

Cable specification

1. Optical cable type: GJYXCH-4B6 (2.0X5.2)
2. Cross section of cable:



3. Optical fiber type and properties

Item		Unit	Specification
			G. 657A2
Mode field diameter	1310nm	μm	8.6 ± 0.4
Cladding diameter		μm	125.0 ± 1.0
Cladding non-circularity		%	≤1.0
Core concentricity error		μm	≤0.5
Coating diameter		μm	245 ± 5
Coating/cladding concentricity error		μm	≤12
Cable cut-off wavelength		nm	≤ 1260
Attenuation Coefficient	1310nm	dB/km	≤0.35
	1550nm	dB/km	≤0.21
Macro-bend loss (1 turn, 10mm radius)	1550nm	dB/km	≤0.1
	1625nm	dB/km	≤0.2
Proof stress level		kpsi	≥100

Other parameters meet standard ITU-T G.657

4. Dimensions of cable constructions

Item		Parameters
Strength member	Material	0.45mm steel wire*2 1.0mm phosphorized steel wire
	Dimension	5.2(±0.2)*2.0(±0.2)mm
	Material	LSZH
	Color	Black
Min. bending radius		120mm
Min. bending radius (Rip off the messenger wire)	Static	10 mm
	Dynamic	25 mm
Tensile performance	Short term	600N
	Long term	300N
Tensile performance (Rip off the messenger wire)	Short term	100N
	Long term	50N

Crush resistance	Short term	2200N/100mm
	Long term	1100N/100mm
Cable attenuation		≤ 0.4 dB/km at 1310nm, ≤ 0.3 dB/km at 1550nm
Cable weight (Approx.)		22.5 kg/km

5. Color Code of the Fiber

1	2	3	4
Green	Yellow	Blue	Natural

6. Mechanical and environmental characteristics

Item	Test method	Requirements
Tensile performance	IEC 60794-1-2-E1	The maximum total fiber strain less than 0.4% under rated tensile load. No fiber breakage and no damage to the sheath.
Crush resistance	IEC 60794-1-2-E3	No fiber breakage and no damage to the sheath.
Impact	IEC 60794-1-2-E4	No fiber breakage and no damage to the sheath.
Repeated bending	IEC 60794-1-2-E6	No fiber breakage.
Cable torsion	IEC 60794-1-2-E7	No fiber breakage.
Cable flexing	IEC 60794-1-2-E8	No fiber breakage.
Cable kink	IEC 60794-1-2-E10	No kink occurs.
Temperature cycling	IEC 60794-1-2-F1	The maximum increase (1550nm) in attenuation shall be less than 0.4dB
Environment performance	RoHS	

7. Working condition

Item	Standard	Parameters
Operation temperature	ABNT NBR 15596	-20°C ~ +65°C
Installation temperature		0°C ~ +60°C
Storage temperature		-20°C ~ +65°C