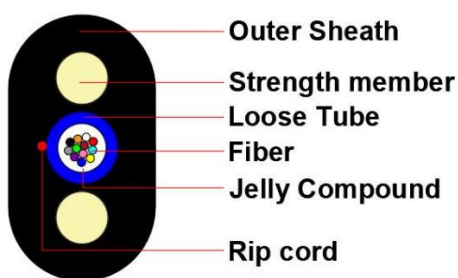


FO FLAT DROP 4/6/8/12H GFRP NO FLEME 1KM

G657A2



Outdoor Communication Cable (GJXJHB) Cable Design



No. of cable		4	6	8	12
Fiber Model		G.657A2			
Strength Member	Material	FRP			
	Diameter (± 0.05) mm	1.2			
	NO.	2			
Loose Tube	Material	PBT			
	Diameter (± 0.1) mm	2.8			
	Thickness (± 0.05) mm	0.4			
	Color	Blue			
Rip Cord	Material	Nylon			
Outer Sheath	Material	PE			
	Thickness (± 0.1) mm	1.0			
	Color	Black			
Cable Dimension W*H (± 0.3) mm		4.0*7.0			
Min. bending radius	Without Tension	10×Cable-W			
	Under Maximum Tension	20×Cable-W			
Temperature range (°C)	Installation	-20~+60			
	Transport & Storage	-40~+70			
	Operation	-40~+70			

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G657A2



Fiber Color

NO.	1	2	3	4	5	6
Color	Blue	orange	green	brown	gray	white
	7	8	9	10	11	12
	red	black	Yellow	Violet	Pink	Aqua

Application:

NO.	Item	Requirement	
1	Allowable Tensile Strength	Short Term	500 N
		Long Term	200 N
2	Allowable Crush Resistance	Short Term	1000 (N/100mm)
		Long Term	300 (N/100mm)

The properties of optical fiber (ITU-T Rec. G.657A2)

Characteristic	Characteristic	Characteristic	Characteristic
Optical properties			
Attenuation	1310nm	≤ 0.35	dB/km
	1383nm(Hydrogen after aging)	≤ 0.35	dB/km
	1490nm	≤ 0.23	dB/km
	1550nm	≤ 0.22	dB/km
	1625nm	≤ 0.23	dB/km
Relative wavelength attenuation @1310nm @1550nm	1285~1330nm 1525~1575nm	≤ 0.05 ≤ 0.05	dB/km dB/km
Dispersion in the wavelength range of	1285~1340nm 1550nm	≤ 3.5 ≤ 18	ps/(nm.km) ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤ 0.092	ps/(nm ² .km)
Polarization Mode Dispersion Coefficient PMD			
Single fiber maximum		≤ 0.2	ps/
Fiber link value (M=20, Q=0.01%)		≤ 0.1	ps/
Typical value		0.04	ps/
Cable cut-off wavelength (λ_{cc})		≤ 1260	nm
Mode field diameter (MFD)	1310nm	8.8 ± 0.4	μm
	1550nm	9.8 ± 0.5	μm
Attenuation discontinuities	1310nm	≤ 0.05	dB
	1550nm	≤ 0.05	dB

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Geometric characteristics			
Core diameter		125±0.7	µm
Cladding roundness		≤0.7	%
Coating diameter		245±5	µm
Coating / package concentricity error		≤12.0	µm
Core / package concentricity error		≤0.5	µm
The warpage (radius)		≥4	m
Environmental characteristics (1310nm、1550nm、1625nm)			
Temperature additional attenuation	-60°C ~+85°C	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	-10°C ~+85°C, 98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23°C, 30 days	≤0.05	dB/km
Hot and humid additional attenuation	85°C和 85% Relative humidity, 30 days	≤0.05	dB/km
Dry heat aging	85°C	≤0.05	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional attenuation			
10 CircleΦ30mm	1550nm	≤0.03	dB
10 CircleΦ30mm	1625nm	≤0.1	dB
1 CircleΦ20mm	1550nm	≤0.1	dB
1 CircleΦ20mm	1625nm	≤0.2	dB
1 CircleΦ15mm	1550nm	≤0.5	dB
1 CircleΦ15mm	1625nm	≤1.0	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	