

STRUCTURE CABLING OPTICAL FIBER

Single Core Tight Wrapped Indoor Optical Cable(GJFJH 1 x n)



D215/D216

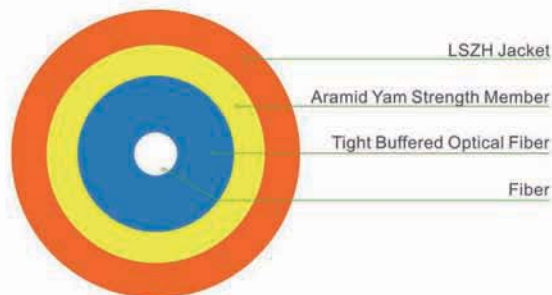
Introduction

One 900 μ m Buffered Fibers are surrounded by aramid yarn strength members and a flame-retardant jacket.

Cable structure and parameter

SN	Item	Unit	Value
1	No. of fibers	count	1
2	Tight buffer material		LSZH
3	Tight buffer Color		Yellow
4	Strength member		Aramid yarns
5	Tight buffer diameter	mm	0.9 \pm 0.05
6	Jacket thickness	mm	0.5
7	Cable diameter	mm	3
8	Cable weight	kg/km	7
9	Short term tension	N	150
10	Short term crush	N/100mm	500

Note: Mechanical sizes are nominal values.



LSZH Jacket

Aramid Yam Strength Member

Tight Buffered Optical Fiber

Fiber

G652D fiber information

- Mode field diameter (1310nm):9.2 μ m \pm 0.4 μ m.
- Mode field diameter (1550nm):10.4 μ m \pm 0.8 μ m.
- Cladding diameter:125 μ m \pm 1.0 μ m.
- Coating diameter:245 μ m \pm 7 μ m.
- Cut off wavelength of cabled fiber (λ_{cc}): \leq 1260 μ m.
- Attenuation at 1310nm: \leq 0.35dB/km.
- Attenuation at 1550nm: \leq 0.21dB/km.
- Bending loss at 1550nm (100 turns, 30mm radius): \leq 0.05dB.
- Dispersion in the range 1288 to 1339nm: \leq 3.5ps/(nm \cdot km).
- Dispersion at 1550nm: \leq 18ps/(nm \cdot km).
- Dispersion slope at zero dispersion wavelength: \leq 0.092ps/(nm 2 \cdot km).

Characteristic of Optical Cable

Mechanical characteristic and test method		
Tensile strength	conform to IEC 794-1-E1	
Crush	conform to IEC 794-1-E3	
Impact	conform to IEC 794-1-E4	
Repeated bending	conform to IEC 794-1-E6	
Torsion	conform to IEC 794-1-E7	
Flexing	conform to IEC 794-1-E8	
Cable bend	conform to IEC 794-1-E11	
Water penetration	conform to IEC 794-1-F5B	
Temperature requirement	Operation	-20 $^{\circ}$ C~+85 $^{\circ}$ C
	Installation	-10 $^{\circ}$ C~+70 $^{\circ}$ C
	Storage/transportation	-40 $^{\circ}$ C~+85 $^{\circ}$ C
Temperature cycling test	conform to IEC 794-1-F1	
Bending Radius	Unloaded	10 times of outer diameter
	loaded	20 times of outer diameter

Order Information

Item	Specification	Description
D215	Single cores	Single Mode
D216	Single cores	Multimode