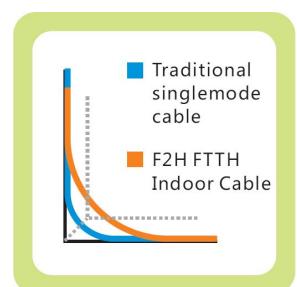
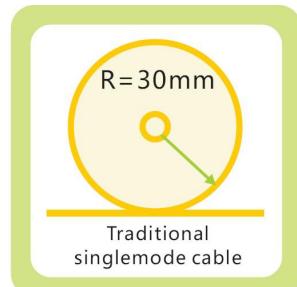




## SoftBend™ Fiber Series - Fiber Assemblies (G.657A)

The Fiber Reinforced Plastic (FRP) cable-based SoftBend™ single mode optical fiber series is ITU-T G.657A compliant and fully compatible with other standard single mode fibers complying with ITU-T G.652, thus ensuring excellent splicing performance and compatibility with legacy networks. The SoftBend™ fiber's bend-insensitivity is beneficial for use in Fiber-to-the-Home (FTTH), enterprise networks or other applications where a small bend radius may be encountered. It maintains low bending loss across the full usable spectrum of wavelengths between 1260nm and 1625nm. SoftBend™ fiber assemblies can improve reliability of some critical services such as triple-play by significantly reducing the bending loss compared to conventional single mode fibers, and offer better service reliability, which can increase subscriber's satisfaction and retention, and revenue opportunities. As a result of reduced bend radius, it enables tighter routing and higher fiber density for device design in CO/CPE equipment and backplane solutions.



### Applications

- Installation with as small as 15mm cable bending radius for indoor cable mounting.
- Face plate in the house and the Cabinet at the SDF.
- Drop/Distribution cable installation for Fiber-to-the-home (FTTH), triple-play service and Local Area Networks installation.
- Device design for tighter routing and higher fiber density.

### Key Features

- Optical and bending loss performance fully compliant to ITU G.657A single mode fiber.
- Fully compatible with ITU G.652 standard ensuring seamless splicing to existing G.652 fiber.
- Its metallic armoured cables have excellent mechanical properties to avoid any damage caused by rodent animals.
- Offering Metallic Armoured and Non-Metallic cables, and patch cords and Pigtail with ST, SC, FC, LC type and others connectors.
- RoHS compliance.

## FibreOptica A series – Metallic Armoured indoor cable

A series fiber cable is designed for FTTH indoor horizontal & vertical, high density installation. Metallic armoured cables have excellent mechanical properties which can prevent any damage caused by rodent animals.

### Cable Structure

Tight buffer Fiber	$\Phi 600\text{um}/\Phi 900\text{um}$ micro-bend fiber
Kevlar	Dubang 1580 x 2
Metallic soft tube	$\Phi 1.2 \pm 0.1 \text{ mm} * \Phi 1.7 \pm 0.1 \text{ mm}$
stainless steel yarn	stainless steel 304-0.07H
PE outer sheath	$\Phi 3.0 \pm 0.2 \text{ mm}/\Phi 3.3 \pm 0.2 \text{ mm}$

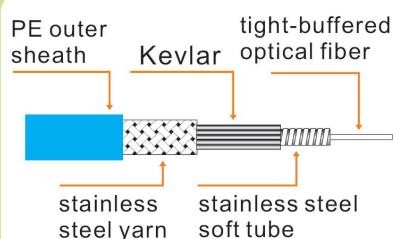


### Cable Characteristics

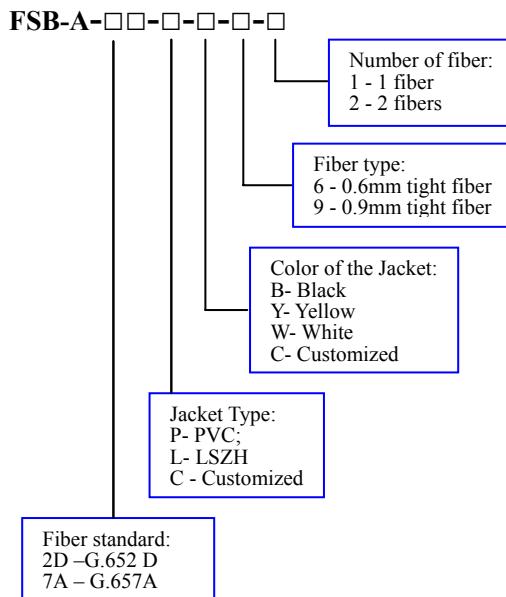
Max attenuation Coefficient	$1310\text{nm} \leq 0.3 \text{ dB/km}$
	$1550\text{nm}: \leq 0.2 \text{ dB/km}$
Working temperature	-20 to +75°C

### Mechanical Characteristics

Tensile strength(N)	$\geq 200$
Crush test(N/100mm)	$\geq 2000$
Min bending radius ( mm)	15mm
Impactive test(mm <sup>2</sup> Kg)	150H $\pm 5$
Weight	24Kg/Km



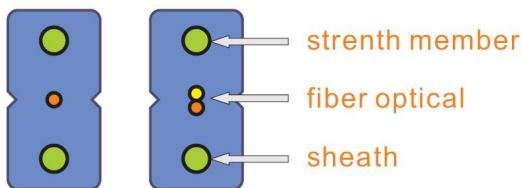
### Ordering Information



## FibreOptica E Series Cable – Figure "8" cable

FibreOptica E series fiber cable is designed for FTTH installation, Indoor cables, Drop/Distribution cables. It can be used with mechanical splicers. The fiber is in the center of the cable and two strengthening mandrels are on the two sides of the fiber. The fiber and strengthening mandrels are coated together into a fiber cable - "8" Shape design.

- Simple structure, anti press, anti pull, anti aging.
- "8" Shape design, enabling easy strip of the jacket, easy installation and maintenance.
- An additional micron permanent protective coating on the glass cladding makes it the most robust fiber in the telecommunications industries.
- Small-bending fatigue lifetime is several hundred times longer than other standard single mode fibers.

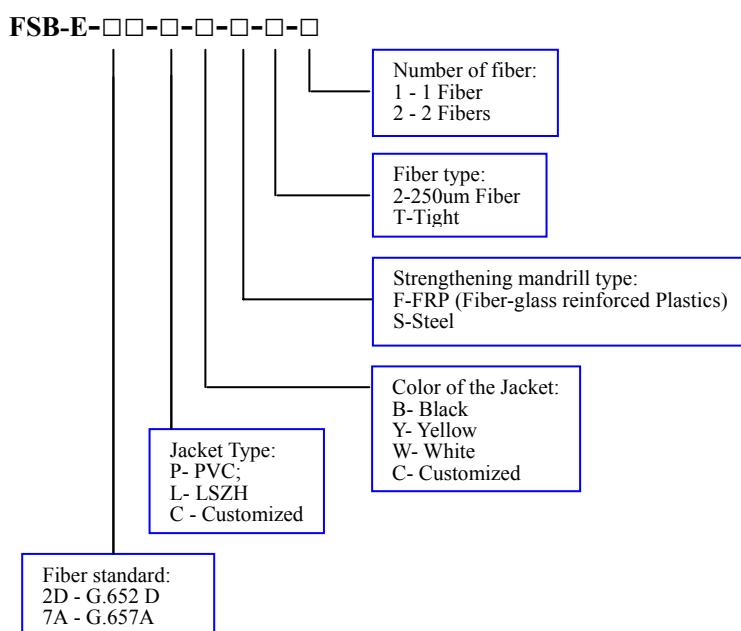


Model	FSB-E
Fiber diameter(um)	250
Fiber Type	G.657A
Attenuation Coefficient	1310nm: ≤0.35dB/km 1550nm: ≤0.22dB/km 1383nm ≤0.31dB/km 1625nm: ≤0.23dB/km
Mode Field Diameter @ 1310 nm	8.6±0.4
Mode Field Diameter @ 1550 nm	9.5±0.4
Core/clad concentricity error	<2%
Min bending radius mm	15

### Attenuation with Bending

Φ30mm,10 turns, at 1550nm macro bend add attenuation	≤0.25dB
Φ30mm,10 turns, at 1625nm macro bend add attenuation	≤1.0dB
Φ20mm,1 turns, at 1550nm macro bend add attenuation	≤0.75dB
Φ20mm,1 turns, at 1625nm macro bend add attenuation	≤1.5dB
Cut-off wavelength λcc	1260 nm
zero dispersion wavelength	1300 to 1324 nm
Fiber number	1/2/4
Cable Weight(kg/km)	<10
Tensile strength(N) long/short term	30/60
Crush test(N/100mm) long /short term	1000/2000

## Ordering Information





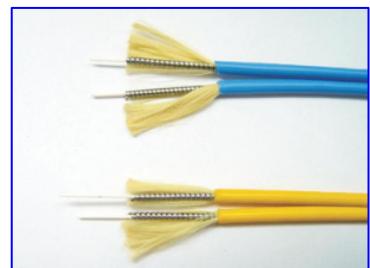
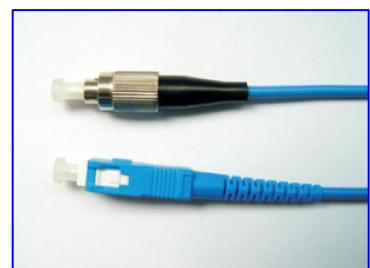
## SoftBend Fiber Accessories

FibreOptica's SoftBend Fiber patchcord and pigtails are new accessories designed for the need of the next-generation FTTH and FTTD. SoftBend Fiber Assemblies include three series: FSB-I, FSB-II and FSB-III.

**FSB-I:** metallic armoured indoor patchcord series

**FSB-II:** Non-metal patchcord series

**FSB-III:** pigtail series



## Ordering Information

FSB-□-□-□-□-□-□□-□□-□

Interface Type:  
N if no connector required  
P - PC  
U - UPC  
A - APC

Connector Type:  
FF – FC to FC  
SS – SC to SC  
LL – LC to LC  
FS – FC to SC  
FL – FC to LC  
Others are available)

Color of the Jacket:  
B- Black  
Y- Yellow  
W- White  
C- Customized

Outer diameter:  
1 - 0.9mm (type III)  
2 - 2.0mm (type II, III)  
3 - 3.0mm (type I, II, III)  
4 - 0.9mm (type I)

Jacket Type:  
P- PVC;  
L- LSZH  
C - Customized

Type:  
I - Metallic armoured in-door patchcord series  
II - Non-metal patchcord series  
III - pigtail series