



Single jacket dielectric fiber optic cable ADSS 24 core

1. Cable Description

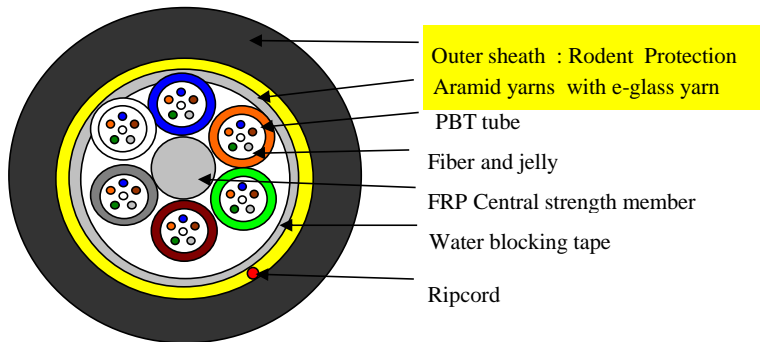
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. The tube is wrapped with a layer of Kevlar. Between the Kevlar yarn ,e-glass yarn .and the loose tube water-blocking material is applied to keep the cable compact and watertight. The cable is completed with a HDPE sheath.

2.Application

The actual status of overhead power lines ,covers the general requirements of single jacket ADSS dielectric Cable for aerial or duct or under ground duct

3. Characteristics

- FRP central strength member
 - Tube filling gel
 - Loose tube stranded
 - HDPE sheath outdoor cable
- Kevlar and e-glass yarn make cable more tensile and anti rodent



4.Cable construction details

Number of fiber	24 core	
Moisture Barrier	Water blocking system	
Loose tube and Filler elements	material	PBT
		Thixotropic Jelly Compound
Central strength member	diameter	Φ2.2mm+/-0.2mm
	material	FRP
Outer sheath	diameter	2.0mm+/-0.2mm
	material	HDPE , UV
	diameter	1.8±0.2mm

5. Fiber color

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

6.Cable Mechanical characteristic

core	Cable diameter	weight
24 core	10±0.5mm	100±5kg/km
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	800
Min allowable Tensile Strength(N)	Short term	1500
Min. Allowable Crush Load (N/100mm)	Long term	300
Min. Allowable Crush Load (N/100mm)	short term	1000
Span Length	80-100m	
Operationtemperature (°C)	-40+70	
Installationtemperature (°C)	-15+60	
Storage temprature (°C)	-40+75	

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*k m)	----	≤18	----	----
	1625nm	Ps/(nm*k m)	----	≤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(nm ² *k m)	≤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 concentricly 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 available if required by customer

9. Cable marking and cable reel marking

The cable sheath shall be marked with white characters according to customer's requirement.



10. STANDARD

TIA/EIA-598-A , IEEE 802.3 , ISO/IEC 11801:2011 , ANSI/TIA-568-C.3 , Telcordia GR-20 core , ITU-T G.652D , RoHS ISO9001 , ISO14001

