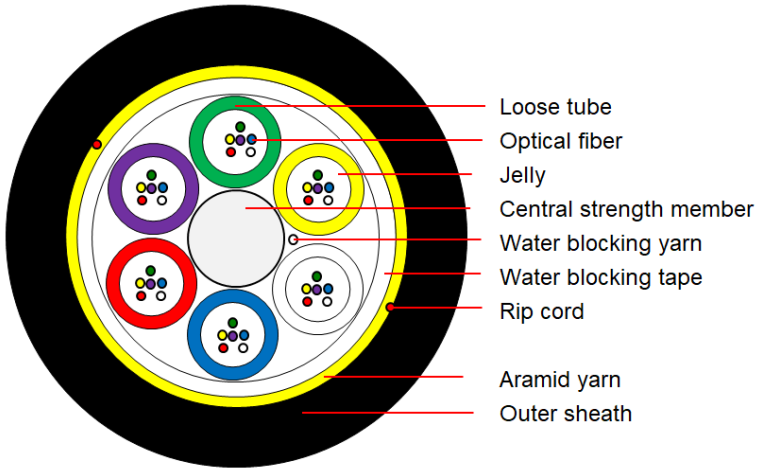
ADSS-Single jacket
CFOA-SM-AS-S-NR-80m

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



2. Cable description

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

3. Fiber & tube color

3.1 Fiber color code starts from No.1 Green:

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

3.2 Tube color code start from NO.1 Green.

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

3.3 If there are any fillers, the color will be nature.

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
Loose tube	Number	/	4	6	4	6
Central strength member	Material	/	FRP			

Item	Contents	Unit	Value			
Cable diameter	±0.3	mm	8.0	8.0	8.6	8.6
Cable weight	±10%	kg/km	45	45	54	54

Note: sizes and values without tolerances are nominal values.

It's advised to notch the cable before splitting the sheath for better ripping.

5. Mechanical & Environmental Performance

Item	Contents	Value
Max. tensile load	Short term	1.5G
Max. crush resistance	Short term	1G but min. 1000 N/100mm
Min. bending radius	Installation	20 x cable diameter
	Operation	10 x cable diameter
Temperature range	Operation	-20℃ ~ +65℃
	Installation	-10℃ ~ +60℃
	Storage/transportation	-20℃ ~ +65℃

Note: G is the weight of the cable 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
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.
Water 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

Item	Contents	Value
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 loss	@1550nm (100turns;Φ60mm)	≤0.05dB
Polarization mode dispersion (PMD) for maximum individual fiber		≤0.2ps/km$^{1/2}$