

**P/N: OPT023AAD-XX**

**TopX ARMORED SC/APC - LC/APC SX 657A2**

**LSZH 10M**



**Description:**

Connector A: LC/APC

Connector B: SC/APC

Cable Dia.: 3.0mm

Cable Count: Simplex

Fiber Type: Single Mode G657A2 9/125

Jacket Color: White

Jacket Material: LSZH

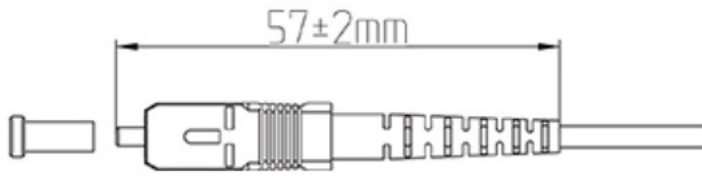
Length Tolerance:  $\pm 0.1$ m

Extra: With hook and braided mesh on both sides of connectors.

Cable Length: Denoted in meters in place of XX in P/N

## Connector Drawing:

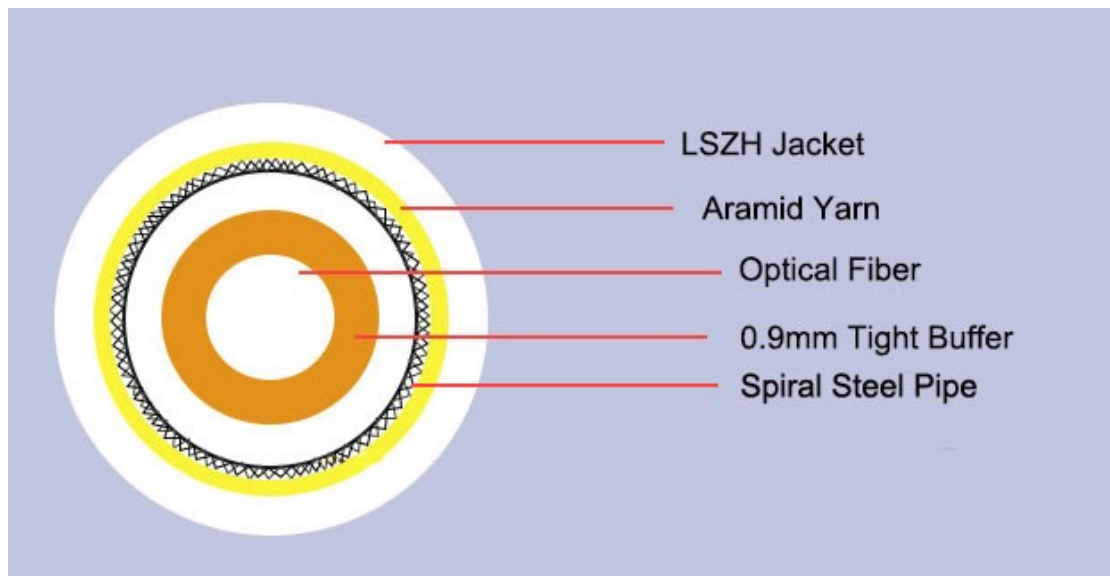
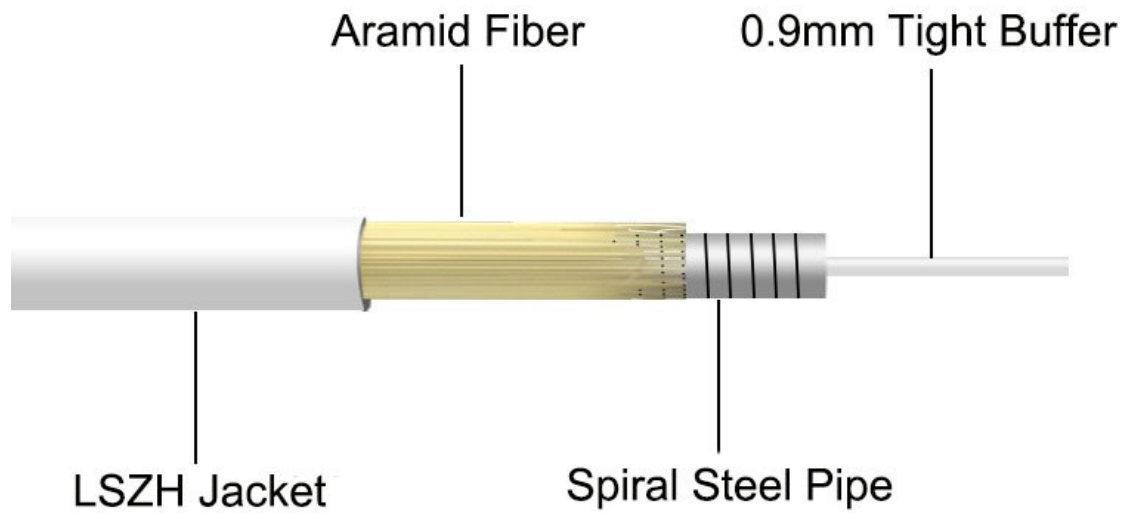
SC/APC



LC/APC



## Cable Drawing:



## **Technical Specification:**

### **SC/APC Connector**

Insertion Loss:  $\leq 0.3\text{dB}$

Return Loss:  $\geq 55\text{dB}$

Material of Ferrule: ZrO<sub>2</sub> (Zirconia/Ceramic)

Ferrule Dia.:  $2.499\pm 0.0020\text{mm}$

Operating Temperature:  $-20\sim 70^{\circ}\text{C}$

Durability:  $>1000\text{times}$

### **LC/APC Connector**

Insertion Loss:  $\leq 0.3\text{dB}$

Return Loss:  $\geq 55\text{dB}$

Material of Ferrule: ZrO<sub>2</sub> (Zirconia/Ceramic)

Ferrule Dia.:  $1.249\pm 0.0005\text{mm}$

Operating Temperature:  $-20\sim 70^{\circ}\text{C}$

Durability:  $>1000\text{times}$

# Optical Performance of Fiber

## G657A2

Fiber Property	Main Indexes	Technical Parameter
Geometrical Dimensions	Cladding diameter	125.0±0.7um
	Cladding non-circularity	≤1%
	Coating diameter	245±7 um
	Coating/cladding non-concentricity error	≤12 um
	Coating non-circularity	≤6%
	Core/cladding concentricity error	≤0.6 um
	Fiber curl (radius)	≥4 m
Optical Characteristics	MFD(1310nm)	9.2±0.4 um
	MFD(1550nm)	10.4±0.5 um
	Attenuation at 1310nm	≤0.35 dB/km
	Attenuation at 1383nm	≤0.35 dB/km
	Attenuation at 1550nm	≤0.21 dB/km
	Attenuation at 1625nm	≤0.23 dB/km
	Max. attenuation at 1285-1330nm, compared to that at 1550nm	≤0.03 dB/km
	Max. attenuation at 1525-1575nm, compared to that at 1550nm	≤0.02 dB/km
	Attenuation discontinuity at 1310nm	≤0.05 dB
	Attenuation discontinuity at 1550nm	≤0.05 dB
	PMD	≤0.2 ps/(km <sup>1/2</sup> )
	PMDq	≤0.1 ps/(km <sup>1/2</sup> )
	Zero-dispersion wavelength	1312±12 nm
	Zero-dispersion slope	≤0.091 ps/(nm <sup>2</sup> .km)
	Dispersion at 1550nm	≤17 ps/(nm.km)
Dispersion at 1625nm	≤22 ps/(nm.km)	
Cable cutoff wavelength λ <sub>c</sub>	≤1260 nm	
Mechanical Property	Proof test level	1%
	Dynamic fatigue	≥20

	Coating strip force	Average value	1.7 N
		Peak value	1.3-8.9 N
Environmental Property	Temperature attenuation (-60°C-±85°C, two cycles, at 1550nm)		≤0.05 dB/km
	Temperature-humidity cycling attenuation (85±2°C, relative humidity≥85%, 30 days, at 1550nm)		≤0.05 dB/km
	Water immersion attenuation (23±5°C, 30 days, 1550nm)		≤0.05 dB/km
	Dry heat aging attenuation (85±2°C, relative humidity 50%, 30 days, 1550nm)		≤0.05 dB/km
Bending Property	10 turns, 15mm radius, at 1550nm		≤0.03 dB
	10 turns, 15mm radius, at 1625nm		≤0.1dB
	1 turn, 10mm radius, at 1550nm		≤0.1dB
	1 turn, 10mm radius, at 1625nm		≤0.2dB
	1 turn, 7.5mm radius, at 1550nm		≤0.2dB
	1 turn, 7.5mm radius, at 1625nm		≤0.5dB