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Single jacket dielectric fiber optic cable (ADSS) 100m span

CODE:

1. Cable Description

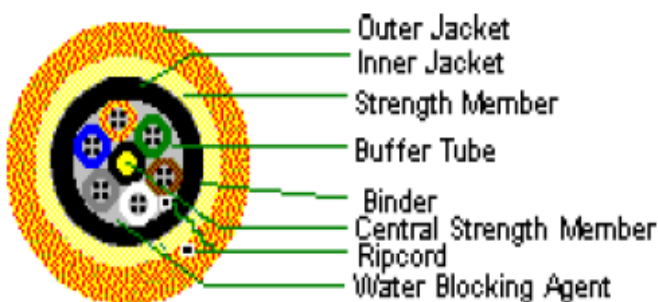
Double sheath cable is loose tube stranded. Fibers, are positioned into a loose tube made of high modulus plastics. The tubes are filled with a water-resistant filling compound. The tubes (and fillers) are stranded around a FRP (Fiber Reinforced Plastic) as a non-metallic central strength member into a compact and circular cable core. After the cable core is filled with filling compound. it is covered with thin CPE inner sheath. After stranded layer of aramid yarns are applied over the inner sheath as strength member, the cable is completed with CPE outer sheath.

2. Application

- It can be installed without shutting off the power.
- Light weight and small diameter reducing the load caused by ice and wind and the load
- Good performance of tensile strength and temperature.
on towers and backprops.
- The design life span is 30 years.

3. Characteristics

- FRP central strength member
- Tube filling gel
- Loose tube stranded
- CPE sheath outdoor cable
- Kevlar make cable more tensile



4.Cable construction details

Number of fiber	6core	
Moisture Barrier	Water blocking system	
Loose tube and Filler elements	material	PBT
	diameter	Φ1.9mm+-0.2mm
Central strength member	material	FRP
	diameter	2.0mm+-0.2mm
Inner sheath	material	CPE--Black color
	Thickness	1.0mm±0.2mm
	OD	7.8mm
Outer sheath	material	CPE--Yellow color
	Thickness	1.5± (±0.1) mm
Cable OD	diameter	10.9 (±0.3)mm

5. Fiber color(how many fiber per tube according to customer's requirement)

Number of fiber per tube 6 cores	1	2	3	4	5	6
	Blue	Orange	Green	Brown	Grey	White
Tube color	1					
	Blue					

6.Cable Mechanical characteristic

core	Cable diameter	weight
6core	10.9 (±0.3)mmmm	95±5kg/km
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
Span	100M	
Kevlar	dupont yarn 800D 10pcs	
Min allowable Tensile Strength(N)	Long term	3000
Min allowable Tensile Strength(N)	Short term	4000
Min. Allowable Crush Load (N/100mm)	Long term	300
Min. Allowable Crush Load (N/100mm)	short term	1000
Operationtemperature (°C)	-40+70	
Installationtemperature (°C)	-15+60	

Storage temprature (°C)	-40+70
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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	----	----
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 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