

## SC Field Installable Fast Connector Specification

### Description

SC Field Installable Fast Connector is used for field-installable optical fiber connector, widely used in Fiber To The Home (FTTH) access optical networks, not only for single-mode or multimode fiber, and can also choose to 900um,3 mm and the introduction of cable buffered type. With fast installation time and low insertion loss, the connector system provides a good alternative to fusion splicing. Installation is as easy as strip, clean, cleave cam and crimp.



Item No.: TK-FC-SCU(A)-F001

### Features

- Factory-installed fiber stub
- No epoxy or polishing required
- Quick and easy fiber termination in the field
- Eliminates cable excess length and pigtail splice storage
- Cost effective

### Application

- Connections at the desk for LAN environments
- Optical access network
- Fiber to the Subscriber (FTTX) applications
- Patch panels
- Direct equipment termination

### Parameter

Item	Specification
Insertion Loss	Average $\leq 0.2\text{dB}$ , Max $\leq 0.4\text{dB}$
Return Loss	PC: $\geq 40\text{dB}$ , APC: $\geq 55\text{dB}$
One-Time Assembly Yield	$\geq 97\%$
Assembly Repeatability	$\geq 5$ times
Average Assembly Time	$\leq 3\text{minute}$
Life-Time	$\geq 30\text{years}$
Tensile Strength	$\geq 30\text{N}$ (2.0x3.0 drop cable)
Operation Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

## Advantages

Interconnection of two mated fibers occurs inside the ferrule hole, providing precise fiber alignment (patent-design)

The ferrule hole with a accuracy of 1.0um controls both the embedded fiber and the coming fiber and ensures the interconnection of the two fibers.

Interconnection inside the ferrule hole - Strong adaptability for different OD of fibers

In the event of deviation between different diameters of the embedded fiber(D1) and the coming fiber(D2), and both in the same capillary hole, there is a clear advantage to C slot design; the mis-alignment distance shall be a maximum less than  $(D1-D2)/2$ . While using the V-groove alignment, it is equal or more than  $D1-D2$ .

Ceramic material has excellent compatibility with the glass fiber and low thermal expansion coefficient-over a wide operation range:-40°C~+85°C

Ceramic material assures low insertion loss change value under 0.1dB during the tests of high temperature test, low temperature test and high-low temperature cycling test.

Ceramic material has a distinctive advantage—Ceramic is more rigid and will not deform at the fiber interconnection point.

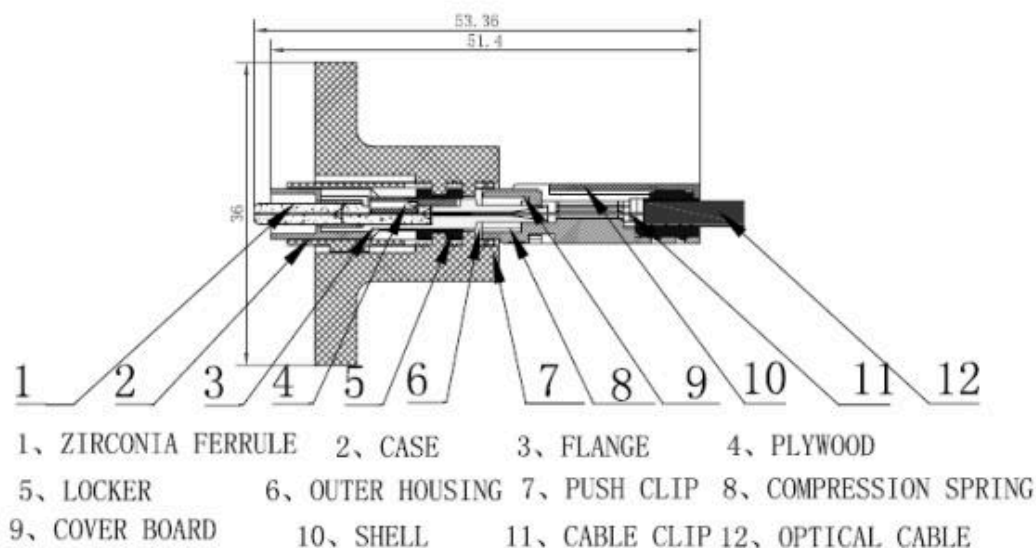
As ceramic material has better tensile strength than plastic material, when Fibers interconnected inside the ferrule hole, it ensures the fiber interconnection point is not easy to deform.

Ceramic material has good performance—long life-time

Ceramic ferrules pass "Pressure Cooker Test" and "-85°C~+85°C test" etc. And the ferrules still meet or exceed the ferrule hole roughness, flatness and precision interconnection requirements due to the clean and non-deformed ceramic ferrule hole after the tests.

The Field Mountable Fiber Optic Connector is easy to be assembled by using a special fixed-length fiber-cut-off jig. Fiber insertion loss is smooth with a high field-assembly yield as the ferrule entry funnel easily guides the fiber forward.

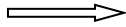
## Measured the Structure



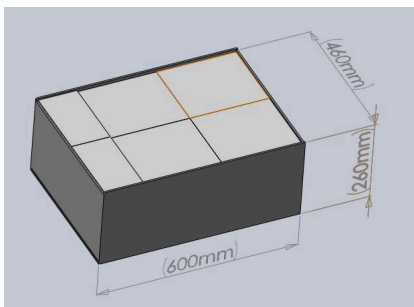
## Product Packaging Information



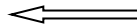
1pcs/bag



10pcs/set



1000pcs/Box (size: 60\*46\*26)



100pcs/box