No Shutter
	4S Duplex with No Flange	2 Black	2 Phosphor Bronze	A Internal Shutter (w/o mark)
		3 Green	3 Zir Dia.	
		8 Beige		
		9 Aqua		

ORDER CODE example: **988 - 411 - N**

### FEATURES

- Compact design
- Telcordia, ANSI, TIA/EIA, and ISO compliance\*
- Color coding
- High precision alignment



LC One Piece Adapter No Weld Type



LC One Piece Adapter Welded Type

The new one piece housing design prevents breaking of the adapter due to the absence of ultrasonic weld type construction.

## LC One Piece Adapter

SNR/JNR



LC One Piece Adapter Duplex with SC Footprint, with Flange, Junior-Senior



LC One Piece Adapter Duplex with SC Footprint, without Flange, Junior-Senior

CODE	TYPE	COLOR	SLEEVE TYPE	SHUTTER
988	3 Duplex with Flange	1 Blue	1 Zirconia	N No Shutter
	4 Duplex with No Flange	2 Black	2 Phosphor Bronze	A Internal Shutter (w/o mark)
		3 Green	3 Zir Dia.	
		8 Beige		
		9 Aqua		

ORDER CODE example: **988 - 411 - N**

# MU Connector

The SENKO family of singlemode and multimode MU connectors and adapters are fully inter-mateable with NTT-MU style products, and are NTT and JIS compliant.\* This small form factor connector is approximately half the size of the SC connector, and has a push-pull style design. The connector features a pre-assembled body and precision molded plastic housing, and a free-floating ferrule measuring 1.25mm O.D. held in place with a precision spring.

Housing and boot are made from UL-rated material. The MU-J style connector is the same as the regular MU connector, but without the outer housing and with a very narrow, short boot for 900 micron fiber, ideal for back panel solutions and high-density situations. SENKO MU Connectors are available in pre-assembled or kit (unassembled) formats.

SPECIFICATION	SINGLEMODE	MULTIMODE
<b>Insertion Loss</b>	0.10dB typical	0.15dB typical
<b>Return Loss</b>	≥ 55dB typical for singlemode PC	
<b>Durability</b>	< 0.1dB typical change, 500 matings	< 0.2dB typical change, 500 matings
<b>Operating Temperature</b>	-40 to +75°C	-40°C to +75°C
<b>Ferrule Hole Sizes</b>	126µm +1/-0 Concentricity: ≤ 1µm 125µm +1/-0 Concentricity: ≤ 1µm 125.5µm +1/-0 Concentricity: ≤ 1µm	127µm

Specifications shown above were obtained using SENKO recommended products and procedures.

## APPLICATIONS

- CATV
- Video
- Active device termination
- Premise installations
- Telecommunications networks
- Local Area Networks (LANs)
- Data processing networks
- Wide Area Networks (WANs)
- Industrial, medical & military

## FEATURES

- NTT-MU hardware compatibility
- NTT & JIS compliance\*
- Compact, pull-proof design
- High precision alignment
- One piece construction
- Tunable zirconia connector ferrule
- Corrosion resistant body
- UL-rated plastic housing and boot
- Universal Duplex Clip
- Low insertion loss & back reflection\*

# MU One Piece Connector



Note:

1. When terminated using SENKO recommended procedures.
2. Custom configurations available upon request.

CONNECTOR	FERRULE	HOUSING	BOOT TYPE	BOOT COLOR
<b>510</b> MU Connector	111 SM: 125.5µm	1 Blue	1 2.0mm cable	1 Blue
	112 SM: 126µm	2 Black	2 1.0mm Fiber	2 Black
	113 SM: 125µm	3 Red	4 1.6mm Cable	3 Green
	211 MM: 127µm	4 Beige	5 1.0 Fiber Short	4 Red
		5 Brown		5 Gray
		6 Yellow		6 Yellow
		0 MU-J*		7 White
				8 Beige
				9 Lavender

ORDER CODE example: **510 - 111 - 519**



## MU Connector Kit



MU Kit with 2.0mm Cable boot

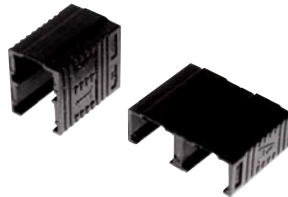


MU Kit with 1.0mm Fiber Short Body

CODE	FERRULE	HOUSING	BOOT TYPE	BOOT COLOR
<b>511</b> MU kit	<b>101</b> SM: 125.5µm	<b>5</b> Brown	<b>1</b> 2.0mm Cable	<b>9</b> Lavender
	<b>102</b> SM: 126µm	<b>0</b> MU-J	<b>2</b> 1.0mm Fiber Long Body	
	<b>103</b> SM: 125µm		<b>3</b> 1.0mm Fiber Short Body	
	<b>201</b> MM: 127µm			

ORDER CODE example: **511 - 103 - 519**

## Universal MU Duplex Clip

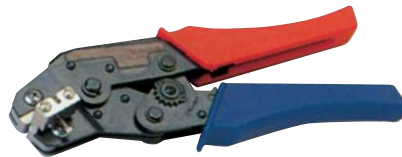


CODE	CLIP TYPE	COLOR
<b>512</b>	<b>1</b> Vertical	<b>12</b> Black
	<b>2</b> Horizontal	<b>15</b> Brown

ORDER CODE example: **512 - 116**

## MU Connector

## Crimp Tool



CRIMP TOOL CODE	TYPE
<b>CRT</b>	<b>301</b> MU Connector
	<b>701</b> LC/MU Dual Crimp Tool

ORDER CODE example: **CRT - 301**

### APPLICATIONS

- CATV
- Video
- Active device termination
- Premise installations
- Telecommunications networks
- Local Area Networks (LANs)
- Data processing networks
- Wide Area Networks (WANs)
- Industrial, medical & military

### FEATURES

- NTT-MU hardware compatibility
- NTT & JIS compliance\*
- Compact, pull-proof design
- High precision alignment
- One piece construction
- Tunable zirconia connector ferrule
- Corrosion resistant body
- UL-rated plastic housing and boot
- Universal Duplex Clip
- Low insertion loss & back reflection\*

Note:

Custom configurations available upon request.

# MU Adapter



Simplex

Duplex

8-Port

## APPLICATIONS

- Fiber optic subscriber network transmission/switching equipment
- CATV
- Active device termination
- Telecommunication networks
- Metro networks
- Local Area Networks (LANS)
- Data processing networks
- Premise installations
- Industrial, military and medical

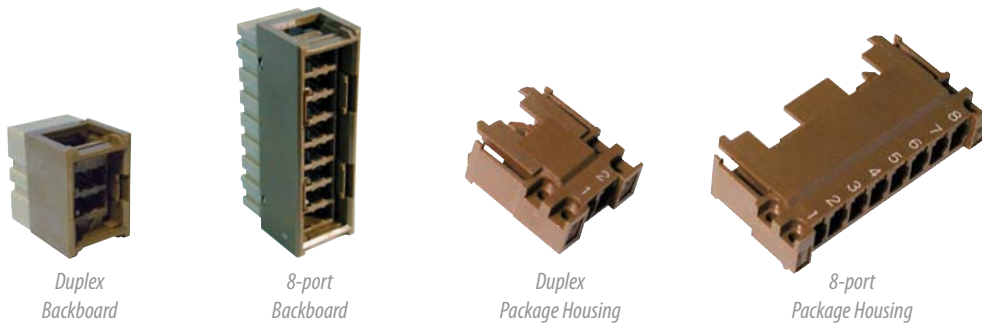
## FEATURES

- Compact design
- NTT-MU hardware compatibility
- NTT & JIS compliance
- High precision alignment
- Low insertion and return loss and back reflection\*

CODE	TYPE	SLEEVE
<b>MUA</b>	1 Simplex	<b>ZA</b> Zirconia
	2 Duplex	
	3 8-Port	

ORDER CODE example: **MUA - 1PB**

# MU Backboard and Package Housing



Duplex Backboard

8-port Backboard

Duplex Package Housing

8-port Package Housing

CODE	TYPE	HOUSING TYPE
<b>MUB</b>	2 Duplex	<b>1</b> Backboard 2.4mm Thickness <b>2</b> Backboard 3.2mm Thickness <b>3</b> Package Housing
	8 8-Port	

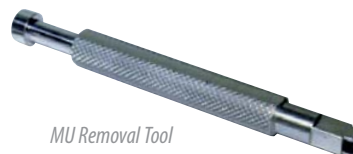
ORDER CODE example: **MUB - 2 - 1**

CODE	TYPE
<b>MU-SH</b>	MU Sleeve Holder



MU Sleeve Holder

CODE	TYPE
<b>MU-JRT</b>	MU Removal Tool



MU Removal Tool

## MPO Connector

The MPO connector offers up to 24 times the density of standard connectors, providing significant space and cost savings.

MPO connectors utilize precision molded MT ferrules, with metal guide pins and precise housing dimensions to ensure fiber alignment when mating. The MPO can be mass terminated in combinations of 4, 8, or 12 fiber ribbon cables. The MPO Adapter comes standard in black.

SPECIFICATION	SINGLEMODE	SINGLEMODE SUPER LOW LOSS	MULTIMODE
<b>Insertion Loss</b>	0.25dB Typical (all fibers) 0.75dB Maximum (single fiber) *	0.1dB Typical (all fibers) 0.35dB Maximum (single fiber) *	0.20dB Typical (all fibers) 0.50dB Maximum (single fiber) *
<b>Return Loss</b>	≥ 55dB (8°Angle Polish)	≥ 55dB (8°Angle Polish)	>25dB
<b>Durability</b>	<0.30dB change 500 matings (per EIA-455-21A)	<0.30dB change 500 matings (per EIA-455-21A)	<0.20dB change 1000 matings (per EIA-455-21A)
<b>Operating Temperature</b>	-40°C ~ +80°C		

\* As tested per ANSI/EIA 455-171 Method D3.

\* As tested per ANSI/EIA 455-171 Method D1.

### APPLICATIONS

- Asynchronous Transmission Mode (ATM)
- Gigabit Ethernet
- CATV, Video and Multimedia
- Active Device/ Transceiver Interface
- Premise Installations
- Telecommunication Networks
- Industrial & Military
- Parallel optical interconnect between PC Cards and patch panels
- Interconnection for O/E modules
- Optical Switch interframe connections

### FEATURES

- Precision molded MT ferrule
- High precision guide pins for exact alignment
- Compact design, up to 12 fiber ribbons
- IEC 61754-7 Compliant\*
- Telcordia GR-1435-CORE compliant\*
- Polishing does not require diamond film

## MPO Connector



MPO Male Connector  
Multimode



MPO Female Connector Singlemode  
Single Mode Low Loss



MPO with Ribbon Fiber Boot  
Singlemode

CODE		HOOK COLOR		BOOT	
701	Male	1	Green (SM)	1	Ribbon Fiber
702	Female	3	Beige (MM 62.5/125)	2	Ruggedized Cable
		4	Yellow (SM Low Loss)	4	Round Cable
		5	Aqua (OM3 50/125)		

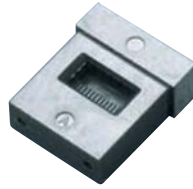
ORDER CODE example:.

702 - 12

Note:

1. \*When terminated using SENKO recommended procedures.
2. Custom configurations available upon request.

# MPO/MT



Note:

1. Low loss and Super Low Loss ferrules are available only for 8 and 12 fiber.
2. 24 Fiber is Thermoset material.
3. Custom configurations available upon request.

CODE	FERRULE TYPE	FERRULE HOLES	MATERIAL
MT	2 SM Standard for Angle Polish	1 4-Fiber	P Thermoplastic (PPS)
	3 SM Low Loss for Angle Polish	2 8-Fiber	
	4 MM Flat Polish	3 12-Fiber	
	5 SM Super Low Loss for Angle Polish	5 24-Fiber	

ORDER CODE example: **MT - 2 - 3 - P**

# MPO

## Adapters



MPO Adapter with Flange



MPO Adapter No Flange

Note:

- Custom configurations available upon request.

ADAPTER CODE	TYPE
777 Standard	1 Black
778 No Flange	

ORDER CODE example: **777 - 1**

# MPO

## Crimp Tool



Note:

1. Other termination tools and accessories are available upon request.
2. Assembly instructions are provided with all connector kits.

CRIMP TOOL CODE	TYPE
CRT	601 MPO Connector
	602 MPO Round

## MT-RJ Connector

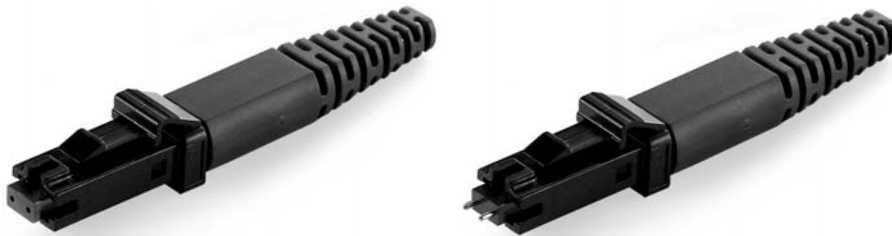
The singlemode or multimode MT-RJ products available from SENKO are used in two fiber applications and are well suited for high density applications. The MT-RJ connectors utilize precision molded MT ferrules pioneered by NTT, together with precision metal guide pins and precise housing dimensions to ensure fiber alignment when mating.

The MT-RJ is reliable and simple to terminate. The MT-RJ Adapter comes standard in black, with additional colors available upon request. An optional MT-RJ Adapter with SC style housing is also available for applications where SC footprint is required.

SPECIFICATION	SM	MM
<b>Insertion Loss</b>	< 0.2dB typical	< 0.25dB typical
<b>Return Loss</b>	≥ 45dB typical	
<b>Durability</b>	< 0.1dB typical change, 500 matings	
<b>Operating Temperature</b>	-40 to +75°C	

Specifications shown above were obtained using SENKO recommended products and procedures.

## MT-RJ Connector



CODE	HOUSING COLOR	BOOT	BOOT COLOR
<b>801</b> MT-RJ Female	<b>1</b> Black	<b>1</b> 3.0mm Cable Round	<b>1</b> Black
<b>802</b> MT-RJ Male		<b>4</b> 1.8mm Duplex Zip Cable Boot	
		<b>5</b> 2.0mm Duplex Zip Cable boot	

ORDER CODE example: **801 - 141**

### APPLICATIONS

- Asynchronous Transmission Mode (ATM)
- Gigabit Ethernet
- CATV, Video and Multimedia
- Active Device/ Transceiver Interface
- Premise Installations
- Telecommunication Networks
- Industrial
- Military
- Parallel optical interconnect between PC Cards and patch panels
- Interconnection for O/E modules
- Optical Switch interframe connections

### FEATURES

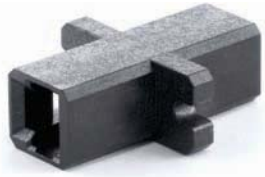
- Precision molded MT ferrule
- High precision guide pins for exact alignment
- Duplex ferrule
- Plug-jack (RJ-45) design
- TIA/EIA 568-A compliant\*
- Polishing does not require diamond film

Note:

1. When terminated using SENKO recommended procedures.
2. Custom configurations available upon request.



## MT-RJ Adapter



MT-RJ Standard Adapter



MT-RJ Adapter with SC Footprint

ADAPTER CODE	COLOR
888 Standard	1 Black
890 SC Footprint with Flange	1 Black
891 SC Footprint with No Flange	2 Beige
	3 Blue

ORDER CODE example: **891 - 1**

Note:  
Custom configurations  
available upon request.

## MT-RJ Ferrule and Guide Pin



MT-RJ ferrule

PIN CODE	TYPE	MATERIAL
MTRJ	S Singlemode 126µm	P Thermoplastic (PPS)
MTRJ	M Multimode 126.5µm	

Note:  
Custom configurations  
available upon request.

PIN CODE	TYPE	TOLERANCE	MATERIAL
GP	2 MT-RJ	1 Multimode	1 Stainless Steel
		2 Singlemode	

ORDER CODE example: **GP - 23 - 2**

Note:  
1. Other termination tools  
and accessories are  
available upon request.  
2. Assembly instructions  
are provided with all  
connector kits.

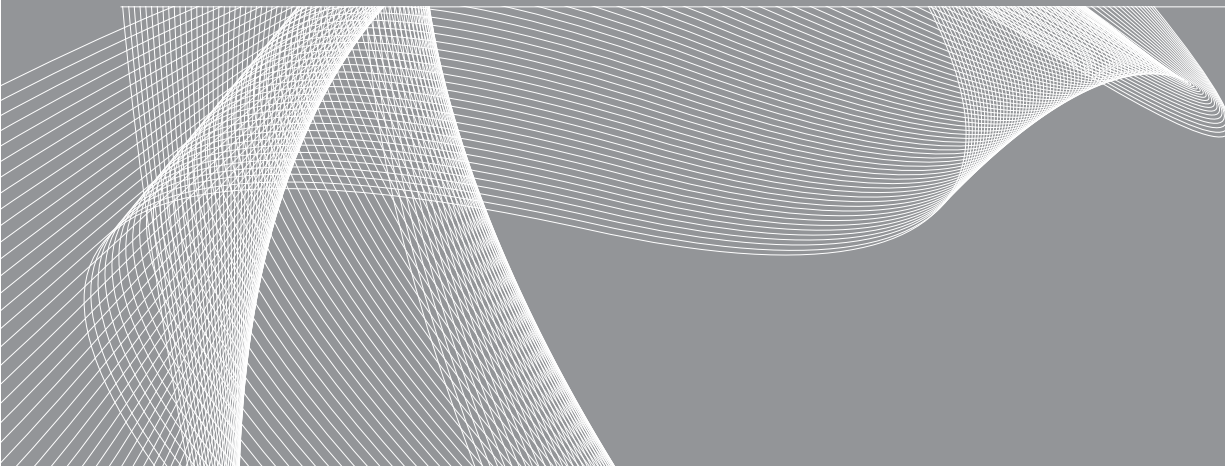
## MT-RJ Crimp Tool



103 MT-RJ Connector, 3.0 mm and Zip Cables

CRIMP TOOL CODE	TYPE
CRT	103 MT-RJ Connector 3.0mm round and Zip cable

STANDARD CONNECTOR SERIES	pg. 04
SMALL FORM FACTORS	pg. 24
SPECIALTY PRODUCTS	pg. 38
CONNECTOR & ADAPTER SUBCOMPONENTS	pg. 44
POLISHING SYSTEMS	pg. 50



# SPECIALTY PRODUCTS

- Attenuators
- Terminators
- Hybrid Adapters
- Switchable Adapter

# Attenuators

## APPLICATIONS

- EDFA
- DWDM
- Long-haul
- Wide-Area Networks
- Metro
- High power

## FEATURES

- One piece housing construction including LC & MU for better side load performance
- Metal-ion doped fiber (continuous)
- High durability
- Attenuation levels ranging from 1dB to 30dB

*Note:*  
Custom configurations available upon request.

SPECIFICATION	
<b>Return Loss</b>	≥ 55dB (UPC) ≥ 65dB (APC)
<b>Attenuation Tolerance</b>	1 to 10dB : ±0.5, 11 to 30 dB : ±5%
<b>Operational Wavelengths</b>	1310, 1490, and 1550nm
<b>Operating Temperature</b>	-40 to +75°C

Specifications shown above were obtained using SENKO recommended products and procedures.



FC Attenuator



FC APC Attenuator



LC Attenuator



MU Attenuator



SC Attenuator



SC APC Attenuator



ST Attenuator

CONNECTOR	TYPE	ATTENUATION LEVEL	ATTENUATION TOLERANCE
ATN Dope Fiber Attenuators	432 SC APC	01 1dB	1 Premium
	532 FC APC	02 2dB	
	632 SC UPC	03 3dB	
	732 FC UPC	04 4dB	
	832 ST UPC	05 5dB	
	1332 MU SPC	06 6dB	
	1432 MU UPC	07 7dB	
	1532 LC UPC	08 8dB	
		09 9dB	
		10 10dB	
		12 12dB	
		15 15dB	
		20 20dB	
		25 25dB	

ORDER CODE example: **ATN - 632 - 04 - 1**

# Terminators

SENKO fiber optic terminators use doped fiber designs or other proprietary designs to eliminate unwanted back-reflection. The terminators are available in FC and SC with SPC, UPC or APC polishes, and also in small form factor design including LC and MU with SPC and UPC Polishes.

SPECIFICATION	
<b>Return Loss</b>	≥ 55dB (UPC) ≥ 65dB (APC)
<b>Operating Temperature</b>	-40 to +75°C



FC Terminator



SC Terminator



ST Terminator



MU Terminator



LC Terminator

## APPLICATIONS

- DWDM upgrade ports
- Network system receiver open ports
- Dark fiber upgrade ports

## FEATURES

- Metal-ion doped fiber (continuous)
- High durability
- Custom configurations

CODE	TYPE	POLISH	DESIGN
TRM	1 SC	2 UPC	1 Doped fiber
	2 FC	3 APC	2 Off-set
	3 ST		
	4 LC		
	5 MU		

ORDER CODE example: **TRM - 1 - 3 - 2**

## LC-MU Hybrid

## Adapter



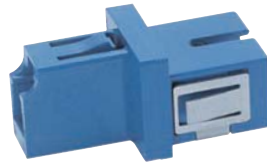
CODE	ADAPTER STYLE	SLEEVE
M90	1 Simplex	01 Zirconia
		02 Phosphor Bronze

ORDER CODE example: **M90 - 102**

Note:  
Custom configurations  
available upon request.

## LC-SC Hybrid

## Adapters



CODE	STYLE	COLOR	SLEEVE
990 LC-SC	1 Simplex	1 Blue	3 Zirconia

ORDER CODE example: **990 - 113**

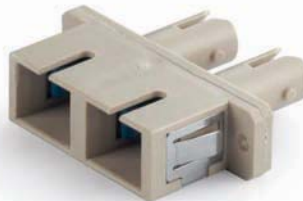
Note:  
Custom configurations  
available upon request.

## SC-ST Hybrid

## Adapters



SC-ST Simplex Adapter with  
Rectangular Flange



SC-ST Duplex Adapter, with Flange



SC-ST Adapter with square flange

- Note:
- All adapters listed above are made with metal housing with the exception of the 289 Series, which is made with polymer housing.
  - Custom configurations available upon request.
  - \* For No Flange option, add NF to order code. Available for 289L and 289T adapters only.

CODE	APPLICATION	SLEEVE
283 Square Flange Simplex (metal)	1 For PC Connector	01 Zirconia Straight Split
286 Rectangular Flange, Simplex (metal)		02 Phosphor Bronze
288 Rectangular Flange, Duplex (metal)		
289L Rectangular Flange, Duplex, Blue* (plastic)		
289T Rectangular Flange, Duplex, Beige* (plastic)		

ORDER CODE example: **288 - 102**



## FC-SC Hybrid

## Adapters



FC-SC Adapter with square flange



FC-SC Adapter with rectangular flange

CODE		KEY WIDTH		SLEEVE	
282	Square Flange	1	For PC Connector: 2.15+0.05/-0	01	Zirconia Straight Split
285	Rectangular Flange	2	For APC Connector: 2.05 +/- 0.02	02	Phosphor Bronze

ORDER CODE example: **282 - 101**

Note:  
 Custom configurations  
 available upon request.

## FC-ST Hybrid

## Adapters



FC-ST Adapter with square flange



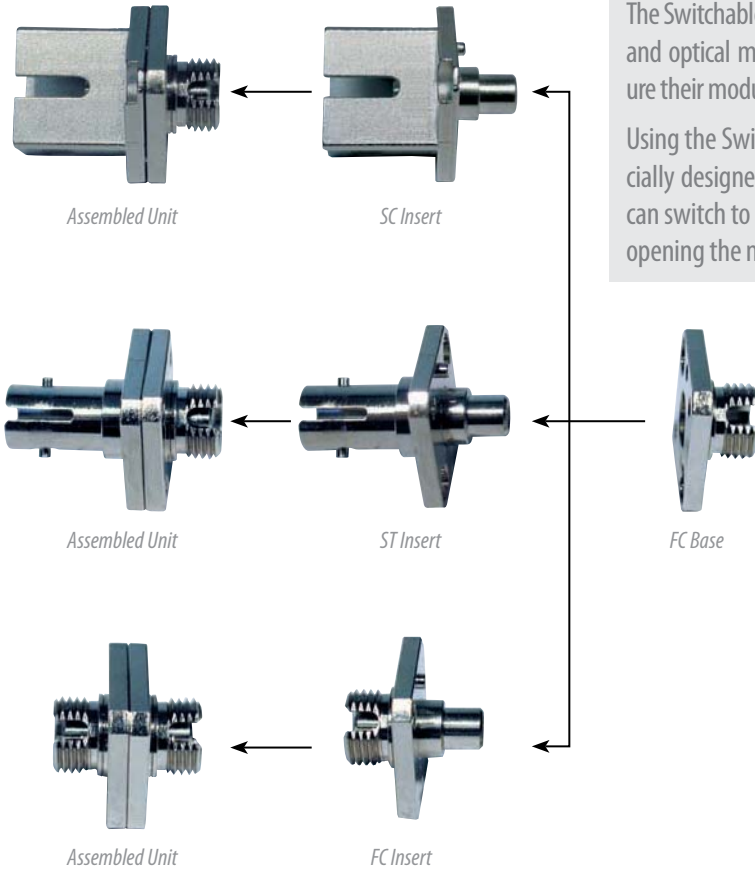
FC-ST Adapter with rectangular flange

CODE		KEY WIDTH		SLEEVE	
284	Square Flange	1	For PC Connector: 2.15+0.05/-0	01	Zirconia Straight Split
287	Rectangular Flange			02	Phosphor Bronze

ORDER CODE example: **284 - 101**

Note:  
 Custom configurations  
 available upon request.

# Switchable Adapter



The Switchable Adapter allows test equipment and optical module manufacturers to configure their modules for one adapter type (FC).

Using the Switchable Adapter base, and specially designed adapter inserts, the end user can switch to ST, SC or FC connectors without opening the module to replace the adapter.

## APPLICATIONS

- Telecommunications networks
- Metro networks
- CATV Networks
- Fiber optic test & measurement equipment

## FEATURES

- Switchable adapter interface, eliminating need for hybrid cable assemblies
- Easy to clean and maintain
- High precision alignment
- Low insertion loss\*

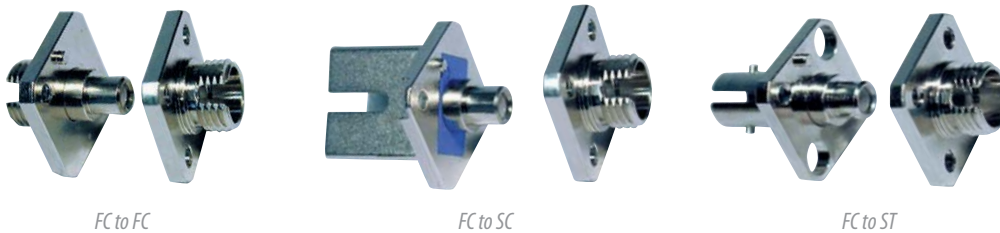
## CONFIGURATIONS

- FC/PC to FC/PC
- FC/APC to FC/APC
- FC/PC to SC/PC
- FC/APC to SC/APC
- FC/PC to ST/PC

*Note:*  
When following SENKO recommended procedures.

## EASY TO CLEAN AND MAINTAIN

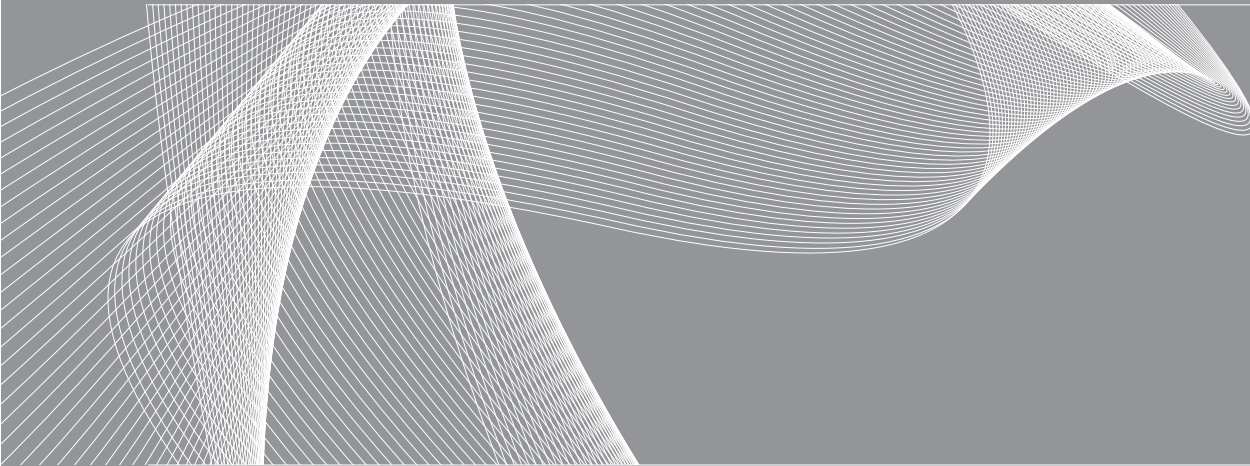
The Switchable Adapter allows the end user to properly clean and maintain both connectors on each side of the bulkhead, as well as the adapter sleeve, without removing the entire adapter from the panel.



CODE	SLEEVE CODE	KEY WIDTH CODE
<b>321</b> FC to FC Switchable Adapter	<b>1</b> Zirconia Straight Split	<b>01</b> For PC Connector 2.15 +0.05/-0
<b>322</b> FC to ST Switchable Adapter	<b>2</b> Phosphor Bronze	<b>02</b> For APC Connector 2.05 ±0.02
<b>323</b> FC to SC Switchable Adapter		

CODE	PART NUMBER	SLEEVE	KEY WIDTH
<b>FC Switchable Adapter Insert</b>	UA-50007-101 PC	Zirconia	2.15/2.20
	UA-50007-102 APC	Zirconia	2.03/2.07
<b>ST Switchable Adapter Insert</b>	UA-50008-101	Zirconia	
<b>SC Switchable Adapter Insert</b>	UA-50009-101 PC	Zirconia	
	UA-50009-102 APC	Zirconia	

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# Connector & Adapter Subcomponents

- Zirconia Ferrules SC-APC and FC-APC
- Zirconia Ferrules SC and FC Singlemode
- Zirconia Ferrules SC and FC Multimode
- Zirconia Ferrules LC and MU Singlemode
- Zirconia Ferrules ST Singlemode and Multimode
- Zirconia Ferrules LC and MU Multimode
- Zirconia Sleeves
- Phosphor Bronze Sleeves
- Phosphor Bronze Adapter Sleeves

## Zirconia Ferrules

### SC-APC and FC-APC



#### APPLICATIONS

- High performance fiber optic connectors used in environments requiring durability after repeated matings, low insertion loss and low back reflection
- Fiber stub
- SC, FC, ST, D4, MU, LC, DIN and other fiber optic connectors
- Singlemode and multimode

#### FEATURES

- High performance and durability
- Low insertion loss\*
- Low back reflection\*
- A PC type with various endface configurations, as well as pre-angled endface for quick polishing and ultra low back-reflection
- Standard and custom configuration-

SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Singlemode $\geq 1\mu\text{m}$
<b>Inner Diameter Tolerance</b>	Singlemode $+1/-0\mu\text{m}$
<b>Outer Diameter Tolerance</b>	Singlemode $\pm 0.5\mu\text{m}$
<b>Length Tolerance (No flange)</b>	$10.5 \pm 0.05\text{mm}$
<b>V-Groove</b>	$60/90 \pm 5$ degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
C SC & FC Connectors	S Singlemode	AS APC Step	125 125 $\mu\text{m}$	NN No Flange
		AC APC Conical	1255 125.5 $\mu\text{m}$	FA APC Flange*
			126 126 $\mu\text{m}$	*Flange key width 1.35mm

ORDER CODE example: **CSAS - 125 - NN**

## Zirconia Ferrules

### SC and FC Singlemode



Note:

1. When following SENKO recommended procedures.
2. Custom length, inner and outer diameter dimensions available upon request
3. \*0.5 $\mu\text{m}$  concentricity also available.

SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Singlemode $\leq 1\mu\text{m}$
<b>Inner Diameter Tolerance</b>	Singlemode $+1/-0\mu\text{m}$
<b>Outer Diameter Tolerance</b>	Singlemode $\pm 0.5\mu\text{m}$
<b>Length Tolerance (No flange)</b>	$10.5 \pm 0.05\text{mm}$
<b>Spherical Radius (pre-dome)</b>	$20 + 5/-10$
<b>V-Groove</b>	$60/90 \pm 5$ degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
C SC & FC Connectors	S Singlemode	PC Pre-dome	125 125 $\mu\text{m}$	NN No Flange
			1255 125.5 $\mu\text{m}$	F4 4 Slot Flange
			126 126 $\mu\text{m}$	

ORDER CODE example: **CSPC - 125 - NN**

## Zirconia Ferrules

### SC and FC Multimode



SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Multimode $\leq 4$ micron
<b>Inner Diameter Tolerance</b>	Multimode $+4/-0$ micron
<b>Outer Diameter Tolerance</b>	Multimode $\pm 1$ micron
<b>Length Tolerance (No flange)</b>	$10.5 \pm 0.1$ mm
<b>Spherical Radius (pre-dome)</b>	$20 + 5/-10$
<b>V-Groove</b>	$60/90 \pm 5$ degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
C SC & FC Connectors	M Multimode	PC Pre-dome	127 127 $\mu$ m	NN No Flange
			144 144 $\mu$ m	F4 4 Slot Flange
			230 230 $\mu$ m	

ORDER CODE example: **CMPC - 127 - NN**

### APPLICATIONS

- High performance fiber optic connectors used in environments requiring durability after repeated matings, low insertion loss and low back reflection
- Fiber stub
- SC, FC, ST, D4, MU, LC, DIN and other fiber optic connectors
- Singlemode and multimode

### FEATURES

- High performance and durability
- Low insertion loss\*
- Low back reflection\*
- A PC type with various endface configurations, as well as pre-angled endface for quick polishing and ultra low back-reflection
- Standard and custom configuration-

## Zirconia Ferrules

### LC and MU Singlemode



SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Multimode $\leq 1$ micron
<b>Inner Diameter Tolerance</b>	Multimode $+1/-0$ micron
<b>Outer Diameter Tolerance</b>	Singlemode $\pm 0.5$ micron
<b>Length Tolerance (No flange)</b>	$6.5 \pm 0.5$ mm (MU) $6.5 \pm 0.7$ mm (LC)
<b>V-Groove</b>	$60/90 \pm 5$ degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
M MU Connectors	S Singlemode	FL Flat	125 125 $\mu$ m	NN No Flange
L LC Connectors			1255 125.5 $\mu$ m	FM MU Flange
			126 126 $\mu$ m	FL-35 LC Flange

ORDER CODE example: **LSFL - 126 - FL-35**

*Note:*  
 Custom length, inner and outer diameter dimensions available upon request.

## Zirconia Ferrules

### LC and MU Multimode



#### APPLICATIONS

- High performance fiber optic connectors used in environments requiring durability after repeated matings, low insertion loss and low back reflection
- Fiber stub
- SC, FC, ST, D4, MU, LC, DIN and other fiber optic connectors
- Singlemode and multimode

#### FEATURES

- High performance and durability
- Low insertion loss\*
- Low back reflection\*
- A PC type with various endface configurations, as well as pre-angled endface for quick polishing and ultra low back-reflection
- Standard and custom configuration-

SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Multimode $\leq 4\mu\text{m}$
<b>Inner Diameter Tolerance</b>	Multimode $+4/-0\mu\text{m}$
<b>Outer Diameter Tolerance</b>	Multimode $\pm 1\mu\text{m}$
<b>Length Tolerance (No flange)</b>	6.5 $\pm$ 0.5mm (MU) 6.5 $\pm$ 0.7mm (LC)
<b>V-Groove</b>	60/90 $\pm$ 5 degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
M MU Connectors	M Multimode	FL Flat	126 127 $\mu\text{m}$	NN No Flange
L LC Connectors			144 144 $\mu\text{m}$	FM MU Flange
				FL-35 LC Flange

ORDER CODE example: **LMFL - 126 - FL-35**

## Zirconia Ferrules

### ST Singlemode and Multimode



For ST Singlemode Connector  $\phi$  2.499mm No flange

Note:  
Custom length, inner and outer diameter dimensions available upon request.

SPECIFICATION	
<b>Material</b>	Zirconia
<b>Concentricity (Standard)</b>	Singlemode $\leq 1\mu\text{m}$ , Multimode $\leq 1\mu\text{m}$
<b>Inner Diameter Tolerance</b>	Multimode $+1/-0\mu\text{m}$ , Multimode $+4/-0\mu\text{m}$
<b>Outer Diameter Tolerance</b>	Singlemode $\pm 0.5\mu\text{m}$ , Multimode $\pm 1\mu\text{m}$
<b>Length Tolerance (No flange)</b>	12.7 $\pm$ 0.05 (SM) 12.70 $\pm$ 0.1 (MM)
<b>Spherical Radius</b>	20 $\pm$ 5/-10
<b>V-Groove</b>	60/90 $\pm$ 5 degrees

CONNECTOR	TYPE	ENDFACE	ID	FLANGE
T ST	S Singlemode	PC Pre-dome	125 125 $\mu\text{m}$	NN No Flange
	M Multimode		126 126 $\mu\text{m}$	
			127 127 $\mu\text{m}$	

ORDER CODE example: **TSPC - 125 - NN**



## Zirconia Sleeves

Zirconia sleeves and tubes are precision manufactured according to strict quality and performance standards. They are available for singlemode and multimode applications.

Reliable mating is assured with strictly controlled dimensions and withdrawal force. Standard styles or FC include SC, FC, ST, D4, LC and MU, with custom designs also available. Diagonal split sleeves are available for superior durability requirements. Tubes are also available.

SPECIFICATION	ST	SC, FC	LC, MU
<b>Material</b>	Zirconia		
<b>Withdrawal Force</b>	200gf~600gf	100gf~250gf	
<b>Insertion Loss</b>	Max 0.5dB, 0.1dB typical or better		
<b>Durability</b>	<0.02dB deviation after 1000 matings <0.02dB after temperature cycle test		
<b>Outer Diameter</b>	3.2 ± 0.02mm	1.62 ± 0.01mm	
<b>Inner Diameter</b>	(2.49)mm	(1.246)mm	
<b>Length</b>	10.1 ± 0.1mm	11.4 ± 0.1mm	6.8 + 0/-0.1mm
<b>Slit Width</b>	Max 0.5 ± 0.01mm	Max 0.2 ± 0.01mm	
<b>Chamfer</b>	2 x R0.1		

### APPLICATIONS

- Singlemode and multimode
- SC, FC, ST, DIN, MU, LC adapters
- Fiber optic receptacles, adapters, attenuators and other

### FEATURES

- High quality zirconia material
- High performance and superior durability
- Low insertion loss\*

*Note:*  
 When following  
 SENKO recommended  
 procedures.

## Zirconia Sleeves



*For LC and MU Adapters  
 Straight Split and High  
 Performance Diagonal Split*



*For SC and FC Adapters  
 Straight Split and High  
 Performance Diagonal Split*

SLEEVE CODE	INNER DIAMETER	LENGTH
<b>ZRS</b> Straight Split Sleeve	25 (2.49)mm	101 10.1mm ST
<b>ZRD</b> Diagonal Split Sleeve		114 11.4mm SC & FC

ORDER CODE example: **ZRD - 25 - 114**

SLEEVE CODE	INNER DIAMETER	LENGTH
<b>ZRS</b> Straight Split Sleeve	12 (1.25)mm	680 6.8mm
<b>ZRD</b> Diagonal Split Sleeve		

ORDER CODE example: **ZRS - 12 - 680**

- Note:*
1. Outer and inner diameter dimensions in ( ) are to be considered as references, which shall be adjusted to the required withdrawal force as specified.
  2. Zirconia tubes also available. Custom configurations available upon request. dimensions available upon request.

## Phosphor Bronze Sleeves

Metal split sleeves are used in adapters for aligning the connector ferrule. They are manufactured for both singlemode and multimode applications. The high quality phosphor bronze material delivers a spring-like property which ensures a strictly controlled withdrawal force of 200 to 600 grams. Tolerance specifications are also well controlled, resulting in a typical insertion loss of 0.1dB\* or less.

SPECIFICATION	ST	SC, FC	D4	LC
<b>Material</b>	Phosphor Bronze C5210H			
<b>Withdrawal Force</b>	200gf~600gf		100gf~300gf	
<b>Insertion Loss</b>	Max 0.5dB, typical 0.1dB or better			
<b>Outer Diameter</b>	(3.08)mm		(2.48)mm	(1.62)mm
<b>Inner Diameter</b>	(2.48)mm		(1.98)mm	(1.25)mm
<b>Length</b>	10.1±0.1mm	11.4±0.1mm	10.4±0.1mm & 9.88±0.1mm	6.8±0.1mm
<b>Slit Width</b>	Max 0.5mm		Max 0.2mm	
<b>Chamfer</b>	2 x 0.1 +0.1/-0			

### APPLICATIONS

- Singlemode and multimode
- SC, FC, ST, D4, MU, LC and DIN adapters
- Fiber optic receptacles, adapters, attenuators and other

### FEATURES

- High quality phosphor bronze material
- High performance and superior durability
- Low insertion loss\*

Note:

1. When following SENKO recommended procedures.
2. MU Phosphor Bronze Sleeve specifications available upon request.
3. Outer and inner diameter dimensions in ( ) are to be considered as references, which shall be adjusted to the required withdrawal force as specified.

## Phosphor Bronze

## Adapter Sleeve



For SC and FC Adapters



For D4 Adapter



For LC and MU Adapters

SLEEVE CODE	INNER DIAMETER	LENGTH
<b>PBS</b> Adapter Sleeve	<b>25</b> (2.48)mm	<b>101</b> 10.1mm ST
		<b>114</b> 11.4mm SC & FC

ORDER CODE example: **PBS - 25 - 114**

SLEEVE CODE	INNER DIAMETER	LENGTH
<b>PBS</b> Phosphor Bronze	<b>20</b> (1.98)mm	<b>104</b> 10.4mm
		<b>988</b> 9.88mm

ORDER CODE example: **PBS - 20 - 988**

SLEEVE CODE	INNER DIAMETER	LENGTH
<b>PBS</b> Phosphor Bronze	<b>12</b> (1.25)mm	<b>680</b> 6.80mm

ORDER CODE example: **PBS - 12 - 680**

STANDARD CONNECTOR SERIES

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SMALL FORM FACTORS

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SPECIALTY PRODUCTS

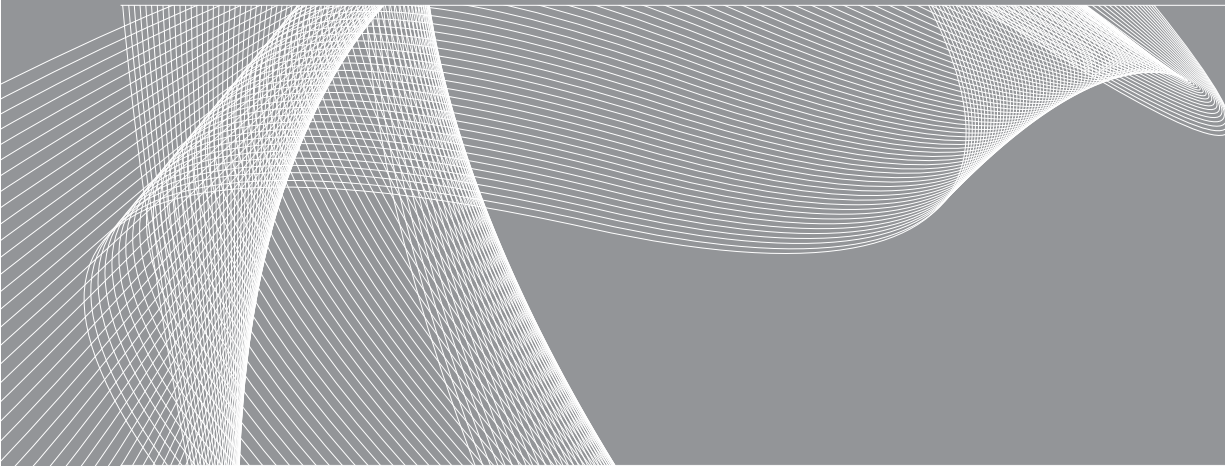
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CONNECTOR & ADAPTER SUBCOMPONENTS

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POLISHING SYSTEMS

pg. 50



# POLISHING SYSTEMS

APC 8000 High Volume Polisher

Polishing Fixture Package

Polishing Rubber Pads

Polishing Films

# APC-8000

## High Volume Polisher

### APPLICATIONS

- High production polishing of industry standard fiber optic connectors and adapters
- Polishing of glass capillaries and fiber stubs

### FEATURES

- Enhanced fixture-to-platten alignment mechanism for eliminating unwanted motion on horizontal plane
- Improved safety cover assembly confining water within the actual polishing area only
- Wide range of speeds for greater control over polishing regime and throughput
- Enhanced software capabilities, with more than 35 programmable recipes, 10 steps per recipe
- Step-by-step guidance and on-screen warning system
- Expanded safety features
- Universal fixture diameter, compatible with fixtures from previous models

### CONNECTOR CAPABILITY

- LC-UPC, LC-APC
- MU-UPC
- SC-UPC, SC-APC
- FC-UPC, FC-APC
- ST-UPC
- E2000™, E2000™-APC
- MT-RJ, MT, Angled MT
- SMA



The APC-8000 features a superior fixture-to-platten locking mechanism and other design enhancements to give the user consistent polishing results at high production volumes. The fixture-to-platten locking mechanism confines motion to vertical plane, eliminating horizontal movement that may cause damage to the fiber. Polishing results are consistent and yield end face geometry exceeding GR-326-CORE standards\*. In addition, the user can polish as little as three connectors at a time without the need to use additional dummy connectors to completely fill the fixture.

The polisher also features an improved safety cover assembly which forms an enclosure around the fixture to confine water within the polishing area. A labyrinth seal platten sits on top of a one-piece water tray for collecting polishing runoff. As a result, the machine does not require frequent maintenance and lubrication, and the polishing procedure is effective and hassle-free. Like previous models, the APC-8000 features a dual concentric drive motion for multi-axis polishing, but features a wider range of speeds available to the user for greater control over polishing cycle and throughput. Polishing can be done at higher speeds without compromising quality.

The APC-8000's expanded software capabilities and safety features make it easy and safe to use. It features a step-by-step automated guidance system, a sensor switch that prevents operation when the cover is open, an onscreen warning system, and an emergency stop button with a key-operated release. The software stores up to 35 recipes, with 10 polishing steps per recipe. The APC-8000 is a free-floating fixture polisher for polishing industry standard, small form factor and multifiber connectors. New fixtures will hold between 12 and 48 connectors or ferrules, depending on connector type. Fixtures from previous models (APC-7000 and APC-9000) may be adjusted for full compatibility with the APC-8000. Please contact a SENKO representative for more information.

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### FIXTURE-TO-PLATTEN LOCKING MECHANISM

- Fixture incorporates 3 locator posts which mate firmly with slots in the safety cover assembly during locked position
- Locking mechanism confines motion to a vertical plane, eliminating unwanted horizontal motion
- Offers consistent polishing results even at high platten speeds
- User can polish as little as three connectors at a time



### SAFETY FEATURES

- CE Approval
- Sensor detects when cover is open and prevent operation.
- Emergency stop button with key-operated release
- Machine does not operate unless fixture posts are aligned with cover and fixture is in contact with rubber pad and platten
- Polishing machine stalls if it senses an obstruction between the fixture and the platten before the 3 locator posts are in place



ORDER CODE example:.

**APC-8000**

## POLISHING SYSTEM

### Polishing Fixture Packages



FC Fixture



MT Fixture



LC Fixture

PRODUCT NUMBER	POLISHING FIXTURE	PACKAGES POSITIONS	NOTE
MU-1.25-24-8	MU One-piece Connector Fixture	24	
LC-1.25-24-8	LC One-piece Connector Fixture	24	
UPC-1.25-36-8	LC/MU Locking Ferrule Fixture	48	
UPC-2.5-24-8	2.5mm UPC Locking Ferrule Fixture	36	SC/FC/E2000-UPC/SC
UPC-LF-8	Universal Loading Fixture		
E-2000-APC-12-8	APC Ferrule Fixture	12	
SC-APC2.5-18-X	SC/APC One-piece, 2.5mm	18	(X) Specify ferrule tip during order
FC-APC2.5-18-X	FC/APC One-piece, 2.5mm	18	(X) Specify ferrule tip during order
SC-UPC2.5-18-8	SC/UPC One-piece, 2.5mm	18	
SC-UPC2.5-18-8	SC/UPC One-piece, 2.5mm	18	
FC-UPC-2.5-18-8	FC/UPC One-piece, 2.5mm	18	
ST-UPC2.5-18-8	ST/UPC One-piece, 2.5mm	18	
SMA-12-8	SMA Fixture, only for 1-piece connectors	12	For critical ferrule end-length applications
MT-12-8	MT Fixture	12	
AMT-12-8	Angled MT Fixture	12	

### PRECISION FIXTURE TOOLING

- Highly durable
- Corrosion resistant
- Custom development available

## POLISHING SYSTEM

### Polishing Rubber Pads



All rubber pad consumables are certified for hardness and parallelism. Pads are available with durometer specifications and color coding found below.

PRODUCT NUMBER	COLOR	DESCRIPTION
RUG55.0-90	Black	5"x5mm 90 duro
RUG55.0-85	Grey	5"x5mm 85 duro
RUG55.0-80	Green	5"x5mm 80 duro
RUG55.0-75	Brown	5"x5mm 75 duro
RUG55.0-70	Violet	5"x5mm 70 duro
RUG55.0-65	Dark Blue	5"x5mm 65 duro
RUG55.0-60	Blue	5"x5mm 60 duro
RUG55.0-55	Rust	5"x5mm 55 duro
RUG55.0-50	Red	5"x5mm 50 duro
RUG55.0-45	Burgundy	5"x5mm 45 duro
RUG55.0-40	Orange	5"x5mm 40 duro

ORDER CODE example..

**RUG55.0-90**

### SPECIFICATIONS

- Thickness: 2.5mm ~ 5.5mm
- Parallelism: ± 0.05mm
- Durometer: 40 ~ 90
- Durometer Tolerance: ± 2.5

*Note:*  
4.8mm, 4.9mm thicknesses and custom types available upon request.

# POLISHING SYSTEM

## Polishing Films

SENKO Polishing Films are available with surface textures and particle density to suit the end user's performance requirements. Films are lot tested for quality, consistency and longevity. A range of films are available for epoxy removal, grinding, fine polish and cleaning of industry standard fiber optic connectors and ferrules.



### ORDER CODE (POLISHING FILMS)

PRODUCT NUMBER	DESCRIPTION	DIAMETER
LFC010-XN	Silicon Carbide, 30µm	(X) Specify 4" or 5"
LFC030-XN	Silicon Carbide, 15µm	(X) Specify 4" or 5"
LFC050-XN	Silicon Carbide, 9µm	(X) Specify 4" or 5"
LFD050-X	Diamond, 9µm	(X) Specify 4" or 5"
LFD100-X	Diamond, 6µm	(X) Specify 4" or 5"
LFD200-X	Diamond, 3µm	(X) Specify 4" or 5"
LFD250-X	Diamond, 1µm	(X) Specify 4" or 5"
LFD300-X	Diamond, 0.5µm	(X) Specify 4" or 5"
LFO501-XN	UPC Final Polishing Film	(X) Specify 4" or 5"
LFF500-5N	Cleaning Film	5 inches

### ORDER CODE (MT POLISHING FILMS)

PRODUCT NUMBER	DESCRIPTION
LFC010-5NP	PSA Type, Silicon Carbide, 30µm
LFC030-5NP	PSA Type, Silicon Carbide, 15µm
LFC200-5NP	PSA Type, Silicon Carbide, 3µm
LFFC200-5NP	PSA Type, Flocked Silicon Carbide, 3µm
LFFA0250-5NP	PSA Type, Flocked Aluminum Oxide, 1µm
LFFA0300-5NP	PSA Type, Flocked Aluminum Oxide, 0.5µm
LFFC0300-5NP	PSA Type, Flocked Cerium Oxide, 0.5µm
LFF500-5N	Non-PSA Type Buffing Film
LSS-1	Colloidal Silica Suspension

ORDER CODE example:.

**LFC010-XN**

### APPLICATION

- Industry standard fiber optic connectors
- Ferrules
- Epoxy removal, grinding, fine polish and cleaning

### FEATURES

- Consistent particle deposition
- Various film diameters
- Various particle sizes

### COMPATIBILITY

Films are compatible with the following connector styles:

- LC-UPC, LC-APC
- MU-UPC
- SC-UPC, SC-APC
- FC-UPC, FC-APC
- ST-UPC
- E2000-UPC, E2000-APC



## POLISHING FILMS

### Longlife Diamond Series



#### LongLife Series (LFD250-5X-L & LFD200-5X-L)

The LongLife Diamond Series is used to grind and polish the connector endface to a smooth surface as illustrated in the figures below (please refer to Polishing-1 and Polishing-2).

PRODUCT	PARTICLE SIZE	BASE MATERIAL THICKNESS
LFD200-5X	3.0µm	75.0µm
LFD250-5X	1.0µm	75.0µm

#### APC SERIES (SENKO)

POLISHING PROCESS	FILM	TIME	FLUID	GRAM FORCE PER CONNECTOR	RPM
Adhesive Removal	LFC030-5N	30sec	None	120	100
Polishing-1	LFD200-5S	30sec	Water	210	150
Polishing-2	LFD250-5S	90sec	Water	210	150
Finishing	LFOS-01-05	120sec	Water	210	150

#### POLISHING FILM ORDER CODE: LONGLIFE SERIES

PRODUCT NUMBER	DESCRIPTION
LFC030-5N	Silicon Carbide Epoxy Removal Film (15µm), 5 Inch diameter
LFD100-5X-L	Diamond Polishing Film (6µm) 5 Inch diameter
LFD200-5X-L	Diamond Polishing Film (3µm) 5 Inch diameter
LFD250-5X-L	Diamond Polishing Film (1µm) 5 Inch diameter
LFD300-5X-L	Diamond Polishing Film (0.5µm) 5 Inch diameter
LFF500-5N	Cleaning Film — 5 Inch diameter
LFD100-6x6-L	Diamond Polishing Film (6µm) — 6 x 6 Inch square
LFD200-6x6D-L	Diamond Polishing Film (3µm) — 6 x 6 Inch square
LFD250-6x6D-L	Diamond Polishing Film (1µm) — 6 x 6 Inch square

ORDER CODE example:.

**LFD100-5X-L**

## POLISHING FILMS

### LFD Diamond Series



#### LFD Diamond Series (LFD250-5X & LFD200-5X)

The LFD Diamond Series is used to grind and polish the connector endface to a smooth surface.

PRODUCT NUMBER	DESCRIPTION
LFD100-5X	Diamond Polishing Film (6µm) 5 Inch diameter
LFD200-5X	Diamond Polishing Film (3µm) 5 Inch diameter
LFD250-5X	Diamond Polishing Film (1µm) 5 Inch diameter
LFD300-5X	Diamond Polishing Film (0.5µm) 5 Inch diameter
LFD100-6x6	Diamond Polishing Film (6µm) — 6 x 6 Inch square
LFD200-6x6D	Diamond Polishing Film (3µm) — 6 x 6 Inch square
LFD250-6x6D	Diamond Polishing Film (1µm) — 6 x 6 Inch square

ORDER CODE example:.

**LFD100-5X**

#### APPLICATION

- Industry standard fiber optic ceramic connectors
- Ceramic ferrules
- Grinding and polishing

#### FEATURES

- Fewer scratches when compared to other grinding films
- Long life
- Mirror-like surface when followed with FOS-01
- Can be used up to 30 times\*

Note:

Depending on polishing process and condition being used.

#### APPLICATION

- Industry standard fiber optic ceramic connectors
- Ceramic ferrules
- Grinding and polishing

#### FEATURES

- Fewer scratches when compared to other grinding films
- Long life
- Mirror-like surface when followed with FOS-01
- Can be used up to 10 times

# POLISHING FILMS

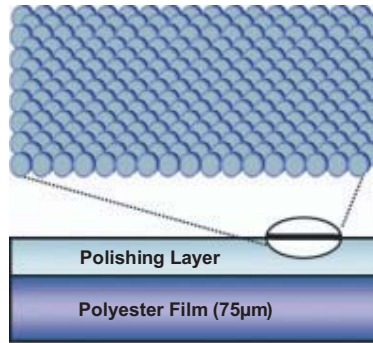
## FOS-01 Final Polish Series

### APPLICATION

- Industry standard fiber optic ceramic connectors
- Ceramic ferrules
- UPC final polish

### FEATURES

- Easy to use
- Clean (slurry-free) work environment
- Simplified polishing process
- Polishes without scratching, ideal for connectors used in high performance applications
- Special binder containing ultra-fine polishing particles <math>< 0.1\mu\text{m}</math> in size
- Excellent uniformity of particle deposition



FOS-01 Series

### Final Polishing Film, FOS-01

FOS-01 is a highly efficient final polishing film manufactured using an advanced coating technology. This superior polishing film is formulated using ultra-fine particles which are uniformly deposited on a polyester film surface, without irregular height protrusions. FOS-01 is specifically designed for polishing fiber optic connector ferrules used in high performance applications.

• *US. Patented*

SPECIFICATION	FOS-01
Particle Size	<math>< 0.1\mu\text{m}</math>
Coating weight (g/m <sup>2</sup> )	6.0
Film surface roughness (µm)	0.15
Polisher	All SENKO APC Series Polishers
Return loss (dB)	<math>< -55\text{ dB}</math>
Fiber height (nm)	0~50
Radius of curvature (mm)	10~25
Apex offset (µm)	<math>< 50</math>

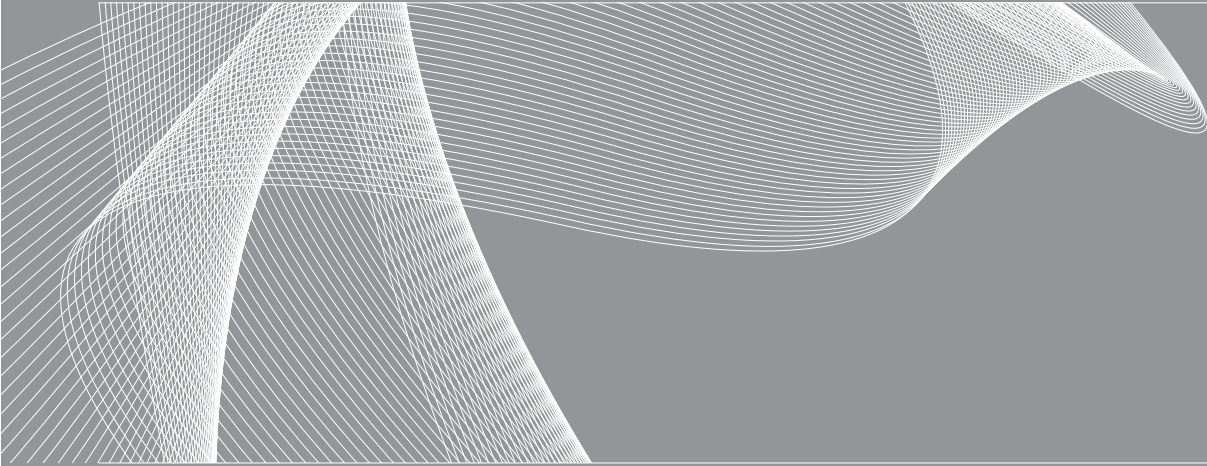


### POLISHING FILM ORDER CODE: FOS-01 AND LFD SERIES

PRODUCT NUMBER	DESCRIPTION
LFOS-01-5N	UPC Final Polishing Film, 5 Inch diameter
LFOS-01-6x6	UPC Final Polishing Film — 6 x 6 Inch square

ORDER CODE example:.

**LFOS-01-5N**





SENKO Advanced Components, Incorporated is a recognized global leader in the design, production, sales, marketing and distribution of over 1000 fiber optic products. It is headquartered in Boston, Massachusetts, USA and is the fiber optic division of the Japan based SENKO Group.

The SENKO Group is a family of companies serving clients in the Electronic / Electrical, Telecom / Fiber Optic, and Automotive / Industrial industries.

We continually expand our product line to suit your business needs, both through innovations in product design and via international partnerships.

Our top quality products are backed with superior technical support and logistic services provided by our worldwide facilities.



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