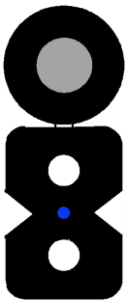
# FTTH Drop Optic Fiber Cable

## Cable Design

*3 unit-Bow type cable-LSZH- G.657A1 Fiber*



**Strength Member:** FRP
**Messenger:** Phosphating steel wire
**Outer Sheath:** Black LSZH

## Cable Specification

| Cable Cores | | 1 | 2 | 4 |
|---|---|---|---|---|
| Thickness of Outer Sheath | mm | 0.4 | | |
| Nominal. Cable Diameter | mm | （5.2±0.2）*（2.0*3.0±0.1） | | |
| Tensile Force | N | 600 | | |
| Nominal Cable Weight | Kg/km | 20 | | |

## Cable Application

| Temperature Range | | Minimum Bend Radius | |
|---|---|---|---|
| Transportation & Storage | -30~+60℃ | Load | 30×D |
| Operation | -30~+60℃ | Unload | 15×D |

## Main Mechanical and Environmental Characteristics

| Test | Test Standard | Specified Value | Acceptance Criteria |
|---|---|---|---|
| Tensile | IEC 60794-1-2-E1 | 600N, 10min | After test△α≤0.4dB, at 1550nm |
| Crush | IEC 60794-1-2-E3 | 1000N, 1min, 3times | △α reversible, no damage |
| Impact | IEC 60794-1-2-E4 | 1J, R=300mm, 3times | △α reversible, no damage |
| Repeated Bending | IEC 60794-1-2-E6 | R=30D | △α reversible, no damage |
| Temperature Cycling | IEC 60794-1-2-F1 | -30~+60℃, 2cycles, 4h | △α reversible, no damage |

## Fiber Color

### Color Identification of Fiber

| Number | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Color | Blue | Orange | Green | Brown |

## Cabled Fiber Performance (G.657A1)

| Characteristics | | Acceptance Value |
|---|---|---|
| Attenuation | @1310nm | ≤0.35dB/km |
| | @1550nm | ≤0.23dB/km |
| Mode Field Diameter | @1310nm | 8.8±0.6μm |
| | @1550nm | 10.4±0.5μm |
| Dispersion | @1300 +30/-15nm | ≤3.5ps/(nm·km) |
| | @1550nm | ≤18.0ps/(nm·km) |
| | @1625nm | ≤22ps/(nm·km) |
| Zero-Dispersion wavelength | | 1300nm～1324nm |
| Zero-Dispersion slope | | ≤0.092ps/(nm$^2$·km) |
| Cable cutoff wavelength $\lambda_{cc}$(nm) | | ≤1260nm |
| Cladding diameter | | 125±1.0μm |
| Macrobend loss | 15mm radius,10turn,@1550 | ≤0.25dB |
| | 15mm radius,10turn,@1625 | ≤1.0dB |
| | 10mm radius,1turn,@1550 | ≤0.75dB |
| | 10mm radius,1turn,@1625 | ≤1.5dB |
| Cladding non-circularity | | ≤0.8% |
| Core/cladding concentricity error | | ≤0.6μm |
| Fiber diameter with coating (uncolored) | | 245±10μm |
| Cladding/coating concentricity error | | ≤12.0μm |
| Proof stress | | ≥0.69GPa(100kpsi) |
| Dynamic stress corrosion susceptibility parameter (typical value) | | ≥20 |

## Sheath Marking

The outer sheath is marked in 1 meter intervals as follows:

**According to customer's requirement**

## Delivery Lengths

**According to customer's requirement**

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