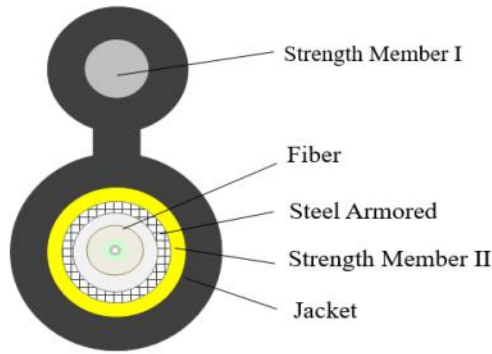


## CABLE STRUCTURE



## DESCRIPTION

The cable is designed to be used in outdoor/Indoor aerial pole last mile drop fiber FTTH drop section with anti-rodent protection.

## FEATURES

- Sumitomo Bare Fiber Is used
- Withstand up to 800N tension pulling strength
- Withstand up to 1000N crush resistance
- Anti-Rodent / Anti-Termite Protection
- Optical performance and macro bending loss performance duly complied to ITU-T compliance.
- G.657 Class A1 single mode fiber
- Low Smoke Zero Halogen Outer Jacket

## Fiber Optic Specification

Item	Description
Fiber Manufacturer	Sumitomo
Mode Field Diameter (1310nm)	8.6um ± 0.4um MFD tolerance.
Cladding Diameter	125.0 um with ±0.7um cladding diameter tolerance.
Wavelength Region	1310nm,1550nm, 1490 and 1625nm
Core Concentricity Error	≤ 0.5um
Fiber Material	High grade silica and single mode type
Cladding Non Circularity	≤ 1%
Cable Cut Off Wavelength	≤1260nm
Max Zero Chromatic Dispersion Slope	0.092ps/(nm2.km)
Zero Dispersion Wavelength	1300nm to 1324nm
Polarization Mode Dispersion (PMD)	≤0.2ps/vkm
Proof Stress	≥0.69Gpa
Fiber Lifespan	25 Years

## Fiber Cable Specification

Items	Specifications	
Fiber Count	1	
Fiber Type	G.657A1	
Tight-buffered Fiber	Dimension	0.9 ± 0.05mm
	Material	PVC
	Color	White
Spiral Steel Armored	Thickness	0.2 ± 0.05mm
	Material	Stainless Steel SUS204
Strength Member I	Material	Galvanized Steel
	Coated Diameter	1.2 ± 0.02mm
	Uncoated Diameter	1.195 ± 0.02mm
	Breaking Strength	1.8 kN
Strength Member II	Aramid yarn	
Aerial Span Length	50 Meter	
Jacket	Dimension	3.5±0.2*6.2±0.3mm
	Material	LSZH oxygen index ≥ 27
	Thickness	≥ 0.4mm
	Color	Black with UV protection
	Carbon Black %	2.5±0.5 %
Fiber Attenuation coefficient in Cable	dB/km(1310nm)	≤0.35dB/km
	dB/km(1550nm)	≤0.21dB/km

Note : Specifications are subject to change without notice

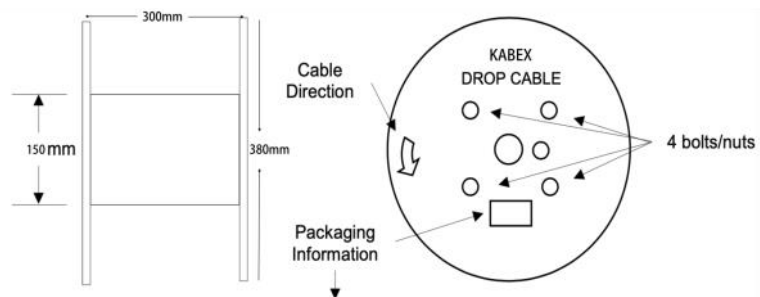
## Fiber Cable Mechanical /Environmental Specification

Items	Unit	Specifications	Standard	Acceptance Criteria
Tension (with IB)	N	800 (Length under tension >50m)	IEC 60794-1-21 E1 Method E1	- Loss change $\leq 0.05$ dB@1550 nm - No fiber break and no sheath damage
Tension (without IB)	N	200 (Length under tension >50m)	IEC 60794-1-21 E1 Method E1	- Loss change $\leq 0.05$ dB@1550 nm - No fiber break and no sheath damage
Crush	N/10cm	1000	IEC 60794-1-21 E1 Method E3	- Loss change $\leq 0.05$ dB@1550 nm - No fiber break and no sheath damage
Bending Test	mm	60mm 10 turns	IEC 60794-1-21 E1 Method E11	- Loss change $\leq 0.05$ dB@1550 nm - No fiber break and no sheath damage
Temperature Cycle Test	°C	-30~+70 (2 Cycle)	IEC 60794-1-22 E1 Method F1	- Loss change $\leq 0.05$ dB@1550 nm - No fiber break and no sheath damage

## Cable Packaging

Each 1km wooden cable reel will come with cable test report with following information. Each end will be capped to avoid moisture ingression.

- (a) Total cable length Indication in meters
- (b) Type of fibers and cable core capacity
- (c) PO Number
- (d) Batch Number
- (e) Factory name
- (f) Total Length
- (g) Gross weight
- (h) Contract Number
- (i) Material Number



The marks will be permanent and legible for the duration of the cable life.

## Cable Marking

The cable sheath will be marked at intervals of 1m with height of  $2 \pm 0.3$ mm using inkjet printing method.

Cable Marking Sample Template :

<[Operator Name] Anti Rodent Drop Fibre Cable> <Fibre Count> <Month/Year> <Batch Number> <Length Marker of the Cable in the Meter> <Manufacturer/Contractor>

## Ordering Information

Part No	Description
PH-ARAODC-I7A1LB1-1000	Outdoor Anti-Rodent Aerial Drop Cable with IB, 1C, G657A1, LSZH, Black, 1km/roll

Note : Specifications are subject to change without notice