

Underground Armored and Double Sheathed Outdoor Cable --GYFTY53 (7985)F. CABO 48 FIBRAS ANTIROEDOR BLIND SUBTERRÂNEO GYFTY53 2KM

1. Cable Description

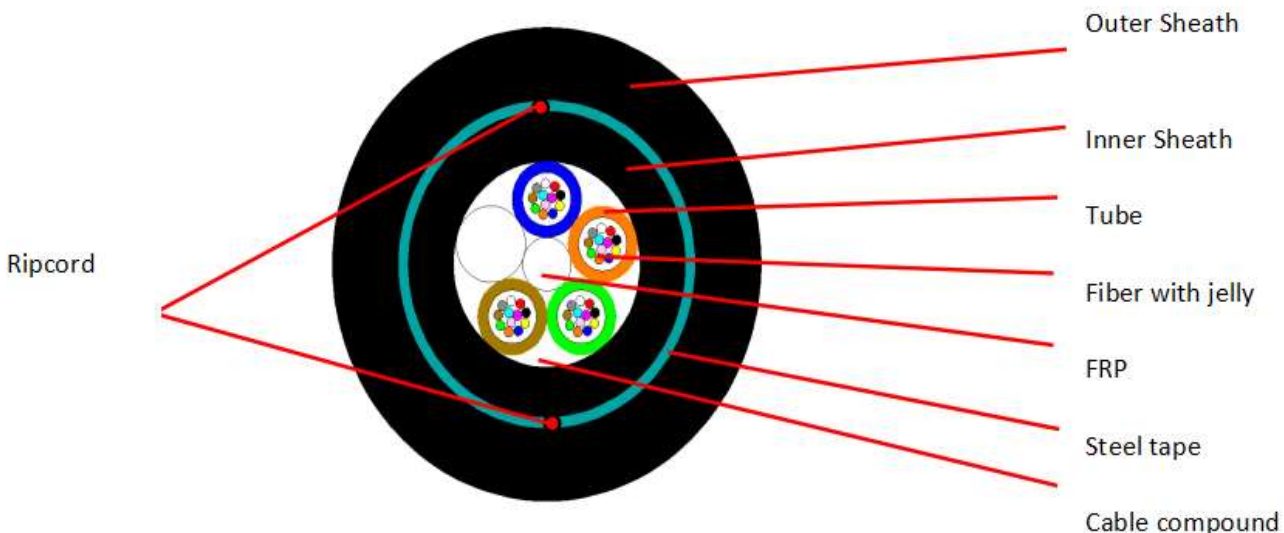
The fibers, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound., sometimes sheathed with polyethylene (PE) for cable with high fiber count, locates in the center of core as a non-dielectric strength member. Tubes (and fillers) are stranded around the strength member into a compact and circular cable core. The cable core is filled with the filling compound to protect it from water ingress, over which a thin PE inner sheath is applied. After the PSP is longitudinally applied over the inner sheath, the cable is completed with a PE outer sheath.

2.Application

- Adopted to outdoor distribution;
- Suitable for aerial, duct and direct buried;
- Long distance and local area network communication.

3. Characteristics

- ②Good mechanical and temperature performance
- ②High strength loose tube that is hydrolysis resistant
- ②Special tube filling compound ensure a critical protection of fiber
- ②Crush resistance and flexibility
- ②The following measures are taken to ensure the cable watertight:
 - ②Steel wire used as the central strength member
 - ②Loose tube filling compound and 100% cable core filling
 - ②PSP enhancing moisture-proof
 - ②Water-blocking material



Number of fiber	48core	
Central strength member	material	FRP
	diameter	Φ1.4mm
Loose tube	material	PBT
	diameter	Φ2.0mm+/-0.2mm
Inner Sheath	material	PE
Armored	material	corrugated steel tape
Tube-filling	Tube filling compound	
Inner sheath	material	PE
	diameter	7.6±0.1mm
Outer sheath	material	PE
	thickness	1.7mm±0.2mm
Cable OD	12.5+/-0.5mm	
Cable Weight	125kg+/10	

5. Fiber color and Tube color

Number of fiber per tube 12 cores	1	2	3	4	5	6
	Blue	Orange	Green	Brown	Grey	White
	7	8	9	10	11	12
	Red	Black	Yellow	Violet	Pink	Aqua

Tube color	1	2	3	4	
	Blue	Orange	Green	Brown	

6. Cable Mechanical characteristic

Temperature range	-40+70	----
Min Bending Radius(mm)	Long term	10D
Min Bending Radius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	800
Min allowable Tensile Strength(N)	Short term	1500
Max allowable Crush Strength(N)	Long term	2500
Max allowable Crush Strength(N)	Short term	3000
Operation temperature (°C)	-40+70	
Installation temperature (°C)	-20+60	
Storage temperature (°C)	-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	----	----
	1625nm	Ps/(nm*km)	----	≤22	----	----
Bandwidth	850nm	MHZ.KM	----	----	≥400	≥160
	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	$\cong 1180,$ ≤ 1330	$\cong 1180,$ ≤ 1330	----	----	----
Cable sutoffwavelength 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 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 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 conentricity error	um	≤ 0.6	≤ 0.6	≤ 1.5	≤ 1.5	≤ 1.5
Curl(radius)	um	≤ 4	≤ 4	----	----	----