

Micro Tube Indoor Outdoor Drop Riser Fiber optic Cable for Building Wiring (GJPFJH)

The cable consists of 12, 24, 48 or 96 bend insensitive G657.A2/B2 optical fibers protected with easy-strip buffer compound. The fiber units are protected by a flame retardant Afumex (LSOH) outer sheath. During the sheathing process, two Glass Reinforced Plastic (GRP) rods are included. The cable is also available with a UV resistant sheath for external installation.

Micro Tube Indoor Outdoor Drop Fiber optic Cable is a popular fiber cable in the market. The drop fiber cable uses multiple 900um flame-retardant tight buffer fibers as optical communication medium, two parallel Fiber Reinforced Plastic (FRP) are placed at the two sides as strength member, then the cable is completed with a flame-retardant LSZH (low smoke, zero halogens, flame-retardant) jacket.

Features

Fiber type: ITU-T- G652D, G657A fiber, G657B fiber

It has good mechanical and environmental performance

Flame (or not flame retardant) performance to meet the requirements of the standard

Mechanical and physical properties of the sheath to meet the relevant standards Soft, flexible and convenient

Good structure design, easy for branching and splicing

Small size and light weight, easy for installation

LSZH sheath ensuring good flame-retardant performance

Especially applicable to vertical wiring in buildings

Application

Used as access building cable in premises distribution system, especially used in indoor or outdoor aerial access cabling.

Adopted to core network;

access network, fiber to the home;

Building to building installation

Construction

Dielectric (single & dual jacket)

Flame Rating:

Riser (OFNR / OFCR / FT4)

Fiber Count:

12(6x2f), 16(8x2f), 24(12x2f), 36(18x2f), 48(24x2f), 72(36x2f) and 96(48x2f)

Fiber Type

Single-mode (ESMF, bend-insensitive)

Transmission Characteristics: G657A2

| Characteristics | Conditions | Specified Values | Units |
|--------------------------------------|------------|------------------|-------|
| Geometrical characteristics | | | |
| Cladding diameter | | 125.0±0.7 | µm |
| Cladding non-circularity | | ≤0.7 | % |
| Coating diameter | | 242±5 | µm |
| Coating/cladding concentricity error | | <12 | µm |
| Core/cladding concentricity error | | ≤0.5 | µm |
| Curl | | ≥4 | m |

| Optical characteristics | | | |
|---|--------------------------|-----------|--------------------------|
| Attenuation | 1310nm | ≤0.4 | dB/km |
| | 1383nm | ≤0.4 | dB/km |
| | 1490nm | ≤0.3 | dB/km |
| | 1550nm | ≤0.3 | dB/km |
| | 1625nm | ≤0.3 | dB/km |
| Attenuation vs. Wavelength max. A difference | 1285~1330nm | ≤0.03 | MHz*km |
| | 1525~1575nm | ≤0.02 | MHz*km |
| Dispersion coefficient | 1550nm | ≤18 | ps/(nm*km) |
| | 1625nm | ≤22 | ps/(nm*km) |
| Zero dispersion wavelength | | 1304~1324 | nm |
| Zero dispersion slope | | ≤0.092 | ps/(nm ² *km) |
| Polarization mode dispersion | | | |
| PMD maximum individual fiber | | ≤0.1 | ps/km ^{1/2} |
| PMD design link value | | ≤0.04 | ps/km ^{1/2} |
| Cable cut off wavelength | | ≤1260 | nm |
| Mode field diameter | 1310nm | 8.8~9.6 | μm |
| | 1550nm | 9.9~10.9 | μm |
| Group index of refraction | 1310nm | 1.4691 | |
| | 1550nm | 1.4696 | |
| Environmental characteristics | 1310nm、1550nm&1625nm | | |
| Temperature cycling | -60℃ to +85℃ | ≤0.05 | dB/km |
| Temperature-humidity cycling | -10℃ to +85℃4% to 98% RH | ≤0.05 | dB/km |
| Water immersion | 23℃, 30 days | ≤0.05 | dB/km |
| Dry heat | 85℃, 30 days | ≤0.05 | dB/km |
| Damp heat | 85℃, 85%RH, 30 days | ≤0.05 | dB/km |
| Mechanical specification | | | |
| Proof test | | ≥100 | kpsi |
| Macro bending induced loss | | | |
| 1Turns @10mm Radius | 1550nm | ≤0.5 | dB |
| 1Turns @10mm Radius | 1625nm | ≤1.5 | dB |
| 10Turns @15mm Radius | 1550nm | ≤0.05 | dB |
| 10Turns @15mm Radius | 1625nm | ≤0.30 | dB |

| | | | |
|---|-------------------|-------|----|
| 100Turns @25mm Radius | 1310&1550&1625 nm | ≤0.01 | dB |
| Dynamic stress corrosion susceptibility parameter | | 20 | |