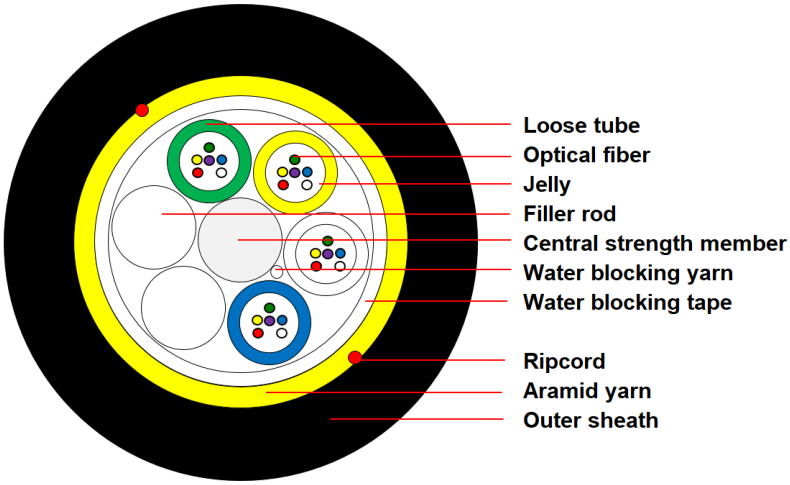
ADSS-Single Jacket
CFOA-SM-AS-80m-S

1. Cable cross-section (not to scale and only for reference)



Not to scale, color is only for showing, may be not exact same as real product color

2. Cable description

Loose tube construction, tubes with jelly filled, elements (tubes and filler rods when necessary) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape wrapped the cable core, aramid yarns reinforced, 2 ripcords, then PE outer sheath.

3. Fiber & tube color

Fiber color code start from No.1 Green.

No.	1	2	3	4	5	6
Color	Green	Yellow	White	Blue	Red	Purple
No.	7	8	9	10	11	12
Color	Brown	Pink	Black	Gray	Orange	Aqua

Tube color code start from No.1 Green.

No.	1	2	3	4	5	6
Color	Green	Yellow	White	Blue	Red	Purple

Note: the filler color is natural.

4 Structure parameter

Item	Contents	Unit	Value			
Fiber count	Number	/	24	36	48	72
Cable structure	/	/	1+6			
Fiber No. per tube	Number	/	6	6	12	12

Item	Contents	Unit	Value			
Loose tube	Number	/	4	6	4	6
Central strength member	Material	/	FRP			
Outer sheath	Thickness	mm	Nominal 1.6			
Cable diameter	±5%	mm	9.9	9.9	10.5	10.5
Cable weight	±10%	kg/km	69	72	79	83
Max. span	/	m	80			

Note: sheath thickness not consider ripcord portion, sizes and values without tolerances are nominal values.
For ripcord, the “opposite position” means the angle between the two ripcords should be 120° to 240°.

5. Mechanical & Environmental Performance

Item	Contents	Value
Max. tensile load	Short term	1.5G
Max. crush resistance	Short term	1G, Min.1000 N/100mm
Min. bending radius	Installation	20 x cable diameter
	Operation	10 x cable diameter
Temperature range	Operation	-20℃ ~ +65℃
	Installation	-20℃ ~ +65℃
	Storage/transportation	-20℃ ~ +65℃

“G” is the cable weight per km.

6. Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Thermal Cycle NBR 13510	- Temperature: -20℃~+65℃ - Time of each step: 48h - Times: 4	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm
Tensile Strength NBR 13512	- Load: short term tension - Length of cable: 25m×6	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm - Fiber strain ≤ 0.05%, no residual.
Crush Test NBR 13507	- Load: short term crush - Load increase rate: 5mm/min - Load time: 2min	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm - No sheath damage.
Torsion NBR 13513	- Length:0.2m - Angle:±90° - Times:10	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm - No sheath damage.
Curvature NBR 13508	- Curve radius:12 x OD - Circle:5	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm - No sheath damage.
Bending NBR 13518	- Curve radius:12 x OD - Times:25 - Load:2kg ; Angle:±90°	- Loss change ≤ 0.1dB@1310±20nm - Loss change ≤ 0.1dB@1550±20nm

Item	Test Method	Acceptance Condition
Humidity Penetration NBR 9136	- Height of water: 1m - Sample length: 3m - Time: 24h	- No water leak from the cable core of the opposite end.
Impact NBR 13509	- Height:0.15m - Times:25 - Weight: according to the standard	- No fiber break and no sheath damage.

7. OPTICAL FIBER

Item	Contents	Value
G.652D Optical characteristics		
Attenuation	@1310nm	≤0.36dB/km
	@1550nm	≤0.22dB/km
Dispersion	@1288nm～1339nm	≤3.5ps/(nm·km)
	@1550nm	≤18ps/(nm·km)
Zero-Dispersion wavelength		1300nm～1324nm
Zero-Dispersion slope		≤0.092ps/(nm^2·km)
Mode field diameter (MFD)	@1310nm	9.2±0.4μm
	@1550nm	10.4±0.5μm
Cable cutoff wavelength λcc(nm)		≤1260nm
Macro bending Attenuation	@1550nm (100turns;Φ60mm)	≤0.05dB
Link polarization dispersion (PMD_Q)		≤0.1ps/$km^{1/2}$