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Unitube (Central Loose) Outdoor Cable GYXTW

1. Cable Description

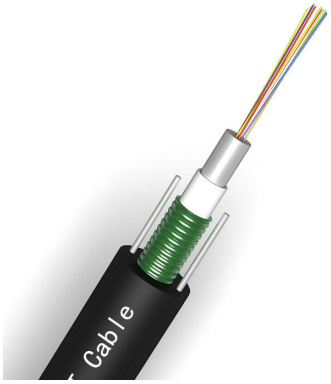
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. The tube is wrapped with a layer of corrugated steel tape. Between the corrugated steel tape and the loose tube water-blocking material is applied to keep the cable compact and watertight. Two parallel steel wires are placed at the two sides of the steel tape. The cable is completed with a polyethylene (PE) sheath.

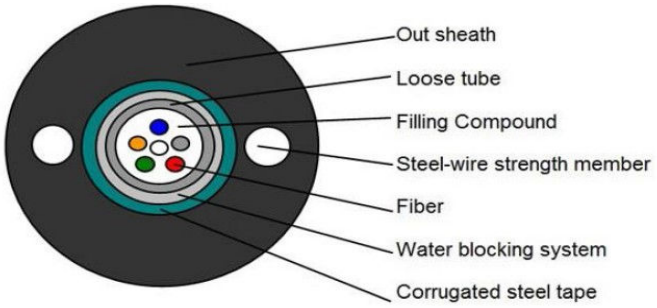
2.Application

This specification covers the general requirements of Central Loose Tube Outdoor Cable for aerial or duct.

3. Characteristics

· Good mechanical and temperature performance.
· High strength loose tube that is hydrolysis resistant.
· Special tube filling compound ensure a critical protection of fiber.
· Crush resistance and flexibility.
· Two parallel steel wires ensure tensile strength.
· Small diameter, light weight and friendly installation.





4.Cable construction details

Number of fiber	2~16core	
Loose tube	material	PBT
	diameter	Φ2.2(outer/inner)
Tube-filling	Tube filling compound	
Steel wire	size	0.8mm/1.0mm
	Number	2
Outer sheath	material	PE,HDPE,LDPE
	thickness	1.8±0.2mm

5. Fiber color

Number of fiber per tube 12cores	1	2	3	4	5	6
	Blue	Orange	Green	Brown	Grey	White
	7	8	9	10	11	12
	Red	Black	Yellow	Violet	Pink	Aqua

6.Cable Mechanical characteristic

core	Cable diameter	weight
2~16	8.0mm+-0.3mm	65kg/km+-10kg
Temperature range	.-20+70	-----
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	1200
Min allowable Tensile Strength(N)	Short term	1500
Operationtemperature （℃）	-40+70	
Installationtemperature （℃）	-20+60	
Storage temprature （℃）	-40+70	

7.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	0.34/0.22	3.0/1.0	----	----
Dispresion	1550nm	Ps/(nm*km)	----	≤18	----	----	Dispresion
	1625nm	Ps/(nm*km)	----	≤22	----	----	
Bandwith	850nm	MHZ.KM	----	----	≧400	≧160	Bandwith
	1300nm	MHZ.KM	----	----	≧800	≧500	
Zero dispersion wavelength		nm	1300-1324	≧1302, ≤1322	----	----	≧ 1295, ≤1320
Zero dispresion slope		nm	≤0.092	≤0.091	----	----	----
PMD Maximum Individual Fibr			≤0.2	≤0.2	----	----	≤0.11
PMD Design Link Value		Ps(nm2*km)	≤0.12	≤0.08	----	----	----
Fibre cutoff wavelength λc		nm	≧ 1180, ≤1330	≧1180, ≤1330	----	----	----
Cable sutoffwavelength λcc		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 dimater	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/chaffinch concentrically 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 conentricity error	um	≤0.6	≤0.6	≤1.5	≤1.5	≤1.5
Curl(radius)	um	≤4	≤4	----	----	----

8.Package

1.**Packing material:** Wooden drum
2.Packing length: standard length of cable shall be 2 km. Other cable length is also availabler
if required by custome