

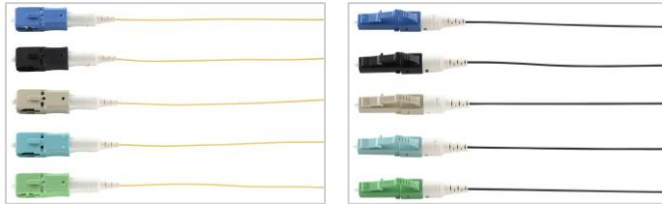
# **Lynx-CustomFit™ Splice-On Connector**

**Introduction for Telecoms/Contractors/Technicians**

Sumitomo Electric Industries, Ltd.

# Types of Field Installable Connectors

## Mechanical Splice Type



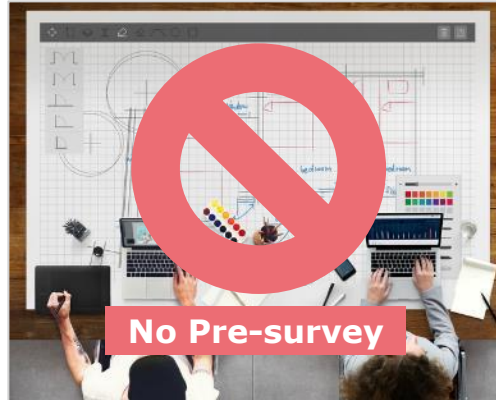
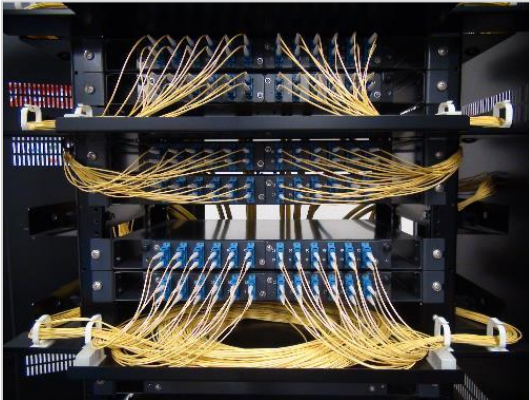
## Fusion Splice Type (Lynx-CustomFit™)



<b>Equipment Cost</b>	<b>Low</b>	High (Fusion Splicer)
<b>Installation</b>	<b>Quick &amp; easy</b>	Easy
<b>Splice Check</b>	Checking leaked light with Visual Light Source	<b>Splice Loss estimation by Fusion Splicer</b>
<b>Optical Loss performance</b>	Good	<b>Excellent (same as factory—connectorization)</b>
<b>Typical Application</b>	FTTH; Home reach, LAN; cable termination	FTTH; Home reach, central office; OSP Cable / Patch cord termination, data center

# What is Lynx-CustomFit™?

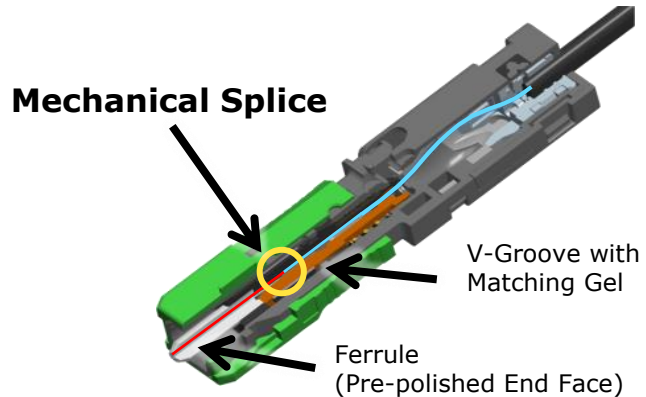
## Lynx-CustomFit™ Uses Fusion Splicers



- Low loss
- No polishing
- No pre-survey
- Installable in small space

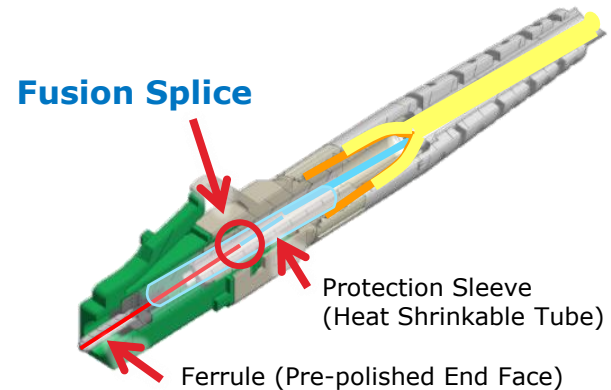
# Excellent Loss with Fusion Splicer

## Mechanical Splice Connector (Non Polish Type)



- Good loss
- Precise mechanical alignment by using matching gel
- Quick installation

## Lynx-CustomFit™ (Fusion Splice Connector)



- Excellent loss
- Fusion splice technology directly connects cores
- Easy installation

# Screening the Variance of Splice Loss

## Mechanical Splice Connector (Non Polish Type)



Loss is not checked.

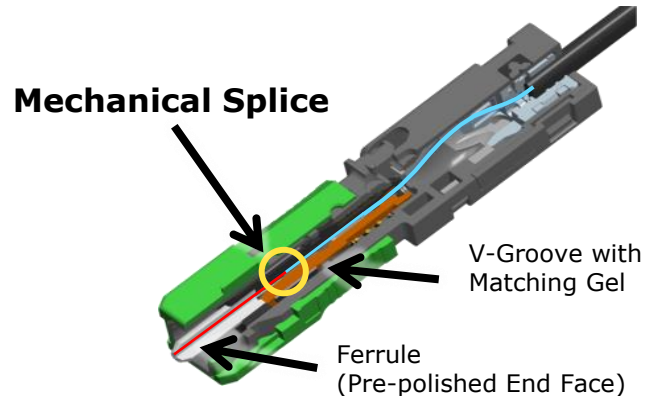
## Lynx-CustomFit™ (Fusion Splice Connector)



Estimated loss is checked.

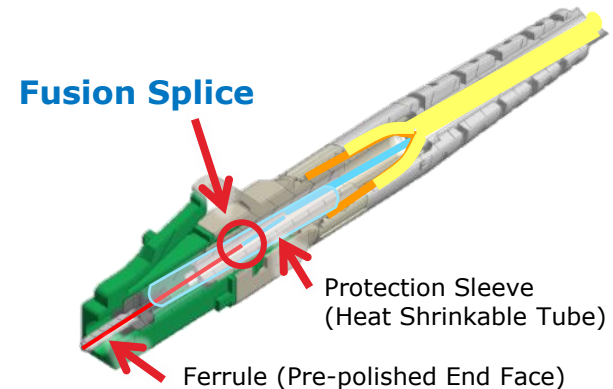
# Excellent Loss with Fusion Splicer

## Mechanical Splice Connector (Non Polish Type)



- Good loss
- Precise mechanical alignment by using matching gel
- Quick installation

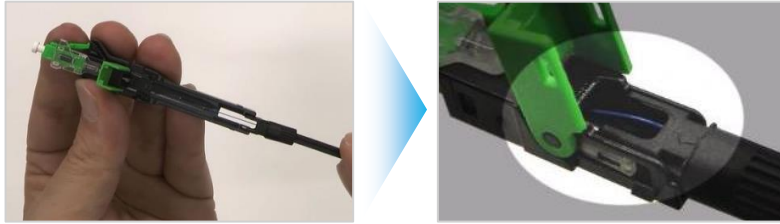
## Lynx-CustomFit™ (Fusion Splice Connector)



- Excellent loss
- Fusion splice technology directly connects cores
- Easy installation

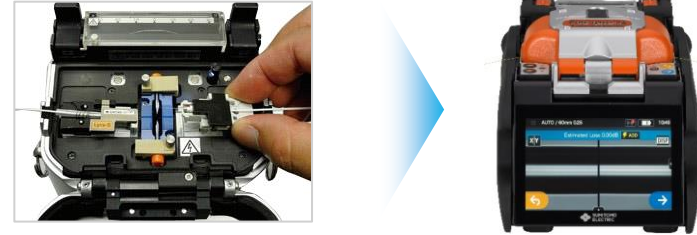
# Splice Automatically with Fusion Splicer

## Mechanical Splice Connector (Non Polish Type)



- Manual insertion is required to connect fibers
- Connect fibers by using Jigs

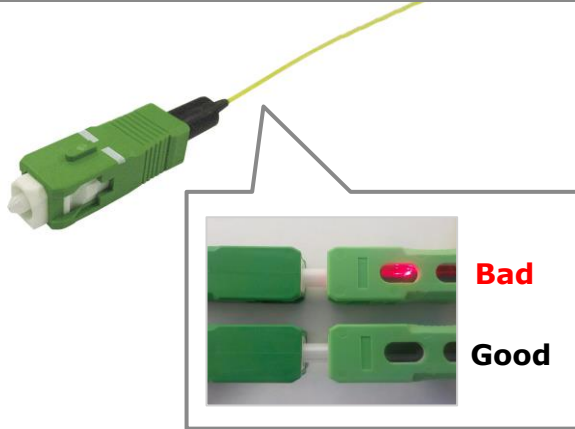
## Lynx-CustomFit™ (Fusion Splice Connector)



- Automatic splice by fusion splicer
- No special skills needed to connect fibers. Fusion splicer makes acceptable splicing
- Help videos are available

# Splice Check

## Mechanical Splice Connector (Non Polish Type)



- The visual light source can tell success or failure of the termination

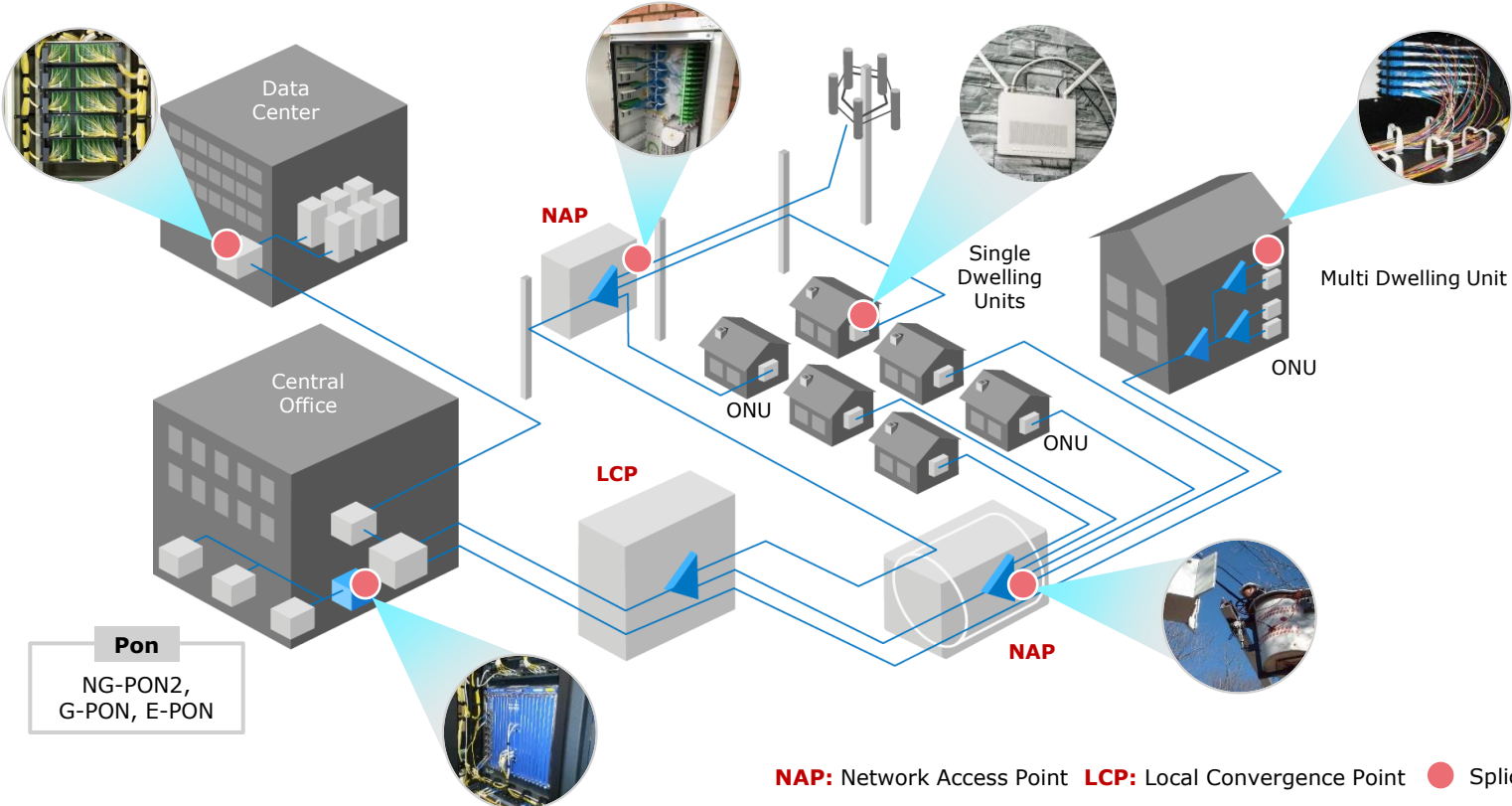
## Lynx-CustomFit™ (Fusion Splice Connector)



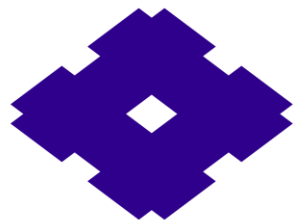
- Fusion splicer can tell the estimation loss
- During the installation, checking the loss is quite important to meet required loss budget
- Even a beginner technician can terminate correctly



# Area of Application: Lynx-CustomFit™



**NAP:** Network Access Point **LCP:** Local Convergence Point ● Splice Point



**SUMITOMO  
ELECTRIC**

**Connect with Innovation**

<http://www.global-sei.com>

**SUMITOMO  
ELECTRIC  
GROUP**

# Lynx-CustomFit™ Lineup and Specification

## Full Lineup for all needs



### Standards and Optical Performance

	SC	LC	FC	ST	Q8MPO / 12MPO
Interface Standard	IEC61754-4	IEC61754-20	IEC61754-13	IEC 61754-2	IEC 61754-7-1
Insertion Loss (against master plug)		SMF: Ave. 0.2dB, Max. 0.3dB MMF: Ave. 0.1dB, Max. 0.25dB			SMF(Std Loss) : Max.0.75dB SMF(Low Loss): Max. 0.4dB MMF(Low Loss): Max. 0.4dB
Return Loss (against master plug)		SMF: ≥ 60dB (APC), ≥ 55dB (UPC) MMF: ≥ 30dB (PC)			SMF: ≥ 55dB

### Lineup for Single Fiber Connector (Lynx-CustomFit™ Ver.3)

Connector type	Polishing type	Fiber type	Connector color	Fiber / Cord diameter	Boot type	
SC LC FC ST*1	APC	SM	Green	250µm/900µm *2 2mm with 900µm Tight Buffer 2mm with 900µm Loose Buffer 3mm with 900µm Tight Buffer	Standard boot Short boot *3	
	UPC	SM	Blue			
	PC		MM50(OM2)			Black
			MM50(OM3)			Aqua
			MM62.5(OM1)			Beige

\*1 ST connector is available for SM(UPC polishing) and MM(PC polishing).

\*2 250µm/900µm is applicable for the following; 250µm, 900µm Tight buffer, 900µm Loose Tube and 900µm Loose Buffer

\*3 Short boot is available for SC and LC type of 250µm/900µm tight buffer.

### Lineup for MPO Connector (Lynx-CustomFit™ Ver.2)

Guide pin	Fiber/Polishing type	Connector color	Cord diameter
With / Without guide pin	SM Low loss	Yellow	RBN: 8c/12c Bare Ribbon RND: 8c/12c Round cord (φ 3mm) RBC: 8c/12c Ribbon cord
	SM Standard loss	Green	
	MM50(OM2) Low loss	Black	
	MM50(OM3) Low loss	Aqua	

# Lynx-CustomFit™ Lineup and Specification

## Full Lineup for all needs



### Assembly Tool

Tool Name [Part No.]		An appropriate Sumitomo Electric fusion splicer	Fiber cleaver [FC-8R]	Jacket remover [JR-M03]	Thermal jacket remover [JR-7]	Sheath splitter [LYNX-CORDTOOL-16-24]	Sheath splitter [LYNX-CORDTOOL-2.0-3.0]	Kevlar snips [N-57]	ST assembly tool [LYNX-ST-AT-01]
Appearance									
Single Fiber	Cord	● with all current models	●	●	—	● for 1.6/2.4mm cord	● for 2.5mm cord	●	● for ST connector
	Fiber	● with all current models	●	●	● for $\phi 0.2 \sim 0.4$ mm fiber	—	—	—	● for ST connector
MPO	Round Cord / Ribbon Cord	● with ribbon fiber splicer	●	—	—	—	● for round cord / ribbon cord	●	—
	Bare Ribbon	● with ribbon fiber splicer	●	—	●	—	—	—	—

### Fiber Holders for Single Fiber Connector (Lynx-CustomFit™ Ver.3)

Type	Part No. Left side (Setting fiber / cord)	Part No. Right side (Setting ferrule sub-assembly)
250μm fiber	FHS-025 or LYNX-S-LB	LYNX-C-PLS (Plastic, Standard) * or LYNX-C (Metal, Option)
900μm Tight Buffer	FHS-09 or LYNX-S	
900μm Loose Tube	LYNX-S-LB	
900μm Loose Buffer		
2mm cord with 900μm Tight Buffer	LYNX-S	
2mm cord with 900μm Loose Buffer	LYNX-S-LB	
3mm cord with 900μm Tight Buffer	LYNX-S	

\* 1 pc of LYNX-C-PLS holder is supplied with every 10 connectors.

### Fiber Holders for MPO Connector (Lynx-CustomFit™ Ver.2)

Type	Part No. Left side (Setting fiber / cord)	Part No. Right side (Setting ferrule sub-assembly)
Bare Ribbon	12-fiber: FHM-12V 8-fiber: FHM-8	LYNX2-C(MT) (Plastic, Standard) *
Round Cord		or
Ribbon Cord		LYNX2-C(MT) Metal (Metal, Option)

\* 1 pc of LYNX2-C(MT) holder is supplied with every 10 connectors.