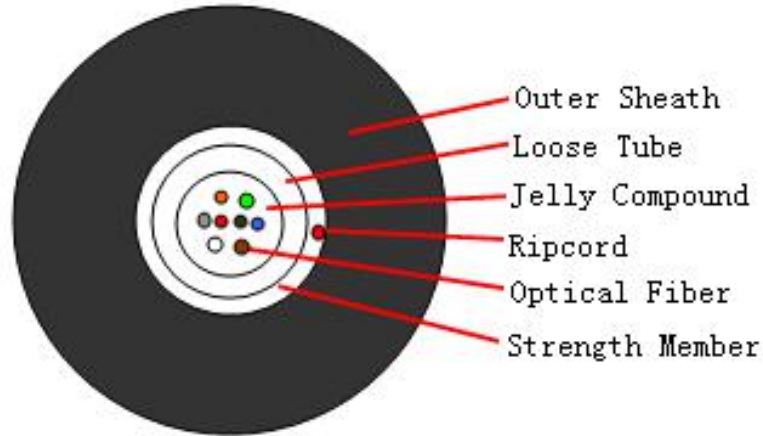


## Aerial E-Glass Strength Central Loose Tube Fiber Optical Fiber HDPE Outer Sheath (GYXFTY)



### Technical data

No. of cable		2~12	14~24
Fiber Model		G.652D/OM3-300m	
Strength Member	Material	Water-blocking reinforced glass yarn	
Loose Tube	Material	PBT	
	Diameter (±0.1) mm	3.5	4.2
	Thickness (±0.05) mm	0.7	0.8
Ripcord	Material	Nylon	
	Color	Red	
Outer Sheath	Material	HDPE (low friction outer sheath)	
	Thickness (±0.1) mm	1.5	
Cable Diameter (±0.5) mm		7.3	8.3
Cable Weight(±5.0) kg/km		50	61

### Fibre Color

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua
No.	13	14	15	16	17	18
Color	Blue+P	Orange+P	Green+P	Brown+P	Gray+P	White+P
No.	19	20	21	22	23	24
Color	Red+P	Natural+P	Yellow+P	Violet+P	Pink+P	Aqua+P

"P" means Point mark

The properties of single mode optical fiber (ITU-T Rec. G.652.D)

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient	
@ 1310 nm	≤ 0.35dB/km
@ 1383 nm	≤ 0.32 dB/km
@ 1550 nm	≤ 0.21 dB/km
@ 1625 nm	≤ 0.25 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 <sup>2</sup> .km)
PMD <sub>Q</sub> (Quadrature average*)	≤0.2 ps/km <sup>1/2</sup>
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	≤1.0%
Primary coating diameter	245 ± 10 μm
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0°C~ +70°C @ 1310 & 1550nm	≤ 0.1 dB/km

**FFOTOM3-300 features new generation 50/125μm multimode fiber**

**Performance**

FFOTOM3-300 features new generation 50/125μm multimode fiber			
Characteristic	Characteristic	Characteristic	Characteristic
Optical properties			
Attenuation	850nm 1300nm	≤2.5 ≤0.7	dB/km dB/km
Overfilled bandwidth	850nm 1300nm	≥1500 ≥500	MHz.km MHz.km
Effective bandwidth	850nm	≥2000	MHz.km
10Gb / s Ethernet link length		300	m
Numerical aperture (NA)		0.185~0.215	
The differential modulus delay DMD		See FFOTOM3-300 within the template	
Backscatter characteristics (1300nm)			
Partly discontinuous point		≤0.1	dB
Fiber attenuation inhomogeneity		≤0.1	dB

Bidirectional backscattering coefficient difference		≤0.1	dB/km
Geometric characteristics			
Core diameter		50±2.5	μm
Cladding roundness		≤6.0	%
Coating diameter		125±2	μm
Cladding roundness		≤2.0	%
Coating / cladding concentricity error		≤1.5	μm
Coating diameter		245±10	μm
Core / package concentricity error		≤12.0	μm
Delivery length		1.1~8.8	km/reel
Environmental characteristics (850nm And 1300nm)			
Temperature additional attenuation	-60℃ ~ +85℃	≤0.15	dB/km
Flooding additional attenuation	23℃±2℃ , 30days	≤0.20	dB/km
Hot and humid additional attenuation	85℃ and 85% Relative humidity, 30 days	≤0.20	dB/km
Dry heat aging	85℃±2℃	≤0.20	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional attenuation 100 laps Φ75mm	850nm&1300 nm	≤0.5	dB
Coating peeling force	Typical average	1.5 ≥1.3 ≤8.9	N N
Dynamic fatigue parameters		≥20	

### Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: 3000N - Length of cable: about 50m	- Fiber strain ≤ 0.33% - Loss change ≤ 0.05 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: 2000N/10cm - Load time: 1min	- Loss change ≤ 0.05dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Impact energy:4. 5J	- Loss change ≤ 0.05dB@1550nm - No fiber break and no sheath damage.
Repeated Bending IEC 60794-1-21,E6	-R=40D,30 cycles	- Loss change ≤ 0.05dB@1550nm - No fiber break and no sheath damage.
Temperature Cycling Test	- Temperature step: +20℃→-20℃→+70℃→+	- Loss change ≤ 0.05 dB/km@1550 nm

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IEC 60794-1-22,F1	20°C - Time per each step: 12 hrs - Number of cycle: 2	- No fiber break and no sheath damage.
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