

Aerial Flat Drop Cable 1/2FO w. steel wire

Cable Design



- **UV Fiber:** G.657A1 fiber tight buffered to 900µm
- **Strength member:** KFRP
- **Outer Sheath:** Black LSZH
- **Steel Wire:** galvanized steel wire

Cable Specification

LSZH outer sheath		Sheath protection
Steel Wire	Galvanized Steel Wired	Strength member
Strength member		KFRP
UV Fiber		SM G.657A1
Nominal Cable Diameter	mm	(5.1±0.1)* (2.0±0.1)
Nom. Cable Weight	Kg/km	25
Bend Radius (mm)	Dynamic (during installation)	30
	Static (during operation)	15

Main Mechanical and Environmental Characteristic

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile	IEC 60794-1-2-E1	600N, 1min	$\Delta\alpha \leq 0.1\text{dB/km}$, fiber strain $\leq 0.4\%$
Crush	IEC 60794-1-2-E3	2200N/10cm, 1min	$\Delta\alpha$ reversible, no damage
Impact	IEC 60794-1-2-E4	1J, 1 times in 3 points	$\Delta\alpha$ reversible, no damage
Torsion	IEC 60794-1-2-E7	$\pm 180^\circ$, 20cycles, 20N	$\Delta\alpha$ reversible, no damage
Repeated Bending	IEC 60794-1-2-E6	R=30mm, 20N, 300cycles	$\Delta\alpha$ reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-20~+60°C, 2cycles, 8h	$\Delta\alpha \leq 0.1\text{dB/km}$, no damage

Fiber & Tube Color

Color Identification of Fiber

No	1
Color	Blue

No	1	2
Color	Blue	Orange

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Cabled Fiber Performance (G.657A1)

Characteristics		Acceptance Value
Attenuation	@1310nm	$\leq 0.36\text{dB/km}$
	@1550nm	$\leq 0.22\text{dB/km}$
Mode Field Diameter	@1310nm	$8.6 \pm 0.4\mu\text{m}$
Zero-Dispersion Wavelength		1300nm ~ 1324nm
Zero-Dispersion Slope		$\leq 0.092\text{ps}/(\text{nm}^2 \cdot \text{km})$
Cable Cutoff Wavelength $\lambda_{cc}(\text{nm})$		$\leq 1260\text{nm}$
Cladding Diameter		$125 \pm 0.7\mu\text{m}$
Macrobend loss	$\varnothing 20\text{ mm, 1 turn, @1550}$	$\leq 0.75\text{dB}$
	$\varnothing 30\text{ mm, 10 turn, @1550}$	$\leq 0.25\text{dB}$
	$\varnothing 20\text{ mm, 1 turn, @1650}$	$\leq 1.5\text{dB}$
	$\varnothing 30\text{ mm, 10 turn, @1650}$	$\leq 1.0\text{dB}$
Cladding Non-circularity		$\leq 1.0\%$
Core/Cladding Concentricity Error		$\leq 0.6\mu\text{m}$
Fiber diameter with coating (uncoated)		$242 \pm 5\mu\text{m}$
Proof Test		$\geq 0.69\text{GPa}$ (100kpsi)
Dynamic Fatigue		≥ 20

Sheath Marking

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

In Accordance with Custom's Requirement

Delivery Length

Standard delivery length will be 2 km.

Drum Marking

The drum will be loaded in carton box.