

DATASHEET

2-8F Butterfly Flat Indoor FTTH Drop Cable assemblies Dca and Cca Certificated LSZH Jacket

Best cable Solution in FTTH 's Project



OMC INDUSTRY CO.LIMITED

Description

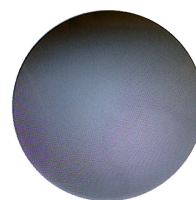
It's a kind of Pigtail but assembly with **Butterfly Flat Indoor FTTH Drop Cable**. This is a last cable in FTTH project. Used widely between Fact plate, terminal box, ONU tec. With easy accessibility to the fiber and simple installation, FTTH cable can be directly connected to the homes. It is suitable for connecting with communication equipment and used as access building cable in premises distribution system. The optical fibers are positioned in the center of cable and two parallel Fiber Reinforce Plastic (FRP) strength members are placed at the two sides. Then, the cable is completed with LSZH sheath. Also, customers can specify your required connectors.

Optical performance.

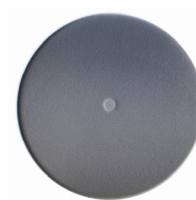
Test Item		Test Condition	Value(dB)	
			UPC	APC
Optical Performance	Insertion Loss	1310nm LED light source	<0.3	<0.3
	Return Loss	1310nm LED light source	>50	>60
Environmental Performance (Max. Insertion Loss change)	High temperature	+85°C168 hours	<0.2	
	Temperature Cycle	-40-+75°C, 21 Cycles 168 hours	<0.2	
	Humidity Aging	+75°C, 95%R.H,168 hours	<0.2	
	Humidity/Condensation Cycling	-10°C-+65°C, 90%~100%RH, 14 cycles 168 hours	<0.2	
Mechanical Performance (Max. Insertion Loss change)	Vibration	10-55Hz, 1.5mm(p-p)	<0.2	
	Flex	0.9kg,-90°~+90° repeat for 100 cycles	<0.2	
	Torsion	1.35kg,90°~+90° ,10times	<0.2	
	Withstand tensile	90N,10min	<0.2	
	Drop	H=1.5M,Total of 8 drops	<0.2	
	Exchangeability	Randomly	<0.2	
	Durability	500 times	<0.2	

End-face Quality (SM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	



SM APC

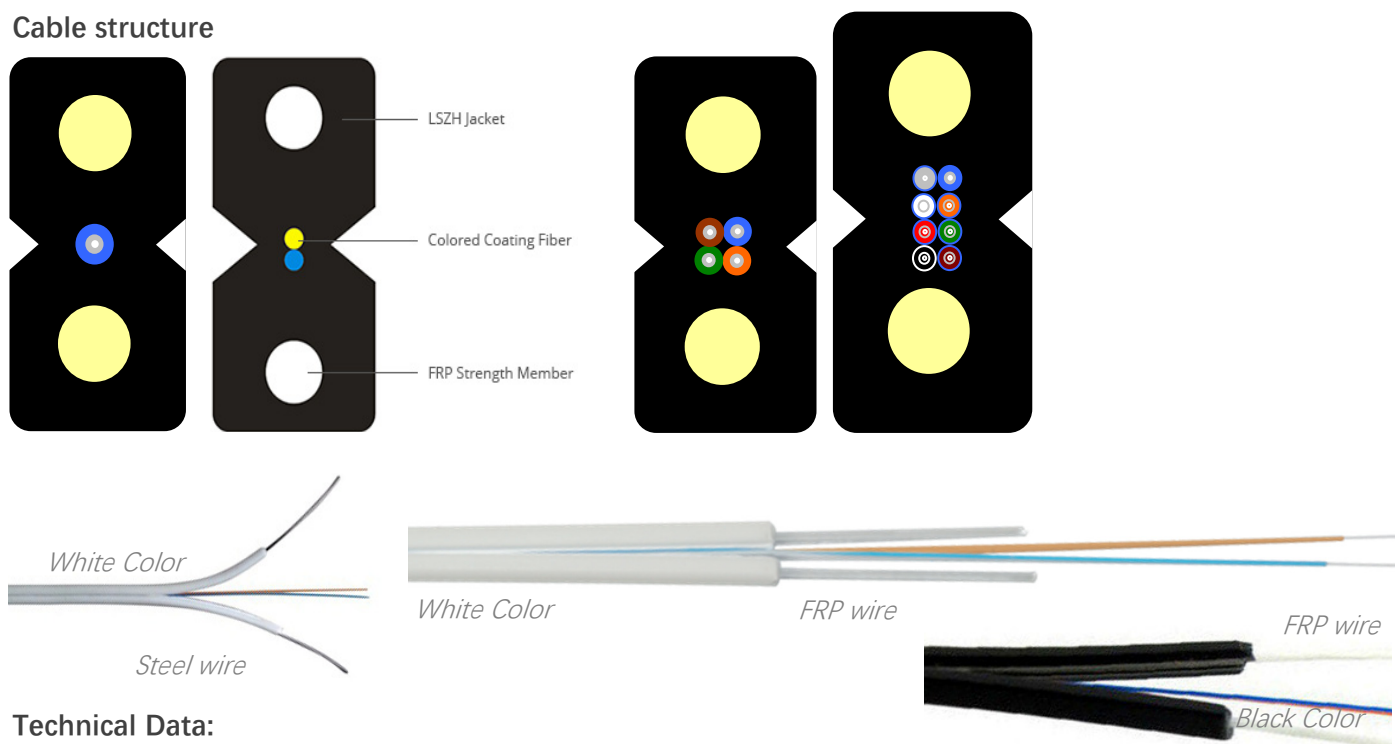


SM UPC

Product introduction

FTTH Indoor Drop Cable uses butterfly flat structure, whose optical fiber unit is positioned in the center. Two parallel Fiber Reinforced Plastic (FRP) or Steel wire strength members are placed at the two sides. Then, the cable is completed with LSZH sheath. FTTH indoor cable has a much greater bandwidth to carry data and less susceptible to interference than common indoor fiber cables. With small diameter, water-resistant, soft and bendable characteristics, it's easy to deploy and maintenance. In addition, the non-metallic strength member can provide lightning protection and anti-electromagnetic interference. FTTH cables are ideal for indoor cabling, end users directly cabling, and access network.

Cable structure



Technical Data:

Fiber Count	1F	2F/4F	6F-12F
Strength member	FRP/KFRP/ Solid Steel wire		
	0.45-0.52mm	0.45-0.52mm	0.45-0.52mm
Cable diameter(mm) Approx.	2.0(±0.1)*3.0(±0.2)	2.0(±0.1)*3.0(±0.2)	2.0(±0.1)*4.0(±0.2)
Cable weight(kg/km) Approx	7/10	7.5/10.5	8.5/11.5
Tensile Strength Short/ Long Term (N)	200/100 for steel wire strength member 80/40 for KFRP wire strength member		
Crush resistance short/long term (N/100mm)	1000/500		
Operating temperature range(°C)	-40°C ~+70°C		

Main Mechanical and Environmental Performances

Items	Test Standard	Specified Value	Requirements
Tension	IEC 60794-1-2-E1	See Technical data	Additional attenuation: ≤0.4dB after test
Crush	IEC 60794-1-2-E3	See Technical data	Additional attenuation: ≤0.4dB after test
Impact	IEC 60794-1-2-E4	R=300mm, 10Nm, one in 3 different places	Additional attenuation: ≤0.4dB after test
Repeated Bending	IEC 60794-1-2-E6	R=30H	Additional attenuation: ≤0.4dB after test
Temperature Cycling	IEC 60794-1-2-F1	-40°C ~+70°C	Attenuation change: ≤0.4dB/km after test



Fiber Specification

Item		Unit	Specification
Fiber Type			G. 657A1
Mode field diameter	1310nm	mm	8.6-9.5 ± 0.4
Cladding diameter		mm	125.0 ± 0.7
Cladding non-circularity		%	£1.0
Core/cladding concentricity error		mm	£0.5
Coating diameter		mm	245 ± 5
Coating/cladding concentricity error		mm	£12
Cable cut-off wavelength		nm	£ 1260
Attenuation Coefficient	1310nm	dB/km	£0.36
	1550nm	dB/km	£0.22
Macro-bend loss (1 turn, 10mm radius)	1550nm	dB/km	£0.75
	1625nm	dB/km	£1.5
Proof stress level		kpsi	≥100

Item		Unit	Specification
Fiber Type			G. 657A2
Mode field diameter	1310nm	mm	8.6-9.5 ± 0.4
Cladding diameter		mm	125.0 ± 0.7
Cladding non-circularity		%	£1.0
Core/cladding concentricity error		mm	£0.5
Coating diameter		mm	245 ± 5
Coating/cladding concentricity error		mm	£12
Cable cut-off wavelength		nm	£ 1260
Attenuation Coefficient	1310nm	dB/km	£0.36
	1550nm	dB/km	£0.22
Macro-bend loss (1 turn, 7.5mm radius)	1550nm	dB/km	£0.5
	1625nm	dB/km	£1.0
Proof stress level		kpsi	≥100

Note: Other parameters meet standard ITU-T G.657

Connector's Standard:

SC: TIA/EIA, FOCIS3, GR-326.NTT-SC IEC61754-4 and JIS C5973.

LC: TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.

High quality Ferrule



High quality SM Ceramic ferrule,
Good concentricity<0.5um



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Feature:

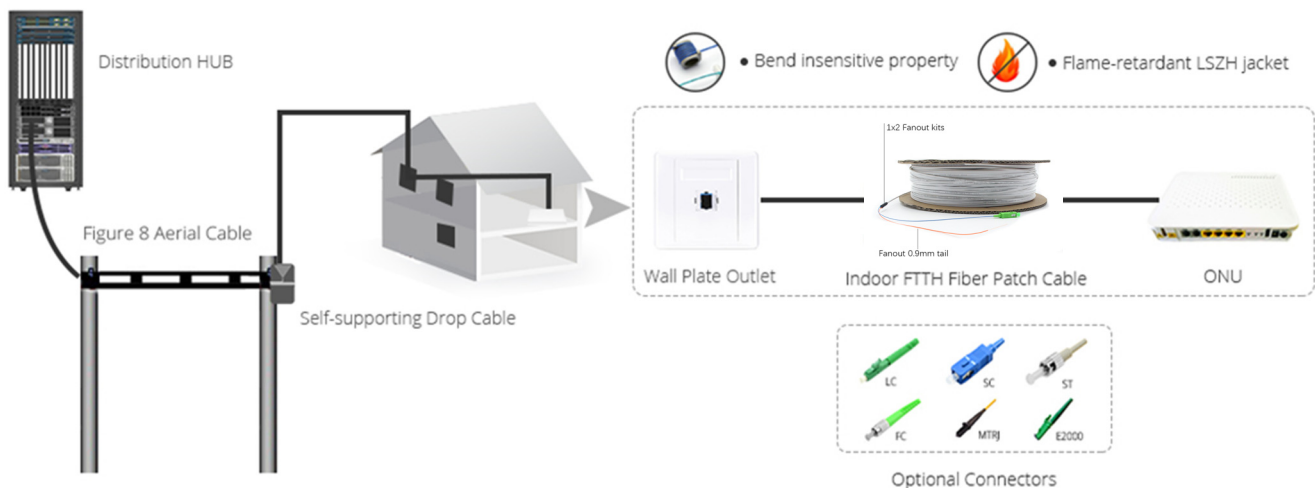
Good mechanical and environmental characteristic
 Simple structure, light weight and high practicability
 Low smoke zero halogen and flame retardant sheath
 Novel flute design, easily strip and splice, simple installation and maintenance
 Two parallel FRP strength members ensure good performance of anti-electromagnetic and crush resistance
 Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property

Application

Access Networks
 LAN (Local Area Network)
 Fiber Optic Communication System
 FTTH (Fiber to The Home) Indoor Building
 Optical fiber connected and transmitted equipment

Ideal Solution by FTTH Indoor Fiber Patch Cable

Butterfly Flat Indoor Drop Cable is widely used in fiber to the home (FTTH) network system, which can directly connect the communication line from the LAN to the end users. Butterfly flat drop cable uses special low-bend-sensitivity fiber to provide high bandwidth and excellent communication transmission, it's very suitable for indoor cabling, end users directly cabling, and access network.



Packaging

This easily taken and well-protected fiber patch cable package has been labelled and marked by OMC as de-fault .Standard carton size : 34*22*15 cm; 44*34*24 cm ; 54*39*34 cm . Which carton to be used depends on goods Qty . Packing can be customized.



1, Film wrap or Wooden/Paper drum



2, Paper Carton



3, fumig-free Pallet