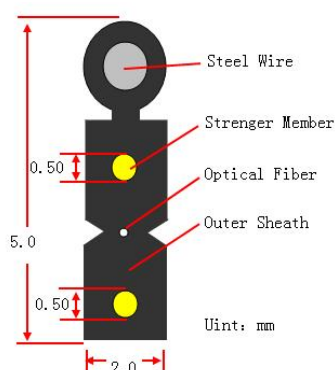


FTTH Outdoor Indoor Drop Cable (GJYXFCH)

Cable Design



Technical data

No. of cable		1/2
Fiber Model		G657A2
Strength Member	Material	FRP
	Diameter (± 0.03) mm	0.5
	NO.	2
Support Member	Material	Phosphating Steel Wire
	Diameter (± 0.03) mm	1.0
	NO.	1
Outer Sheath	Material	Anti-UV LSZH
	Color	Black
Cable Diameter (± 0.2) mm		2.0 $\times$ 5.0
Cable Weight (± 2.0) kg/km		17.5
Attenuation	1310nm	≤ 0.40 dB/km
	1550nm	≤ 0.30 dB/km
Allowable Tensile Strength	Long Term	300N
	Short Term	600N
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 @1310nm @1550nm	1285~1330nm	≤ 0.05	dB/km
	1525~1575nm	≤ 0.05	dB/km
Dispersion in the wavelength range of	1285~1340nm	≤ 3.5	ps/(nm.km)
	1550nm	≤ 18	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 Fiber link value (M=20, Q=0.01%) Typical value		≤ 0.2 ≤ 0.1 0.04	ps/km ps/km ps/km
Cable cut-off wavelength(λ_{cc})		≤ 1250	nm
Mode field diameter (MFD)	1310nm	8.8±0.4	μm
	1550nm	9.8±0.5	μm
Attenuation discontinuities	1310nm	≤ 0.05	dB
	1550nm	≤ 0.05	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 1CircleΦ10mm 10CircleΦ15mm 1CircleΦ7.5mm	1550nm	≤ 0.330	dB
	1550nm	≤ 0.080	dB
	1550nm	≤ 0.015	dB
	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 600N for 10 minutes .Variation of attenuation≤0.1dB .Fibers strain≤0.33%	IEC 60794-1-2-EIA IEC 60794-1-2-EIB IEC 60794-2-50
Crush Tset	Load 1000N for 3 minutes .Variation of attenuation≤0.1dB	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≤0.1dB	IEC 60794-1-2-E4 IEC 60794-2-50
Bending Test	Load 100N for 5 minutes Radius of curvature=10×O.D .Variation of attenuation≤0.1dB	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