

GJYXFCH-FTTH Flat Drop Cable 2.0×5.2mm

Items	STRUCTURE PARAMETER		
	Name	Nos	SIZE
Load-bearing strength member	Phosphating steel wire	1	1.0 mm
Cable strength member	FRP	2	0.5 mm
Outer sheath material	LSZH		
Diameter of cable	(2.0±0.05) x (5.2±0.1)mm		
Fiber type and colour	G.657.A1		

GJYFXCH-1	1 Core Fibre	Blue
GJYFXCH-2	2 Cores Fibre	Blue Orange
GJYFXCH-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	≤1260nm		

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

Cross Section



Printing on Sheath

	ZION 2024 FTTH 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.657)

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 λ _c nm	1150≤λ _c ≤1330
Zero dispersion wavelength λ 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 \geq 2.0%(proof tension stress \geq 19.76N)
allowable bending radiuses	15mm
Additional attenuation with bending	10turn/D=30mm α 1550 \leq 0.25dB α 1625 \leq 1.0dB
	1turn/D=20mm α 11550 \leq 0.75dB α 1625 \leq 1.5dB
Coating strip force	Peak value: $1\leq F\leq 8.9$
	Average value: $1\leq F\leq 5$
Dynamic fatigue test , Nd	≥ 20
Tense test , breaking strength of(0.5)	≥ 3.8 GPa

Packing and Marking

Packing

- Each single length of cable shall be reeled on Plastic Drum.
- Drum length: Standard drum length is 3000m \pm 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.