

(38132)F. CABO 06 FIBRAS AUTOSUS 7.0MM AS120M-GYFTY G652D 2KM

1. Cable Description

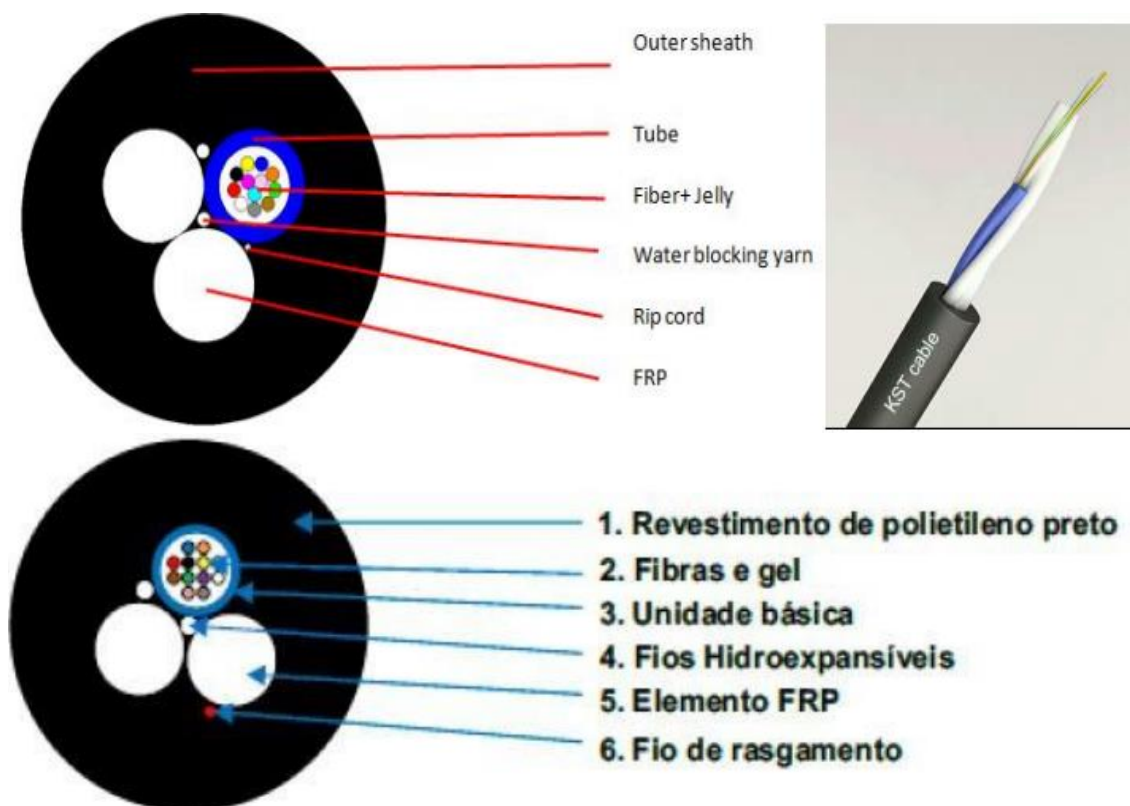
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. FRP rods filled. The cable is completed with a polyethylene (PE) sheath.

2. Application

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

3. Characteristics

- FRP Filled element make cable high tension
- Tube filling gel
- Loose tube stranded
- PE sheath outdoor cable



4. Cable construction details

Number of fiber	06core		
	number	1	

Loose tube	material	PBT
	diameter	2.8mm ±0.1mm
Strength member	material	FRP
	diameter	
2.8mm±0.1mmOverall cable diameter 7.0±0.2mm		
Cable weight per km	60.0 kg/km±5kg	

Fiber color

Color code according to customer's requirement

Cable	Color code Brazil	Internacional color code
1	Green	Blue
2	Yellow	Orange
3	White	Green
4	Blue	Brown
5	Red	Grey
6	Violet	White
7	Brown	Red
8	Pink	Black
9	Black	Yellow
10	Grey	Violet
11	Orange	Pink
12	Aqua	Aqua

Cable Mechanical characteristic

core	Cable diameter	weight
6	7.0±0.2mm	60 kg/km±5kg
Temperature range	-40+70	
Min Bending Radius(mm)	Long term	10D
Min BendingRadius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	2000
Min allowable Tensile Strength(N)	Short term	4000
Operationtemperature (℃)	-40+70	
Installationtemperature (℃)	-20+60	
Storage temprature (℃)	-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	----	----	Dispersion
	1625nm	Ps/(nm*km)	≤22	----	----	
Bandwidth	850nm	MHZ.KM	----	≥400	≥160	Bandwidth
	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 *k m)	≤ 0.12	≤ 0.08	----	----	----
Fibre cutoff wavelength λ_c		nm	≥ 1180 , ≤ 1330	≥ 1180 , ≤ 1330	----	----	----
Cable cutoff wavelength λ_{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/chaffinch 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	----	----	----

