FTTH Outdoor/Indoor Drop Cable (GJYXCH)

This specification covers the design requirements of structure, mechanical, physical and performance standards for the supply of optical fiber cables. The features described in this document are intended to provide information on the performance of optical cable.

1. Specifications

1.1 General Specifications

Cable Type	FTTH Outdoor Indoor Drop Cable
Fiber Type	SM G657A1/ SM G657A2
Application	FTTH, LAN, CCTV
Recommended installation methods	Aerial
Environment	Indoor/Outdoor
Temperature Range	-40℃ to 70℃

1.2 Fiber Specifications

Fiber style		Unit	SM G652D	SM G657A1	SM G657A2
condition		nm	1310/1550	1310/1550	1310/1550
attenuation		dB/km	≤0.36/0.23	≤0.35/0.21	≤0.35/0.21
Dispersion	1310nm	Ps/(nm*km)	≤18	≤18	≤18
	1550nm	Ps/(nm*km)	≤22	≤22	≤22
Zero dispersion wavelength		nm	1312±10	1312±10	1300-1324
Zero dispersion slope		ps/(nm²×Km)	≤0.091	≤0.090	≤0.092
PMD Maximum Individual Fiber		[ps/√km]	≤0.2	≤0.2	≤0.2
PMD Design Link Value		ps/(nm²×Km)	≤0.08	≤0.08	≤0.08
Fiber cutoff wavelength λc		nm	≧1180,≤1330	≧1180,≤1330	≧1180,≤1330
Cable cutoff wavelength λcc		nm	≤1260	.....	.....
MFD	1310nm	um	9.2±0.4	9.0±0.4	9.8±0.4
	1550nm	um	10.4±0.8	10.1±0.5	9.8±0.5
Step(mean of bidirectional measurement)		dB	≤0.05	≤0.05	≤0.05
Irregularities over fiber length and point discontinuity		dB	≤0.05	≤0.05	≤0.05

Difference backscatter coefficient	dB/km	≤0.03	≤0.03	≤0.03
Attenuation uniformity	dB/km	≤0.01	≤0.01	≤0.01
Cladding diameter	um	125.0±0.1	124.8±0.1	124.8±0.1
Cladding non-circularity	%	≤1.0	≤0.7	≤0.7
Coating diameter	um	242±7	242±7	242±7
Coating/chaffinch concentrically error	um	≤12.0	≤12.0	≤12.0
Coating non circularity	%	≤6.0	≤6.0	≤6.0
Core/cladding concentricity error	um	≤0.6	≤0.5	≤0.5
Curl(radius)	um	≥4	≥4	≥4

1.3 Standard Color Identification of Fiber

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Slate	White

1.4 Cable Design

Item	Description
Model No	GJYXCH/GJYXFCH
1. Fiber count	1 Core , 2 Core, 4 Core, 6 Core
2. Cable Diameter	2.0*5.0mm
3. Cable Weight	20KGS/18KGS
4. Strength member	
-Material	Steel/FRP
-Diameter	0.45mm*2
5.Outer Sheath	
-Material	LSZH
6. Sheath marking	
-Type of marking	Laser printing
7. Messenger	
OD	1.0mm
Material	Steel wire

1.4.1 Strength Member

The strength member is made of steel or FRP. It provides both tensile and anti-buckling strength to the cable.

1.4.2 Outer Jacket

LSZH sheath is extruded over the fiber.

1.4.3 Cable Sheath Marking

Each cable have the following information clearly marked on the outer jacket of cables:

a. Name of manufacturer.

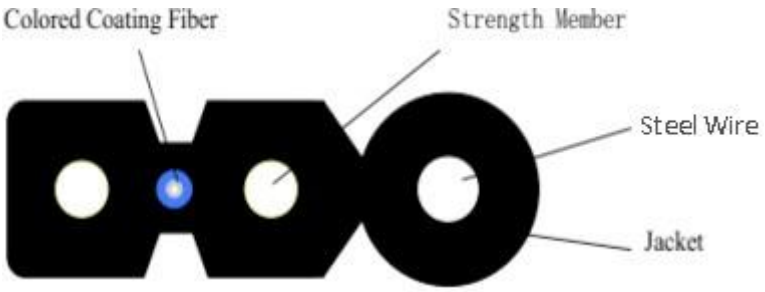
b. Year of manufacturer

c. Type of cable and fiber

d. Length mark (printing on each meter normally)

e. Or as customer's requirements.

2. Cable Structure



3. Cable Performance

Items		Description
Installation Temperature range		-20--+60℃
Operation and transport temperature		-40-+70℃
Min Bending Radius(mm)	Long term	10D
	short term	20D
Allowable Tensile Strength(N)	Long term	300
	short term	600
Crush Load (N/100mm)	Long term	1100
	short term	2200

4. Packing

Items		Description
Cable length		1KM or 2KM per reel
Package material		drum carton
Package size	1KM	34.5*28*35cm
	2KM	41*30*41cm