

(35622) F. CABO 12 FIBRAS AUTOSUST 2.0MM AS120MN-12F G652D SM-6.76.0806

1. Cable Description

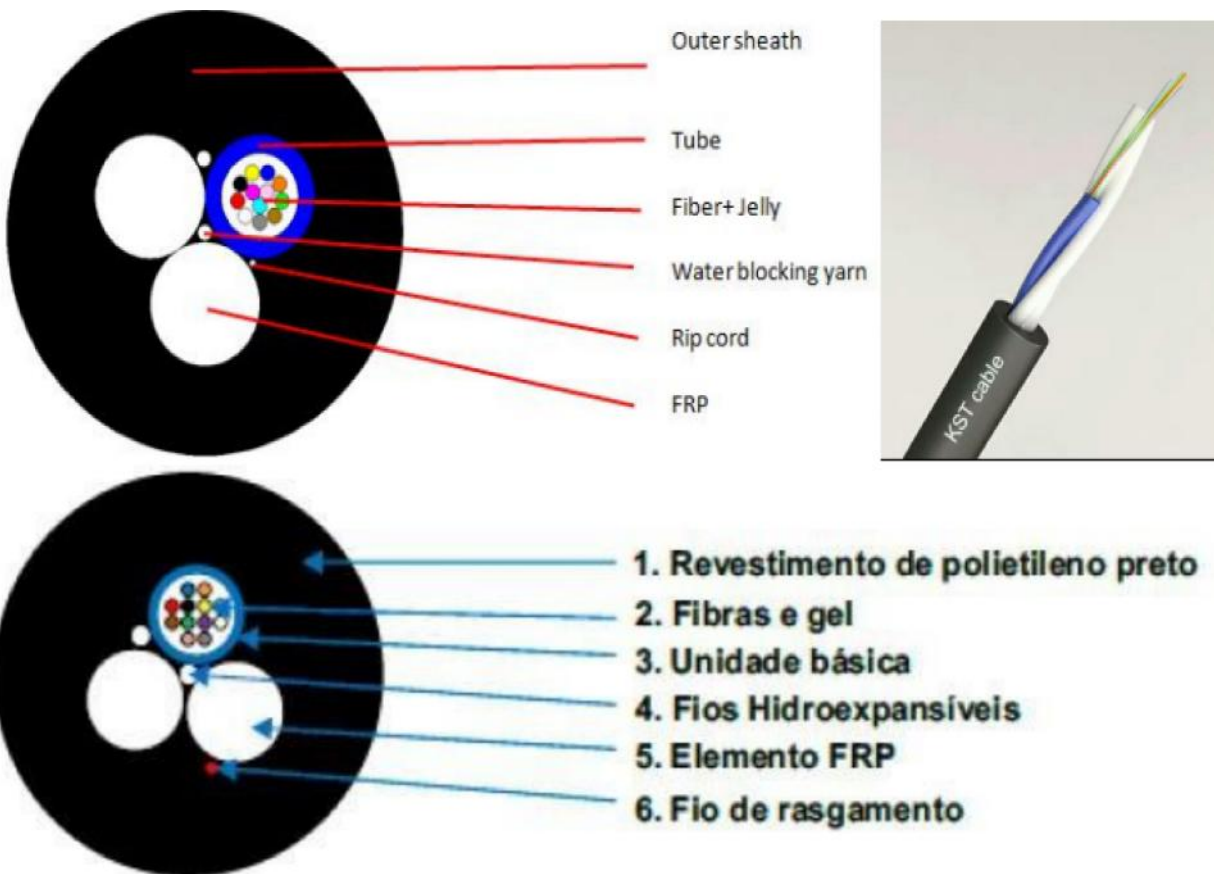
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. FRP rods filled. The cable is completed with a polyethylene (PE) sheath.

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	12core		
	number		1

Loose tube	material	PBT
	diameter	2.0mm ±0.1mm
Strength member	material	FRP
	diameter	2.0mm±0.1mm
Overall cable diameter	6.8±0.3mm	
Cable weight per km	40.0 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
12	6.8±0.3mm	60.0 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	1500
Min allowable Tensile Strength(N)	Short term	3000
Operationtemperature (°C)	-40+70	
Installationtemperature (°C)	-20+60	
Storage temprature (°C)	-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		
Dispresion	1550nm	Ps/(nm*km)	----	≤18	----	Dispresion
	1625nm	Ps/(nm*km)	----	≤22	----	
Bandwith	850nm	MHZ.KM	----	----	≥ 400	≥ 160
	1300nm	MHZ.KM	----	----	≥ 800	≥ 500

Zero dispersion wavelength	nm	1300-1324	$\geq 1302,$ ≤ 1322	----	----	$\geq 1295,$ ≤ 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 c	nm	$\geq 1180,$ ≤ 1330	$\geq 1180,$ ≤ 1330	----	----	----	
Cable cutoff wavelength 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	----	----	----

