FTTH drop cable

GJYXCH-FTTH Drop Cable 2.0×5.2mm

	STRUCTURE PARAMETER		
	Name	Nos	SIZE
Load-bearing strength member	Phosphating steel wire	1	1.0 mm
Cable strength member	Phosphating steel wire	2	0.45 mm
Outer sheath material	LSZH		
Diameter of cable	(2.0±0.1) x (5.1±0.1)mm		
Fiber type and colour	G.657.A1		

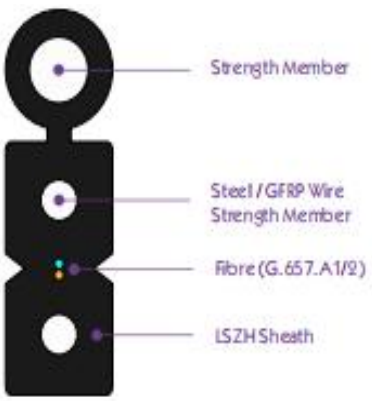
GJYXCH-1	1 Core Fibre	Blue
GJYXCH-2	2 Cores Fibre	Blue | Orange
GJYXCH-4	4 Cores Fibre	Blue | Orange | Green | Brown

MIN bending radius	operation	30D
	Using	15D
Available Tensile strength	Long term	300N
	short term	600N
Available crush strength	Long term	1000 N/100mm
	Short term	2000 N/100mm

Optical characteristics after cable finished	**Standard Value**		
	Attenuation	1310nm	≤0.36dB/km
		1550nm	≤0.22dB/km
	Cut-off wavelength		

Environment characteristics	Storage temperature	-40℃～+70℃
	Operating temperature	-30℃～+60℃

Cross Section



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Cable Specification

	GJYXCH FTTH DROP CABLE XXCORE(G.657A) XXXXm
ZION	: Manufacturer's brand(we can design as per client brand)
2024	: Manufacture year
FTTH	: Cable type
XX (G.657A)	: XX cores single-mode optical fiber (ITU-T Rec. G.657A)
XXXXm	: Mark of meters

*The marking is printed every 1 meter;

- The color of marking is white, but if the remarking is necessary, the yellow color marking shall be printed newly on a different position.
- An occasional unclear of length marking is permitted if both of the neighboring markings are clear;
- The both cable ends are sealed with heat shrinkable end caps to prevent water ingress.

Fiber Properties

The properties of single mode optical fiber (ITU-T Rec. G.657A)

Items	Specification
MFD（1310nm） mm	8.2-9.0
Cladding diameter mm	125.0 ± 0.7
Cladding no-circular %	≤1.0
Cladding to core concentricity error mm	≤0.5
Secondary coating diameter mm	245.0± 10.0
Secondary coating to cladding concentricity error	≤12.0
Fiber curl m	≥4.0
@1310 nm	≤0.34dB/km
@1383 nm	≤0.31 dB/km
@1383 nm (after H2 aging)	Δ≤0.01 dB/km
@1550 nm	≤0.20dB/km
@1625 nm	≤0.23 dB/km
Point discontinuity at1310 and at 1550nm	≤0.02 dB
2m fiber Cut-off wavelength λc nm	1150≤λc≤1330
Zero dispersion wavelength l_0 nm	1300~1324
Slope S_0 ps/(nm^2.km)	≤0.092
At 1288~1339nm, D(l) ps/(nm.km)	≤3.5
At 1271~1360nm, D(l) ps/(nm.km)	≤5.3
At 1550nm , D(l) ps/(nm.km)	≤18
At 1625nm , D(l) ps/(nm.km)	≤22
PMD ps/$km^{1/2}$	≤0.2(fiber value)
	≤0.1 (Link value)

- Attenuation vs. Wavelength maximum increase of the att. in 1285-1330nm reference the att. at 1310nm 0.03dB/km; maximum increase of the att. in 1525-1575nm reference the att. at 1550nm 0.02dB/km.
- Attenuation from out end- attenuation from inner end 0.05dB/km ; max segment loss-avg loss0.03dB/km.(OTDR)

Mechanical Characteristics

Items	Specification
Proof stress level	Strain≥2.0%(proof tension stress ≥19.76N)
allowable bending radiuses	15mm
Additional attenuation with bending	10turn/D=30mm α1550≤0.25dB α1625≤1.0dB
	1turn/D=20mm α11550≤0.75dB α1625≤1.5dB
Coating strip force	Peak value：1≤F≤8.9
	Average value：1≤F≤5
Dynamic fatigue test , Nd	≥20
Tense test , breaking strength σf(0.5)	≥3.8GPa

Packing and Marking

Packing

- Each single length of cable shall be reeled on Plastic Drum.
- Drum length: Standard drum length is 3000m±2% or design as per client inquiry ;

Drum Marking (can according to the requirement in the technical specification)

-Manufacturer name;
-Manufacturing year and month;
-Roll-direction arrow;
-Cable outer end position indicating arrow;
-The word “OPTICAL FIBER CABLE”;
-Cable type and size;
-Drum number;
-Drum length;
-Gross / net weight;
-Origin, The word “MADE IN CHINA”;
-Caution plate indicating the correct method for loading, unloading and convey the cable;
-Other customer information such as contract no., project no., and delivery destination. (if needed)

Cable identification documents

-Product qualified certificate;
-Test report.