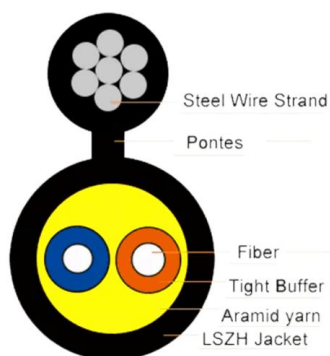


Aerial Cable|GJYFJCH FTTH Drop Optic Cable Single Mode

G657A1 G657A2 Metal Strength Member

Cable Design



Technical data

Product specification	3.5×6.5mm
Fiber type	9/125(G.657A2) or on request
Tight buffer materia	LSZH
Tight buffer color	Blue or on request
Tight buffer diameter mm	0.9±0.05
Strength member	Aramid yarn
Suspension unit type	1×7(single steel wire 0.4mm) or on request
Message wire thickness mm	≥0.6
Outer sheath material	LSZH
Outer sheath color	Black
Outer sheath thickness mm	1.0±0.2
Cable weight Kg/km	Approx.28.0
Min. bending radius mm	With suspension unit:130 Without suspension unit:15
AttenuationdB/km	≤0.38 at 1310nm,≤ 0.26 at 1550nm
Short term tensile N	600
Crush resistance N/100mm	2200
Operation temperature °C	-10~+70

Tight lines Colours

NO.	1	2
Colour	Blue	orange
		

The properties of single mode optical fiber (ITU-T Rec. G.657A1)

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient @ 1310 nm @ 1383 nm @ 1550 nm @ 1625 nm	≤ 0.36 dB/km ≤ 0.32 dB/km ≤ 0.22 dB/km ≤ 0.30 dB/km
Point discontinuity	≤ 0.05 dB
Cable cut-off wavelength	≤ 1260 nm
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	≤ 0.092 ps/(nm ² .km)
PMD _Q (Quadrature average*)	≤ 0.2 ps/km ^{1/2}
Mode field diameter @ 1310 nm	9.2±0.4 μm
Core / Clad concentricity error	≤ 0.5 μm
Cladding diameter	125.0 ± 0.7 μm
Cladding non-circularity	$\leq 1.0\%$
Primary coating diameter	245 ± 10 μm
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0oC~ +70oC @ 1310 & 1550nm	≤ 0.1 dB/km

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension - Length of cable: about 50m	- Fiber strain $\leq 0.36\%$ - Loss change ≤ 0.1 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change ≤ 0.05 dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 5J	- Loss change ≤ 0.1 dB@1550nm - No fiber break and no sheath damage.

Temperature Cycling Test YD/T901-2001-4.4.4.1	- Temperature step: +20°C→-40°C→+70°C →+20°C - Time per each step: 12 hrs - Number of cycle: 2	- Loss change ≤ 0.05 dB/km@1550 nm - No fiber break and no sheath damage.
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Sheath marking

The optical fiber drop cable shall have sequentially numbered length marking at intervals of approximately 1 meter. The starting number of ordering length for any coil shall begin with zero meter. The accuracy of the measurement of length marking shall be held within the limits of $\pm 1\%$.

- Type of wire
- Year and month of manufacture
- Length marking each meter along the wire