

# **Lynx-CustomFit™**

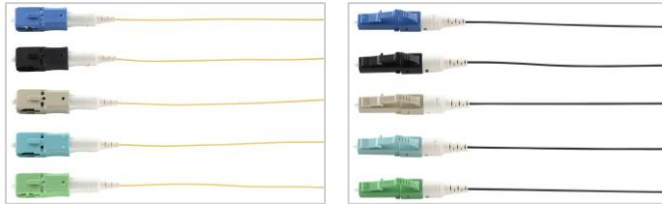
# **Splice-On Connector**

## **Introduction for Telecoms/Contractors/Technicians**

Sumitomo Electric Industries, Ltd.

# Types of Field Installable Connectors

## Mechanical Splice Type



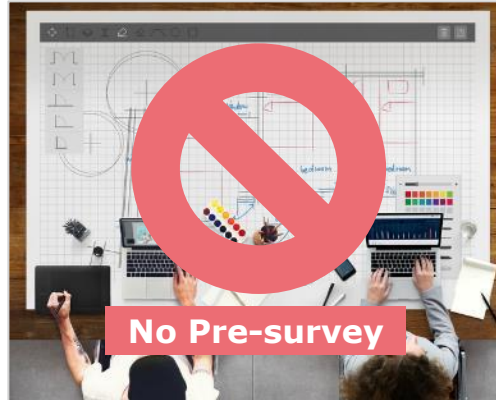
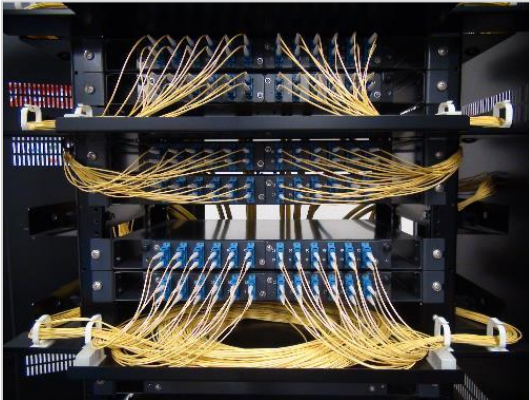
## Fusion Splice Type (Lynx-CustomFit™)



<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 centre

# What is Lynx-CustomFit™?

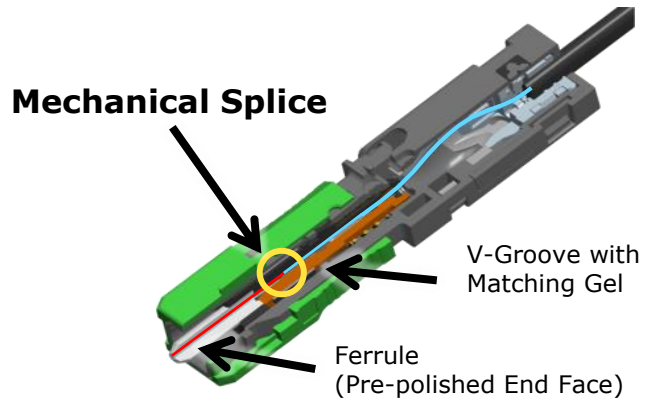
## Lynx-CustomFit™ Uses Fusion Splicers



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

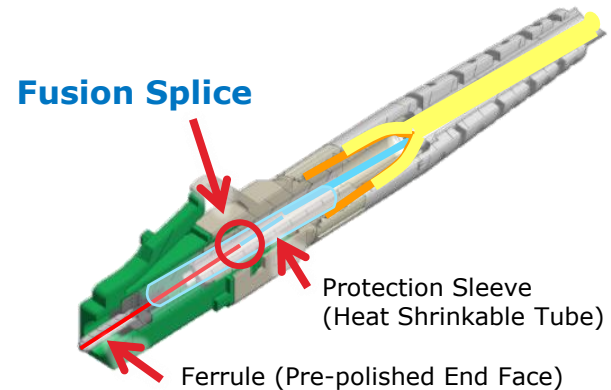
# Excellent Loss with Fusion Splicer

## 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.

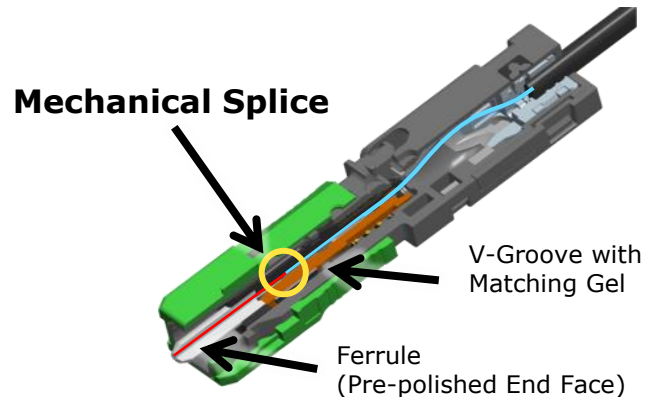
## Lynx-CustomFit™ (Fusion Splice Connector)



Estimated loss is checked.

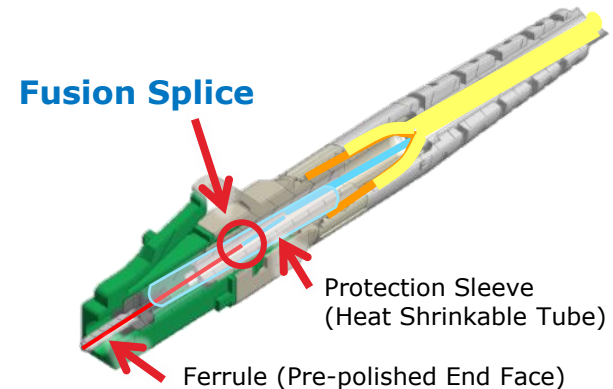
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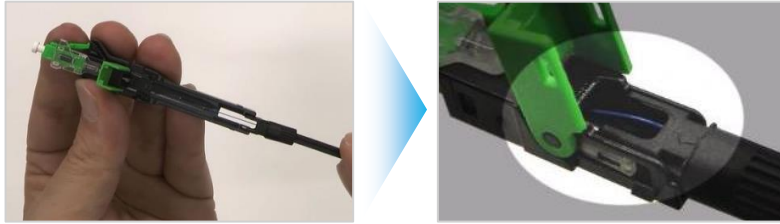
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- Excellent loss
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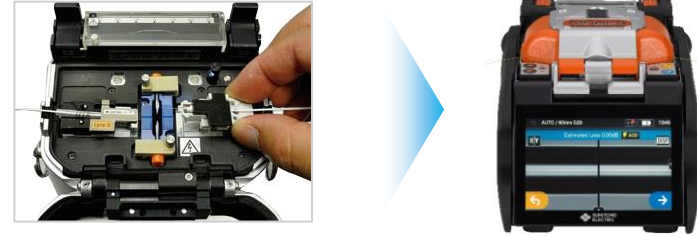
# Splice Automatically with Fusion Splicer

## Mechanical Splice Connector (Non Polish Type)



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

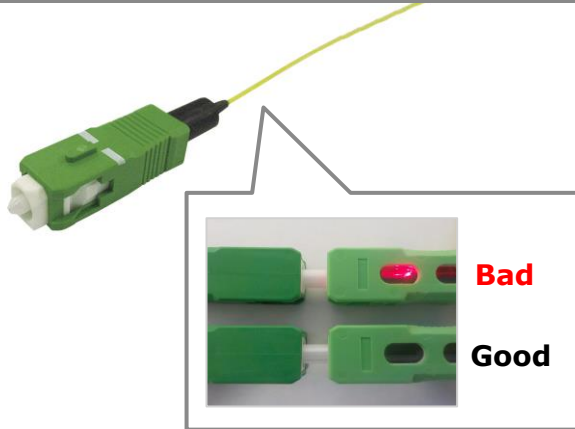
## Lynx-CustomFit™ (Fusion Splice Connector)



- Automatic splice by fusion splicer
- No special skills needed to connect fibres. 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

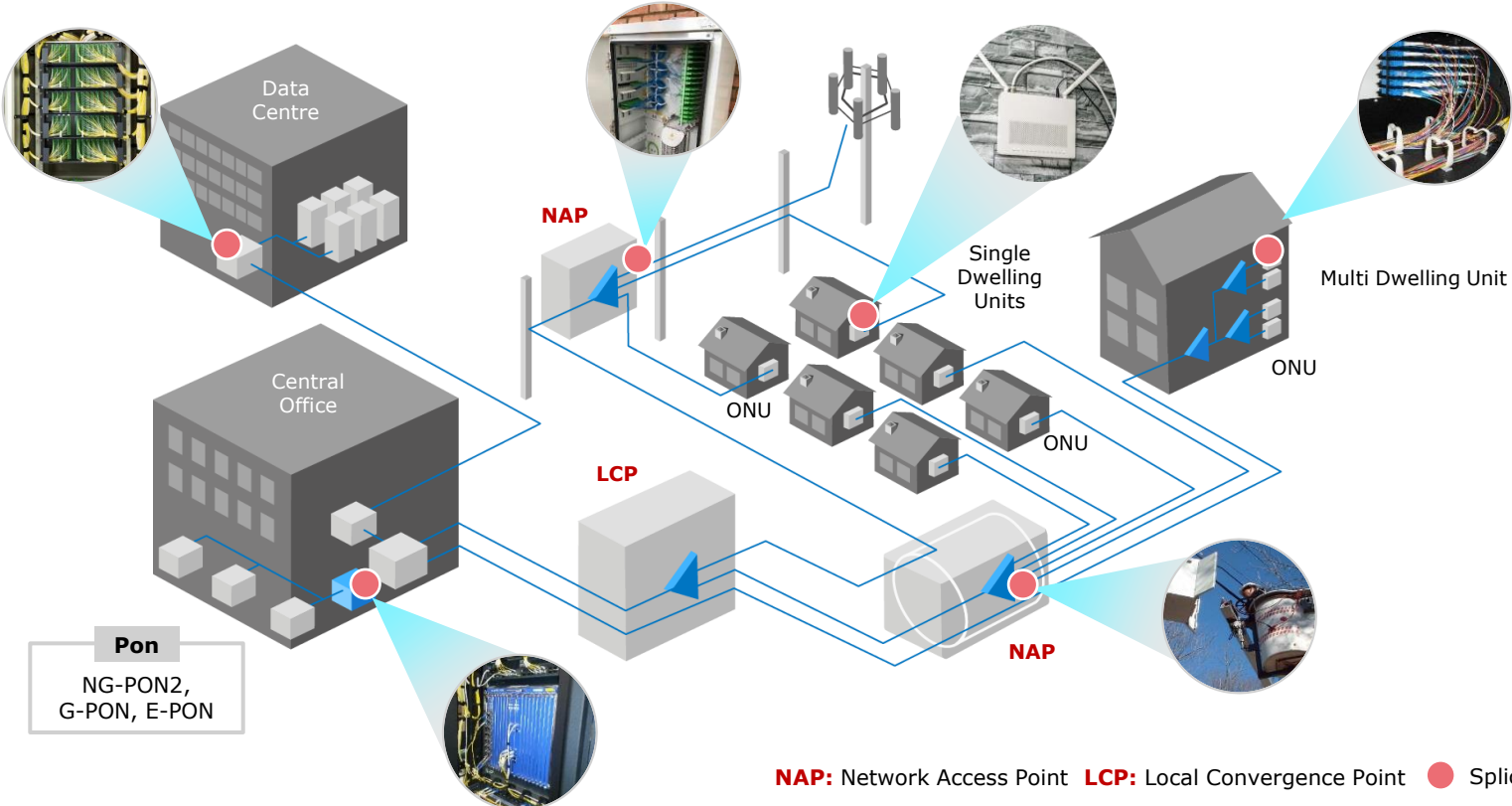
## Lynx-CustomFit™ (Fusion Splice Connector)



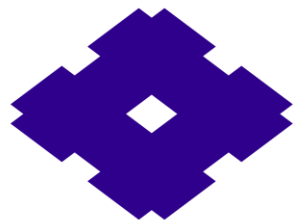
- Fusion splicer can tell the estimation loss
- During the installation, checking the loss is quite important to meet required loss budget
- Even a beginner technician can terminate correctly



# Area of Application: Lynx-CustomFit™



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



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# Lynx-CustomFit™ Lineup and Specification

## Full Lineup for all needs



### Standards and Optical Performance

	SC	LC	FC	ST	Q8MPO / 12MPO
<b>Interface Standard</b>	IEC61754-4	IEC61754-20	IEC61754-13	IEC 61754-2	IEC 61754-7-1
<b>Insertion Loss (against master plug)</b>		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
<b>Return Loss (against master plug)</b>		SMF: ≥ 60dB (APC), ≥ 55dB (UPC) MMF: ≥ 30dB (PC)			SMF: ≥ 55dB

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

Connector type	Polishing type	Fibre type	Connector color	Fibre / 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	Fibre/Polishing type	Connector color	Cord diameter
With / Without guide pin	SM Low loss	Yellow	RBN: 8c/12c Bare Ribbon RND: 8c/12c Round cord (φ3mm) 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	Fibre cleaver [FC-8R]	Jacket remover [JR-M03]	Thermal jacket remover [JR-7]	Sheath splitter [LYNX-CORDTOOL-1.6-2.4]	Sheath splitter [LYNX-CORDTOOL-2.0-3.0]	Kevlar snips [N-57]	ST assembly tool [LYNX-ST-AT-01]
Appearance									
Single Fibre	Cord	● with all current models	●	●	—	● for 1.6/2.4mm cord	● for 2/3mm cord	●	● for ST connector
	Fibre	● with all current models	●	●	● for φ0.2~0.4mm fiber	—	—	—	● for ST connector
MPO	Round Cord / Ribbon Cord	● with ribbon fibre splicer	●	—	●	—	● for round cord / ribbon cord	—	—
	Bare Ribbon	● with ribbon fibre splicer	●	—	●	—	—	—	—

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

Type	Part No. Left side (Setting fibre / cord)	Part No. Right side (Setting ferrule sub-assembly)
250µm fibre	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 900µm Loose Buffer	LYNX-S-LB	
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 100 connectors.

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

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

\* 1 pc of LYNX2-C(MT) holder is supplied with every 100 connectors.