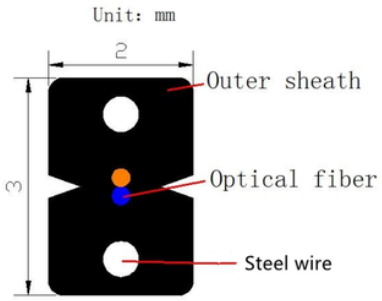
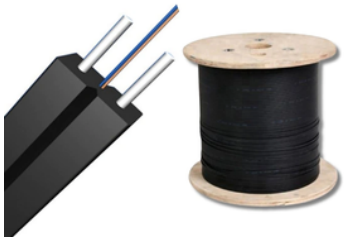
2 Core FTTH Drop Cable GJXH Single Mode

GJXH





RS461102

1000m on wooden reel

Technical Data

No. of cable			**2**
Fiber Model			G.657A2
strength member	Material		steel wire
	Diameter（±0.03）mm		0.4
	NO.		2
Outer Sheath	Material		LSZH
	Color		Black
Cable size（±0.2）mm			2.0×3.0
Cable Weight（±2）kg/km			10
Allowable Tensile Strength	Short Term	N	80
	Long Term		40
Allowable Crush Resistance	Short Term	N/100mm	2200
	Long Term		1000
Min. bending radius	Without Tension		10×Cable-ϕ
	Under Maximum Tension		20×Cable-ϕ
Temperature range（°C）	Installation		-20~+60
	Transport&Storage		-40~+70
	Operation		-40~+70

No.	1	2
Color	Blue	Orange

Main mechanical & environmental performance test

Characteristic	condition	data	unit
Optical properties			
Attenuation	1310nm 1383nm(氢老化后) 1490nm 1550nm 1625nm	≤0.35 ≤0.35 ≤0.23 ≤0.22 ≤0.23	dB/km dB/km dB/km dB/km 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/(nm².km)
Polarization Mode Dispersion Coefficient PMD Single fiber maximum Fiber link value (M=20, Q=0.01%) Typical value		≤0.2 ≤0.1 0.04	ps/ ps/ ps/
Cable cut-off wavelength （λcc）		≤1260	nm
Mode field diameter （MFD）	1310nm 1550nm	8.8±0.4 9.8±0.5	μm μm
Attenuation discontinuities	1310nm 1550nm	≤0.05 ≤0.05	dB 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°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 10 CircleΦ30mm 1 CircleΦ20mm 1 CircleΦ20mm 1 CircleΦ15mm 1 CircleΦ15mm	 1550nm 1625nm 1550nm 1625nm 1550nm 1625nm	 ≤0.03 ≤0.1 ≤0.1 ≤0.2 ≤0.5 ≤1.0	 dB dB dB dB dB dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-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 Y D / T901-2001-4.4.4.1	- Temperature step: +20°C→-40°C→+70°C →+20°C - 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.