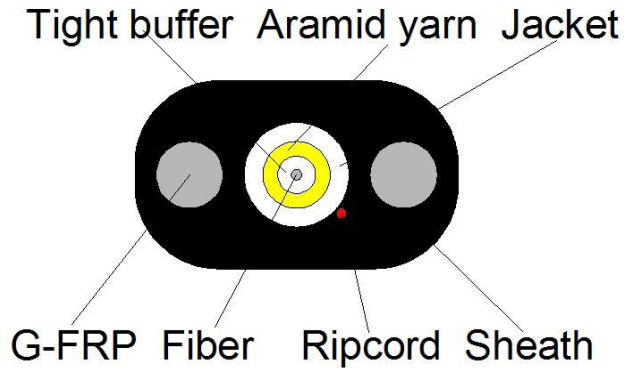


FTTH Butterfly Optic Cable (GJXJHB)

1. CABLE CONSTRUCTION



1.2 Structure Specification

Cable Type		GJXJH
Fiber count		1-Feb
Optical Unit	Tight buffer OD:	0.85±0.05mm
	Strength yarn	Aramid yarn
	Jacket Material	PVC
	OD.	2.8±0.2mm
Strength Number		G-FRP 1.2mm*2
Sheath Material		LSZH
OD of cable(mm)		4.0×7.0±0.2
Net weight (kg/km)		38
Max.Tensile Loading (N)		800

2. PERFORMANCE PARAMETERS OF THE OPTICAL FIBER

2.1 Single Mode Fiber

ITEMS	UNITS	SPECIFICATION	
		G657A1	G657A2
Fiber type		G657A1	G657A2
Attenuation	dB/km	1310nm≤ 0.4 1550nm≤ 0.3	
Chromatic Dispersion	ps/nm.km	1310nm≤ 3.6 1550nm≤ 18 1625nm≤ 22	
Zero Dispersion Slope	ps/nm ² .k		≤ 0.092
Zero Dispersion Wavelength	nm		1300 ~ 1324
Cut-off Wavelength (lcc)	nm		≤ 1260
Attenuation vs. Bending (60mm x100turns)dB	30mm radius, 100ring	≤0.5@ 1550nm	≤0.05@ 1550nm
	7.5mm radius, 1ring	---	≤0.5@1625nm
Mode Field Diameter	μm	9.2 ± 0.4 at 1310nm	9.2 ± 0.4 at 1310nm
Core-Clad Concentricity	μm	≤ 0.5	≤ 0.5
Cladding Diameter	μm	125±1	125±1
Cladding Non-circularity	%	≤ 0.8	≤ 0.8
Coating Diameter	μm	245±5	245±5
Proof Test	Gpa	≥ 0.69	≥ 0.69

2.2 Multi Mode Fiber

ITEMS	UNITS	SPECIFICATION					
		62.5/125	50/125	OM3-150	OM3-300	OM4-550	
Fiber Core Diameter	μm	62.5±2.5	50.0±2.5			50.0±2.5	
Fiber Core Non-circularity	%	≤6.0	≤6.0			≤6.0	
Cladding Diameter	μm	125.0±1.0	125.0±1.0			125.0±1.0	
Coating Diameter	μm	245±10	245±10			245±10	
Core-Clad Concentricity	μm	≤12.0	≤12.0			≤12.0	
Coating Non-circularity	%	≤8.0	≤8.0			≤8.0	
Core-Clad Concentricity	μm	≤1.5	≤1.5			≤1.5	
Attenuation	850nm	dB/km	3.0	3.0		3.0	
	1300nm	dB/km	1.5	1.5		1.5	
OFL	850nm	MHz.km	≥160	≥200	≥700	≥1500	≥3500
	1300nm	MHz.km	≥300	≥400	≥500	≥500	≥500
The biggest theory numerical aperture	/	0.275±0.015	0.200±0.015			0.200±0.015	
Cladding Non-circularity	%	≤2.0	≤2.0			≤2.0	

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3. MECHANICAL AND ENVIRONMENTAL PERFORMANCE OF THE CABLE

NO	ITEMS	TEST METHOD	ACCEPTANCE CRITERIA
1	Tensile Loading Test	#Test method: IEC 60794-1-E1 -Long-tensile load: 0.5 times the short-term pulling force -Short-tensile load: reference to clause 1.2 -Cable length: ≥50m	- Attenuation increment@1550nm: ≤0.1dB - No jacket cracking and fiber breakage
2	Crush Resistance Test	#Test method: IEC 60794-1-E3 - Long load: 500 N/100mm ² - Short load: 1000 N/100mm ² Load time: 1 minutes	- Attenuation increment@1550nm: ≤0.4dB - No jacket cracking and fiber breakage
3	Impact Resistance Test	#Test method: IEC 60794-1-E4 -.Impact height: 1M -.Impact weigh: 100 g -.Impact point: ≥3 -.Impact frequency: ≥1/point	- Attenuation increment@1550nm: ≤0.4dB - No jacket cracking and fiber breakage
4	Repeated Bending	#Test method: IEC 60794-1-E6 -.Mandrel diameter: 30H -.Subject weight: 2kg -.Bending frequency: 300times -.Bending speed: 2s/time	- Attenuation increment@1550nm: ≤0.4dB - No jacket cracking and fiber breakage
5	Torsion Test	#Test method: IEC 60794-1-E7 -.Length: 1m	- Attenuation increment@1550nm: ≤0.4dB