

## 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 <sub>c</sub> nm	1150≤λ <sub>c</sub> ≤1330
Zero dispersion wavelength λ <sub>0</sub> nm	1300~1324
Slope S <sub>0</sub> ps/(nm <sup>2</sup> .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 <sup>1/2</sup>	≤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 $\alpha$ 1550 $\leq$ 0.25dB $\alpha$ 1625 $\leq$ 1.0dB
	1turn/D=20mm $\alpha$ 1550 $\leq$ 0.75dB $\alpha$ 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	$\geq 20$
Tense test , breaking strength of(0.5)	$\geq 3.8$ 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.