

(35620)F. CABO 12 FIBRAS AUTOSUST 2.0MM AS120MN-12F G652D SM 2KM

### 1. Cable Description

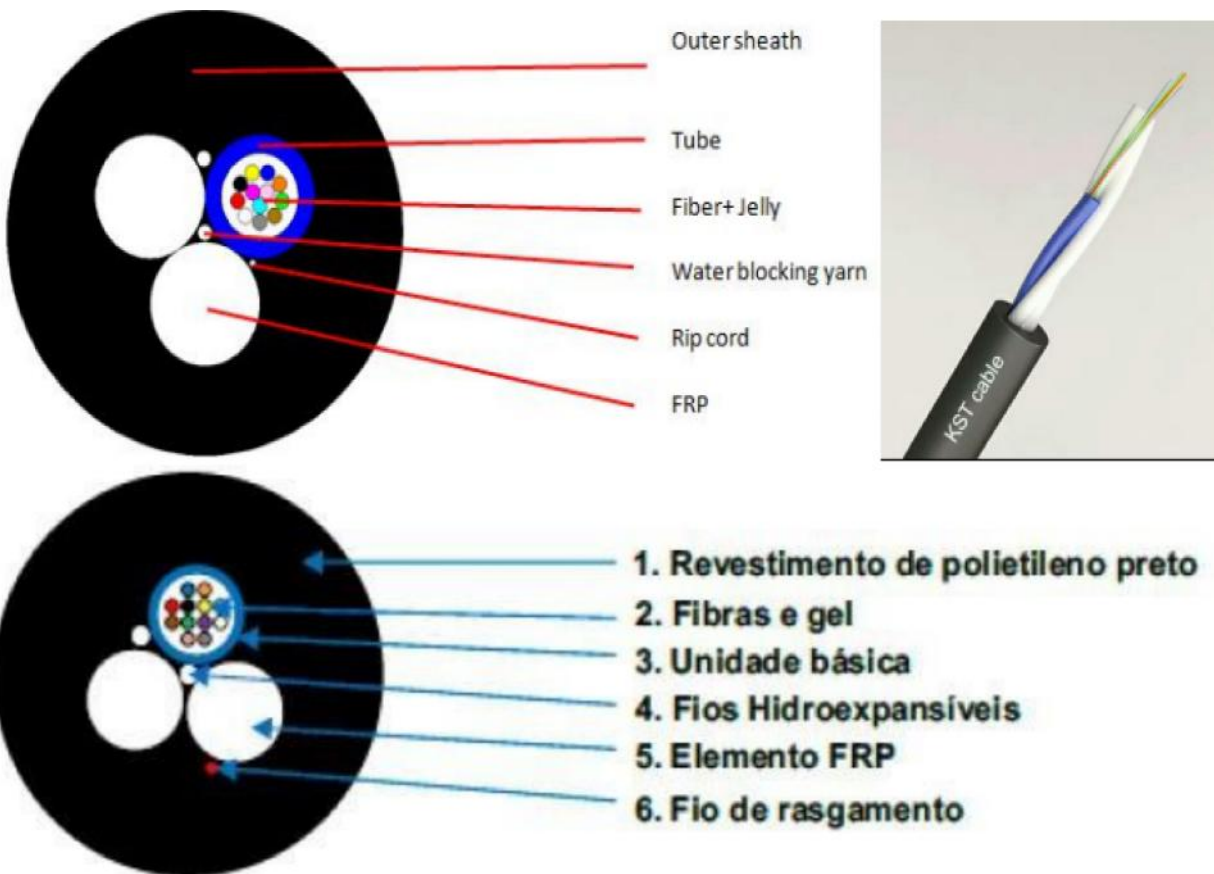
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. FRP rods filled. The cable is completed with a polyethylene (PE) sheath.

### 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	12
	number
	1

Loose tube	material	PBT
	diameter	2.0mm ±0.1mm
Strength member	material	FRP
	diameter	2.0 mm±0.1mm
Overall cable diameter	6.80mm±0.5mm	
Cable weight per km	45.0 kg/km±5kg	

### Fiber color

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	Browm	Red
8	Pink	Black
9	Black	Yellow
10	Grey	Violet
11	Orange	Pink
12	Aqua	Aqua

### Cable Mechanical characteristic

core	Cable diameter	weight
12	6.80mm±0.5mm	45.0 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	$\geq 1302,$ $\leq 1322$	----	----	$\geq 1295,$ $\leq 1320$	
Zero dispersion slope	nm	$\leq 0.092$	$\leq 0.091$	----	----	----	
PMD Maximum Individual Fibr		$\leq 0.2$	$\leq 0.2$	----	----	$\leq 0.11$	
PMD Design Link Value	Ps(nm <sup>2</sup> *k m)	$\leq 0.12$	$\leq 0.08$	----	----	----	
Fibre cutoff wavelength c	nm	$\geq 1180,$ $\leq 1330$	$\geq 1180,$ $\leq 1330$	----	----	----	
Cable cutoff wavelength cc	nm	$\leq 1260$	$\leq 1260$	----	----	----	
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	$\leq 0.05$	$\leq 0.05$	$\leq 0.10$	$\leq 0.10$	$\leq 0.10$	
Irregularities over fiber length and point	dB	$\leq 0.05$	$\leq 0.05$	$\leq 0.10$	$\leq 0.10$	$\leq 0.10$	

## Dicontinuity

Difference backscatter coefficient	dB/km	$\leq 0.05$	$\leq 0.03$	$\leq 0.08$	$\leq 0.10$	$\leq 0.08$
Attenuation uniformity	dB/km	$\leq 0.01$	$\leq 0.01$			
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	%	$\leq 1.0$	$\leq 1.0$	$\leq 1.0$	$\leq 1.0$	$\leq 1.0$
Coating diameter	um	242+/-7	242+/-7	242+/-7	242+/-7	242+/-7
Coating/chaffinch concentricity error	um	$\leq 12.0$	$\leq 12.0$	$\leq 12.0$	$\leq 12.0$	$\leq 12.0$
Coating non circularity	%	$\leq 6.0$	$\leq 6.0$	$\leq 6.0$	$\leq 6.0$	$\leq 6.0$
Core/cladding concentricity error	um	$\leq 0.6$	$\leq 0.6$	$\leq 1.5$	$\leq 1.5$	$\leq 1.5$
Curl(radius)	um	$\leq 4$	$\leq 4$	----	----	----



