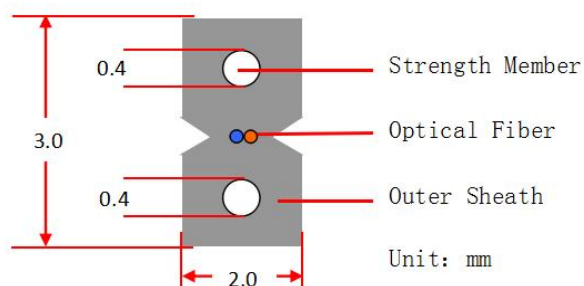


FTTH Indoor Drop Cable (GJXH)

Cable Design



Technical data

No. of cable		1/2
Fiber Model		G657A2
Strength Member	Material	Phosphating Steel Wire
	Diameter (± 0.05) mm	0.4
	NO.	2
Outer Sheath	Material	LSZH
Cable Diameter (± 0.2) mm		2.0 $\times$ 3.0
Cable Weight (± 1.0) kg/km		10.0
Attenuation	1310nm	≤ 0.40 dB/km
	1550nm	≤ 0.30 dB/km
Allowable Tensile Strength	Long Term	60N
	Short Term	120N
Allowable Crush Resistance	Long Term	1000N/100mm
	Short Term	2200N/100mm
Min. bending radius	Without Tension	15.0D
	Under Tension	30.0D
Temperature range	Installation	0°C~+50°C
	Transport&Storage	-20°C~+50°C
	Operation	-20°C~+50°C

Fibre Color

No.	1
Color	Blue

The properties of optical fiber (ITU-T Rec. G.657A2)

Characteristic	Characteristic	Characteristic	Characteristic
Optical properties			
Attenuation	1310nm	≤ 0.35	dB/km
	1383nm(After hydrogen aging)	≤ 0.32	dB/km
	1550nm	≤ 0.20	dB/km
	1625nm	≤ 0.21	dB/km
Relative wavelength attenuation	1285~1330nm	≤ 0.05	dB/km

@1310nm @1550nm	1525~1575nm	≤0.05	dB/km
Dispersion in the wavelength range of	1285~1340nm 1550nm	≤3.5 ≤18	ps/(nm.km) ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤0.092	ps/(nm ² .km)
Polarization Mode Dispersion Coefficient PMD			
Single fiber maximum		≤0.2	ps/km
Fiber link value (M=20, Q=0.01%)		≤0.1	ps/km
Typical value		0.04	ps/km
Cable cut-off wavelength(λ _{cc})		≤1250	nm
Mode field diameter (MFD)	1310nm 1550nm	8.8±0.4 9.8±0.5	μm μm
Attenuation discontinuities	1310nm 1550nm	≤0.05 ≤0.05	dB dB
Geometric characteristics			
Core diameter		125±0.7	μm
Cladding roundness		≤0.7	%
Coating diameter		245±5	μm
Coating / package concentricity error		≤12.0	μm
Core / package concentricity error		≤0.5	μm
The warpage (radius)		≥4	m
Environmental characteristics (1310nm、1550nm、1625nm)			
Temperature additional attenuation	-60℃ ~+85℃	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	-10℃ ~+85℃, 98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23℃, 30 days	≤0.05	dB/km
Hot and humid additional attenuation	85℃ 和 85% Relative humidity, 30 days	≤0.05	dB/km
Dry heat aging	85℃	≤0.05	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional attenuation			
1CircleΦ7.5mm	1550nm	≤0.330	dB
1CircleΦ10mm	1550nm	≤0.080	dB
10CircleΦ15mm	1550nm	≤0.015	dB
1CircleΦ7.5mm	1625nm	≤0.710	dB
1CircleΦ10mm	1625nm	≤0.160	dB
10CircleΦ15mm	1625nm	≤0.095	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

Main mechanical & environmental performance test

DESCRIPTION	VALUES	REFERENCES
Tensile Strength	Load 120N for 10 minutes	IEC 60794-1-2-EIA

	.Variation of attenuation ≤ 0.1 dB .Fibers strain $\leq 0.33\%$	IEC 60794-1-2-E1B IEC 60794-2-50
Crush Tset	Load 2200N for 3 minutes .Variation of attenuation ≤ 0.1 dB	IEC 60794-1-2-E3 IEC 60794-2-50
Impact Test	Energy=1 J on surface of 12.5mm radius,3 times; .Variation of attenuation ≤ 0.1 dB	IEC 60794-1-2-E4 IEC 60794-2-50
Bending Test	Load 100N for 5 minutes Radius of curvature= $10 \times O.D$.Variation of attenuation ≤ 0.1 dB	IEC 60794-1-2-E18A Procedure no.2

Sheath marking

The optical fiber drop cable shall have sequentially numbered length marking at intervals of approximately 1 meter. The starting number of ordering length for any coil shall begin with zero meter. The accuracy of the measurement of length marking shall be held within the limits of $\pm 1\%$.

- Manufacturer's name
- Type of wire
- Year and month of manufacture
- Length marking each meter along the wire