

### Optical Fiber Drop Cable

#### Product Features

- High performance of bending insensitive.
- Suitable for the end of structure cabling.
- Easily strip of jacket to expose fiber core.
- Customized service fit various requirements from clients.

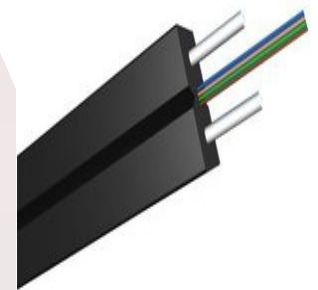
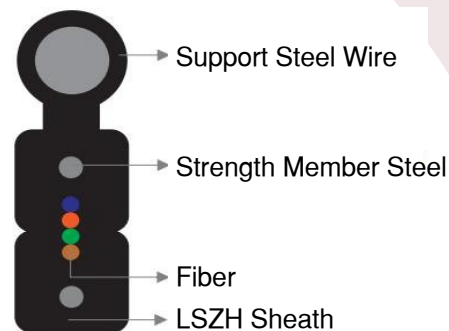
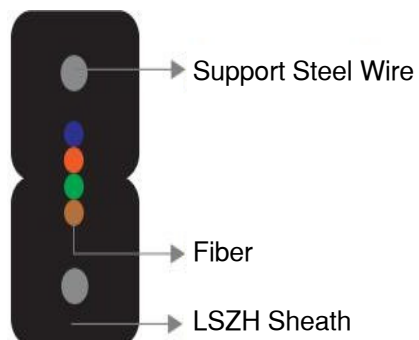
#### Applications

- FTTX, Underground use / Indoor use.
- Suitable for standard single ferrule mechanical connectors (LC, SC, ST, etc.).
- IEEE 802.3z 10GBase, 40GBase, 100GBase Ethernet and legacy speeds.
- FDDI / ATM

#### Applicable Standard

- ITU-T G.652.D / ITU-T G.657.A1, A2
- ITU-T G.651.OM2, OM3, OM4
- Telcordia GR-409-CORE
- UL 1651
- UL 1685, UL 1666, NFPA 262, IEC 60332-1-2, IEC 60332-3-24
- ANSI/ICEA S-83-596
- ANSI/TIA-568-C.3
- RoHS compliant (2011/65/EU)

#### Drawing



### Fiber Core Geometric Characteristics

Type	ITU-T G.652.D / G.657.A1 / G.657.A2	ITU-T G.651.OM2 / OM3 / OM4
Core Diameter	8.3 $\mu$ m	50.0 $\pm$ 2.5 $\mu$ m
Core Non-Circularity	N.A.	$\leq$ 5 %
Clad Diameter	125 $\pm$ 0.7 $\mu$ m	125 $\pm$ 1 $\mu$ m
Clad Non- Circularity	$\leq$ 0.7 %	$\leq$ 1 %
Core-Clad Concentricity Error	$\leq$ 0.5 $\mu$ m	$\leq$ 1.0 $\mu$ m
Coating Diameter	240 $\pm$ 5 $\mu$ m	245 $\pm$ 10 $\mu$ m
Coating Non- Circularity	$\leq$ 5 %	$\leq$ 5 %
Coating-Clad Concentricity Error	$\leq$ 12 $\mu$ m	$\leq$ 8 $\mu$ m
Fiber Curl	$\leq$ 4 m	$\leq$ 4 m

### Single Mode Fiber Core Optical Characteristics

Items	Values	Conditions
Attenuation	$\leq$ 0.4 dB/km	$\leq$ 1310 nm
	$\leq$ 0.3 dB/km	$\leq$ 1550 nm

Items	Conditions	G.652.D	G.657.A1	G.657.A2
Mode Field Diameter (MFD)	1310 nm	9.2 $\pm$ 0.4 $\mu$ m	8.9 $\pm$ 0.4 $\mu$ m	8.8 $\pm$ 0.4 $\mu$ m
	1550 nm	10.4 $\pm$ 0.5 $\mu$ m	9.9 $\pm$ 0.5 $\mu$ m	9.9 $\pm$ 0.5 $\mu$ m

Items	Conditions	G.652.D	G.657.A1	G.657.A2
Cut-off Wavelength	N.A.	$\leq$ 1260 nm	$\leq$ 1260 nm	$\leq$ 1260 nm

### Multi Mode Fiber Core Optical Characteristics

Items	Values	Conditions
Attenuation	$\leq$ 3.5 dB/km	850 nm
	$\leq$ 1.0 dB/km	1300 nm

Items	Conditions	OM2	OM3	OM4
Overfilled Launch Bandwidth (OFL)	850 nm	$\geq$ 500MHz-km	$\geq$ 1500MHz-km	$\geq$ 3500MHz-km
	1300 nm	$\geq$ 500MHz-km	$\geq$ 500MHz-km	$\geq$ 500MHz-km

Items	Conditions	OM2	OM3	OM4
Effective Modal Bandwidth (EMB)	850 nm	N.A.	$\geq$ 2000MHz-km	$\geq$ 4700MHz-km
	1300 nm	N.A.	$\geq$ 500MHz-km	$\geq$ 500MHz-km

1 Gb Ethernet Transmission Distance	850 nm	700 m	1000 m	1040 m
	1310 nm	600 m	600 m	600 m

10 Gb Ethernet Transmission Distance	850 nm	150 m	300 m	550 m
	1310 nm	N.A.	300 m	300 m

40 Gb Ethernet Transmission Distance	850 nm	N.A.	100 m	150 m
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100 Gb Ethernet Transmission Distance	850 nm	N.A.	100 m	150 m
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### Fiber Core Mechanical Characteristics

Tensile Proof Test	100 kpsi (0.69 GPa)
Coating Strip Force	Š 2.7 N
Dynamic Fatigue Stress Corrosion Parameter (nd)	Š 18

### Product Construction

Fiber Core Count	2	4
Fiber Core Color	Refer to fiber color code table	
FRP Strength Members	E-Glass FRP 0.4 mm Tensile Strength 140Kg/mm <sup>2</sup>	
Jacket Diameter	2.0 x 3.1 mm	
Jacket Thickness	0.4~0.8 mm	
Jacket Material // Flame Retardant // Cable Weight	PVC // OFN // 8.66 kg/km FRPVC // OFNR // 8.76 kg/km FRLSPVC // OFNP // 9.63 kg/km LSZH // IEC332-1-2 // 8.93 kg/km LSFRZH // IEC332-3-24 // 7.74 kg/km	PVC // OFN // 8.68 kg/km FRPVC // OFNR // 8.79 kg/km FRLSPVC // OFNP // 9.64 kg/km LSZH // IEC332-1-2 // 8.95 kg/km LSFRZH // IEC332-3-24 // 7.77 kg/km
Jacket Color	Black / Ivory	
Tensile Loading (Short Term)	100 N	
Tensile Loading (Long Term)	50 N	
Crush Load (Short Term)	2000 N/100mm	
Crush Load (Long Term)	1000 N/100mm	
Bend Radius (Short Term)	20 Times of Cable Diameter	
Bend Radius (Long Term)	10 Times of Cable Diameter	

### Product Reliability Characteristics

Items	Values	Conditions
Tensile Strength (TIA/EIA-455-33A)	SM Š 0.2 dB MM Š 0.3 dB	Length: 150 m Load: 9.5 kgf Period: 10 min.
Crush Test (TIA/EIA-455-41A)	SM Š 0.2 dB MM Š 0.3 dB	Length: Š 100 mm Velocity: 2.54 mm/min. Load: 2.0 kgf/mm Period: 10 min.
Repeated Bending (TIA/EIA-455-104A)	SM Š 0.2 dB MM Š 0.3 dB	Load: 1.5 Kgf Degreed: ± 90° Rate: 30 ± 1 times/min Times: 25
Impact Test (TIA/EIA-455-25B)	SM Š 0.2 dB MM Š 0.3 dB	Load: 2.0 kgf Distance: 150mm Rate: 30 ± 1 times/min Times: 20
Torsion Test (TIA/EIA-455-85A)	SM Š 0.2 dB MM Š 0.3 dB	Length: 1 m Degreed : ±180° Times: 10 Period: 10 min

### Fiber Color Code

Code	1	2	3	4							
Color	Blue	Orange	Green	Brown							

### Product Environmental Condition

Storage/Shipping	-20°C to +75°C
Installation	0°C to +60°C
Operation	-10°C to +70°C

### Package

Condition	Dimension	Length
Plywood Reel	300x180x250x230 mm	1000 Meter
	400x220x270x250 mm	2000 Meter
Pallet	1150x1150x15 mm	--

### Product Part number

FC-OS2-04-DRPI-3 – Optical Fiber Single mode 4-core Plastic), and LSZH (Low Smoke Zero Halogen) Jacket

drop cable, FRP (Fiberglass Reinforced

FC-OS2-04-DRPO-3—Optical Fiber Single mode 4-core d Plastic), and LSZH (Low Smoke Zero Halogen) Jacket

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