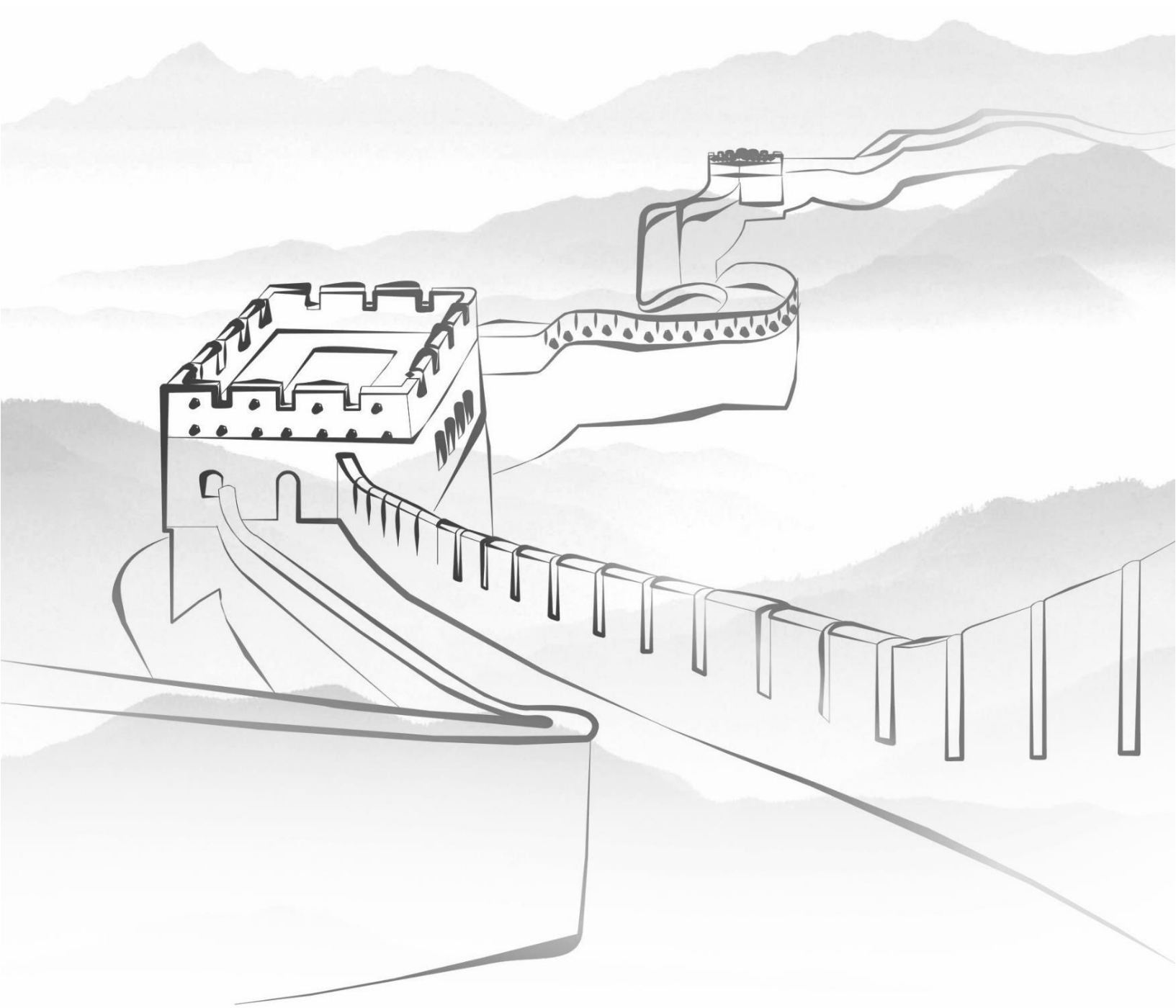


Optical Fiber Cable Specification



CFOA-SM-AS80/120/200-S XXFO COMPACTO NR

Cable Design



- **Central Strength Member (CSM):** Glass fiber reinforced plastic rod (FRP), with PE sheath covering when needed.
- **Loose Tube:** Containing 2/6/12 fibers and filled with a suitable water tightness jelly.
- **Stranding:** Loose tubes & fillers SZ stranded around CSM.
- **Longitudinal Water Tightness:** Dry core with water swellable elements.
- **Outer Sheath:** Black PE.

Cable Specification

span=80

Cable description							
Item	Specified	Measure					
Cable Cores		6	12	24	36	48	72
No. of Tubes		3	6	4	6	4	6
Fiber Counts in Tube		2	2	6	6	12	12
No. of Fillers		3	/	2	/	2	/
Cable Diameter	mm	7.8±0.3	7.8±0.3	8±0.3	8±0.3	8.6±0.3	8.6±0.3
Cable Weight	kg/km	45±5	45±5	48±5	48±5	57±5	57±5
Tensile Strength	N	Span=80, 1.5×P					
Cable description							
Item	Specified	Measure					
Cable Cores		96			144		
No. of Tubes		8			12		
Fiber Counts in Tube		12			12		
No. of Fillers		/			/		
Cable Diameter	mm	10±0.5			12.8±0.5		
Cable Weight	kg/km	79±10			130±10		
Tensile Strength	N	Span=80, 1.5×P					

span=120

Cable description							
Item	Specified	Measure					
Cable Cores		6	12	24	36	48	72
No. of Tubes		3	6	4	6	4	6
Fiber Counts in Tube		2	2	6	6	12	12
No.of Fillers		3	/	2	/	2	/
Cable Diameter	mm	8±0.3	8±0.3	8.2±0.3	8.2±0.3	8.9±0.3	8.9±0.3
Cable Weight	kg/km	48±5	48±5	51±5	51±5	60±5	61±5
Tensile Strength	N	Span=120, 2×P					
Cable description							
Item	Specified	Measure					
Cable Cores		96			144		
No. of Tubes		8			12		
Fiber Counts in Tube		12			12		
No.of Fillers		/			/		
Cable Diameter	mm	10.1±0.5			12.9±0.5		
Cable Weight	kg/km	81±10			132±10		
Tensile Strength	N	Span=120, 2×P					

span=200

Cable description							
Item	Specified	Measure					
Cable Cores		6	12	24	36	48	72
No. of Tubes		3	6	4	6	4	6
Fiber Counts in Tube		2	2	6	6	12	12
No.of Fillers		3	/	2	/	2	/
Cable Diameter	mm	8±0.3	8±0.3	8.5±0.3	8.5±0.3	9.2±0.3	9.2±0.3
Cable Weight	kg/km	49±5	49±5	56±5	56±5	66±5	66±5
Tensile Strength	N	Span=200, 3×P					
Cable description							
Item	Specified	Measure					
Cable Cores		96			144		
No. of Tubes		8			12		
Fiber Counts in Tube		12			12		
No.of Fillers		/			/		
Cable Diameter	mm	10.5±0.5			13.1±0.5		
Cable Weight	kg/km	88±10			138±10		
Tensile Strength	N	Span=200, 3×P					

Color Code for Fiber and Loose Tube

Fiber color

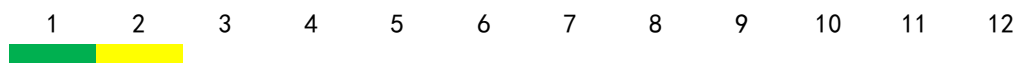


Loose tube color(s) _full color



Or

Loose tube color(s) _half color



Cable Performance

Cable performance		
Test	Specified Value	Acceptance Criteria
Tensile NBR13512	Depend on weight and span	Additional attenuation \leq 0.1 dB No visible damage to the surface of outer sheath
Compression NBR 13507	1xP N, minimum 1000N	Additional attenuation \leq 0.1 dB No visible damage to the surface of outer sheath
Impact NBR 13509	The impact of weight: depend on cable diameter Height: 150mm 3 point, 25 times per point	No crack to fiber No visible damage to the surface of outer sheath
Temperature Cycling NBR 13510	48H, 4 cycles, -20~+65°C	Additional attenuation \leq 0.05 dB/km
Water Penetration NBR 9136	1m sample, 1m height, 24 h	No water leakage

Fiber Performance

G.652D performance		
Characteristics		Acceptance Value
Attenuation	@ 1310nm	\leq 0.36 dB/km
	@ 1550nm	\leq 0.22 dB/km
Mode field diameter (MFD)	@ 1310nm	9.3 \pm 0.5 μ m
	@ 1550nm	10.4 \pm 0.8 μ m
Chromatic dispersion coefficient	1285~1330nm (absolute value)	\leq 3 ps/(nm·km)
	@ 1550 nm	\leq 18 ps/(nm·km)
	@ 1625 nm	\leq 22 ps/(nm·km)
Zero-dispersion wavelength		1300nm~1324 nm
Zero-dispersion slope		\leq 0.092 ps/(nm ² ·km)
Cable cut-off wavelength λ_{cc} (nm)		\leq 1260 nm
Cladding diameter		125 \pm 0.7 μ m

Sheath Marking

The outer sheath is marked in 1 meter intervals as follows:

2022FiberHome < Type designation (defined by purchaser) > **** m

Cable Packing and Marking

1.1 Standard cable length for each reel

Standard length: 3/4000m per reel Tolerance: $\pm 1\%$.

Other cable length available.

1.2 Reel type

Each length of the cable shall be wound on a wooden reel.

The arbor holes provided in the reels shall be approximately 85 mm with a wood in the arbor hole (in lieu of fiberboard).

1.3 Reel marking

Details given below shall be distinctly marked with a weather-proof material on both outer sides of the reel flange:

Purchaser's name

Reel number

Name of the manufacturer

Year of manufacture

Arrow showing the direction the drum shall be rolled

1.4 Cable end retaining methods

Iron wooden reel: inner retaining.

Wooden reel: outer retaining recommended, inner retaining or groove retaining available.



Wooden reel

----- End of Specification -----