

# FuseConnect™ ST Connector

## - Fusion Spliced Field Installable Connector



### 1. Introduction

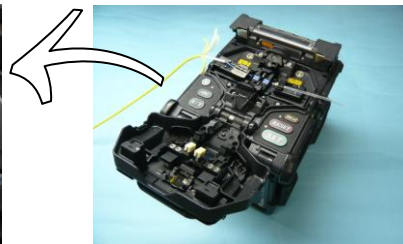
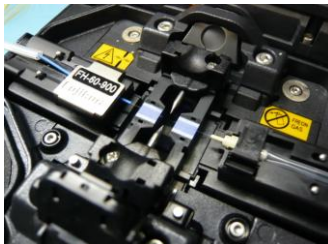
The FuseConnect™ ST connector is part of a series of field installable connectors that employs a fusion splicer to terminate the connector in the field. It is compatible with the standard ST connector, and demonstrates performance comparable to factory built jumpers.

Connector plug unit that is equipped with pre-polished connector can be easily set on fusion splicer for fusion splice connection purpose. Fusion splice addresses return loss concerns present in analog optical networks. This advanced process yields true APC performance of return loss in ST/APC configuration.

The unique and innovative design of FUSE connect eliminates the complicated crimping operation. The simplified field installation minimizes the potential for operator error.

#### Compatible Fujikura's fusion splicer models:

- FSM-60S / FSM-60R      • FSM-18S / FSM-18R      • FSM-50R
- FSM-17S-FH/FSM-17R   • FSM-11S / FSM-11R



#### Simple installation process



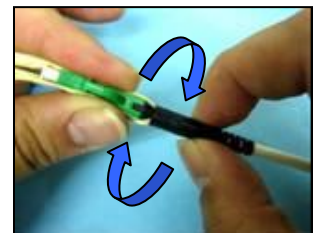
1. Set cable and connector plug on fusion splicer and splice.



2. Slide splice sleeve over splice point.



3. Transfer to heater and heat shrink splice sleeve.



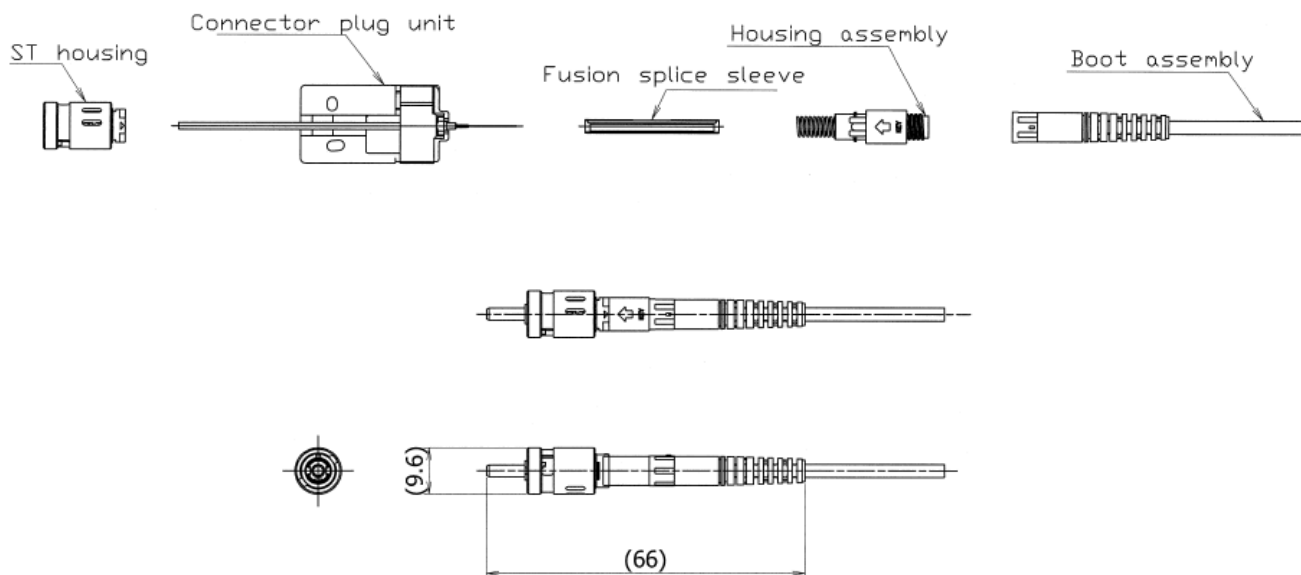
4. Assemble boot assembly and cut yam.

### 2. Applications

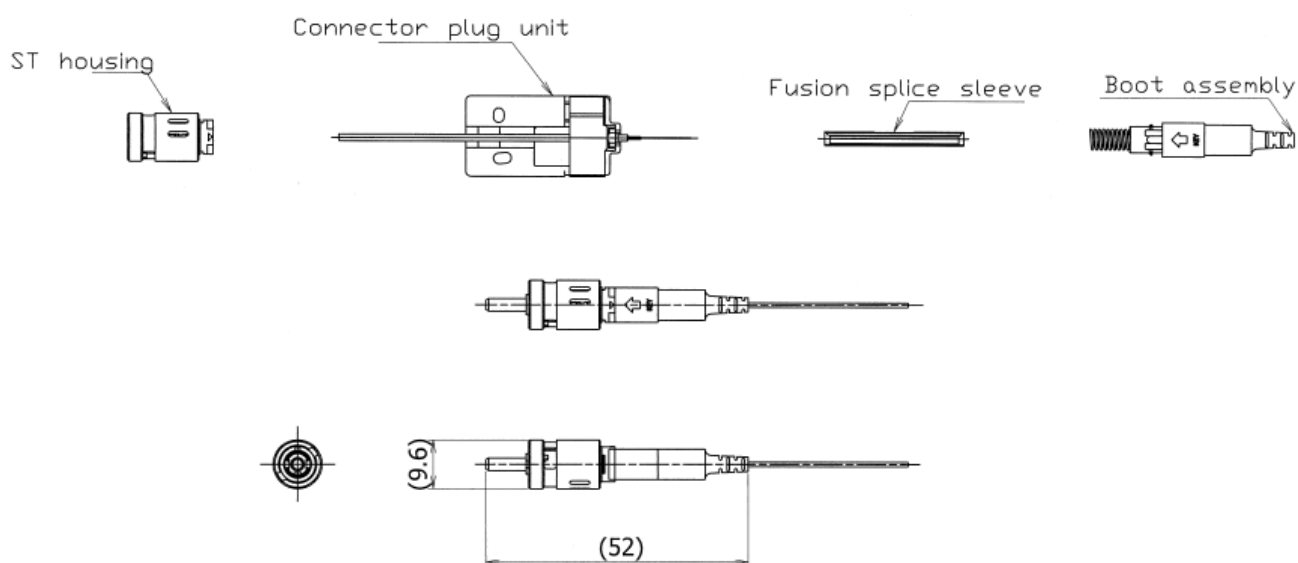
- Connectorization in:
  - RF-overlay FTTP networks
  - Cable TV backbone network
  - Outside plant
  - FTTHdesk
  - MDU FTTP Cabling
- Central office connector replacement
- Data center installation

### 3. Structure

#### 3.1. FuseConnect™ ST for $\phi 2\text{mm}$ and $\phi 3\text{mm}$ cables



#### 3.2. FuseConnect™ ST for $\phi 900\mu\text{m}$ fibers



## 4. Specifications

Parameter	Value
Connector type	ST [IEC-874-10]
Cable type	900μm, 2mm, 3mm
Polish	APC, UPC, PC
Insertion loss	Single-mode: Average 0.15dB, Maximum 0.40dB Multimode: Average 0.10dB, Maximum 0.30dB
Return loss	Single-mode (APC): Minimum 60dB Single-mode (UPC): Minimum 50dB Multimode : Minimum 30dB
Operating temperature	-20°C to +75°C
Environmental/mechanical characteristics	IEC 61753-1 category C

## 5. Performance Characteristics

Test items	Test conditions		Connector loss	Return loss
High temperature test	85 deg C, 96 hours		Max increase during and after test : 0.2dB	APC: Min 60dB  UPC: Min 45dB
Low temperature test	-10 deg C, 96 hours			
Dump heat test	40 deg C, 95 %RH, 96hours			
Temperature cycle test	-10 to 60 deg C, 5 cycle			
Vibration test	0.75mm, 10 - 55 Hz, 15cycle 1 octave / min , 3 axes			
Flex test	2N, 100 cycle , ±90°			
Cable retention	900um	5N , 60s		
	2mm/3mm	50N , 120s		
Impact test	5 drops from 1.5m height			
Tensile strength of coupling mechanism	40N , 60s			
Mating durability	500 times			

## 6. Tool information



Jacket  
Stripper



Yarn  
Cutter



φ 0.9Fiber  
Stripper



Jacket  
Splitter



Cable  
Clamp

## 7. Ordering information

① ②

FuseConnect-ST-SF-    -    

① Fiber type

- **APC** : Single-mode; APC polished
- **SM** : Single-mode; UPC polished
- **GI5** : Multimode 50μm; PC polished
- **GI6** : Multimode 62.5μm; PC polished
- **10G** : Multimode 50μm; PC polished

② Cable type

- **09** : φ900μm
- **20** : φ2mm
- **30** : φ3mm

## 8. Package Information:

10pcs / 1 package

## 9. References

IEC-874-10

IEC 61753-1 category C

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