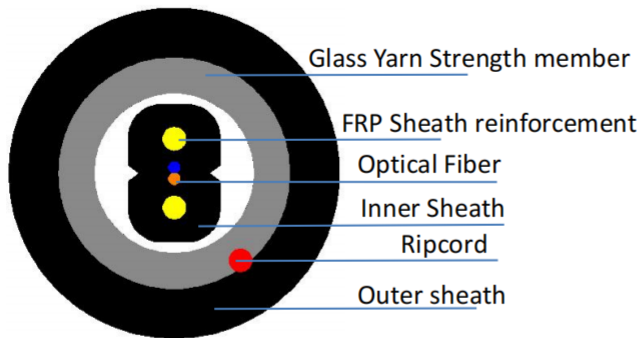


GYXFY

Cable Design



Optical fiber characteristics

Optical Characteristics					
Fiber Type		G.652	G.655	50/125 μ m	62.5/125 μ m
Attenuation (+20 $^{\circ}$ C)	850nm			≤ 3.0 dB/km	≤ 3.3 dB/km
	1300nm			≤ 1.0 dB/km	≤ 1.0 dB/km
	1310nm	≤ 0.36 dB/km	≤ 0.40 dB/km		
	1550nm	≤ 0.22 dB/km	≤ 0.23 dB/km		
Bandwidth	850nm			≥ 500 MHz \cdot km	≥ 200 MHz \cdot km
	1300nm			≥ 500 MHz \cdot km	≥ 500 MHz \cdot km
Numerical Aperture				0.200 \pm 0.015NA	0.275 \pm 0.015NA
Cable Cut-off Wavelength λ_{cc}		≤ 1260 nm	≤ 1450 nm		

Technical data

Structure and Technical Specifications						
Fiber Count	Nominal Diameter (mm)	Nominal Weight (kg/km)	Allowable Tensile Load (N)		Allowable Crush Resistance (N/100mm)	
			Short Term	Long Term	Short Term	Long Term
1~4	7	60	1500	500	1000	300

Identification

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	blue	orange	green	brow	grey	white	red	black	yellow	violet	pink	aqua

Test

Parameter	Test method	Test conditions	Acceptance criteria*	
Tensile strength	IEC 60794-1-2-E1	Load: As per cable maximum tensile strength in table above.	Change in Attn <0.05 dB/Km. No damage or rack to cable & no fiber break	
Crush	IEC 60794-1-2-E3	Short time: 10 min Long time: 120 min Load: As per maximum crush resistance in table above Number of positions: 3 adjacent sections (ensuring one over tube and one over lay reversal)		
Impact	IEC 60794-1-2-E4	Weight: 1.5 kg Height: 1.0 m Anvil radius: 12.5 mm Impacts: 1		
Torsion	IEC 60794-1-2-E7	Sample length: 1 m Bends: 360° (1turn) clockwise and after measurement (one minute) 720° (2turns) anticlockwise (two minutes)		
Bend	IEC 60794-1-2-E11	Mandrel diameter: 180 mm Bend: 360° (1turn)		
Bend under tension	Concurrent to tensile test IEC 60794-1-2-E18	Mandrel diameter: 360 mm Bend: 360° (1turn)		
Temperature cycling	IEC 60794-1-2-F1	Sample length: 1000 m (minimum) Temperature range: From -10°C to +70°C		
Compound Flow Test	IEC 60794-1-2	Sample length: 300mm in an air oven(24Hour) Temperature of 50 °C No Dripping		
Water penetration	IEC 60794-1-2-F5B	Sample length=3m, Water height=1m		No water leakage after 24 hours

Marking:

The color of marking is white, but if the remarking is necessary, the **black color** marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress