

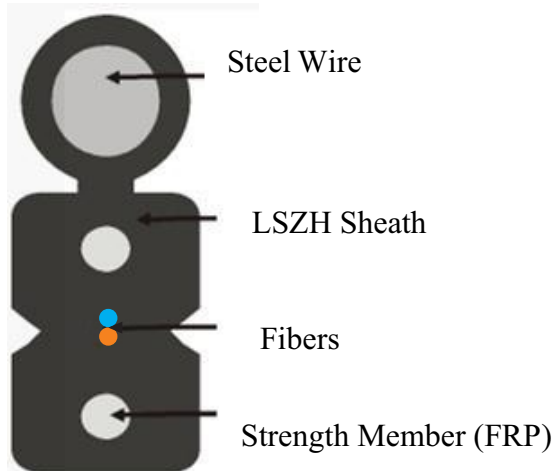
For FTTH Optical Fiber Cable CCDx80A1LFMxx

1. Technical parameter of ITU-T G.657A1 (B6) single-mode optical fiber

Characteristics	Conditions	Specified Values	Units
Optical Characteristics			
Mode field diameter (MFD)	1310nm	9.2±0.5	μm
	1550nm	10.5±0.8	μm
Cut-off wavelength (λ _{cc})		≤1260	nm
Attenuation coefficient	1310nm	≤0.35	dB/km
	1383nm	≤0.34	dB/km
	1550nm	≤0.21	dB/km
Macro bending loss	Φ30mm, 100circles, at 1625nm	≤0.1	dB
Attenuation non-uniformity		≤0.05	dB
Dispersion coefficient	1288~1339nm	≤3.5	Ps/(nm.km)
	1271~1360nm	≤5.3	Ps/(nm.km)
	1550nm	≤18	Ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
PMD	Link value	≤0.2	Ps/km ^{1/2}
Max zero dispersion slope		≤0.092	Ps/(nm ² .km)
Group index of refraction (Typical Value)	1310nm	1.466	
	1550nm	1.467	
Geometric characteristic			
Cladding diameter		125±0.7	μm
Core/cladding concentricity error		≤0.5	μm
Cladding non-circularity		≤1.0	%
Coating diameter		245±10	μm
Cladding/coating concentricity error		≤12.0	μm
Coating non-circularity		≤8	%
Diameter of colored coating		250±15	μm
Mechanical characteristic			
Proof stress		≥0.69	Gpa
Proof Strain		≥1.0	%
Coating strip force	Average value	1.0-5.0	N
	Peak value	1.3-8.9	N
Dynamic stress corrosion susceptibility parameter (n _d value)		≥20	

2. OPTICAL FIBER CABLE FEATURES

2.1 Structure:



Suitable:

CCDx80A1LFMxx

Indoor cable distribution Adopted to core network, access network and fiber to home

2.2 .1 Fiber color code

No.	1	2	3	4		
Color	Blue	Orange	Green	Brown		

Color-coding of fiber will be clearly, and not fade in temperature of working and installation.

2.2.2 Construction of CCDx80A1LFMxx

Item		Description
Approx. cable diameter		$(2.0 \times 3.0) \pm 0.3\text{mm}$
Approx. stranded steel wire sheath outer diameter		$2.0 \pm 0.3\text{mm}$
Cable size		$(2.0 \times 5.0) \pm 0.2\text{mm}$
Approx. cable net weight		$18.5\text{kg/km} \pm 0.2\text{kg/km}$
Central Strength Member	Material	FRP
	Outer diameter	$0.50 \pm 0.02\text{mm}$
Steel wire	Material	Steel wire

	Diameter	1.0±0.02mm
Optical fiber	Type	G .657A1
	Numbers	1~4
	colour	Blue、 Orange、 Green、 Brown
LSZH sheath of cable	Material	LSZH
	colour	Black / Grey
Attenuation coefficient	1310nm	≤0.4dB/km
	1550nm	≤0.3dB/km

2.3 Mechanical and physical of the cable

Cable Type	Tensile Strength (N)		Crush Resistance Strength (N/100mm)		Min. Bending Radius (mm)	
	Short Term	Long Term	Short Term	Long Term	Dynamic	Static
CCDx80A1LFMxx	600	300	2200	1000	30D	15D
Operation Temperature: -20°C~+60°C						

3. Cable marking

Unless otherwise required the sheath will be marked at intervals of 1m, containing:

- (a) Indication in meters
- (b) Quantity and type of fibers
- (c) Factory name
- (d) Date of manufacturing (year)
- (e) Other requirements

The marks will be permanent and legible for the duration of the cable life.

5. Packaging & Delivery

All cables will be delivered on drums with protection of both ends of the cable. Each drum will be a waterproof mark according to requirements.

Normal cable length: 2km, or as per the customer's requirement