

Technical Specification

Self-supporting Bow-type Drop Aerial Cable Single-Mode

LSZH FLAT, Solid Self Support, FRP Strength Member

The optical fiber unit is positioned in the center, two parallel strength members are placed at the two sides, and a steel wire as the solid wire is also applied then the cable is completed with an outer sheath finally UV curable acrylate protective coating is applied over the glass cladding to provide the necessary maximum fiber lifetime to 20 years

◆Feature

- ◆ Excellent temperature performance
- ◆ The fluted design makes it easy for stripping
- ◆ Simple structure, light weight and high practicability

◆Application

- ◆ FTTH (Fiber to The Home)
- ◆ Pre-terminated in the factory
- ◆ Especially suitable for last mile aerial connectivity



◆Structure & Material

Item	Material	Color
Optical Fiber	ITU-T G.657A2	Blue & Orange
Strength Member	Φ0.5 mm FRP	-
Messenger wire	Φ1.0 mm circular Phosphating steel wire	-
Outer Sheath	LSZH	Black
Cable weight(kg/km) (±5%)	21.5 Kg	-

◆Geometrical Characteristics

Item	
Clandding diameter	125,0 μm ± 0,7 μm
cClandding non-circularity	≤ 1 %
Coating diameter	245± 10 μm(Before Colored) 250 ± 15μm (Colored)
Core concentricity error	≤ 0,5 μm

◆Cable Property

Cable Type	Dimension with Messenger wire	Tensil strength		Crush resistance		Blending Radius	
		Long term	Short term	Long term	Short term	Static	Dynamic
	(mm)	(N)		(N/100mm)		(mm)	
GJYXFCH -2	2.0±0.1×5.0±0.3	300	600	1000	2200	20	40

◆Fiber Characteristic

Fiber Type	Attenuation (Max)	Macro bend loss (Max.)
	1260nm, 1310nm, 1383nm , 1550nm, 1625nm	R=15mm, 10 turns
	(dB/km)	(dB)
G.657.A2	λ 1260 nm \leq 0,47 dB/km λ 1310 nm \leq 0,40 dB/km λ 1383 nm \leq 0,40 dB/km λ 1550 nm \leq 0,40 dB/km λ 1625 nm \leq 0,40 dB/km	\leq 0,03 dB @1550nm \leq 0,1 dB @1625nm
Mode field diameter at 1310 nm	(8.6 μ m \sim 9.2 μ m) \pm 0,4 μ m	
Zero dispersion wavelength	λ_{0min} 1300 λ_{0max} 1324 nm	$S_{0min} \leq 0,073$ ps/nm ² x km $S_{0max} \leq 0,092$ ps/nm ² x km
Zero dispersion slope	≤ 0.092 ps/(nm ² ·km)	
Cable cut-off wavelength	≤ 1260 nm	
Polarization mode dispersion design link value (M=20, Q=0.01%)	≤ 0.1 ps/ \sqrt km	

◆Mechanical Specification

Proof stress level	≥ 100 kpsi (0.69 GPa)
Coating strip force (average value)	1~5N
Coating strip force(peak value)	1.0~8.9N
Fiber curl (Radius)	≥ 4 m
Aerial installation: maximum subsidence	1% max (SAG)
Span	≥ 80 m

◆Enviromental Performance

Transportation & Storage	Installation	Operation	Remarks	Certification
"-20°C to 60°C"	"-20°C to 60°C"	"-20°C to 60°C"	RoHS	(IEC), 60794-1: E1, E2B, E3, E4, E6, E7 y F1.

◆Packaging

- ◆ The cable shall be packed into a standard length of 1,000 meters per reel with tolerance of $\min \pm 0\%$ and $\max \pm 2\%$.
- ◆ The cable don't content any type of toxic elements in composition or packing.
- ◆ The colors of the fiber are establishes for the norm EIA/TIA 598.