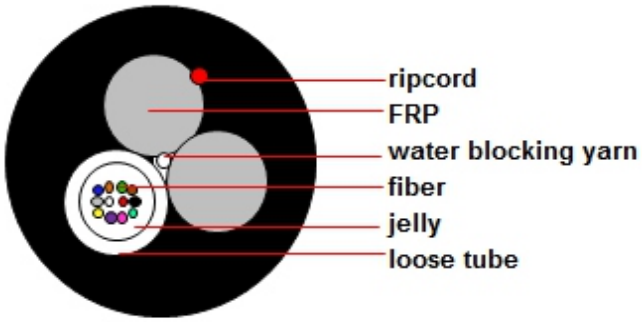
CFOA-SM-ASU80-S NR

1. Cable cross-section



2. Cable Specification

2.1 Introduction

Single loose tube construction, jelly compound filled, then PE outer sheath with two non-metallic strength members combined.

2.2 Fiber color code

Fiber color in each tube starts from No. 1 Green.

1	2	3	4	5	6	7	8	9	10	11	12
Green	Yellow	White	Blue	Red	Purple	Brown	Pink	Black	Gray	Orange	Aqua

2.3 Color codes for loose tube

1
Nature

2.4 Cable structure and parameter

span 80m

SN	Item	Unit	Value
1	No. of fibers	count	2~12
2	Nominal cable diameter	mm	6.8
3	Nominal cable weight	kg/km	40
4	Short term tension	N	1.5× cable weight
5	Short term crush	N/100mm	1000

3. Characteristic of Optical Cable

3.1 Min. bending radius for installation

Static: 15 x cable diameter

Dynamic: 20 x cable diameter

3.2 Application temperature range

Operation: - 20℃ ~ +65℃

Installation: -10℃ ~ +60℃

Storage/transportation: - 20℃ ~ +65℃

3.3 Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Thermal Cycle NBR 13510	- Temperature: -20°C~+65°C - 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 stain≤0%； Residual: 0%
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
Impact NBR 13509	- Height:0.15m - Times:25 - Weight: according to the standard	- No fiber break and no sheath damage.
Filling Component Leakage NBR 9149	- Length:300mm - Sample:3 - Temperature: 65± 2°C - Time:24h	- No outflow or dripping
Oxidative Induction Time NBR 13977	- Pretreatment temperature: 85°C - Pretreatment time: 168h - Test temperature: 190± 0.5°C	- Oxidative induction time≥ 20min
Alternated Flexion NBR 13514	- Mandrel:570mm - Times: 50	- Loss change ≤ 0.1dB@1310± 20nm - Loss change ≤ 0.1dB@1550± 20nm

4. Characteristic of Optical Fiber

G652D fiber information

Mode field diameter (1310nm):	9.2μm±0.4μm
Mode field diameter (1550nm):	10.4μm±0.8μm
Cut off wavelength of cabled fiber (λ_{cc}):	≤1260nm
Attenuation at 1310nm:	≤0.35dB/km

Attenuation at 1550nm:	≤0.22dB/km
Bending loss at 1550nm (100 turns, 30mm radius):	≤0.05dB
Dispersion in the range 1285 to 1330nm:	≤3.5ps/ (nm•km)
Dispersion in the range 1525 to 1575nm:	≤18ps/ (nm•km)
Dispersion slope at zero dispersion wavelength:	≤0.092ps/ (nm^2•km)
Polarization mode dispersion link value:	≤0.2ps/√km