



Single jacket ADSS 12 72CORE span 100m

**1. Cable Description**

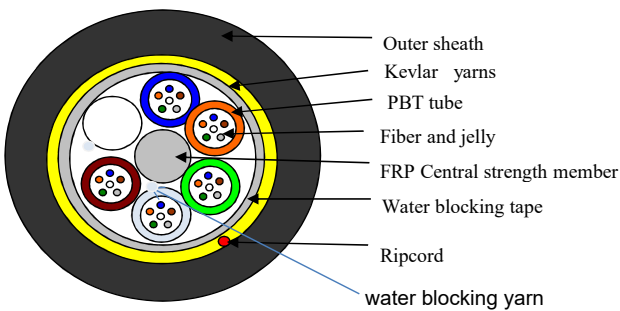
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. The tube is wrapped with a layer of Kevlar. Between the glass yarn and the loose tube water-blocking material is applied to keep the cable compact and watertight. The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

**3. Characteristics**

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



**4.Cable construction details**

Number of fiber	12~72	
Moisture Barrier	Water blocking system	
Loose tube and Filler elements	material	PBT
	thickness	0.35 mm ± 0.05 mm
	diameter	Φ2.4 mm ± 0.1 mm
Central strength member	material	FRP
	diameter	2.5 mm ± 0.1 mm
Outer sheath	material	PE
	thickness	1.6 mm ± 0.1 mm
	diameter	11.5 mm ± 0.3 mm

**5. Fiber color**

12 Core

Tube Number	1					
	Blue					
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

24 Core

Tube Number	1	2				
	Blue	Orange				
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

48 Core

Tube Number	1	2	3	4		
	Blue	Orange	Green	Brown		
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

### 72Core

Tube Number	1	2	3	4	5	6
	Blue	Orange	Green	Brown	Grey	White
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
12~72	11.5m ± 0.3mm	128 ± 10 KG
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
anti water	water blocking yarn	2 pcs
Min allowableTensile Strength(N)	Long term	3000
Min allowableTensile Strength(N)	Short term	5000
Min. Allowable Crush Load (N/100mm)	Long term	500
Min. Allowable Crush Load (N/100mm)	short term	1500
Operationtemperature (℃)		-40+70
Installationtemperature (℃)		-15+60
Storage temperature (℃)		-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	----	----
Dispersion	1550nm	Ps/(nm*km)	≤18	----	----	Dispersion
	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 dispersion slope	nm	≤0.092	≤0.091	----	----	----
PMD Maximum Individual Fibr		≤0.2	≤0.2	----	----	≤0.11
PMD Design Link Value	Ps(nm <sup>2</sup> *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
Inequalities 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 diameter 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	----	----	----

## 8.Package

<b>1.Packing material:</b> Wooden drum
<b>2.Packing length:</b> standard length of cable shall be 2 km. Other cable length is also available if required by customer