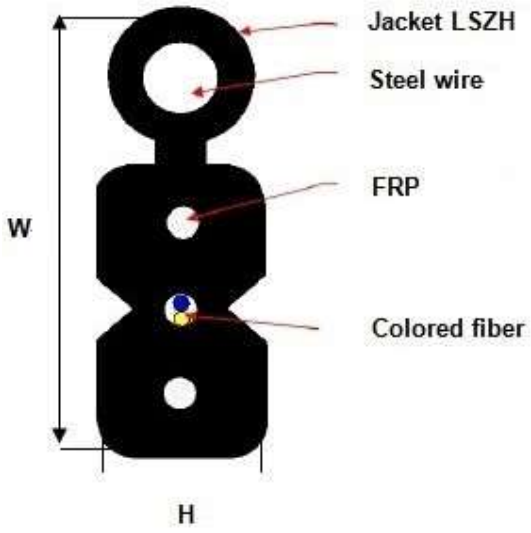
FTTH Drop Cable with Messenger

Type: 2 cores G657A2
P/N: GJYXFCH-2B6a2



- **Scope of applications:**

  The cable is suitable for the general requirements of fiber optic telecommunication and FTTH application.

- **Cable description:**

  Outdoor aerial application, UV resistance, and fungi growth resistance (fungi proof).
  Pure virgin HDPE jacket provides high resistant performance, UV resistance, and fungi resistance.
  Flat drop cable FTTx with galvanized steel messenger wire for self-support, span of more than 80 meters.
  Cable built with 2 colored bare fibers according with the EIA/TIA 598 normative, 2 parallel FRP strength members, black LSZH Jacket.
  OTDR test report will be issued for each reel of cable for initial verification of attenuation in fiber and uniformity of attenuation (printed and digital), for 1310nm, 1550nm and 1625nm.

- **Optical fiber G657A2**

Items	Unit	Specification
Attenuation	dB/km	≤0.47 at 1260nm ≤0.40 at 1310nm ≤0.40 at 1383nm ≤0.30 at 1550nm ≤0.40 at 1625nm
Chromatic Dispersion	ps/nm.km	≤3.5 at 1285nm~1330nm ≤18.0 at 1550nm
Zero Dispersion Wavelength	nm	1300 ~ 1324
Zero Dispersion Slope	ps/nm2.km	≤0.092
Polarization Mode Dispersion	ps/√km	≤0.2
Cut-off Wavelength (λcc, 22m of a cabled fiber)	nm	≤1260
Mode Field Diameter@1310nm	μm	8.6-9.5
Mode Field Tolerance	μm	±0.4
Cladding Diameter	μm	125±0.7
Cladding Diameter Tolerance	μm	±0.7
Cladding Non-circularity	%	≤1.0
Coating cladding concentricity error	μm	≤12.5
Core concentricity error	μm	≤ 0.5
Coating Diameter	μm	245±10
Bending loss	dB	≤0.03 at 1550nm, Radius 15mm 10 turn ≤0.1 at 1625nm, Radius 15mm 10 turn
Proof Test	GPa	0.69

Mechanical and environmental data:

Items	Description
No. of fiber	2
Fiber model	G657A2, single mode
Fiber colour	Blue, Orange – Norm EIA/TIA 598
Outer diameter of colour coating	250um
Dielectric strength member	2x0.5mm FRP
Messenger wire	1.2mm steel wire
Jacket	LSZH or HDPE
Colour of Jacket	Black
Size of optical fiber cable	5.0±0.3mm (width) x 2.0±0.5mm (height)
Maximum weight cable kg/KM	25
Life Span	20 years
Arrow (SAG) aerial installation	1%

Optical fiber cable:

Temperature range	Storage	□	-20□ - +60□
	Installation	□	-20□ - +60□
	Operation	□	-20□ - +60□
Min. Bending Radius	Dynamic	mm	20H
	Static	mm	10H
Max. Tension	Short-term	N	600
	Long-term	N	300
Max. Crush Load	Short-term	N	2200
	Long-term	N	1000

Markings:

Printings on optical fiber cable

White marks are printed at intervals of 1 meter with the following information.

1. Meter marks
2. Type of cable and fiber count
3. Year of manufacture

Other marks can be customized.

Packing

The cable will be packed on wooden reel;
Standard length 1KM, other lengths subject to negotiation
Minus Tolerance: 0%
Plus Tolerance: 2%

Cable Drum

The cables are packed in fumigated wooden drums.
Dimensions of drum according to customer´s requirements.
Identification of drum according to customer´s requirements.

Mechanical, Electrical and Environmental Test Characteristics

Test Item		Standard	Requirement	No. of Sample	Test Result	Conclusion
ension Performance 00N 5min, 1550nm	Attenuation after test	IEC 60794-1-2-E1	≤0.1dB	Orange	0.02dB worst	Pass
				Green	0.00dB worst	
	Appearance after test		No damage on cable	---	Meet requirement	
Cable crush 500N/100mm, 1min, 1550nm	Attenuation after test	IEC 60794-1-2-E3	≤0.1dB	Orange	0.00dB worst	Pass
				Green	0.01dB worst	
	Appearance after test		No damage on cable	---	Meet requirement	
Cable Impact 10N, height 1 m, 1550nm	Attenuation after test	IEC 60794-1-2-E4	≤0.1dB	Orange	0.00dB worst	Pass
				Green	0.00dB worst	
	Appearance after test		No cable breakage	---	Meet requirement	
Cable repeated Bending 20D, 25N, 30 times, 1550nm	Attenuation after test	IEC 60794-1-2-E6	≤0.1dB	Orange	0.02dB worst	Pass
				Green	0.02dB worst	
	Appearance after test		No cable breakage	---	Meet requirement	
Cable torsion 25N, 10 times, 180°1550nm	Attenuation after test	IEC 60794-1-2-E7	≤0.1dB	Orange	0.01dB worst	Pass
				Green	0.00dB worst	
	Appearance after test		No cable breakage	---	Meet requirement	
Cable Bending 20D, 4 turns, 10 times	Attenuation after test	IEC 60794-1-2-E11	≤0.1dB	Orange	0.02dB worst	Pass
				Green	0.01dB worst	
	Appearance after test		No cable breakage	---	Meet requirement	

Filling compound	Appearance after test	IEC 60794-1-2-E14	No compound flow from cable in 24 hours	---	Meet requirement	Pass
Temperature cycle -45°C~+85°C, 8h, 2 cycles, 1550nm	Attenuation after test	IEC 60794 -1-2 F1	≤0.5dB	Orange	0.33	Pass
				Green	0.41	
Water penetration 1m, 24h		IEC 60794 -1-2 F5B	No water	---	Meet requirement	Pass