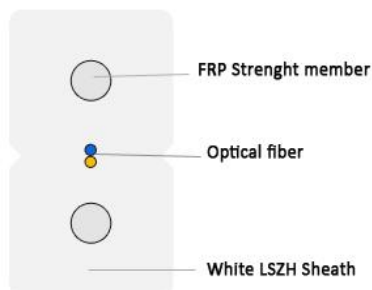


FTTH Indoor Drop Cable

OPTICAL FIBER CABLE TECHNICAL SPECIFICATION

FTTH Indoor Drop Cable (OFC-2G657A2), Optical fiber count - 2, Optical fiber type - G.657.A2,size 2x3.0 mm,LSZH, Cable isolation color - White, Strength element - Steel wire Messenger , Footage per coil - 500 m.

Core - stranded of 2 optical fiber
0.5mm*2 FRP
Outer LSZH sheath.



Cable Design

No. of Fibers		2 G657A2
FRP size	mm	0.5*2
Cable Diameter	±0.1mm	2.0*3.0
Cable Weight	±1kg / km	8.1
Jacket material		White LSZH Low smoke zero halogen and flame retardant sheath

APPLICATION:For use in Long-Haul, Metro or Access Networks, for air-blowing installation

Temperature Range	Transport & Storage:	-40 to +70 °C	Minimum Bending Radius	
	Installation:	-30 to +70 °C	Dynamic:	30MM
	Operation:	-40 to +70 °C	Static:	15MM

MAIN CHARACTERISTICS

Test	Test Standard	Specified Value	Requirement *
Max Tension	IEC 60794-1-21E1	80 N	$\Delta \alpha \leq 0.1$ dB, no damage
Crush	IEC 60794-1-21-E3	1000 N / 100 mm, max. 1 min	$\Delta \alpha \leq 0.1$ dB, no damage
Impact	IEC 60794-1-21-E4	5 Nm, 3 impacts, R = 300 mm	$\Delta \alpha \leq 0.1$ dB after the test
Torsion	IEC 60794-1-21-E7	100N, ±360°, 20 cycles, 4m	$\Delta \alpha \leq 0.1$ dB, no damage
Repeated Bending	IEC 60794-1-21-E6	R=20 x D, 100N, 25 cycles	no damage
Cable Bend	IEC 60794-1-21-E11	R=15 x D, 4 turns, 3 cycles	$\Delta \alpha \leq 0.1$ dB, no damage
Temperature Cycling	IEC 60794-1-22-F1	-40 to +70 °C	$\Delta \alpha \leq 0.15$ dB/km

* all optical measurements performed at @1550nm

OPTICAL FIBERS COLOUR IDENTIFICATION Compliant to EIA/TIA-598-D

Fiber Colours

No.	1	2										
Colour	Blue	Orange										
No.												
Colour												

Fibers Parameters

Attenuation coefficient [dB/km]	ITU-T G.657.A2	
	1310 nm	0.35
	1550 nm	0.22

Cable marking

“GJYXFH 2 G657A2 2024 XXXXXM ” custom label added after each standard label

Reel Length

Standard reel length: 500m/reel, Drum+cartons

Other lengths are also available

Cable Drum

The cables are packed in wooden disinfected (heat treated) drums

Cable Packing

One end of the cable will be sealed with suitable plastic caps to prevent the entry of moisture during shipping, handling and storage.

The inner end is available for testing.

ITU-T G.657.A2

Characteristics		Conditions	Specified values	Units
Optical Characteristics				
Attenuation		1310nm	≤0.35	[dB/km]
		1383nm	≤0.35	[dB/km]
		1460nm	≤0.25	[dB/km]
		1490nm	≤0.23	[dB/km]
		1550nm	≤0.21	[dB/km]
		1625nm	≤0.23	[dB/km]
Attenuation vs.Wavelength Max.a difference		1285-1330nm,in reference to 1310nm	≤0.03	[dB/km]
		1525-1575nm,in reference to 1550nm	≤0.02	[dB/km]
Zero Dispersion Wavelength (a)			1300-1324	[nm]
Zero Dispersion Slope(S)			≤0.092	[ps/(nm ² ·km)]
PMD	Maximum Individual Fibre		≤0.1	[ps/√km]
	Link Design Value (M=20,Q=0.01%)		≤0.06	[ps/√km]
	TypicalValue		0.04	[ps/√km]
Cable Cutoff Wavelength (λ)			≤1260	[nm]
Mode Field Diameter (MFD)		1310nm	8.2-9.0	[um]
		1550nm	9.3-10.3	[um]
Effective Group Index of Refraction(N)		1310nm	1.466	
		1550nm	1.467	
Point Discontinuities		1310nm	≤0.05	[dB]
		1550nm	≤0.05	[dB]
Geometrical Characteristics				
Cladding Diameter			125.0±0.7	[um]
Cladding Non-Circularity			≤0.7	[%]
Coating Diameter			235-245	[μm]
Coating-Cladding Concentricity Error			≤12.0	[μm]
Coating Non-Circularity			≤6.0	[%]
Core-Cladding Concentricity Error			≤0.5	[μm]
Curl(radius)			≥4	[m]
Delivery Length			Upto 50.4	[km/reel]
Environmental Characteristics		1310nm,1550nm&1625nm		
Temperature Dependence Induced Attenuation		60℃ to+85℃	≤0.05	[dB/km]
Temperature-Humidity Cycling Induced		-10℃to+85℃,98%RH	≤0.05	[dB/km]
Watersoak Dependence Induced Attenuation		23℃,for 30 days	≤0.05	[dB/km]
Damp Heat Dependence Induced Attenuation		85℃and 85%RH,for 30 days	≤0.05	[dB/km]
Dry Heat Aging		85℃,for 30 days	≤0.05	[dB/km]
Mechanical Specifications				
Proof Test			≥9.0	[N]
			≥1.0	[%]
			≥10	[kpsi]
Macro-bend Induced Loss	10 Turns Around a Mandrel of 15 mm	1550nm	≤0.03	[dB]
	10 Turns Around a Mandrel of 15 mm	1625nm	≤0.1	[dB]
	1Turn Around a Mandrel of 10 mm	1550nm	≤0.1	[dB]
	1 Turn Around a Mandrel of 10 mm	1625nm	≤0.2	[dB]
	1 Turn Around a Mandrel of 7.5 mm	1550nm	≤0.5	[dB]
	1 Turn Around a Mandrel of 7.5 mm	1625nm	≤1.0	[dB]
Coating Strip Force		typical average force	1.5	[N]
		peak force	1.3-8.9	[N]
Dynamic Fatigue Parameter (n。)			≥20	