

Unitube (Central Loose) Outdoor Cable Armored Cable --GYFXTS

1. Cable Description

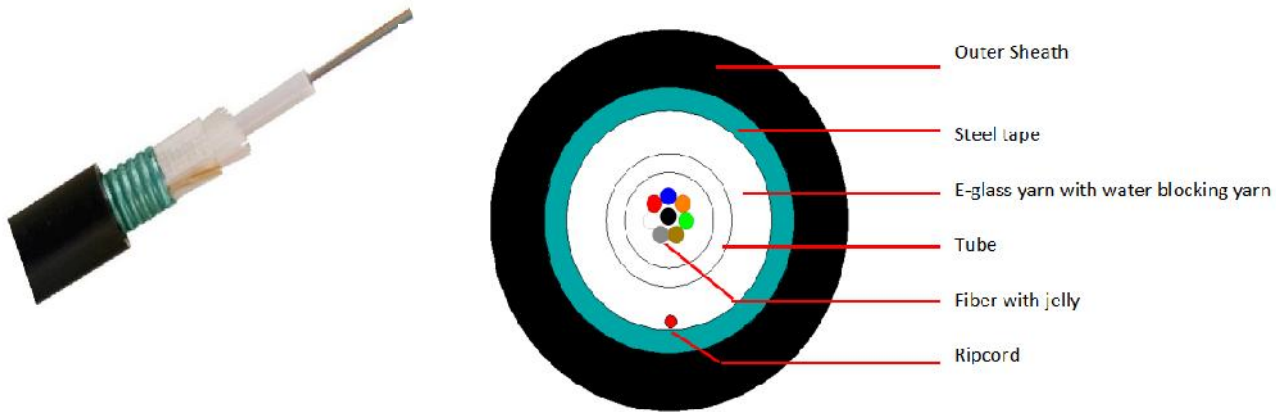
The fibers, are positioned in a loose tube made of a high modulus plastic. **The tubes are filled with thixotropic jelly.** E-glass yarn inside steel tape .then with PE outer jacket.

2.Application

This specification covers the general requirements of Center Tube Optical cable for aerial .overhead, duct .

3. Characteristics

1. Stell tape armored anti -rodont
2. Proven loose tube design for good performance
3. Excellent mechanical and environmental characteristics
4. Small outer diameter,light weigh easy to installation
5. E-glass yarn make cable more tensile strength



Cable construction details

Number of fiber	2~24 core	
Loose tube	material	PBT
	diameter	2.0mm+/- 0.2mm (2~12core) 2.8mm+/-0.2mm (24core)
Filled buffer material	Thixotropic gel	
Strength member	E-glass yarn	
armored	steel tape	
Overall cable diameter	7.5±0.5mm	
Material	PE	
Cable weight per km	65 kg/km	

Fiber color

	1	2	3	4	5	6
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Number of fiber per tube 12cores	Blue	Orange	Green	Brown	Grey	White
	7	8	9	10	11	12
	Red	Black	Yellow	Violet	Pink	Aqua
Color 13~24 will be marked with a black tracer. For black color no need marked black tracer, will use nature color instead.						

Cable Mechanical characteristic

core	Cable diameter	weight
2~24	7.5±0.5mm	65 kg/km
Temperature range	-40+70	-----
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	600
Min allowable Tensile Strength(N)	Short term	1200
Operationtemperature (°C)	-40+70	
Installationtemperature (°C)	-20+60	
Storage temprature (°C)	-40+70	

Fiber characteristic

Fiber style	Unit	SM G652	SM G652D	MM 50/125	MM 62.5/125	MM OM3-300
condition	nm	1310/1550	1310/1550	850/1300	850/1300	850/1300
attenuation	dB/km	≤	≤	≤	≤3.0/1.0	≤3.0/1.0
		0.36/0.23	0.36/0.23	3.0/1.0	----	----
Dispersion	1550nm	Ps/(nm*km)	----	≤18	----	----
	1625nm	Ps/(nm*km)	----	≤22	----	----
Bandwith	850nm	MHZ.KM	----	----	≥ 400	≥ 160
	1300nm	MHZ.KM	----	----	≥ 800	≥ 500
Zero dispersion wavelength	nm	1300-1324	≥ 1302, ≤1322	----	----	≥ 1295, ≤1320
Zero dispersion slope	nm	≤0.092	≤0.091	----	----	----
PMD Maximum Individual Fibr		≤0.2	≤0.2	----	----	≤0.11
PMD Design Link Value	Ps(nm ² *km)	≤0.12	≤0.08	----	----	----
Fibre cutoff wavelength c	nm	≥ 1180, ≤1330	≥ 1180, ≤1330	----	----	----
Cable sutoffwavelength cc	nm	≤1260	≤1260	----	----	----
MFD	1310nm	um	9.2+/-0.4	9.2+/-0.4	----	----
	1550nm	um	10.4+/-0.8	10.4+/-0.8	----	----
Numerical Aperture(NA)		----	----	0.200+/-0.015	0.275+/-0.015	0.200+/-0.015

Step(mean of bidirectional measurement)	dB	≤0.05	≤0.05	≤0.10	≤0.10	≤0.10
Irregularities over fiber length and point	dB	≤0.05	≤0.05	≤0.10	≤0.10	≤0.10

Dicontinuity						
Difference backscatter coefficient	dB/km	≤0.05	≤0.03	≤0.08	≤0.10	≤0.08
Attenuation uniformity	dB/km	≤0.01	≤0.01			
Core diameter	um			50+/-1.0	62.5+/-2.5	50+/-1.0
Cladding diameter	um	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1
Cladding non-circularity	%	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Coating diameter	um	242+/-7	242+/-7	242+/-7	242+/-7	242+/-7
Coating/concentricity error	um	≤12.0	≤12.0	≤12.0	≤12.0	≤12.0
Coating non circularity	%	≤6.0	≤6.0	≤6.0	≤6.0	≤6.0
Core/cladding concentricity error	um	≤0.6	≤0.6	≤1.5	≤1.5	≤1.5
Curl(radius)	um	≤4	≤4	----	----	----