FiberLight

Optical Fiber CABLE

TECHNICAL DATA SHEET

Access Network Indoor & Outdoor 1 Core Optical Drop Cable GJYFXH/TJZY

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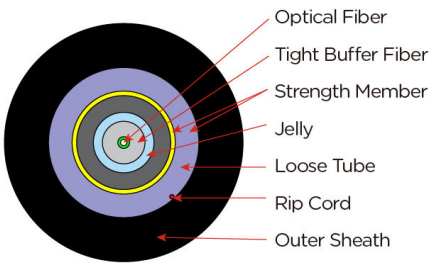
Product Description

GJYFXH/TJZY is a 1-core optical drop cable designed for access network applications where the cable may be routed between outdoor and indoor environments.



The cable incorporates a single-mode G.657.A2 optical fiber inside a protected loose-tube structure, water-blocking material, aramid yarn reinforcement and an outer sheath designed to provide mechanical and environmental protection.

Its compact and lightweight construction provides easy installation, routing and access in FTTH and FTTx networks.

Features

- 1 Core Single Mode optical fiber
- ITU-T G.657.A2 bend-insensitive fiber
- Suitable for both indoor and outdoor access networks
- Compact and lightweight construction
- PBT loose tube for fiber protection
- Water-blocking jelly for moisture protection
- High-strength aramid yarn reinforcement
- Non-metallic cable construction

- LSZH / PE outer sheath options according to application
- UV-resistant outer sheath for outdoor installation
- Good crush and tensile resistance
- Easy stripping and installation using ripcord
- Suitable for outdoor-to-indoor cable transition
- Excellent bending performance

Applications

- FTTH access networks
- FTTx networks
- Indoor and outdoor access cabling
- Outdoor-to-indoor cable transition
- Building access networks
- Vertical cabling
- Indoor optical distribution
- Fiber optic loop cabling
- Customer premises networks
- Data center access
- Duct installation
- Facade installation
- Aerial access installation

Cable Construction

Item	Cable Element	Description
1	Optical Fiber	1 × Single Mode G.657.A2
2	Fiber Color	Green
3	Buffer	LSZH
4	Buffer Color	White
5	Loose Tube	PBT
6	Loose Tube Color	Natural
7	Water Blocking	Jelly
8	Strength Member	Aramid Yarn
9	Ripcord	1 × Ripcord
10	Outer Sheath	LSZH / PE
11	Sheath Color	Black
12	Cable Structure	Round / Unitube Drop Cable

Optical Fiber Characteristics

Parameter	Specification
Fiber Type	Single Mode
Fiber Standard	ITU-T G.657.A2
Fiber Size	9/125 µm

Fiber Count	1
Cladding Diameter	125 ± 1.0 µm
Mode Field Diameter @ 1310 nm	8.8 ± 0.4 µm
Cut-off Wavelength	≤ 1260 nm
Attenuation @ 1310 nm	≤ 0.40 dB/km
Attenuation @ 1550 nm	≤ 0.30 dB/km
Typical Attenuation @ 1310 nm	0.35 dB/km
Typical Attenuation @ 1550 nm	0.21 dB/km
Minimum Bend Radius	7.5 mm

Optical Transmission Characteristics

Parameter	Specification
Operating Wavelength	1310 / 1550 nm
Maximum Attenuation @ 1310 nm	≤ 0.40 dB/km
Maximum Attenuation @ 1550 nm	≤ 0.30 dB/km
Typical Attenuation @ 1310 nm	≤ 0.35 dB/km
Typical Attenuation @ 1550 nm	≤ 0.21 dB/km
Cable Cut-off Wavelength	≤ 1260 nm
Zero Dispersion Slope	≤ 0.092 ps/(nm²·km)
Dispersion @ 1285–1340 nm	-3.5 to +3.5 ps/(nm·km)

G.657.A2 Bending Characteristics

Parameter	Specification
Fiber Type	G.657.A2
Minimum Design Bend Radius	7.5 mm
Application	Tight routing / FTTH
Bending Performance	Bend-insensitive

Mechanical Characteristics

Parameter	Specification
Strength Member	Aramid Yarn
Strength Member Type	Dielectric
Water Blocking	Jelly
Cable Structure	Loose Tube
Crush Protection	Provided by cable reinforcement
Tensile Protection	Aramid Yarn
Ripcord	1 × Ripcord
Metallic Components	None

Outer Sheath Characteristics

Parameter	Specification
Sheath Material	LSZH / PE
Sheath Color	Black
UV Resistance	Available / Anti-UV
Application	Indoor & Outdoor
Construction	Round
Flame Performance	According to applicable requirement
Halogen Performance	According to selected LSZH compound

Standards and Compliance

The cable shall comply with the applicable requirements of:

- ITU-T G.657.A2 – Bending-loss insensitive single-mode optical fiber
- ITU-T G.652.D – Single-mode optical fiber characteristics, where applicable
- IEC 60793 – Optical Fibers
- IEC 60794 – Optical Fiber Cables
- IEC 60332 – Flame propagation, where applicable
- IEC 60754 – Halogen gas / acidity requirements, where applicable
- IEC 61034 – Smoke density requirements, where applicable
- RoHS – Restriction of Hazardous Substances, where applicable