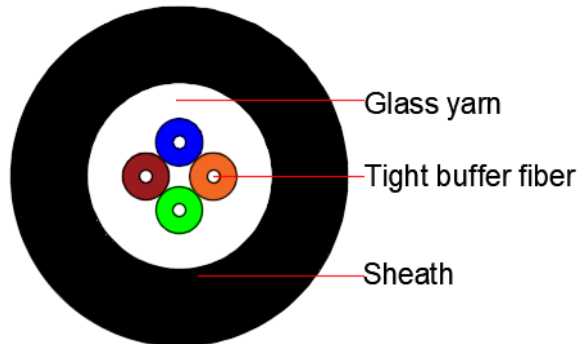


## 1. Cable Construction

### 1.1 Cross Sectional Diagram



## 2. Technical Specification

Fiber Counts		<b>4F</b>
Tight buffer	Material	LSZH
	OD(mm)	0.90±0.05mm
	Color	Blue/ Orange/ Green/ Brown
Central Strength member		Glass yarn
Sheath	Material	LSOH(CPR Cca/Dca)
	Color	Black
Cable	Diameter	5.4±0.3mm
	Weight	19±5kg/km
Operating temperature		-40°C~+60°C
Store/Transport temperature		-40°C~+60°C
Installation temperature		-40°C~+60°C

## 3. Tight buffer Identification

NO.	1	2	3	4
Tight buffer Color	Blue	Orange	Green	Brown

## 4. Optical Fiber

ITEMS	UNITS	SPECIFICATION	
Fiber Type	-	G657A1	
Attenuation	dB/km	Before Cable	After Cable

		1310 nm ≤ 0.35 1383 nm ≤ 0.35 1550 nm ≤ 0.21 1625 nm ≤ 0.23	1310 nm ≤ 0.36 1383 nm ≤ 0.36 1550 nm ≤ 0.24 1625 nm ≤ 0.25
Chromatic Dispersion	ps/nm.km	1285~1340 nm: -3.5~3.5 1550 nm ≤ 18 1625 nm ≤ 22	
Zero Dispersion Slope	ps/nm <sup>2</sup> .km	≤ 0.092	
Zero Dispersion Wavelength	nm	1300~ 1324	
PMD (M=20, Q=0.01%)	ps/√km	≤ 0.06	
Cut-off Wavelength (λ <sub>cc</sub> )	nm	≤ 1260	
Attenuation vs. Bending	dB	≤ 0.25 at 1550 nm ≤ 1.0 at 1625 nm (30mm x 10turns) ≤ 0.75 at 1550 nm ≤ 1.5 at 1625 nm (20mm x 1turns)	
Mode Field Diameter	μm	9.1 ± 0.4 @ 1310nm 10.3 ± 0.5 @ 1550nm	
Core-Clad Concentricity	μm	≤ 0.5	
Cladding Diameter	μm	125 ± 0.7	
Cladding Non-circularity	%	≤ 0.7	
Coating Diameter	μm	240 ± 5	
Proof Test	Gpa	≥ 0.69	

## 5. Mechanical and Environmental Performance of the Cable

N O .	ITEMS	TEST METHOD	ACCEPTANCE CRITERIA
1	Tensile Loading Test IEC 60794-1-E1	- Tensile load: 500N - Maintained time: 1min - Length of cable: about 150m	- Attenuation increment @ 1550nm: ≤ 0.1dB - No jacket cracking and fiber breakage
2	Crush Resistance Test IEC 60794-1-E3	- Load: 500 N/100mm - Load time: 1 minutes - Load time: 10time	- Attenuation increment @ 1550nm: ≤ 0.1dB - No jacket cracking and fiber breakage

3	Impact Resistance Test IEC 60794-1-E4	-Impact height: 1000mm -Impact weigh: 100g -Impact point: 3 -Impact frequency: 1/point	-Attenuation increment@1550nm:≤0.1dB - No jacket cracking and fiber breakage
4	Repeated Bending IEC 60794-1-E6	-Angle bending: ±90 degree -Subject weight: 1.5kg -Testing time: 100seconds -Relax time: 10seconds	-Attenuation increment@1550nm:≤0.1dB - No jacket cracking and fiber breakage
5	Torsion Test IEC 60794-1-E7	-Length: 1m -Testing time: 10min -Relax time: 10seconds	-Attenuation increment@1550nm:≤0.1dB - No jacket cracking and fiber breakage
6	Temperature Cycling Test IEC 60794-1-F1	-Temperature steps: +20°C、-20°C、+60°C、+20°C -Testing Time: 24 hours/step -Cycle index: 2	- Attenuation increment@1550nm:≤0.1 dB - No jacket cracking and fiber breakage

## 5.2 Fiber Optical Cable bending radius

Static bending: ≥ 10 times than cable out diameter

Dynamic bending: ≥ 20 times than cable out diameter.

## 6. Package and Mark

### 6.1 PACKAGE

Material of the drum shall be fumigation wood.

0.5km/Drum: 500\*330\*500mm; 1km/Drum: 600\*330\*600mm;

Not allowed two length units of cable in one drum, Two ends should be packed inside drum, reserve length of cable not less than 1meter.

### 6.2 MARK

White color Ink jet printing, Cable Mark: Brand, Cable type, Fiber type and counts, Year of manufacture and Length marking.