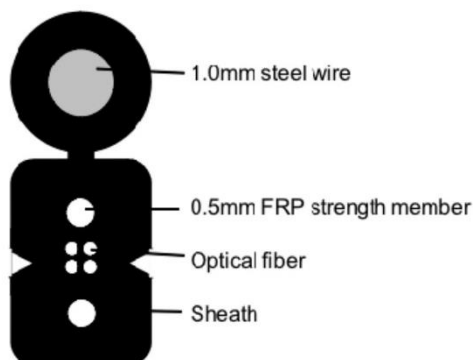


Outdoor FTTH Drop Cable GJYXCH-4FO

1. Cable Design



2. Cable structure and parameters

No. of optical fiber			4
Fiber Model			G.657A1
Strength member	Material		FRP
	Diameter（±0.03）mm		0.50
	No.		2pcs
Messenger	Material		Phosphated steel wire
	Diameter（±0.03）mm		1.0
Outer Sheath	Material		LSZH
	Color		Black
Cable size（±0.15）mm			2.0×5.0
Cable Weight（±1）kg/km			20
Allowable Tensile Strength	Short Term	N	600
	Long Term		300
Allowable Crush Resistance	Short Term	N/100mm	2200
	Long Term		1000
Minimum bend radius(dynamic) mm			60
Minimum bend radius(static) mm			30
Temperature range （℃）	Installation		-20~+60
	Transport&Storage		-40~+70
	Operation		-40~+70

3.Fiber Color

No.	1	2	3	4
Color	Blue	Orange	Green	Brown

4. The properties of single mode optical fiber (ITU-T Rec. G.657A1)

Characteristic	condition	data	unit
Optical properties			
Attenuation	1310nm	≤ 0.35	dB/km
	1383nm	≤ 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	≤ 0.05	dB/km
	1525~1575nm	≤ 0.05	dB/km
Dispersion in the wavelength range of	1285~1340nm	≤ 3.5	ps/(nm.km)
	1550nm	≤ 18	ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤ 0.092	ps/(nm ² .km)
Polarization Mode Dispersion Coefficient PMD		≤ 0.2	ps/
Single fiber maximum Fiber link value (M=20, Q=0.01%) Typical value		≤ 0.1	ps/
		0.04	ps/
Cable cut-off wavelength (λ_{cc})		≤ 1260	nm
Mode field diameter (MFD)	1310nm	8.6±0.4	μm
	1550nm	9.8±0.5	μm
Attenuation discontinuities	1310nm	≤ 0.05	dB
	1550nm	≤ 0.05	dB
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℃ ~+85℃	≤ 0.05	dB/km
Temperature-humidity cycle additional attenuation	-10℃ ~+85℃, 98% Relative humidity	≤ 0.05	dB/km
Flooding additional attenuation	23℃, 30 days	≤ 0.05	dB/km
Hot and humid additional	85℃ and 85% Relative	≤ 0.05	dB/km

attenuation	Humidity, 30 days		
Dry heat aging	85℃	≤0.05	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional Attenuation 1 turnΦ10mm	1550mm	≤0.50	dB
	1625mm	≤1.50	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

5. Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension - Length of cable: about 50m	- Fiber strain ≤ 0.36% - Loss change ≤ 0.1 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change ≤ 0.05dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 5J	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Temperature Cycling Test YD/T901-2001-4.4.1	- Temperature step: +20℃→-40℃→+70℃ →+20℃ - Time per each step: 12 hrs - Number of cycle: 2	- Loss change ≤ 0.05 dB/km@1550 nm - No fiber break and no sheath damage.

6. Package and marking

Package 1000m/wooden spool/carton box

Cable Mark: According to customer's requirements.

Drum Mark: According to customer's requirements.

