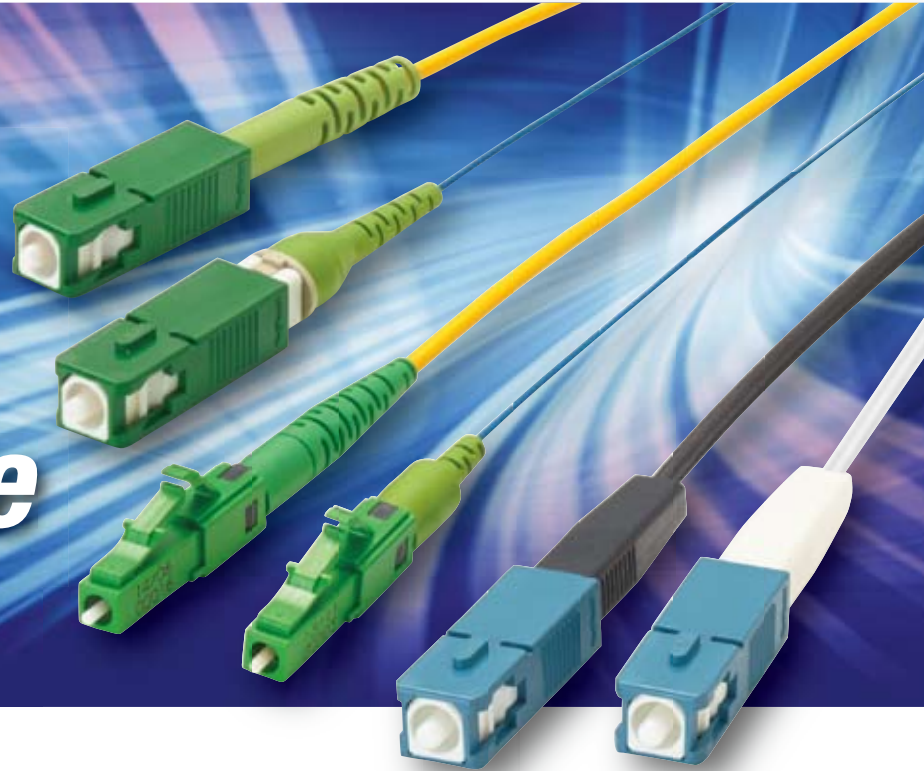


## *Fusion-spliced, field-terminated connector for FTTX*

**Simple &  
Field  
Installable**



# FuseConnect™



- Connectorization in :
  - RF-overlay FTTP networks
  - Outside plant
  - Cable TV backbone networks
  - MDU FTTP cabling
- Central office connector replacement
- Data center installation

Single Fiber Fusion Splicer

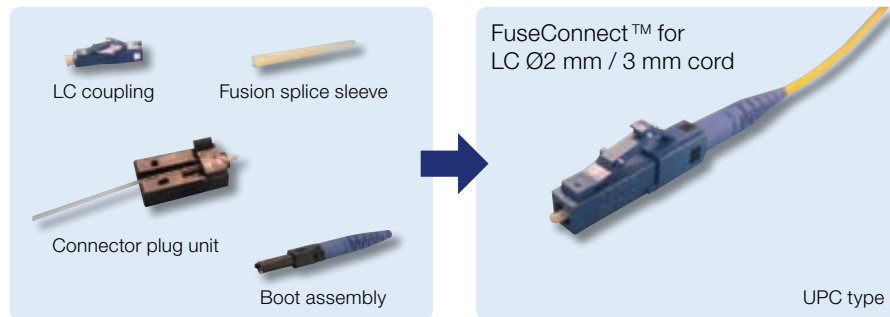
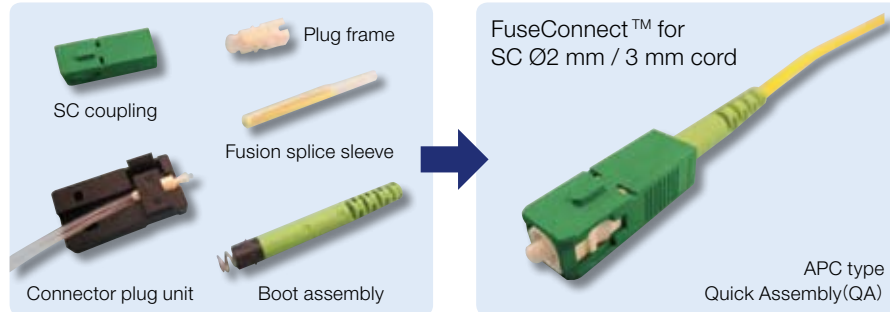
## **Fujikura 12S**

- World's smallest and lightest
- Excellent for FTTX
- Superior mobility for aerial / confined space



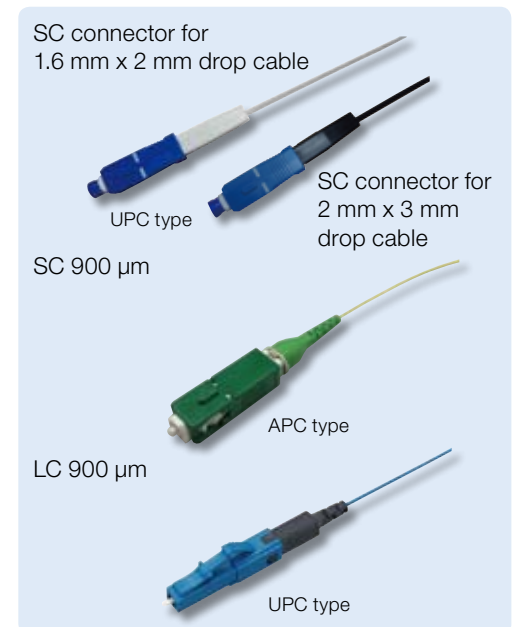
# FuseConnect™

Fujikura's FuseConnect™ with factory pre-polished ferrule, utilizes fusion splicer to terminate the connector in the field. This eliminates polishing, adhesives and crimping in the field, which minimizes the potential for operator error and expensive connector scrap. Fusion splice addresses return loss concerns present in analog optical networks. This advanced process yields true APC performance for SC / APC and LC / APC configuration. The innovative design and simplified field installation makes the FuseConnect™ the ideal choice for various fiber termination and FTTX applications.

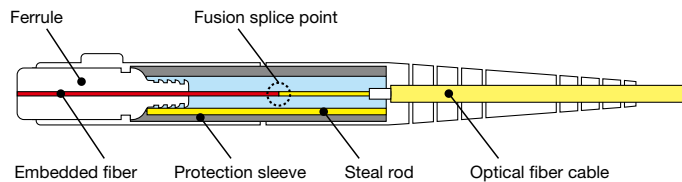


## Features

- Field installable
- No adhesives, crimping or polishing
- True APC performance
- MM compliant to TIA / EIA568C.3
- Compatible with Fujikura and most other fusion splicers



## Interior Structure



## Specification

Item	Content
Applicable fiber type	900 µm, 2 mm, 3 mm, 1.6 mm x 2 mm drop cable, 2 mm x 3 mm drop cable
Connector type	SC or LC
Polishing	UPC or APC or PC (MM)
Connection loss (with master)	< 0.3 dB (Singlemode)
	< 0.3 dB (Multimode)
Return loss	> 65 dB (SM fiber APC polish)
	> 55 dB (SM fiber PC polish)
	> 30 dB (MM UPC polish)
Operating temperature	-40°C to 75°C

## Ordering Information (SC, LC) (900 um fiber, Ø2 mm cord, Ø3 mm cord)

Type	SC 900 um fiber	SC 2 mm cord / SC 3 mm cord	LC 900 um fiber	LC 2 mm cord	LC 3 mm cord
SM UPC Polish	FuseConnect-SC-SF-SM-09	FuseConnect-SC-QA-SM-20/30	FuseConnect-LC-SF-SM-09	FuseConnect-LC-QA-SM-20	FuseConnect-LC-SF-SM-30
SM APC Polish	FuseConnect-SC-SF-APC-09	FuseConnect-SC-QA-APC-20/30	FuseConnect-LC-SF-APC-09	FuseConnect-LC-QA-APC-20	FuseConnect-LC-SF-APC-30
MM (50) PC Polish	FuseConnect-SC-SF-GI5-09	FuseConnect-SC-QA-GI5-20/30	FuseConnect-LC-SF-GI5-09	FuseConnect-LC-QA-GI5-20	FuseConnect-LC-SF-GI5-30
MM (62.5) PC Polish	FuseConnect-SC-SF-GI6-09	FuseConnect-SC-QA-GI6-20/30	FuseConnect-LC-SF-GI6-09	FuseConnect-LC-QA-GI6-20	FuseConnect-LC-SF-GI6-30
MM50 10G PC Polish	FuseConnect-SC-SF-10G-09	FuseConnect-SC-QA-10G-20/30	FuseConnect-LC-SF-10G-09	FuseConnect-LC-QA-10G-20	FuseConnect-LC-SF-10G-30

## Ordering Information (SC) (2 mm x 3 mm drop cable, 1.6 mm x 2 mm drop cable)

Type	SC connector for 2 mm x 3 mm drop cable	SC connector for 1.6 mm x 2 mm drop cable
SM UPC Polish	FuseConnect-SC-DC	FuseConnect-SC-LFC
SM APC Polish	FuseConnect-SC-APC-DC	FuseConnect-SC-APC-LFC

# Fujikura 12S

Being the world's smallest and lightest fusion splicer, Fujikura 12S offers the versatility for splicing in challenging situations such as aerial and confined space. Utilizing Fujikura's FuseConnect™, the 12S offers the ideal splicing solution for any fiber termination and FTTX application.

## Specifications

Applicable fibers	Single / SMF (G.652/657), MMF (G.651), DSF (G.653), NZDSF (G.655)
Cladding dia. / Sheath dia.	125 µm / 160 µm to 3 mm by fiber holder system
Cleave length	5 mm to 13 mm
Splice mode / Heating mode	Total 100 splice modes / 30 heating modes
Typical splice loss	0.05 dB (SM), 0.02 dB (MM), 0.08 dB (DS) and 0.08 dB (NZDS) Measured by cut-back method relevant to ITU-T and IEC standards
Splice time / Tube heating time	Typical 15 sec with SM / Typical 30 sec with FP-03 (60 mm)
No. of splice / Heating per full charge battery*1	100 cycles
Splice result storage	2000 splices
Electrode life	3000 splices
Size / Weight	121W × 162D × 57H mm / 776 g (including battery)
Operating condition	Altitude : 0 to 3660 m above sea level. Wind : 15 m / sec Temp. : -10°C to 50°C. Humidity : 0 to 95% RH, non-dew.
Resistance test**2	Shock : 76 cm bottom surface drop Dust : 0.1 to 500 µm dia. Alumina Silicate Rain : H = 10 mm / hr for 10 min

\*1 Based on 2 min splice / heating cycle under room temperature and condition

\*\*2 Carried out in Fujikura labs in Japan. Tests do not guarantee product will not be damaged under these conditions

## Standard Package

Description	Model No.	Q'ty
Fusion splicer	12S with BTR-10 and ELCT2-12	1pc
Fiber holder	FH-60-XXX (XXX : see fiber holder options)	2pairs
AC adapter	ADC-19	1pc
AC power cord	ACC-XX (XX = 08(JP), 09(US), 10(UK), 11(EU), 12(AU))	1pc
Carrying case	CC-29	1pc
Spare electrodes	ELCT2-12	1pair
Instruction manual CD	M-12	1pc
Quick reference guide	Q-12S-E	1pc
Alcohol pot	AP-01	1pc
Screw driver	SD-01	1pc

## Optional Items

Description	Model No.
Fiber holder options	FH-60-250 (coating dia. of 250 µm)
	FH-60-900 (coating dia. of 900 µm)
	FH-60-DC250 (2 mm × 3 mm drop cable)
	FH-60-IDC250 (1.6 mm × 2 mm drop cable)
	FH-FC-20 (coating dia. of 900 µm in Ø2 mm cord)
	FH-FC-30 (coating dia. of 900 µm in Ø3 mm cord)
Battery pack	BTR-10
Electrodes	ELCT2-12
Transfer clamp	CLAMP-DC (for drop cable)

## Accessories

Description	Model No.
High precision single fiber cleaver	CT-06
High precision fiber cleaver	CT-30 (for single to 12 ribbon fibers)
Primary coat stripper	PS-02
Nylon jacket stripper	JS-01
Protection sleeves	FP-03 / 03 (L = 40) and FPS-01 series
Jacket split tool	FUSE-ST

## Optional Items



Fiberholders



Transfer clamp (CLAMP-DC)

## Other Preparation Tools



Cable Clamp  
(For Ø2 mm / 3 mm sheath cord)

Jacket stripper\*3

Nipper\*3  
(For drop cable)

Kevlar Cutter\*3  
(For Ø2 mm / 3 mm sheath cord)

\*3 Not sold by Fujikura.

Please visit **NEW** web site!

<http://www.fusionsplicer.fujikura.com>



Facebook

<https://www.facebook.com/fujikuraFusionSplicers>

Specifications and descriptions are subject to change without prior notice.

## Fujikura Ltd.

1-5-1, Kiba, Koto-ku, Tokyo 135-8512, Japan  
Phone:+81-3-5606-1164 Fax:+81-3-5606-1534 <http://www.fujikura.com>

## Fujikura Asia Ltd.

438A Alexandra Road, Block A Alexandra Technopark #08-03 Singapore 119967  
Phone:+65-6-278-8955 Fax:+65-6-278-0965 <http://www.fujikura.com.sg>

## Fujikura Europe Ltd.

C51 Barwell Business Park, Leatherhead Road, Chessington, Surrey KT9 2NY, UK  
Phone:+44-20-8240-2000 Fax:+44-20-8240-2010 <http://www.fujikura.co.uk>

## AFL Telecommunications

260, Parkway East, Duncan, SC29334, USA  
Phone:+1-800-235-3423 Fax:+1-800-926-0007 <http://www.aflglobal.com>

## Fujikura (China) Co., Ltd.

16th Floor, Shanghai Hang Seng Bank Tower, 1000 Lujiazui Ring Road, Pudong New Area, Shanghai, 200120 CHINA  
Phone +86-21-6841-3636 FAX +86-21-6841-2070