

Overview

Connect Fiber's Round to Flat Transition fiber with tracer features an outer PE jacket & an inner flat LSZH jacket. The Transition fiber is designed to simplify FTTH deployment by allowing an easy transition from outdoor cable to riser rated cable by utilizing a single fiber cable. The optical fiber is positioned in the centre, two parallel Fiber Reinforced Plastics (FRP) are placed at the two sides, the cable is completed with a black or color LSZH sheath. Finally, the cable is completed with PE sheath. The manufacturing processes utilized high quality raw materials that guarantee the cable to be able to withstand the typical service condition for a period of twenty-five (25) years without detriment to the operation characteristics of the cable.

Features

- ITU-T G.657.A2 rated fiber with improved attenuation and bend performance as well as compatibility with standard single-mode.
- High quality raw material guarantees long service life of cable.
- Single cable is suitable for indoor & outdoor installation.
- Especially suitable for the last leg in FTTH systems.

Ordering Information

Fiber Count	Part Number	Description
2	CF-002-ODTFDC-SJNA-LSZH-ARP-T	Air Blown Transition Fiber Cable, Black Outdoor PE Jacket (no armour) surrounding a 2F Single Mode White Indoor LSZH G.657A2 Fiber, 2 rip cords and a 22 AWG tracer wire. Outer Cable Dimensions 6.5mm +/- 0.5mm. Indoor Fiber Cable Dimensions 3.0+/-0.1mm x 2.0 +/-0.1mm, 2000m

Standards

CABLE DESCRIPTION

- G.657A2 Single Mode Fiber
- Suitable for indoor & outdoor installation.
- 22 AWG copper tracer.

TEST CRITERIA

- ITU-T G.652 Characteristics of a single-mode optical fiber
- IEC 60794-1-1 Optical fiber cables-part 1-1: Generic Specification-General
- IEC 60794-1-2 Optical fiber cables-part 1-2: Generic Specification-Basic optical cable test
- IEC 60794-3 Optical fiber cables-part 3: Sectional Specification-Outdoor cables
- IEC 60794-3-10 Optical fiber cables-part 3-10: Outdoor Cables-Family specification for duct and
- IEC 60794-3-11 Optical fiber cables-Part 3-11: Outdoor Cables-Detailed specification for duct and

WORKING CONDITIONS

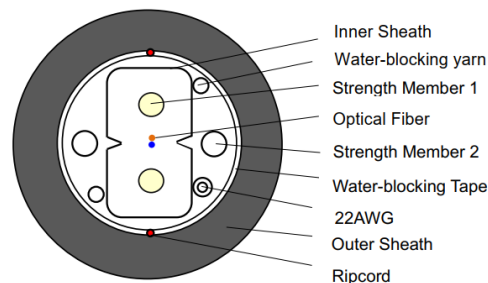
- Operation temperature: -40 °C to 70 °C
- Installation temperature: -40 °C to 70 °C

MINIMUM ALLOWABLE BENDING RADIUS

- Static: 10D (D: is the out diameter of the cable)
- Dynamic: 20D (D: is the out diameter of the cable)

Cable Construction

CROSS SECTION VIEW



CF – AIR BLOWN TRANSITION FIBER WITH TONEWIRE

Specifications

Optical properties of the SM fiber are achieved through a germanium doped silica based core with a pure silica cladding which meets ITU-T G657A2, UV curable acrylate protective coating is applied over the glass cladding to provide the necessary maximum fiber lifetime. Geometrical and optical characteristics of fiber in cable as the following table:

Category	Description	Specification	
		Before cable	After Cable
Geometrical Characteristics	Cladding diameter	125.0 ± 0.7 µm	
	Coating diameter	245 ± 5 µm	
	Cladding non-circularity	≤0.7%	
	Coating/cladding concentricity error	≤12.0 µm	
	Coating non-circularity	≤0.6%	
	Core/cladding concentricity error	≤0.5 µm	
Optical Characteristics	Mode field diameter at 1310 nm	8.4 ~ 9.2 µm	
	Mode field diameter at 1550 nm	9.3 ~ 10.3 µm	
	Attenuation at 1310 nm	≤ 0.35 dB/km	≤ 0.40 dB/km
	Attenuation at 1383 nm	≤ 0.35 dB/km	≤ 0.40 dB/km
	Attenuation at 1550 nm	≤ 0.21 dB/km	≤ 0.30 dB/km
	Attenuation at 1625 nm	≤ 0.23 dB/km	≤ 0.30 dB/km
	Zero dispersion wavelength	1300~1324 nm	
	Zero dispersion slope	≤ 0.092 ps/(nm ² ·km)	
	Cable cut-off wavelength	≤ 1260 nm	
Mechanical Characteristics	Min bend radius	7.5mm	
	Tensile Performance	600N short term 300N long term	
	Crush resistance	2200N/10cm short term 1000N/10cm long term	

DIMENSIONS AND DESCRIPTIONS OF CABLE CONSTRUCTION

Item	Details	Fiber Count
Optical fiber	Fiber count	2
	Colour	Blue/Orange
Tracer wire	Type	22 AWG
Strength member 1	Material	GFRP
	Diameter (mm)	0.5
Strength member 2	Material	GFRP
	Diameter (mm)	1.2
Inner Sheath	Material	LSZH
	Colour	White
	Dimension (mm)	3.0 (±0.1) x 2.0(±0.1)
Outer Sheath	Material	PE
	Colour	Black
	Dimension (mm)	6.5 ± 0.5
Cable Weight (kg/km)		34