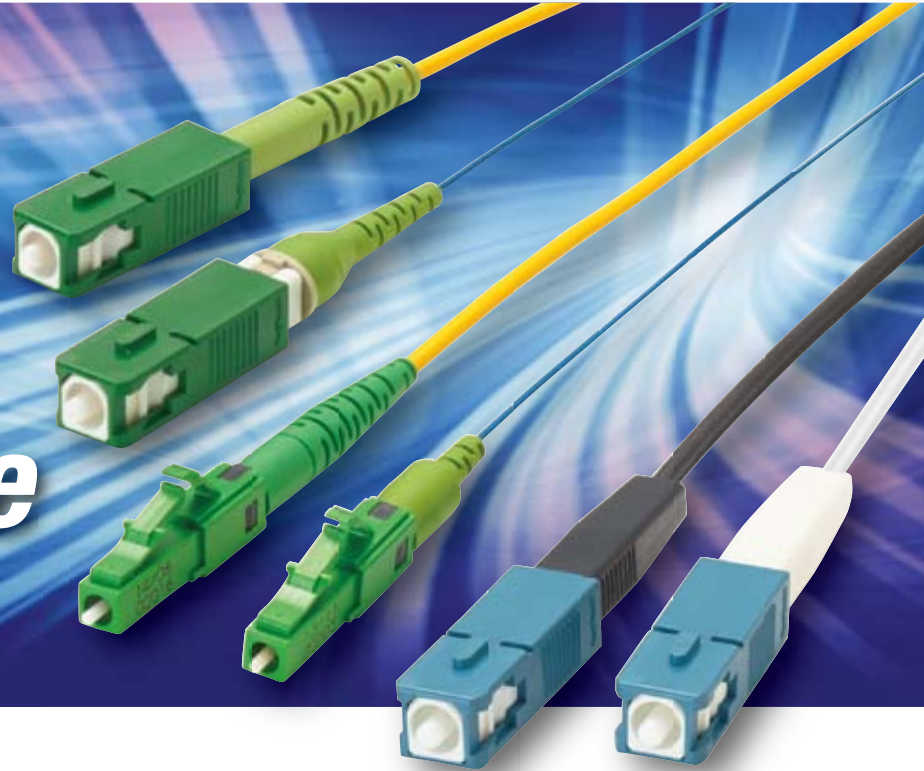


Fusion-spliced, field-terminated connector for FTTX

**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

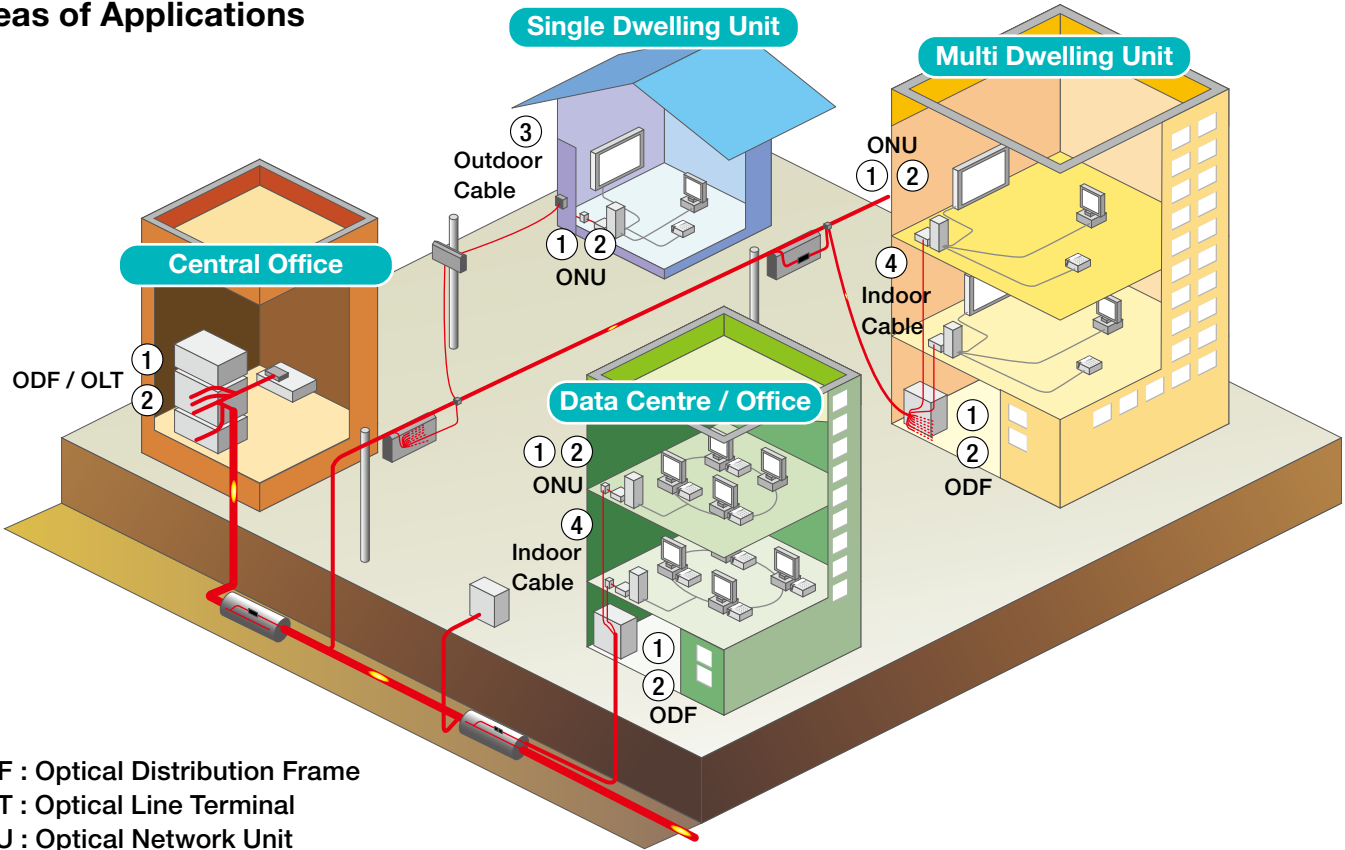
Fujikura 12S

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

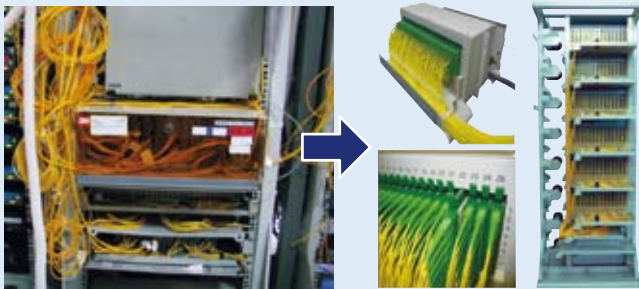
FuseConnect™ with 12S Package

Fujikura's FuseConnect™ connectors and 12S package offers a dynamic range of solutions to various fiber termination and FTTX applications from central office to single / multi dwelling unit.

Areas of Applications



ODF : Optical Distribution Frame
OLT : Optical Line Terminal
ONU : Optical Network Unit



Eliminates excess cable in ODF

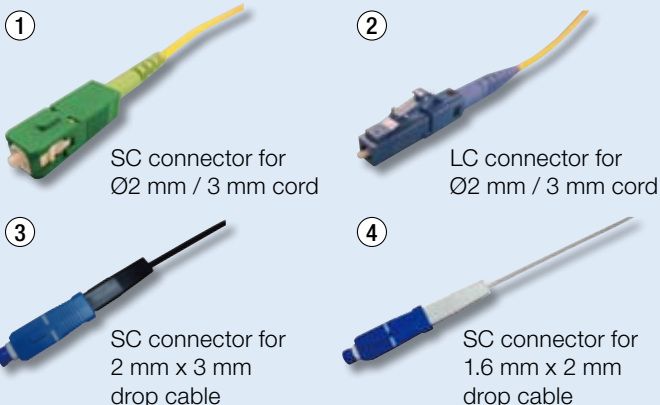


Splicing in ODF



Splicing aerial drop cable

Applicable Connectors for

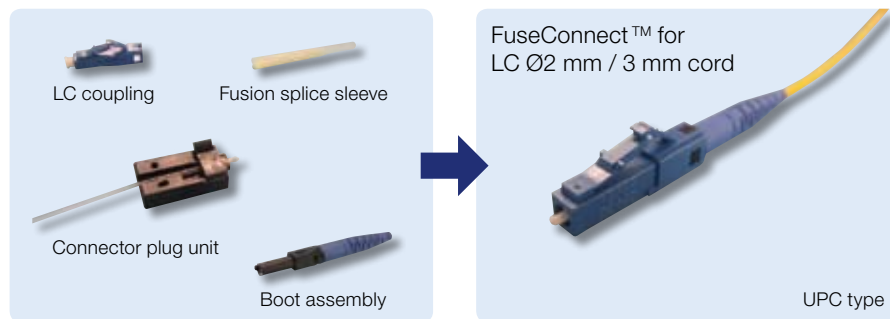
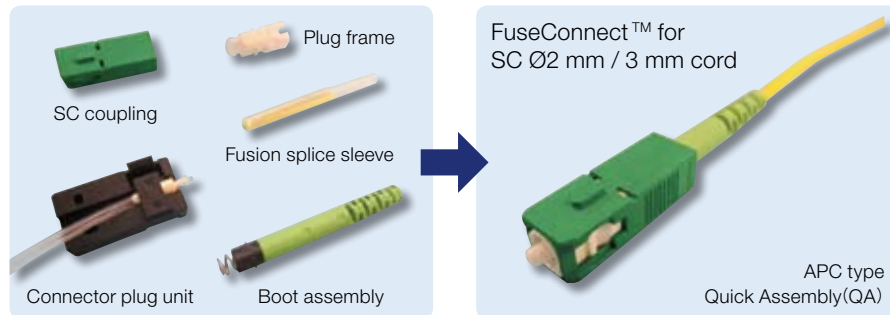


Advantages

- Performance
 - Simple, fast and accurate with fusion splicing
- Fiber management
 - Eliminates excess cable in ODF
 - No need for splice tray and protection sleeves
 - Easy maintenance
- Cost savings
 - Reduce maintenance cost

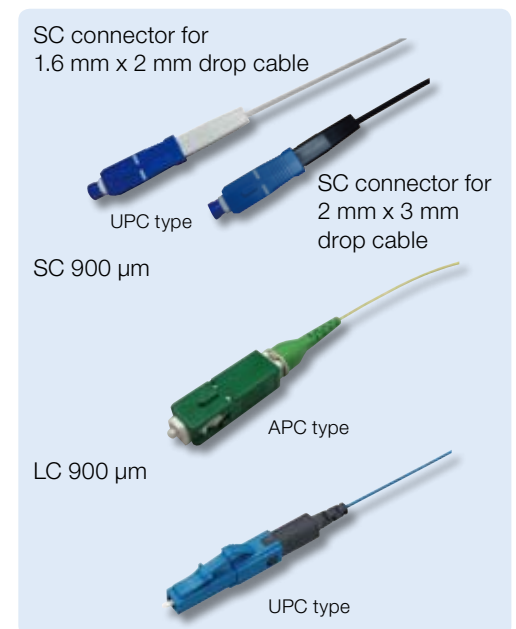
FuseConnect™

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.

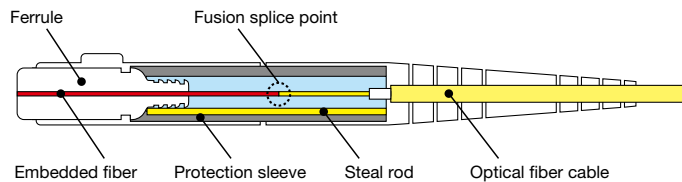


Features

- 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.

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



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

Specifications and descriptions are subject to change without prior notice.

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