



SENKO's Long Standing LC Connector License Offers Various Styles of LC Connectors and Adapters to Meet the Customers Need



## LC PREMIUM UNIBODY Connector



The LC Premium Unibody Connector molded with a Single body delivers maximum strength against mechanical tests including side loading test and TWAL tests. Manufactured to the highest standard, the LC Unibody connector is designed to meet and exceed the Verizon FOC TPR requirement and designed for the usage for the OSP application or where customers needs the highest quality product.

- Premium SM and Premium Low Loss SM (LS) are available
- Typical IL of 0.05 for LS SM and 0.08 for Premium SM Ferrule
- Various option of boots are available to meet your need
- PC Type and APC Type available



## LC STANDARD (2PC) Connector



The Original LC designed connector gives the maximum value for cost. Using high quality components, this connector meets IEC, TIA/EIA and the general requirement of GR-326.

- Available with Pre-assembled 1pc style or in a Multi piece kit
- Typical IL of 0.12 for Standard ferrules
- Various options of boots are available to meet your demand

### FEATURES COMPARISON CHART

| For LC Premium and LC Standard         | PREMIUM UNIBODY<br>LOW LOSS SM FERRULE | PREMIUM UNIBODY<br>SM FERRULE | STANDARD 2PC<br>SM FERRULE |
|--|--|-------------------------------|----------------------------|
| LC License Holder                      | ○                                      | ○                             | ○                          |
| IL Average Against Master (UPC)        | 0.05                                   | 0.08                          | 0.12                       |
| IL Mean Value Random Mating (UPC)      | 0.07                                   | 0.12                          | 0.25                       |
| Verizon FOC TPR-9409                   | ○                                      | ○                             |                            |
| GR-326 Core Issue 4                    | ○                                      | ○                             | △                          |
| IEC, TIA/EIA JIS Spec                  | ○                                      | ○                             | ○                          |
| IEC Random Mating Grade A*             | ○                                      |                               |                            |
| IEC Random Mating Grade B*             | ○                                      | ○                             |                            |
| IEC Random Mating Grade C*             | ○                                      | ○                             | ○                          |
| ROHS Compliant                         | ○                                      | ○                             | ○                          |
| UL 94V-0                               | ○                                      | ○                             | ○                          |
| Ruggedized Unibody Structure           | ○                                      | ○                             |                            |
| Universal Body For Sim-Dup-BTW         | ○                                      | ○                             |                            |
| 6 Position Tuning After Assembly (UPC) | ○                                      | ○                             | ○                          |
| LC MINI Boots                          | ○                                      | ○                             | ○                          |
| Standard Boots                         | ○                                      | ○                             | ○                          |
| TWAL Proof 900µm Boots                 | ○                                      | ○                             | ○                          |
| Pre-assembled 1pc Style                | ○                                      | ○                             | ○                          |
| Free Floating Ferrule                  | ○                                      | ○                             | ○                          |
| Metal Back Post                        | ○                                      | ○                             | ○                          |
| Crimp Tool CRT-701**                   | ○                                      | ○                             | ○                          |

Note: \*IEC 61753-1 \*\*CRT-705 to be used for 1.2mm Unibody

# TECHNICAL SPECIFICATIONS

## Unibody Premium and Standard 2pc Connector

| PRODUCT SERIES                     | TYPE OF CONNECTOR                   | IL AGAINST MASTER (dB) |            | IL RANDOM MATING (dB) |                    |
|------------------------------------|-------------------------------------|------------------------|------------|-----------------------|--------------------|
|                                    |                                     | Average IL             | Maximum IL | Mean IL               | Maximum IL         |
| Unibody Premium Low Loss SM        | 931-159-1xx, 932-159-1xx            | 0.05                   | 0.15       | 0.07                  | 0.15 <sup>*1</sup> |
| Unibody Premium SM                 | 931-153-1xx, 932-153-1xx            | 0.08                   | 0.20       | 0.12                  | 0.25 <sup>*2</sup> |
| Unibody Premium APC Low Loss       | 931-159-3xx, 932-159-3xx            | 0.07                   | 0.15       | 0.09                  | 0.20               |
| Unibody Premium APC                | 931-153-3xx, 932-153-3xx            | 0.10                   | 0.25       | 0.14                  | 0.30               |
| Unibody Premium MM                 | 931-251-2xx, 932-251-2xx            | 0.10                   | 0.20       | -                     | -                  |
| Standard 2pc + Standard SM Ferrule | 911-151-1xx, 912-151-1xx            | 0.12                   | 0.30       | 0.25                  | 0.50 <sup>*3</sup> |
| Standard MM                        | 911-251-2xx, 912-251-2xx            | 0.15                   | 0.30       | -                     | -                  |
| <b>Singlemode</b>                  |                                     |                        |            |                       |                    |
| Operating Temperature              | -40°C to +75°C                      |                        |            |                       |                    |
| Durability                         | <0.2dB typical change, 500 matings* |                        |            |                       |                    |

IEC Random mating test IEC 61753-1

1 - To meet IEC Random Mating Grade A ( $\leq 0.07\text{dB}$  mean,  $\leq 0.15\text{dB}$  max for  $>97\%$  of sample. Grade A Spec is not finalized, above is a recommendation.

2 - To meet IEC Random Mating Grade B ( $\leq 0.12\text{dB}$  mean,  $\leq 0.25\text{dB}$  max for  $>97\%$  of sample)

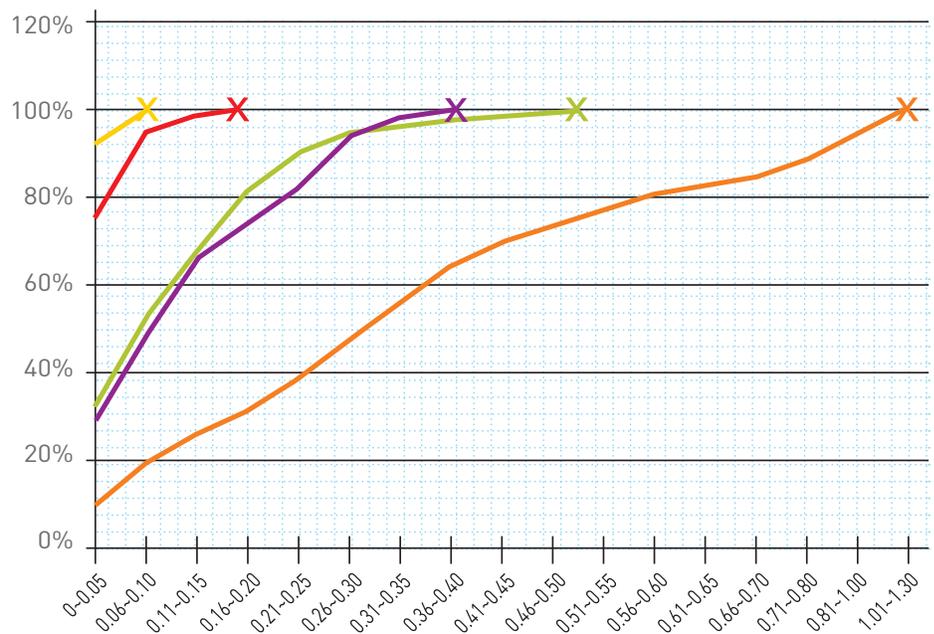
3 - To meet IEC Random Mating Grade C ( $\leq 0.25\text{dB}$  mean,  $\leq 0.50\text{dB}$  max for  $>97\%$  of sample)

## Random Mating IL

SENKO has categorized its connectors to reflect the IEC Random Mating specified grades A\*, B, and C, allowing the end-user to make an informed decision when selecting connectors, of how finished patchcords using SENKO connectors will perform.

### Random mating Insertion Loss

- SENKO Low Loss
- SENKO Premium
- SENKO Standard
- High quality Competitor
- Low quality Competitor



931, 932 Series

LC PREMIUM UNIBODY



900µm MINI Boot



2.0mm MINI Boot



3.0mm MINI Boot

| CONNECTOR              | FERRULE TYPE           | HOUSING                  | BOOT TYPE          | BOOT COLOR |
|------------------------|------------------------|--------------------------|--------------------|------------|
| 931 LC Unibody Simplex | 153 SM: Premium 125µm  | 1 SM: Blue               | B MINI Boot 900µm  | 1 White    |
| 932 LC Unibody Duplex  | 159 SM: Low Loss 125µm | 2 MM: Beige              | C MINI Boot 2.0mm  | 2 Blue     |
|                        | 251 MM: Premium 127µm  | 5 MM OM3: Aqua           | D MINI Boot 3.0mm  | 3 Black    |
|                        |                        | 6 MM OM4: Heather Violet | 1 BTW Boot         | 4 Yellow   |
|                        |                        |                          | 4 2.0mm Round      | 5 Red      |
|                        |                        |                          | 5 2.0mm Boot Short |            |
|                        |                        |                          | 6 3.0mm Boot       |            |
|                        |                        |                          | 7 Flex-Angle 2.0mm |            |
|                        |                        |                          | 9 Flex-Angle 3.0mm |            |

931 - 153 - 141 ORDER CODE example

**Note:** Other ferrule ID size are available  
SM 126µm SM 125.5µm MM 230µm MM 144µm

**Features:**

- SENKO's flagship highest quality LC connector Series
- Solid body robust design to improve mechanical strength.
- Designed to exceed the requirement of Verizon FOC TPR 9409 requirement
- Premium Super Low loss, typical IL against Master 0.05dB
- Premium Super Low Loss to meet IEC 61753-1 Grade A random mating requirement of Max 0.15dB
- Premium SM typical IL against Master 0.08dB Max
- Premium SM to meet IEC 61753-1 Grade B random mating requirement of Max 0.25dB
- 6 direction tuning feature to improve random mating IL
- Wide choice of boot types
- Crimp tool to be used CRT-701

931, 932 Series

LC PREMIUM UNIBODY



900µm MINI Boot



2.0mm MINI Boot



3.0mm MINI Boot

| CONNECTOR              | FERRULE TYPE           | HOUSING      | BOOT TYPE          | BOOT COLOR |
|------------------------|------------------------|--------------|--------------------|------------|
| 931 LC Unibody Simplex | 153 SM: Premium 125µm  | 3 APC: Green | B MINI Boot 900µm  | 6 Green    |
| 932 LC Unibody Duplex  | 159 SM: Low Loss 125µm |              | C MINI Boot 2.0mm  |            |
|                        |                        |              | D MINI Boot 3.0mm  |            |
|                        |                        |              | 1 BTW Boot         |            |
|                        |                        |              | 4 2.0mm Round      |            |
|                        |                        |              | 5 2.0mm Boot Short |            |
|                        |                        |              | 6 3.0mm Boot       |            |
|                        |                        |              | 7 Flex-Angle 2.0mm |            |
|                        |                        |              | 9 Flex-Angle 3.0mm |            |

931 - 153 - 316 ORDER CODE example

**Note:** Other ferrule ID size are available  
SM 126µm SM 125.5µm MM 230µm MM 144µm

**Features:**

- SENKO's flagship highest quality LC connector Series
- Solid body robust design to improve mechanical strength
- Designed to exceed the requirement of Verizon FOC TPR 9409 requirement
- Premium Super Low loss, typical IL against Master 0.07dB
- Premium SM typical IL against Master 0.10dB
- Wide choice of boot types
- Crimp tool to be used CRT-701

## LC STANDARD 2PC

### 911, 912, 921, 922 Series

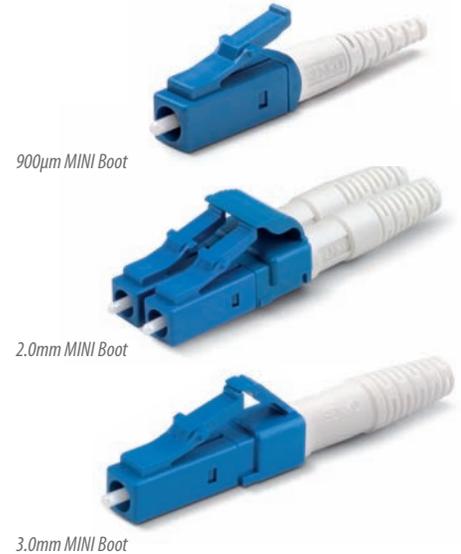
| CONNECTOR                | FERRULE TYPE             | HOUSING                  | BOOT TYPE                | BOOT COLOR |
|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 911 Preassembled Simplex | 151 SM: Standard 125.5µm | 1 SM: Blue               | <b>B</b> MINI Boot 900µm | 1 White    |
| 912 Preassembled Duplex  | 251 MM: Standard 127µm   | 2 MM: Beige              | <b>C</b> MINI Boot 2.0mm | 2 Blue     |
| 921 Kit Simplex          |                          | 5 MM OM3: Aqua           | <b>D</b> MINI Boot 3.0mm | 3 Black    |
| 922 Kit Duplex           |                          | 6 MM OM4: Heather Violet | 2 2.0mm Original         | 4 Yellow   |
|                          |                          |                          | 6 3.0mm Boot             | 5 Red      |

912 - 151 - 121 ORDER CODE example

**Note:** Other ferrule ID size are available  
 SM 126µm SM 125µm MM 230µm MM 144µm

#### Features:

- The original 2pc LC Design
- SENKO's Standard Connector series gives the highest value for cost
- Pre-assembled one piece design and Connector Kit style available
- Meets and exceeds the TIA/EIA, IEC and JIS LC Specification
- Standard SM Ferrule typical IL against Master 0.12dB
- Crimp tool to be used CRT-701



## LC CONNECTOR 1.2mm

The new LC Connector is as strong as a 3mm cable. Reduce your cable size, but keep the strength. The LC Connector for 1.2mm cable is fully compliant to GR-326-Core for Media 1.



| CONNECTOR PC                         | FERRULE SIZE | HOUSING COLOR    | CABLE SIZE | BOOT COLOR |
|--------------------------------------|--------------|------------------|------------|------------|
| 931 LC Unibody Pre-Assembled Simplex | 153 125µm    | 1 Blue           | G 1.2mm    | 1 White    |
| 932 LC Unibody Pre-Assembled Duplex  | 251 MM 127µm | 2 Beige          |            |            |
| 933 LC Unibody Un-Assembled Simplex  |              | 5 Aqua           |            |            |
| 934 LC Unibody Un-Assembled Duplex   |              | 6 Heather Violet |            |            |

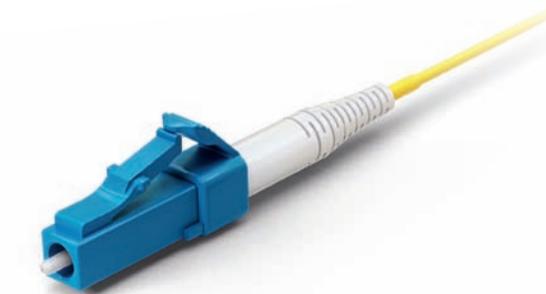
931 - 153 - 1G1 ORDER CODE example

| CONNECTOR APC                        | FERRULE SIZE | HOUSING COLOR | CABLE SIZE | BOOT COLOR |
|--------------------------------------|--------------|---------------|------------|------------|
| 931 LC Unibody Pre-Assembled Simplex | 153 125µm    | 3 Green       | G 1.2mm    | 6 Green    |
| 932 LC Unibody Pre-Assembled Duplex  |              |               |            |            |
| 933 LC Unibody Un-Assembled Simplex  |              |               |            |            |
| 934 LC Unibody Un-Assembled Duplex   |              |               |            |            |

931 - 153 - 3G6 ORDER CODE example

#### Features:

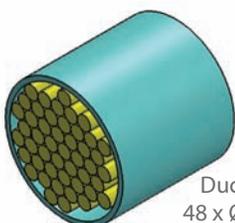
- Meets the same GR-326 requirements as a conventional 3mm and 2mm cable
- Exceeds 15lb Proof Test Objective as per GR-326-Core section 4.4.3.4
- Passes the GR-326 TWAL Test for Media 1 (ruggedized cable) as per section 4.4.3.5
- Reduces cable congestion without sacrificing mechanical strength



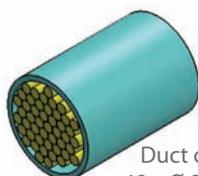
LC-UPC Connector



LC-APC Connector



Duct containing 48 x Ø 3mm cable



Duct containing 48 x Ø 2mm cable

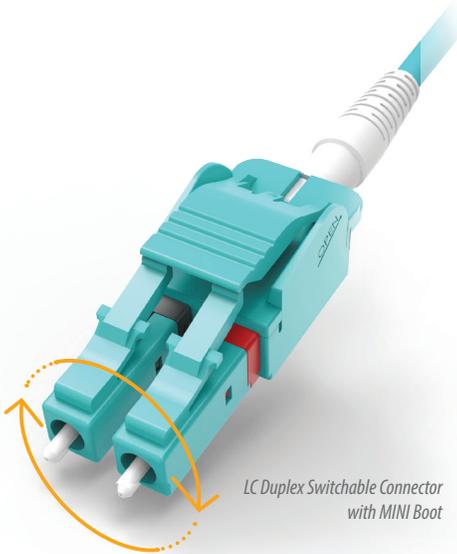


Duct containing 48 x Ø 1.2mm cable

948 Series

# LC SWITCHABLE UNIBOOT

SENKO LC Duplex Switchable Connector is a unique design that allows the use of round style, 2.0mm or 3.0mm jacketed cable instead of the traditional zipcord duplex cable for a more compact design. The housing of the LC Duplex Switchable Connector can be taken apart in the field without the use of any special tooling. This duplex LC allows the fiber polarity to be switched at the time of cable assembly installation without having to re-terminate the connectors.



LC Duplex Switchable Connector with MINI Boot

| CODE | FERRULE TYPE             | HOUSING          | BOOT TYPE                | BOOT COLOR |
|------|--------------------------|------------------|--------------------------|------------|
| 948  | 151 SM: Standard 125.5µm | 1 Blue           | <b>C</b> MINI Boot 2.0mm | 1 White    |
|      | 251 MM: Standard 127µm   | 2 Beige          | <b>D</b> MINI Boot 3.0mm | 2 Blue     |
|      |                          | 3 Green          | 7 Flex-Angle 2.0mm       | 3 Black    |
|      |                          | 5 Aqua           | 9 Flex-Angle 3.0mm       | 5 Red      |
|      |                          | 6 Heather Violet |                          | 6 Green    |
|      |                          |                  |                          | 7 Aqua     |

948 251 5D1 ORDER CODE example

**Features:**

- Uniboot connector aids cable management
- Switchable Connector to change polarity
- NEW - Latch Lock Ready
- MINI Boot ready
- Right Angle Clip for better panel management
- Flex angle boot ready
- Red / Black color indication for easy Polarity Check

CONNECTOR

948-LOCK-01 LC Switchable Uniboot Latch Lock Key Insert

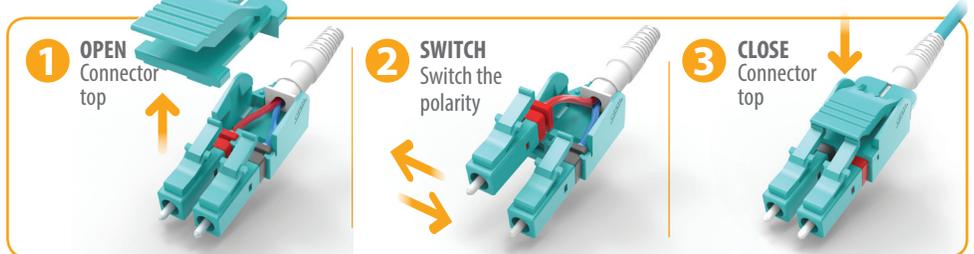
948 LOCK 01 ORDER CODE example



LC Uniboot Latch Lock Ready Connector

## SWITCH POLARITY

Allows the fiber polarity to be switched at the time of cable assembly installation without having to re-terminate the connectors.



## LATCH LOCK

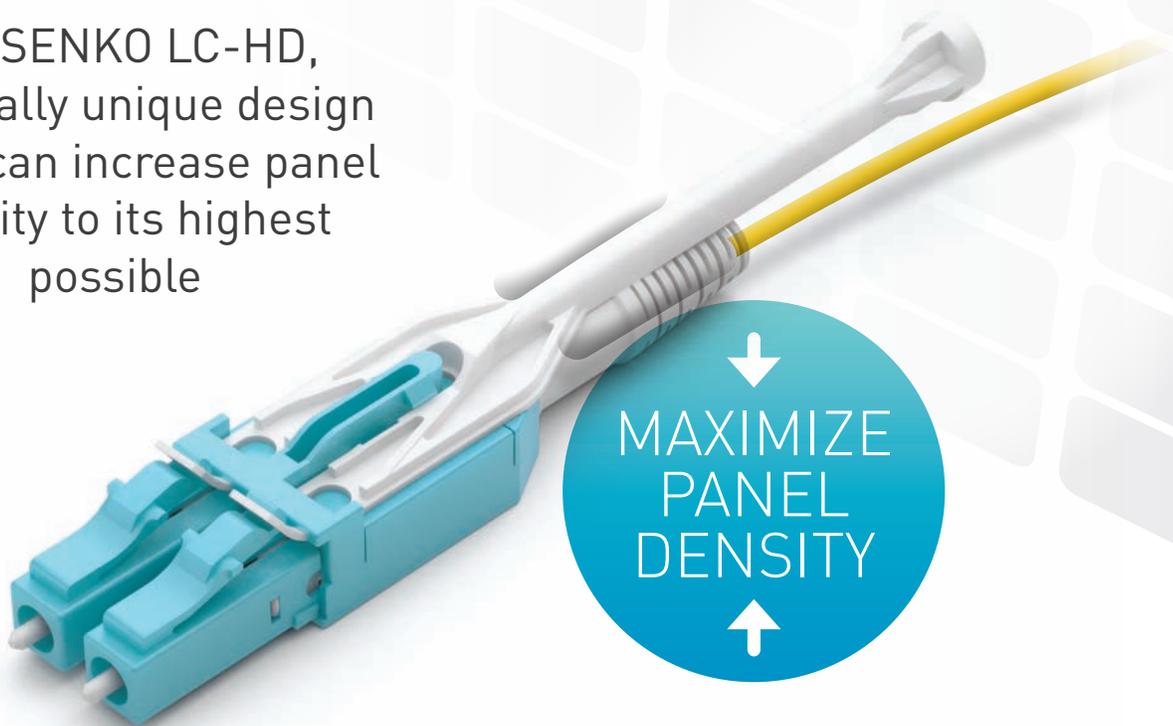
With Add-on key insert, still connects to any conventional adapter but prevents accidental disconnection. Key insert can be removed with no tool.



# LC-HD

## HIGH DENSITY CONNECTOR

The SENKO LC-HD,  
is a totally unique design  
which can increase panel  
density to its highest  
possible



### Easy to release trigger connector

The Senko LC-HD's lever design utilizes a flexible "pull-tab" allowing for the connector to be disengaged easily from densely loaded panels without the need for special tools.

"Pull-Tabs" are available in three standard lengths and multiple colors.



### Stackable adapters

In the days before the Senko LC-HD connector, the LC adapter spacing was limited by the room required to reach LC connectors with the human fingers or with special tools. The overall height of standard LC connectors also required a small vertical space above and below the LC adapters. The low profile Senko LC-HD, together with its pull tab allow the LC adapter to be stacked with absolutely no vertical space.



### 60% increase in density

Because the Senko LC-HD connector can be removed using a simple pull tab, it eliminates the need for finger access to the LC connectors latch mechanism, therefore LC adapters can now be mounted much closer than spacing required in the past.

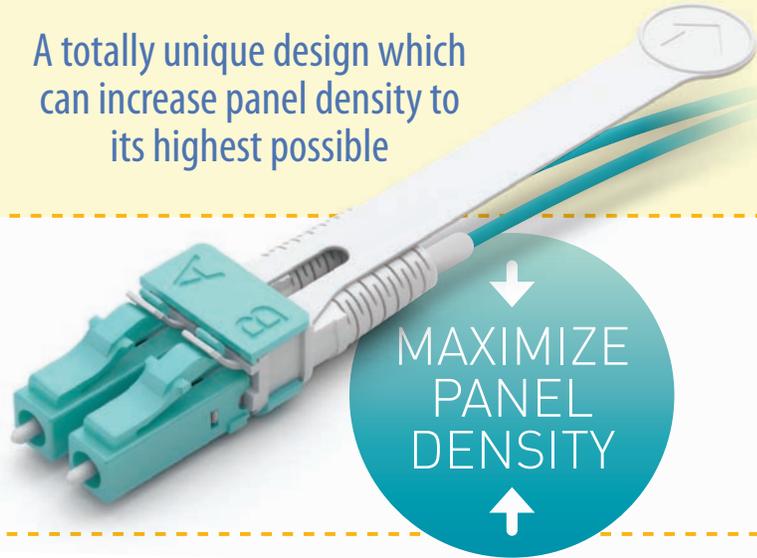


Patented SENKO design

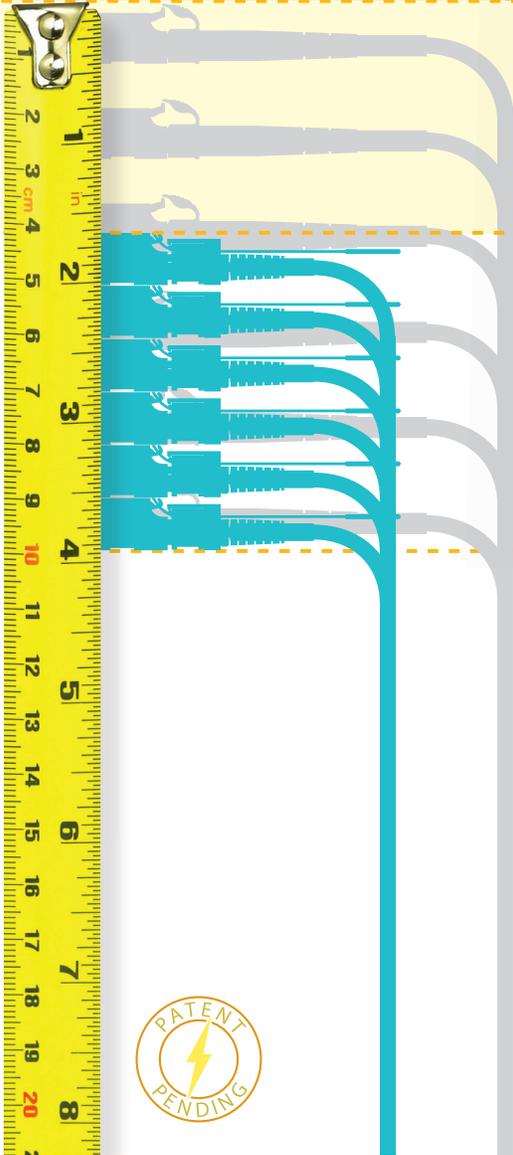
[www.senko.com](http://www.senko.com)

## LC-HD HIGH DENSITY CONNECTOR

A totally unique design which can increase panel density to its highest possible



The SENKO LC-HD, is a totally unique design which can further increase panel density over currently available solutions and allow for the highest density possible. A gentle pull on the tab will disengage it from an extremely dense fiber optical panel. The pull tab is a perfect location to affix a connector label to help in the quick identification of the connector.



**Features:**

- Easy to release trigger connector
- 60% increase in density
- Stackable adapters

**HIGH DENSITY RACK**

**10**  
PACK  
LC-HD  
SPACING

**60%**  
increase in  
density

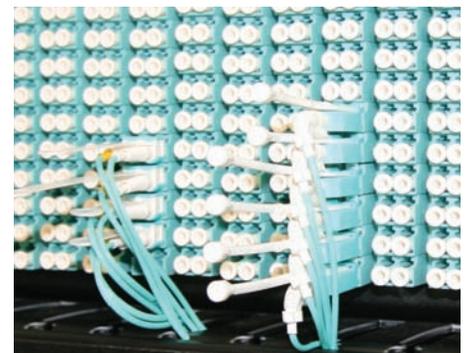
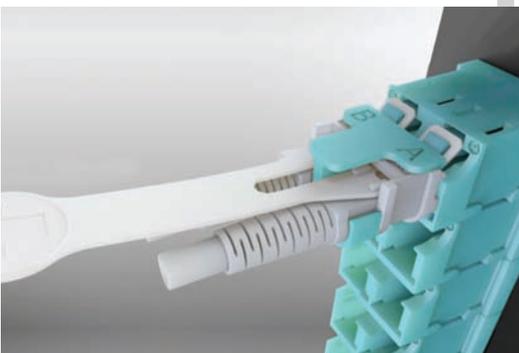
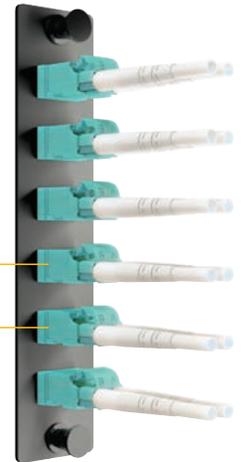
9.4 mm  
(0.37 in)



**CONVENTIONAL RACK**

**6**  
PACK  
SPACING

17.4 mm  
(0.69 in)



## LC-HD CONNECTOR FEATURES

### Easy to release trigger connector

The Senko LC-HD's lever design utilizes a flexible "pull-tab" allowing for the connector to be disengaged easily from densely loaded panels without the need for special tools. "Pull-Tabs" are available in three standard lengths and multiple colors.

### 60% increase in density

Because the Senko LC-HD connector can be removed using a simple pull tab, it eliminates the need for finger access to the LC connectors latch mechanism, therefore LC adapters can now be mounted much closer than spacing required in the past.

### Stackable adapters

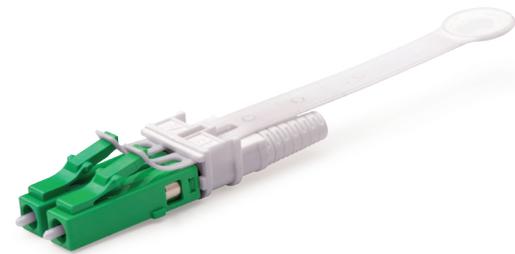
In the days before the Senko LC-HD connector, the LC adapter spacing was limited by the room required to reach LC connectors with the human fingers or with special tools. The low profile Senko LC-HD, together with its pull tab allow LC adapters to be stacked with no vertical space.

## LC-HD

| CONNECTOR TYPE    | FERRULE ID          | HOUSING COLOR            | BOOT TYPE                   | BOOT COLOR |
|-------------------|---------------------|--------------------------|-----------------------------|------------|
| 913 LC-HD Simplex | 153 SM: Premium 125 | 1 SM: Blue               | <b>B</b> LC-HD MINI 900µm   | 1 White    |
| 914 LC-HD Duplex  | 251 MM: Premium MM  | 2 MM: Beige              | <b>C</b> LC-HD MINI 2.0mm   | 2 Blue     |
|                   |                     | 3 SM APC: Green          | <b>U</b> LC-HD 2.0mm Duplex | 3 Black    |
|                   |                     | 5 MM: OM3 Aqua           | <b>G</b> LC-HD 1.2mm Boot   | 4 Yellow   |
|                   |                     | 6 MM: OM4 Heather Violet |                             | 5 Red      |
|                   |                     |                          |                             |            |

913 - 153 - 1B1 ORDER CODE example

**Note:** Pull tab must be purchased separately to complete the set



LC-HD Connector with Pull Tab

## LC-HD UNIBOOT

| CONNECTOR TYPE    | FERRULE ID         | HOUSING COLOR            | BOOT TYPE                | BOOT COLOR |
|-------------------|--------------------|--------------------------|--------------------------|------------|
| 946 LC-HD Uniboot | 251 MM: Premium MM | 1 SM: Blue               | <b>C</b> MINI Boot 2.0mm | 1 White    |
|                   |                    | 2 MM: Beige              | <b>D</b> MINI Boot 3.0mm | 2 Blue     |
|                   |                    | 3 SM APC: Green          |                          | 3 Black    |
|                   |                    | 5 MM: OM3 Aqua           |                          | 4 Yellow   |
|                   |                    | 6 MM: OM4 Heather Violet |                          | 5 Red      |
|                   |                    |                          |                          | 6 Green    |

946 - 153 - 1C1 ORDER CODE example

**Note:** Pull tab must be purchased separately to complete the set



LC-HD Uniboot with Push Pull Tab

## PULL TAB

| TYPE                | CONNECTOR TYPE TO USE WITH | TAB LENGTH | TAB COLOR |
|---------------------|----------------------------|------------|-----------|
| HDPT LC-HD Pull Tab | S Simplex                  | 44 44mm    | W White   |
|                     | D Duplex/Uniboot           | 64 64mm    |           |
|                     |                            | 84 84mm    |           |

HDPT-S-44-W ORDER CODE example

LC-HD Pull Tab



## PUSH PULL TAB

| TYPE                     | CONNECTOR TYPE TO USE WITH | TAB LENGTH | TAB COLOR |
|--------------------------|----------------------------|------------|-----------|
| HDPP LC-HD Push Pull Tab | S Simplex                  | 44 44mm    | W White   |
|                          | D Duplex/Uniboot           | 64 64mm    |           |
|                          |                            | 84 84mm    |           |

HDPP-S-BTW-W ORDER CODE example

**Note:** Push Pull Tab for LC-HD Uniboot only

LC-HD Push Pull Tab



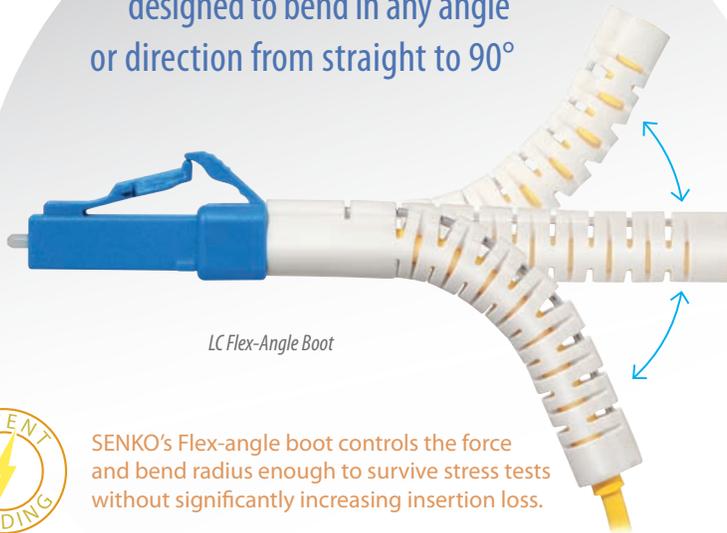
## LC FLEX ANGLE BOOT



LC Flex-Angle Boot

SENKO's new 2.0mm and 3.0mm boot addition for the Premium LC connectors. The Flex-Angle boot is designed to bend and maintain any angle or direction from straight to 90°. The boot is molded over a single stainless steel wire and can be easily positioned by hand. The internal wire holds the boot at the desired angle or direction.

The Flex-Angle boot is designed to bend in any angle or direction from straight to 90°

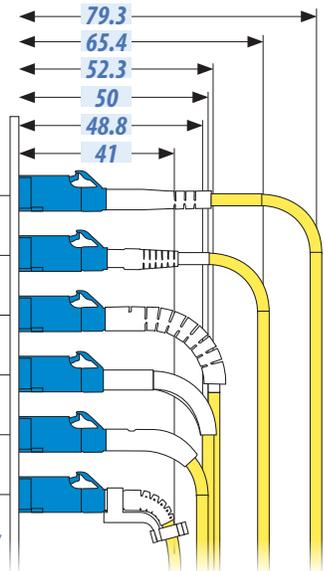


LC Flex-Angle Boot

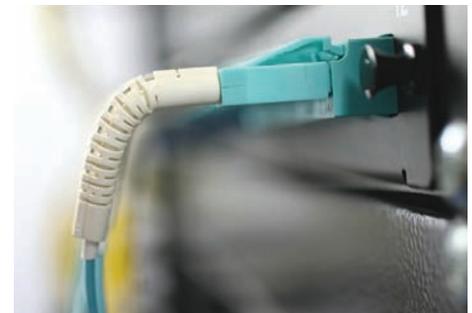
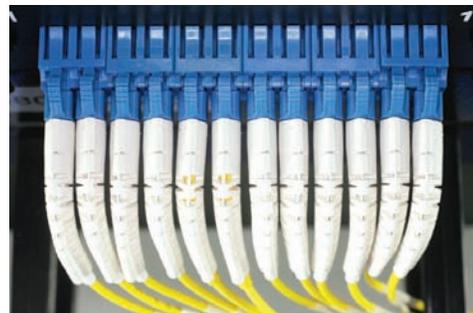
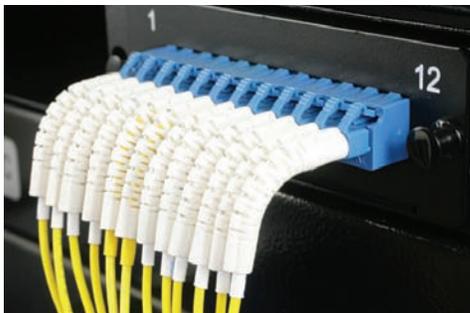


SENKO's Flex-angle boot controls the force and bend radius enough to survive stress tests without significantly increasing insertion loss.

- LC Conventional Boot
- LC MINI Boot
- LC w/Flex-Angle Boot
- LC w/90 Degree Boot
- LC w/50 Degree Boot
- LC +MINI Boot+Right Angle Clip



High density patch panels can be tricky to maneuver around when they are fully populated with rigid 90° boots, and the boots can interfere with a technician's access to the panel. SENKO's Flex-Angle boot allows bending in any direction and freedom of movement around other connectors. Also, removing a jumper is made easy; simply straighten out the boot and remove it without worrying about it affecting other connectors in the panel.



## LC ANGLE BOOTS

| TYPE                   | ITEM NUMBER    |
|------------------------|----------------|
| LC 50 Angle Boot       | BTLC-2-50-x    |
| LC 90 Angle Boot       | BTLC-2-90-x    |
| LC 2mm Flex Angle Boot | 931-JCBF-x     |
| LC 3mm Flex Angle Boot | 931-JCBF3-x    |
| LC Right Angle Clip    | 931-CLIP-RAB-W |

BTLC-2-50-X ORDER CODE example

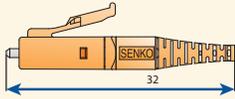
**Highlight:** The Angle boots are assembled using the same termination procedure established for the 2.0mm or 3.0mm connector (same crimp ring and crimp tool), and can be used on simplex and duplex connector configurations.

- Provide fixed and flex angle positioning for better cable management
- Made of RoHS material and UL94-V0 rated type

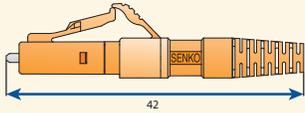
**Note:** Custom configurations available upon request

# LC CONNECTOR BOOT OPTIONS

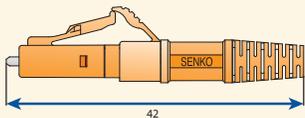
## Standard Connector MINI Boots



**B** MINI 900µm  
931-MIN1-X

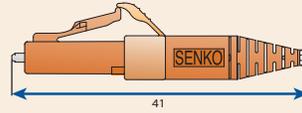


**C** MINI 2.0mm  
931-MIN2-X

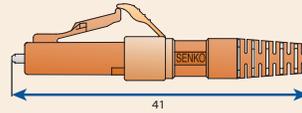


**D** MINI 3.0mm  
931-MIN3-X

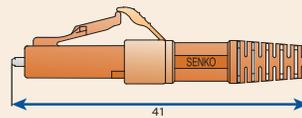
## Unibody Connector MINI Boots



**B** MINI 900µm  
931-UNI1-X

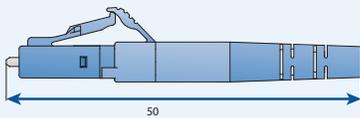


**C** MINI 2.0mm  
931-MIN2-X

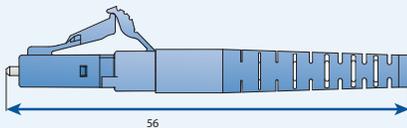
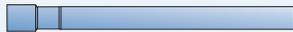


**D** MINI 3.0mm  
931-MIN3-X

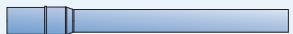
## Standard Connector Boots



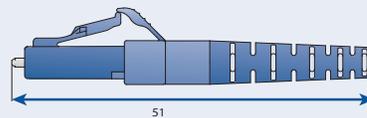
**2** 2.0mm Original  
BTLC-2-X-ON



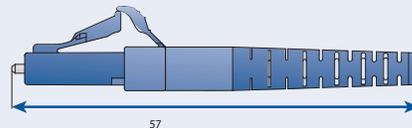
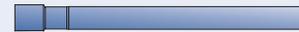
**6** 3.0mm Boot  
931-JCB3-X-R



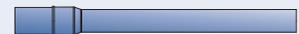
## Unibody Connector Boots



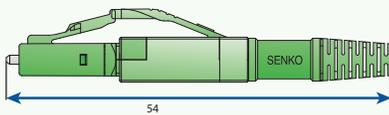
**4** 2.0mm Round  
931-JCB-X-R



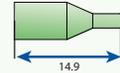
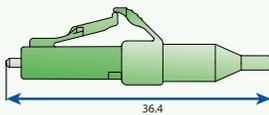
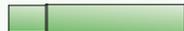
**6** 3.0mm Boot  
931-JCB3-X-R



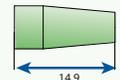
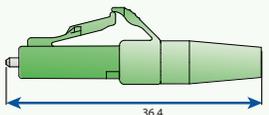
## More Boots Options



LC Switchable with MINI Boot 3.0mm  
931-MIN3-X



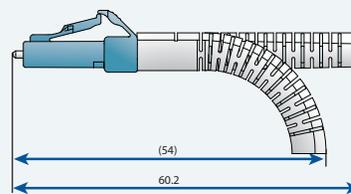
**1** BTW Boot  
931-BTWB-X



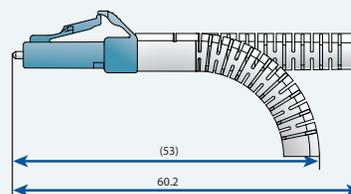
**5** 2.0mm Short Boot  
931-JCBS-X



## Flex Angle Boots



**7** 2.0mm Flex Angle Boot  
931-JCBF-X



**9** 3.0mm Flex Angle Boot  
931-JCBF3-X

**Note:** X=Color Code  
W=White, G=Green, L=Blue, B=Black, A=Aqua, R=Red

999 Series

LC ADAPTER STANDARD



LC Adapter Simplex



LC Adapter Simplex



LC Adapter Duplex

| CODE | TYPE      | COLOR       | SLEEVE TYPE               |
|------|-----------|-------------|---------------------------|
| 999  | 1 Simplex | 1 Blue      | 1 Zirconia Straight Split |
|      | 2 Duplex  | 2 Black     | 2 Metal Straight Split    |
|      |           | 3 APC Green |                           |
|      |           | 8 Beige     |                           |
|      |           | 9 Aqua      |                           |

999 - 191 ORDER CODE example

Features:

- Compact design
- RJ-45 Style Interface
- Simplex and duplex type available
- Telcordia, ANSI, TIA/EIA, and IEC compliance\*
- Color coding
- High precision alignment with zirconia sleeve or metal sleeve

988 Series (SC Footprint SNR-SNR)

LC ADAPTER (SC FOOTPRINT STYLE) SYMMETRICAL DESIGN



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



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

| CODE | TYPE                     | COLOR       | SLEEVE TYPE               | SHUTTER      |
|------|--------------------------|-------------|---------------------------|--------------|
| 988  | 3S Duplex with Flange    | 1 Blue      | 1 Zirconia Straight Split | N No Shutter |
|      | 4S Duplex with No Flange | 2 Black     | 2 Metal Straight Split    |              |
|      | 5S Quad with Flange      | 3 APC Green |                           |              |
|      | 6S Quad with No Flange   | 8 Beige     |                           |              |
|      |                          | 9 Aqua      |                           |              |

988 - 3S11 - N ORDER CODE example

Features:

- SC Foot print design allows to use the LC Adapter in a SC panel and double the density
- Premium One piece housing design / no welding point
- Telcordia, ANSI, TIA/EIA and IEC Compliance
- Internal shutter available
- SC Foot print type, Senior - Junior type also available
- High precision alignment with zirconia sleeve or metal sleeve



LC One Piece Adapter, No Weld Type



LC Two 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 ADAPTER WITH SHUTTER

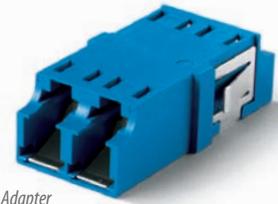
SENKO offers internal shutters for adapters to shield potentially harmful light. SENKO's patented internal shutter is a retractable shutter inside the adapter body and is only actuated by inserting the connector in to the

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.

| CODE | TYPE                     | COLOR       | SLEEVE TYPE               | SHUTTER                       |
|------|--------------------------|-------------|---------------------------|-------------------------------|
| 988  | 3S Duplex with Flange    | 1 Blue      | 1 Zirconia Straight Split | A Internal Shutter (w/o mark) |
|      | 4S Duplex with No Flange | 2 Black     | 2 Metal Straight Split    |                               |
|      |                          | 3 APC Green |                           |                               |
|      |                          | 8 Beige     |                           |                               |
|      |                          | 9 Aqua      |                           |                               |

988 - 3S11 - A ORDER CODE example

### 988 Series



LC One Piece Adapter with SC Foot Print



LC One Piece Adapter with SC Foot Print (SNR/SNR)

## LC-MU & LC-SC HYBRID ADAPTER

| PART NUMBER | DESCRIPTION                                       |
|-------------|---|
| M90-101     | LC-MU Simplex Hybrid adapter with Zirconia Sleeve |
| 990-113     | LC-SC Simplex Hybrid adapter with Zirconia Sleeve |



LC-MU Hybrid Adapter



LC-SC Hybrid Adapter

## LC METAL ADAPTER

LC one piece duplex metal adapters are available in symmetrical SC foot print design with or without flanges. They can be ordered with internal shutters to provide much needed eye safety by shielding the potentially harmful laser light. These adapters have color coded

dust cap and sleeve holder to ensure right adapter is used for the correct application (PC SM: Blue, PC MM: Beige, APC: Green). Both zirconia and phosphor bronze alignment sleeves are available on this product.

| CODE | TYPE                     | DUST CAP/INTERNAL COLOR | SLEEVE TYPE | SHUTTER            |
|------|--------------------------|-------------------------|-------------|--------------------|
| 988M | 3S Duplex with Flange    | 1 Blue                  | 1 Zirconia  | N No Shutter       |
|      | 4S Duplex without Flange | 2 Green                 | 2 Metal     | A Internal Shutter |
|      |                          | 3 Beige                 |             |                    |

988M - 3S11 - N ORDER CODE example



LC One Piece Duplex Adapters

# LC TOP ADAPTER

## True One Piece



## Meet the New, More Rugged, True One Piece (TOP) Design

### FEATURES



**4 anti-rattle wings**  
Significantly reduce movement when snapped into panel



**Integrated non metallic panel clip**



**External/Internal shutter capable**



**LC TOP Adapter with flange**



**LC TOP Adapter no flange**

SENKO introduces its new line of True One Piece adapters with enhanced Rattle Free wings. Available in both flange and no flange configurations. The True One Piece design has proven increased side loading performance over conventional adapters.

### FUNGUS RESISTANCE

Over a period of time it is possible that Polymeric materials can grow fungus on the surface, (see image of a Polymeric sample with fungus growth present) but according to the requirements of Telcordia GR-326 it stipulates that samples shall not support fungus growth per ASTM G21-96. A rating of 0 (zero) is required.

NOTE: This requirement applies to the connector (including boots) and adapter plastic components. SENKO premium connectors are manufactured using materials that do not support this fungus growth, after independent testing of SENKO connectors are rated at 0 (zero).



# LC TOP ADAPTER WITH SC FOOT PRINT

## TOP (True One Piece) Adapter 987 series

Senko introduces its new line of True One Piece adapters with enhanced Rattle Free wings. Available in both flange and no flange configurations.

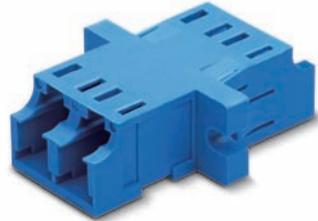
The True One Piece design has proven increased side loading performance over conventional adapters.



| CODE | TYPE                  | COLOR                  | SLEEVE TYPE | SHUTTER                           |
|------|-----------------------|------------------------|-------------|-----------------------------------|
| 987  | 3S Duplex with Flange | 1 Blue                 | 1 Zirconia  | N No Shutter                      |
|      | 4S Duplex No Flange   | 2 Black                | 2 Metal     | A Internal Shutter (without mark) |
|      |                       | 3 Green                |             |                                   |
|      |                       | 7 Violet OM4 (MOQ Req) |             |                                   |
|      |                       | 8 Beige                |             |                                   |
|      |                       | 9 Aqua OM3             |             |                                   |
|      |                       |                        |             |                                   |
|      |                       |                        |             |                                   |
|      |                       |                        |             |                                   |



LC TOP Adapter without Flange



LC TOP Adapter with Flange

**Note:** For External Shutter, please refer to page 11.  
Part Number: 222-2-OS

987 - 3S11 - N ORDER CODE example



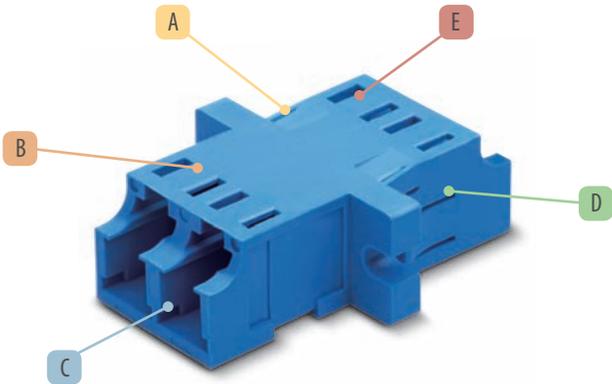
LC One Piece Adapter, No Weld Type



LC Standard Adapter, Welded Type

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

# LC TOP ADAPTER FEATURES



**Features:**

- Four (4) Anti-Rattle “wings” prevent the freedom of the adapter to wiggle in a top-to-bottom direction when snapped into adapter panels
- An integrated panel clip is molded into the adapter’s plastic housing which eliminates the need for any added metallic panel clip
- The integral panel clips have the dual role of also preventing the adapter to wiggle in a side-to-side direction
- Recesses on both sides of the adapter allow the current external shutter to be used

- A** Rattle Free Wings
- B** One Piece Solid Body
- C** Shutter Ready
- D** Integrated Mount Clip
- E** Anti Fungus Plastic UL 94-V-0

# LC KEYED CONNECTOR AND ADAPTER



LC Keyed Connectors and Matching Adapters

SENKO Keyed LC Connector Solution offers mechanical network security for organizations wanting to segregate networks due to privacy or security concerns.

**Features:**

- LC Keyed connectors and adapters prevent improper connection of separate networks with common access points
- LC Keyed products feature twelve color-coded, keyed designs to limit improper connections networks
- Each LC Keyed connector will mate only with same-color LC Keyed adapter

| CODE | TYPE               | FERRULE I.D. | COLOR/CLIP             | HOUSING COLOR & KEY | BOOT      | BOOT COLOR |       |       |        |   |           |   |                  |   |       |
|------|--------------------|--------------|------------------------|---------------------|-----------|------------|-------|-------|--------|---|-----------|---|------------------|---|-------|
| 93   | LC Keyed Connector | 5            | Simplex (Un-assembled) | 153                 | SM: 125µm | 1          | Blue  | A     | Pink   | K | Turquoise | B | MINI Boot 900µm  | 1 | White |
|      |                    | 6            | Duplex (Un-assembled)  | 251                 | MM: 127µm | 2          | Beige | B     | White  | L | Magenta   | C | MINI Boot 2.0mm  |   |       |
|      |                    | 7            | Simplex (Assembled)    |                     |           |            |       | C     | Yellow | M | Olive     | D | MINI Boot 3.0mm  |   |       |
|      |                    | 8            | Duplex (Assembled)     |                     |           |            |       | D     | Red    |   |           | 4 | 2.0mm Round      |   |       |
|      |                    |              |                        |                     |           |            |       | E     | Orange |   |           | 6 | 3.0mm Boot       |   |       |
|      |                    |              |                        |                     |           |            |       | F     | Violet |   |           | 7 | Flex-Angle 2.0mm |   |       |
|      |                    |              |                        |                     |           |            |       | G     | Gray   |   |           | 9 | Flex-Angle 3.0mm |   |       |
|      |                    |              |                        |                     |           |            |       | H     | Cobalt |   |           |   |                  |   |       |
|      |                    |              |                        |                     |           |            | J     | Brown |        |   |           |   |                  |   |       |

936 - 251 - 2A41 ORDER CODE example

| CODE | TYPE             | COLOR & KEY | SLEEVE TYPE           |        |        |                   |           |   |                         |
|------|------------------|-------------|-----------------------|--------|--------|-------------------|-----------|---|-------------------------|
| 977  | LC Keyed Adapter | 3S          | Duplex with Flange    | A      | Pink   | H                 | Cobalt    | 1 | Zirconia Straight Split |
|      |                  | 4S          | Duplex with No Flange | B      | White  | J                 | Brown     |   |                         |
|      |                  | 5S          | Quad with Flange      | C      | Yellow | K                 | Turquoise |   |                         |
|      |                  | 6S          | Quad with No Flange   | D      | Red    | L                 | Magenta   |   |                         |
|      |                  |             | E                     | Orange | M      | Olive             |           |   |                         |
|      |                  |             | F                     | Violet | U      | Black (Universal) |           |   |                         |
|      |                  |             | G                     | Gray   |        |                   |           |   |                         |

977 3SD1 ORDER CODE example

## MINI LC CONNECTOR (5.25mm PITCH TYPE)

The Mini LC Connector is designed with a narrow ferrule pitch to work with the Mini SFP (mSFP) transceiver. This accommodates the need of higher port densities provided by the transceivers without compromising performance. The change in pitch was introduced to create a more compact transceiver footprint. With this reduction, port density can be increased without changes to overall enclosure dimensions.

The MINI LC Duplex Connector looks virtually identical to standard LC Duplex connector distinguishable with its black Duplex clip and its 5.25mm pitch versus the 6.25mm used in standard LC Duplex connector.

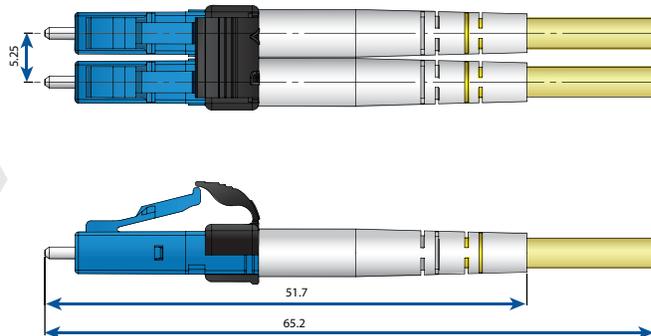
| CONNECTOR | FERRULE TYPE       | HOUSING                  | BOOT TYPE  | BOOT COLOR |
|-----------|--------------------|--------------------------|------------|------------|
| 916       | LC Pre-Assembled   | 1 SM: Blue               | 2 2.0mm    | 1 White    |
|           | 1 PC, 5.25mm Pitch | 2 MM: Beige              | Round Boot |            |
|           |                    | 5 MM OM3: Aqua           |            |            |
|           |                    | 6 MM OM4: Heather Violet |            |            |

916 - 151 - 121 ORDER CODE example

**Note:** Other ferrule ID size are available  
 SM 126µm SM 125µm MM 230µm MM 144µm

### Features:

- Increase the density
- Extremely compact design
- Easy assembly
- Ferrule to ferrule pitch reduced from 6.25 to 5.25
- Same spec as the Standard LC Connector



MINI LC Connector  
 5.25mm Pitch



MINI LC 2.0mm  
 Duplex Connector, Aqua



MINI LC 2.0mm  
 Duplex Connector, Blue

## LC CRIMP TOOL

| CODE | CONNECTOR TYPE             |
|------|----------------------------|
| CRT  | 701 LC/MU Dual Crimp Tool  |
|      | 705 SC/LC 1.2mm Connectors |

CRT - 701 ORDER CODE example

