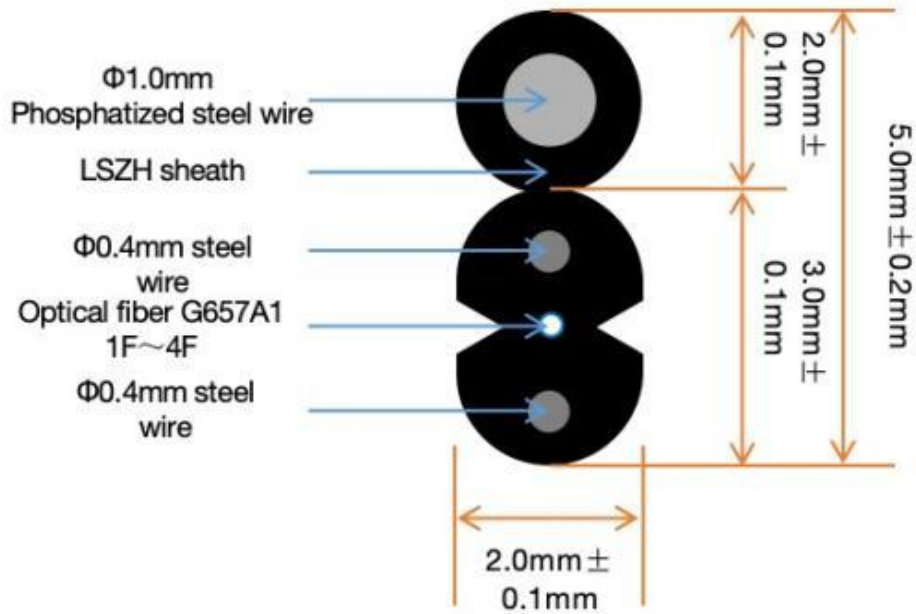


GJYXCH

Cross Section of Cable



Optical Fiber Type and Properties

Category	Description		Specifications
			G.657A1
Optical Specifications	Attenuation	@1310nm	$\leq 0.34\text{dB/km}$
		@1550nm	$\leq 0.22\text{dB/km}$
	Zero Dispersion Wavelength		1300~1324nm
	Zero Dispersion Slope		$\leq 0.092\text{ps}/(\text{nm}^2.\text{km})$
	Dispersion	@1310nm	$\leq 3.5\text{ ps}/\text{nm.km}$
		@1550nm	$\leq 18.0\text{ ps}/\text{nm.km}$
	Cable Cutoff Wavelength(λ_{cc})		$\leq 1260\text{nm}$
	Polarization Mode Dispersion (PMD)		$\leq 0.2\text{ps}/\sqrt{\text{km}}$
	Macro-bend induced attention 10 turns around a mandrel of 15mm radius at 1550nm		$\leq 0.25\text{dB}$

Geometric Specifications	Mode Field Diameter	@1310nm	8.6±0.4μm
	Cladding Diameter		125±1μm
	Cladding Non-Circularity		≤1.0%
	Coating Diameter		243±7μm
	Coating/Cladding Concentricity Error		≤8μm
	Core/Cladding Concentricity Error		≤0.5μm
Mechanical Specifications	Proof Test level		≥1.0%
	Fiber Curl Radius		≥4.0m
	Peak Coating Strip Force		1.3~8.9N

Dimensions of Cable Constructions

Item		Parameters
Fiber	Number of cores	1~4cores
Strength member	Material	Steel wire
	Diameter	2*Φ0.4mm
Messenger wire	Material	Phosphatized steel wire
	Diameter	Φ1.0mm±0.05
Jacket material	Material	LSZH
	Color	Black
Cable diameter		(2.0±0.1) * (5.0±0.2)
Min. bending radius	Static	15D
	Dynamic	30D
Tensile performance	Short term	600N
Crush	Short term	2200N/100mm
Cable weight(kg/km)	Approx.	17.5

Mechanical and Environmental Characteristics

Item	Test standard	Spec	Acceptance Criteria
Temperature Range of Storage	—————	-40 to +70°C	—————
Temperature Range of Installation	—————	-10 to +70°C	—————

Temperature Operation	—————	-20 to +70°C	—————
Tensile Load (short term)	IEC 60794-1-2-E1	600N	Fiber strain<0.4% Without residual additional Loss
Crush Resistance	IEC 60794-1-2-E3	1500N/100mm	No fiber breakage
Repeat Bending	IEC 60794-1-2-E6	R=20×cable outer diameter -1m cable length with 30N weight,30 cycles	No damage to the outer jacket -Attenuation increase ≤0.03dB -Reversible
Cable Bend	IEC 60794-1-2-E11B	5×cable Diameter	No fiber breakage
Water Penetration	IEC 60794-1-2-F5	--Water height: 1m, -Sample length:3m, -Duration of test: 24hrs	No water leakage at the end of the sample
Temperature	IEC 60794-1-2-F1	Temperature step: +20°C→-20°C→+70°C→-20°C→+70°C→+20°C	-Attenuation variation for reference value(the attenuation to be measured before test at +20±3°C) ≤0.05dB,
RoHS Compliant	ROHS	—————	—————

Optical Characteristics

Type of Fiber	G657A1
Attenuation in cable	≤0.35dB/km @1310nm ≤0.25dB/km @1550nm

Other

Sheath Color	black
Sheath Marking	Ink printing
The length of delivery	According to the customer requirement

-End of Specification-