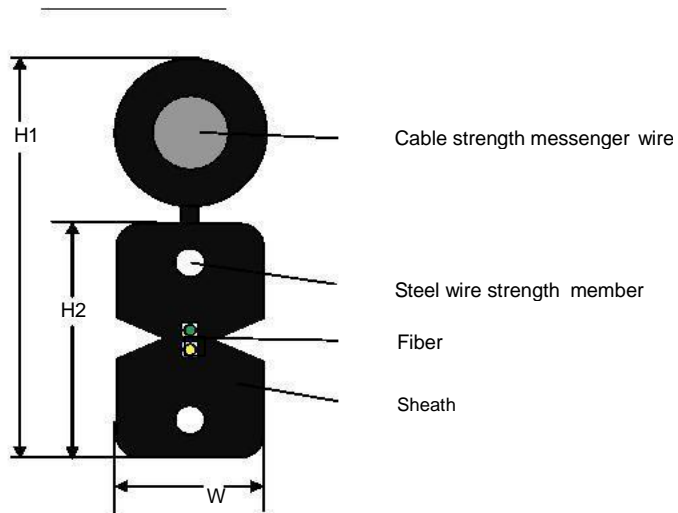


1.6. Specification of CFOAC-BLI-A/B-CM-01-AR/CO LSZH

CFOAC-BLI-A/B-CM-01/02-AR/CO LSZH

Optical cable structure Maximum Span 80m



Fiber optical cable parameter

Item	Description	
Fiber	Fiber	
	BLI-A/B	
Cable strength messenger wire	Material	Galvanized steel wire
	Diameter	1.3mm
Strength member	Fiber strength member	Steel wire
	Diameter	0.45mm
Sheath	Sheath	LSZH
	Color	Black
Optical cable diameter	Length	$5.2 \pm 0.2\text{mm}$
	Width	$2.0 \pm 0.2\text{mm}$
Tensile	Short term	660N
Crush	Short term	1000N
Cable weight		21.5kg/km
Operation Temperature		$-10^{\circ}\text{C} / +60^{\circ}\text{C}$

Fiber chromatogram

Number	1	2
Color	Green	Yellow

2. Fiber Performance

FiberHome G652.D

Characteristics		Acceptance Value
Attenuation	@1310nm	$\leq 0.36\text{dB/km}$
	@1550nm	$\leq 0.22\text{dB/km}$
Mode Field Diameter	@1310nm	$9.3\pm 0.5\mu\text{m}$
	@1550nm	$10.4\pm 0.8\mu\text{m}$
Dispersion	@1285-1330nm	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
	@1525-1570nm	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
PMD		$\leq 0.15\text{ps}\cdot\text{km}^{1/2}$
Cable cutoff wavelength $\lambda_{cc}(\text{nm})$		$\leq 1270\text{nm}$
Zero-Dispersion wavelength		$1300\text{nm}\sim 1324\text{nm}$
Zero-Dispersion slope		$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$
Cladding diameter		$125\pm 1\mu\text{m}$
Cladding non-circularity		$\leq 0.8\%$
Core/cladding concentricity error		$\leq 0.6\mu\text{m}$
Proof Test		$\geq 0.7\text{GPa}$ (100kpsi)
Dynamic fatigue		≥ 20
Point discontinuity		$\leq 0.05\text{dB}$
Attenuation uniformity		$\leq 0.05\text{dB/km}$

FiberHome G657.A2

Optics specifications		
Attenuation	@ 1310nm	$\leq 0.36\text{dB/km}$
	@ 1550nm	$\leq 0.22\text{dB/km}$
Dispersion	@ 1285-1330nm	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
	@ 1525-1570nm	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
Zero-Dispersion wavelength		1300nm~1324nm
Zero-Dispersion slope		$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$
Mode field diameter (MFD) at 1310nm		$(8.6\sim 9.3) \pm 0.4\mu\text{m}$
Mode field diameter (MFD) at 1550nm		$9.8 \pm 0.8\mu\text{m}$
PMD	Max. for fiber on the reel	$0.2\text{ps}/\text{km}^{1/2}$
Cable cutoff wavelength λ_{cc} (nm)		$\leq 1260\text{nm}$
Geometrical characteristics		
Cladding diameter		$125 \pm 0.8\mu\text{m}$
Cladding non-circularity		$\leq 0.8\%$
Core/cladding concentricity error		$\leq 0.6\mu\text{m}$
Fiber diameter with coating (uncolored)		$245 \pm 10\mu\text{m}$
Cladding/coating concentricity error		$\leq 12.0\mu\text{m}$
Mechanical characteristics		
Proof stress		$\geq 0.69\text{GPa}(100\text{kpsi})$
Macrobend loss at 1550nm	$\Phi 20\text{mm}, 1\text{turn}$	$\leq 0.1\text{dB}$
	$\Phi 15\text{mm}, 1\text{turns}$	$\leq 0.5\text{dB}$