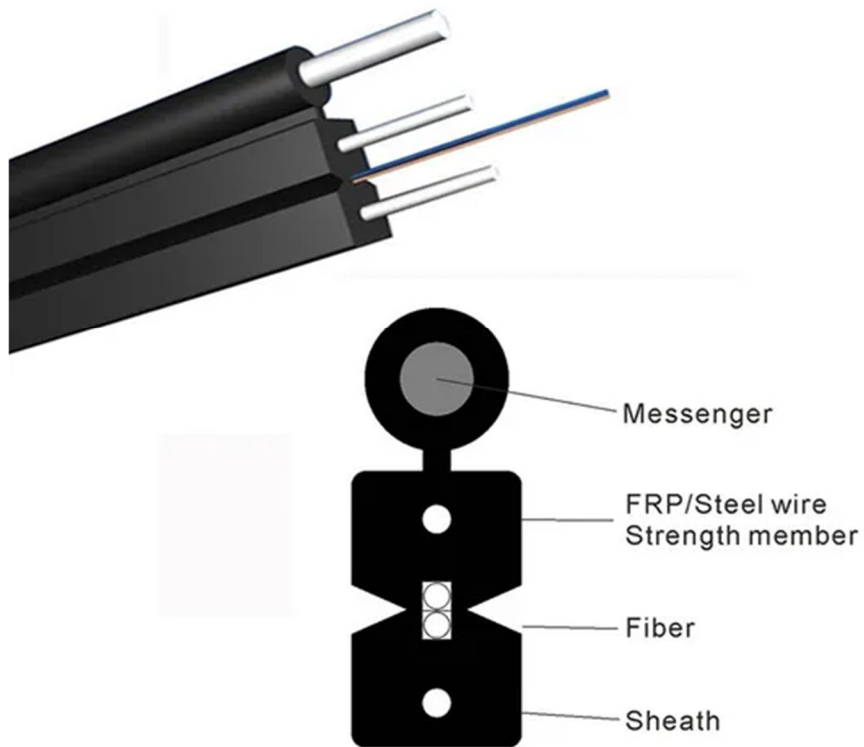


Optical Fiber CABLE

TECHNICAL DATA SHEET

2 Fiber Optic Single Mode 9/125 Indoor Drop Cable LSZH ITU-T G.657A2



2 Fiber Optic Single Mode 9/125 Indoor Drop Cable **LSZH ITU-T G.657A2**

Product Description

The 2 Fiber Optic Indoor Drop Cable is a compact, flexible and bend-insensitive optical fiber cable designed for FTTH access networks, indoor building connections and customer premises applications.

The cable contains two single-mode optical fibers with **9/125 μm G.657.A2** characteristics and is protected by a **Low Smoke Zero Halogen (LSZH)** outer jacket. The G.657.A2 fiber provides improved macrobending performance, making the cable suitable for installations where space is limited and tight bends may occur.

The optical fiber characteristics are based on **ITU-T G.657.A2**, which is designed for improved bending performance compared with conventional G.652 single-mode fiber.

Features

- Compliant with **ITU-T G.657.A2**
- Excellent resistance to macrobending loss
- Minimum design bend radius of **7.5 mm**
- Suitable for tight-space and high-density installations
- Designed for **FTTH and indoor access networks**
- Low Smoke Zero Halogen (**LSZH**) outer jacket
- Compact and lightweight construction
- Flexible and easy to install and route



- Suitable for 1310, 1550 and 1625 nm transmission windows
- Compatible with **ITU-T G.652.D** fiber systems
- Suitable for residential, commercial and building indoor applications

Applications

- FTTH indoor drop connections
- Fiber-to-the-Home (FTTH) access networks
- Indoor subscriber connections
- Residential and commercial buildings
- Fiber termination and distribution inside premises
- Indoor routing between Optical Network Terminal (ONT) and Fiber Termination Box
- Access network last-mile applications

General Specifications

Parameter	GJBFJV-2FO	GJBFJV-4FO
Fiber Count	2	4
Fiber Type	G.657A1/A2	G.657A1/A2
Buffer Diameter	900 μm	900 μm
Approx. Cable Diameter	5.0–7.0 mm	6.0–9.0 mm
Approx. Weight	20–40 kg/km	30–50 kg/km
Long-Term Tensile	150–200 N	150–250 N
Short-Term Tensile	300–400 N	300–500 N
Static Bending Radius	10D	10D
Dynamic Bending Radius	20D	20D

Cable Construction

Item	Cable Element	Description
1	Optical Fibers	2 × Single Mode 9/125 μm
2	Fiber Standard	ITU-T G.657.A2
3	Primary Coating	250 μm
4	Strength Member	Aramid Yarn
5	Outer Jacket	LSZH
6	Jacket Colour	White / Black
7	Cable Structure	Compact Indoor Drop Cable
8	Number of Fibers	2 Fibers

Optical Fiber Characteristics

Parameter	Specification
Fiber Type	Single Mode
Fiber Category	ITU-T G.657.A2
Fiber Size	9/125 μm
Operating Wavelength	1310 / 1550 nm
Cladding Diameter	125 $\pm$ 0.7 μm
Mode Field Diameter @ 1310 nm	8.6–9.2 μm

Cable Cut-off Wavelength	≤ 1260 nm
Proof Test	≥ 0.69 GPa
Maximum Attenuation @ 1310 nm	≤ 0.40 dB/km
Maximum Attenuation @ 1550 nm	≤ 0.30 dB/km
Maximum Attenuation @ 1625 nm	≤ 0.40 dB/km

Macro bending Performance

Bend Radius	Number of Turns	Wavelength	Maximum Bend Loss
15 mm	10	1550 nm	≤ 0.03 dB
15 mm	10	1625 nm	≤ 0.10 dB
10 mm	1	1550 nm	≤ 0.10 dB
10 mm	1	1625 nm	≤ 0.20 dB
7.5 mm	1	1550 nm	≤ 0.50 dB
7.5 mm	1	1625 nm	≤ 1.00 dB

Mechanical Characteristics

Parameter	Specification
Number of Fibers	2
Cable Dimensions	Approx. 3.0×2.0 mm
Outer Jacket Material	LSZH
Strength Member	Aramid Yarn

Approx. Cable Weight	8–12 kg/km
Minimum Installation Bend Radius	≥ 15 mm
Minimum Static Bend Radius	≥ 7.5 mm
Maximum Tensile Load, Installation	100 N
Maximum Tensile Load, Operation	50 N
Crush Resistance	≥ 500 N/100 mm
Operating Temperature	-20°C to +70°C
Installation Temperature	-10°C to +50°C
Storage Temperature	-20°C to +70°C

LSZH Jacket Characteristics

Parameter	Specification
Jacket Material	LSZH
Jacket Colour	White / Black
Flame Performance	According to applicable requirement
Smoke Emission	Low Smoke
Halogen Content	Zero Halogen
Application	Indoor

Fiber Color Identification

Fiber No.	Fiber Color
1	Blue
2	Orange

Transmission Characteristics

Parameter	1310 nm	1550 nm	1625 nm
Maximum Attenuation	≤ 0.40 dB/km	≤ 0.30 dB/km	≤ 0.40 dB/km
Application	O-Band	C-Band	L-Band

Standards and Compliance

- ITU-T G.657.A2 – Characteristics of a bending-loss insensitive single-mode optical fiber and cable
- ITU-T G.652.D – Single-mode optical fiber characteristics, where applicable
- IEC 60793-2-50 – Single-mode fiber specifications
- IEC 60793-1 – Optical fiber test methods
- IEC 60794 – Optical fiber cable requirements and test methods
- IEC 60332 – Flame propagation, where applicable
- IEC 60754 – Halogen gas / acidity requirements, where applicable
- IEC 61034 – Smoke density requirements, where applicable

Environmental Characteristics

Parameter	Specification
Operating Temperature	-20°C to +70°C
Installation Temperature	-10°C to +50°C
Storage Temperature	-20°C to +70°C
Indoor Environment	Suitable
UV Resistance	Not required for standard indoor version
Water Blocking	Not applicable for standard indoor version