

DATASHEET

# Indoor Soft FO Cable

Small Size cable for FO cabling solution

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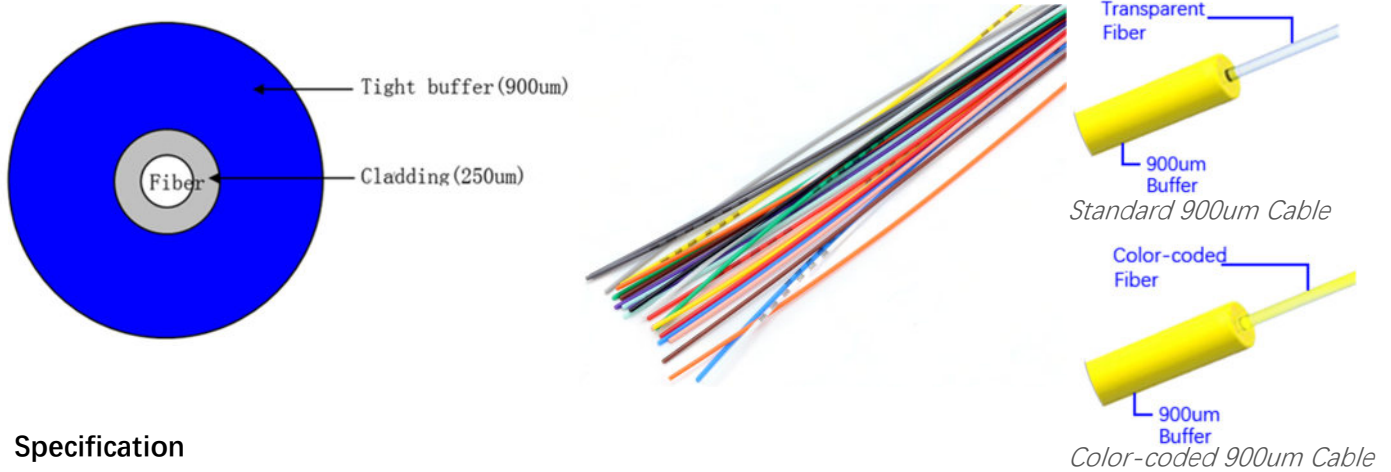


# Indoor Soft FO Cable–Simplex 900um cable

## Product introduction

Buffered fiber is produced as the fiber is sheathed by buffer material. The selection of Top-quality fiber, specific production equipment and accurately designed die make the best performance of product.

## Cable structure



## Specification

Fiber Type	G652D,G655,G656,G657,OM1,OM2,OM3,OM4
Buffered type	<b>Tight buffer, Semi-tight buffer, Loose buffer</b>
Coat Material	PVC, OFNR,OFNP,LSZH,LSOH,NYLON
OD(um)	600,900
Min Bending Radius	Dynamic 20D; Static 10D(except G657)
Coating color	12 colors available, <b>Both 250um and 900um same colored</b>
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C

## Application

Used in pigtails and patch cords

Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

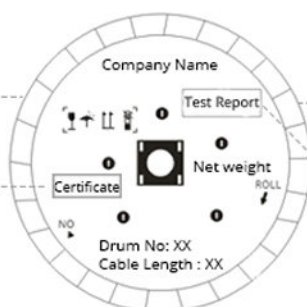
### Package with Roll



Fumigation Certificate

### Warm Tips:

- Cable in stock, ship same day.
- 1-5 KM/roll for standard package.
- Other length is also available without MOQ.



Test Report

### Package with Carton



# Indoor Soft FO Cable –Simplex 1.2-2.8mm cable

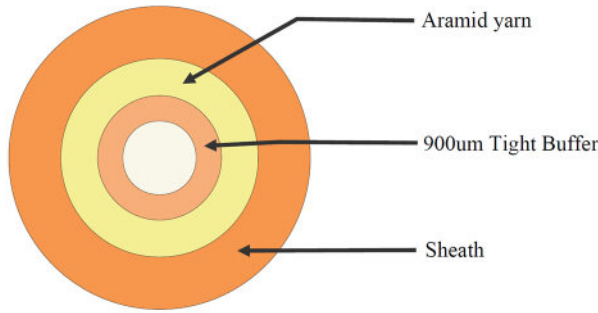
## Product introduction

Simplex cable use 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4				
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH				
OD Optional(mm)	1.6	1.8	2.0	2.4	2.8/3.0
Max Tension (Long term/ Short term N)	40/80	40/80	60/100	60/100	100/150
Max Crushing Resistance(N/100) (Long term/ Short term N)	50/200	50/200	100/500	100/500	100/500
Min Bending Radius(mm)	Dynamic 20D/Static 10D (except G657)				
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C				

## Characteristics

- Tight buffer and Loose buffer fiber easy for stripping
- Excellent flame-retardant performance
- Aramid yarn as strength member make cable have excellent tensile strength
- Adopt strict process and raw materials control to guarantee the lifespan of 15 years
- The jacket anti-corrosion, anti-water ,anti-ultraviolet radiation, flame-retardant and harmless to environment

## Application

- Used in pigtails and patch cords
- Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

Package with Roll

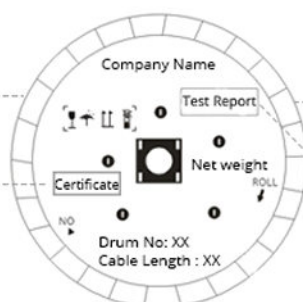
Package with Carton

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for satandard package.
- Other length is also available without MOQ.



Fumigation Certificate



Test Report



# Indoor Soft FO Cable –Zipcord Duplex 1.2-2.8mm cable

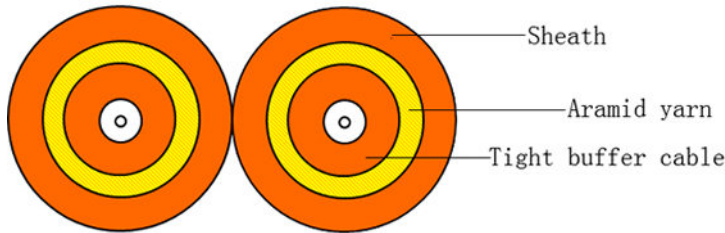
## Product introduction

Zipcord Duplex cable use 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4				
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH				
OD Optional(mm)	1.6x3.3	1.8x3.7	2.0x4.1	2.4x4.9	2.8x5.7
Max Tension (Long term/ Short term N)	80/160	80/160	100/200	100/200	160/300
Max Crushing Resistance(N/100) (Long term/ Short term N)	100/500	100/500	100/500	200/1000	200/1000
Min Bending Radius(mm)	Dynamic 20D/Static 10D (except G657)				
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C				

## Characteristics

Tight buffer and Loose buffer fiber easy for stripping  
 Excellent flame-retardant performance  
 Aramid yarn as strength member make cable have excellent tensile strength  
 Adopt strict process and raw materials control to guarantee the lifespan of 15 years  
 The jacket anti-corrosion, anti-water ,anti-ultraviolet radiation, flame-retardant and harmless to environment

## Application

Used in pigtails and patch cords  
 Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

Package with Roll

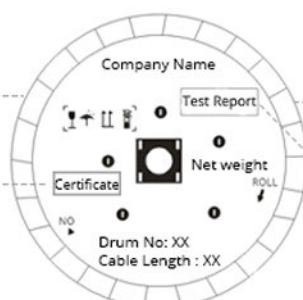
Package with Carton

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for standard package.
- Other length is also available without MOQ.



Fumigation Certificate



Test Report



# Indoor Soft FO Cable –Flat Twin Duplex cable

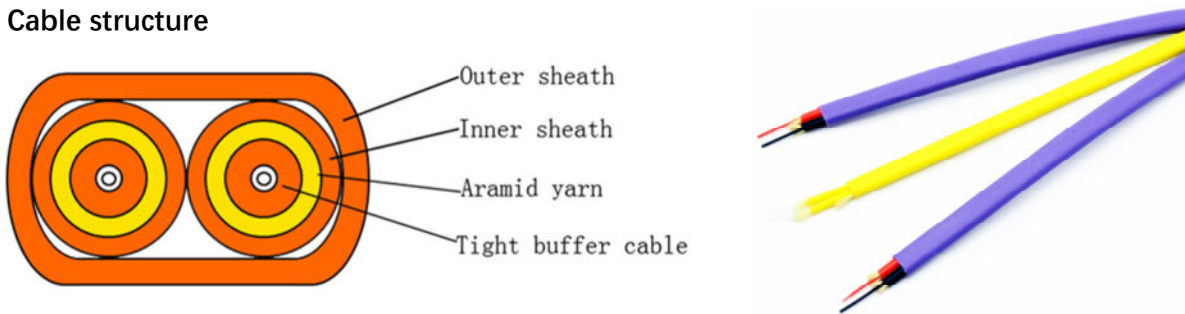
## Product introduction

Flat Twin Duplex cable use 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4		
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH		
OD Optional(mm)	3.2x5.2 (2.0mm unit cable)	3.6x6.0 (2.4mm unit cable)	4.0x7.0 (2.8mm unit cable)
Max Tension (Long term/ Short term N)	160/300	160/300	160/300
Max Crushing Resistance(N/100) (Long term/ Short term N)	100/500	200/1000	200/1000
Min Bending Radius(mm)	Dynamic 20D/Static 10D (except G657)		
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C		

## Characteristics

Tight buffer and Loose buffer fiber easy for stripping  
 Excellent flame-retardant performance  
 Aramid yarn as strength member make cable have excellent tensile strength  
 Adopt strict process and raw materials control to guarantee the lifespan of 15 years  
 The jacket anti-corrosion, anti-water ,anti-ultraviolet radiation, flame-retardant and harmless to environment

## Application

Used in pigtails and patch cords  
 Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

Package with Roll

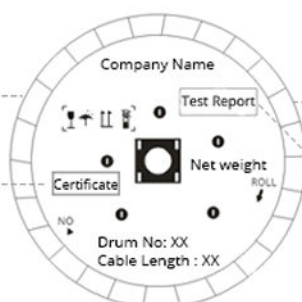
Package with Carton

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for satandard package.
- Other length is also available without MOQ.



Fumigation Certificate



Test Report



# Indoor Soft FO Cable –Uni-tube Duplex cable

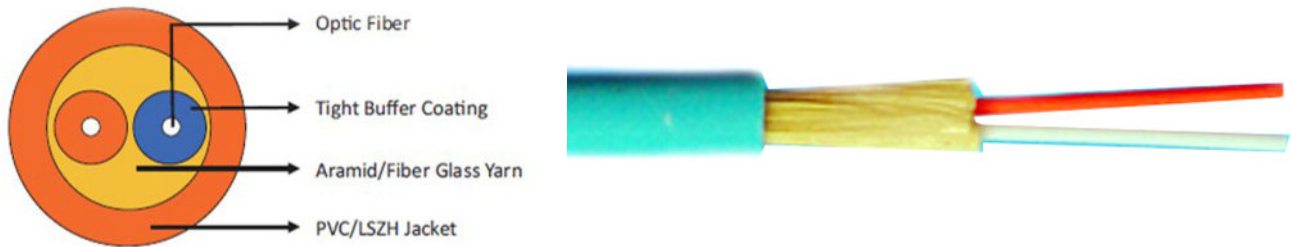
## Product introduction

Uni-tube Duplex cable use 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4	
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH	
OD Optional(mm)	3.0	4.1
Max Tension (Long term/ Short term N)	60/100	100/150
Max Crushing Resistance(N/100) (Long term/ Short term N)	100/500	100/500
Min Bending Radius(mm)	Dynamic 20D/Static 10D (except G657)	
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C	

## Characteristics

Tight buffer and Loose buffer fiber easy for stripping  
 Excellent flame-retardant performance  
 Aramid yarn as strength member make cable have excellent tensile strength  
 Adopt strict process and raw materials control to guarantee the lifespan of 15 years  
 The jacket anti-corrosion, anti-water ,anti-ultraviolet radiation, flame-retardant and harmless to environment

## Application

Used in pigtails and patch cords  
 Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

Package with Roll

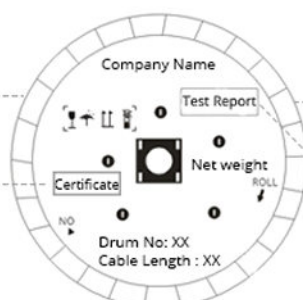
Package with Carton

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for satandard package.
- Other length is also available without MOQ.



Fumigation Certificate



Test Report



# Indoor Soft FO Cable –Flat Ribbon Fiber cable (4-12 fibers)

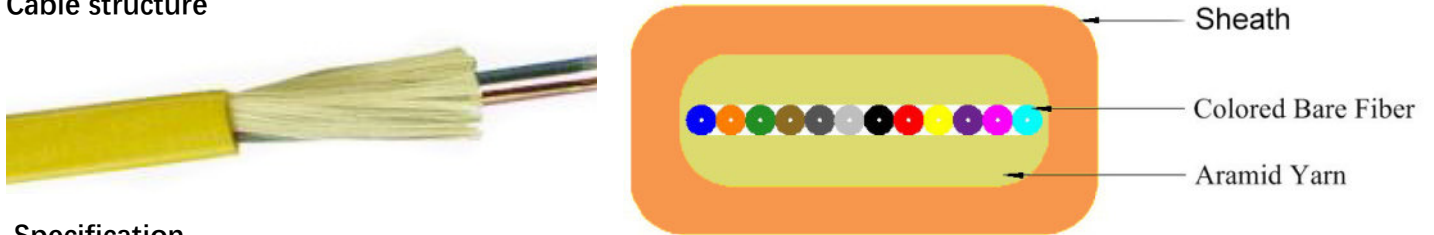
## Product introduction

Ribbon fiber flat cable use fiber ribbon as optical communication medium, the fiber ribbon wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a flat PVC or LSZH or OFNR or OFNP jacket. Ribbon cables are designed for horizontal intrabuilding backbones where limited-smoke and zero-halogen requirements exist, especially used in optical communication equipment rooms and optical distribution frames, optical apparatus and equipment.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G657A1,G657A2,OM1,OM2,OM3,OM4			
Fiber count	4	6	8	12
OD(D*H(mm)±0.3mm)	3.5*2.5	3.8*2.5	4.5*2.5	5.0*2.5
Max. tensile Strength (N)	Short-term		150	
	Long-term		80	
Min. Bending Radius (mm)	Dynamic		60	
	Static		30	
Min/Max.Crush Resistance (N/100mm <sup>2</sup> )	200/1000			
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C			

## Characteristics

- Tight buffer and Loose buffer fiber easy for stripping
- Excellent flame-retardant performance
- Aramid yarn as strength member make cable have excellent tensile strength
- Adopt strict process and raw materials control to guarantee the lifespan of 15 years
- The jacket anti-corrosion, anti-water ,anti-ultraviolet radiation, flame-retardant and harmless to environment

## Application

- Used in pigtails and patch cords
- Used as interconnect lines of equipment and used in optical connections in optical communication rooms and optical distribution frames

## Package

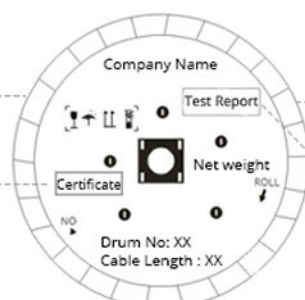
Package with Roll



Fumigation Certificate

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for satandard package.
- Other length is also available without MOQ.



Test Report

Package with Carton



# Indoor Soft FO Cable –900um Bunch fanout Uni-tube design (4-48F)

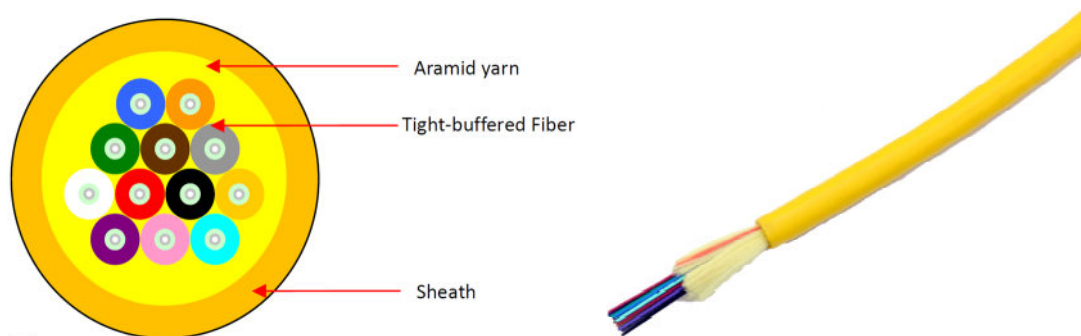
## Product introduction

900um Bunch fanout Uni-tube design FO cable(4-48 fibers) cable use several 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units. The cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4							
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH							
Fiber cores No.	4	6	8	12	16	24	48	
OD (mm)	4.8±0.2	5.2±0.2	5.6±0.2	6.3±0.2	7.4±0.4	8.2±0.4	10.5±0.5	
Max Tensile Strength (N)	Short term	270	330	480	600	660	720	1200
	Long term	90	110	160	200	220	240	520
Min Bending Radius (mm)	Dynamic	20D	20D	20D	20D	20D	20D	20D
	Static	10D	10D	10D	10D	10D	10D	10D
Max crush resistance (N/100mm)	1000							
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C							
Tight buffer Color Code	1,blue 2,orange 3,green 4, brown 5, grey 6,white 7,red 8,black 9,yellow 10,Violet 11,pink 12,Aqua 13,blue+circle 14, orange+circle 15,green+circle, 16,brown+circle, 17,grey+circle, 18,white+circle 19,red+circle, 20,black+circle, 21 yellow+circle, 22 Violet+circle, 23,pink+circle , 24, Aqua+circle.....							

## Characteristics

- Select quality fiber to ensure excellent transmission performance
- Adopt strict process and raw materials control to guarantee the lifespan of 15 years
- Compact structure, flexible, small bending radius, excellent stress, strain properties
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment
- All dielectric structure design, without electromagnetic induction effect

## Package

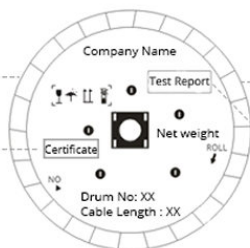
Package with Roll



Fumigation Certificate

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for standard package.
- Other length is also available without MOQ.



Test Report

Package with Carton





# Indoor Soft FO Cable –900um Bunch fanout Multi-tube design (24-144fibers)

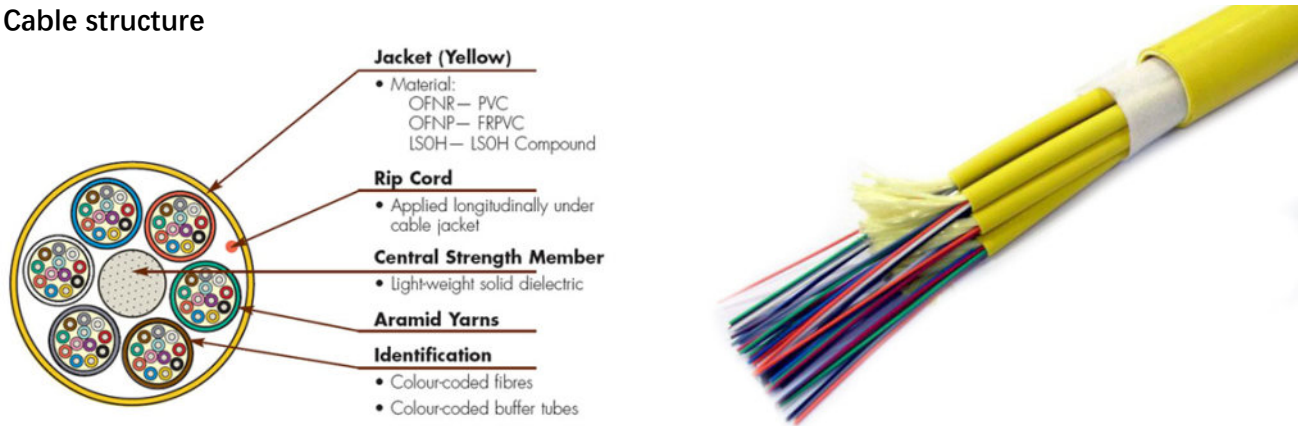
## Product introduction

900um Bunch fanout Multi-tube design FO cable(24-144fibers) cable use several 900um flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units. The cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



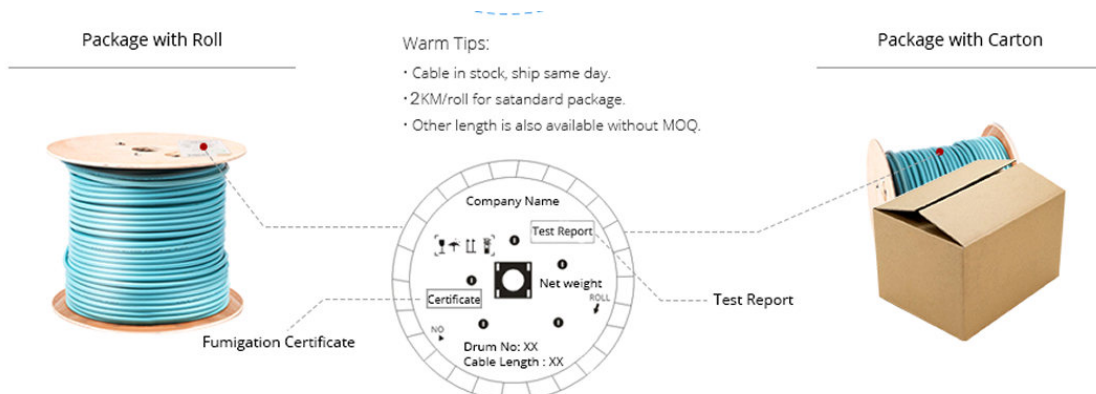
## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4								
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH								
Fiber cores No.	24	36	48	48	72	96	108	144	
Cable Unit	4	6	4	6	6	8	12	12	
OD (mm)	15.5±0.8	18.8±0.8	17±0.8	20±0.8	21±0.8	25.5±0.8	26.2±0.8	28.2±0.8	
Max Tensile Strength (N)	Short term	1000	1200	1750	2000	2500	3000	3000	4000
	Long term	400	480	700	800	1000	1200	1200	1600
Min Crushing Resistance(mm)	Short term	1000	1000	1000	1000	1000	1000	1000	1000
	Long term	300	300	300	300	300	300	300	300
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C								

## Characteristics

Select quality fiber to ensure excellent transmission performance  
 Adopt strict process and raw materials control to guarantee the lifespan of 15 years  
 Compact structure, flexible, small bending radius, excellent stress, strain properties  
 The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment  
 All dielectric structure design, without electromagnetic induction effect

## Package



# Indoor Soft FO Cable –2.0mm Break-out Uni-tube design (4-48 fibers)

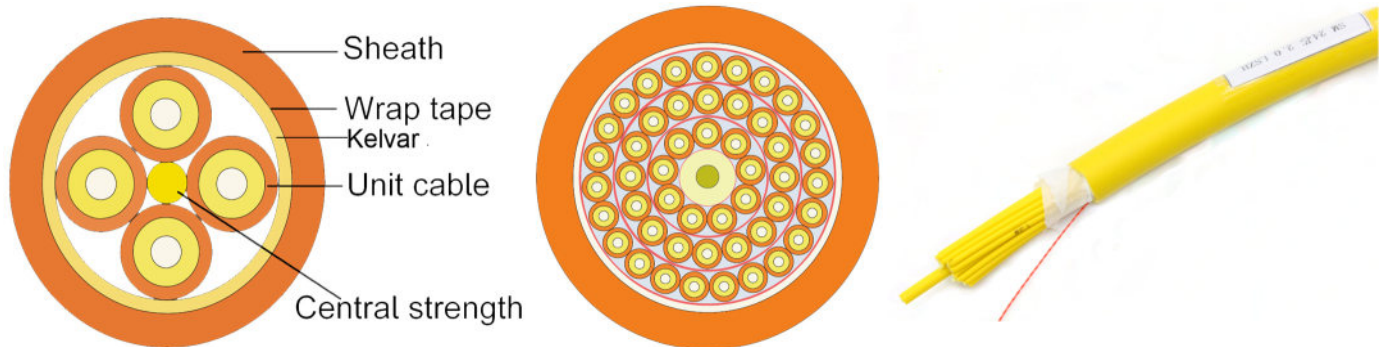
## Product introduction

Break-out cable use Simplex cable (2.0mm flame-retardant tight buffer fiber, Aramid yarn as strength member) as sub-unit. A fiber reinforced plastic (FRP) locates in the center of core as a no-metallic as strength member. The subunits are stranded around the cable core. The cable is completed with a PVC or LSZH or OFNR or OFNP jacket.

## Standards

Comply with standard GR-409, IEC 60794-2-10/11, meet the requirements of UL approval for OFNR and OFNP.

## Cable structure



## Specification

Fiber Type	G652D,G655,G657,OM1,OM2,OM3,OM4						
Coating Material	PVC, OFNR,OFNP,LSZH,LSOH						
Fiber cores No.	2/4	6	8	12	24	48	
OD (mm)	7.5±0.5	9.0±0.5	10.5±0.5	12.5±0.5	15.5±0.5	20.5±0.5	
Max Tensile Strength (N)	Short term	660	700	800	1200	1400	1800
	Long term	200	200	250	400	500	600
Min Bending Radius(mm)	Dynamic :20D/ Static: 10D						
Max crush resistance (N/100mm)	Short term :1000/ Long term:300						
Temperature range	PVC: -20°C ~+90°C ; LSZH: -20°C ~+70°C						

## Characteristics

Stranded non-metallic strength member structure ensure the cable endure large tensile strength

Select quality fiber to ensure excellent transmission performance

Adopt strict process and raw materials control to guarantee the lifespan of 15 years

The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment

## Package

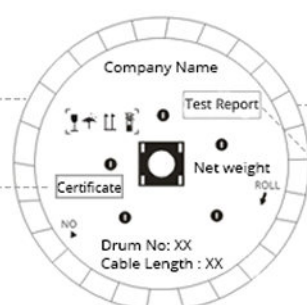
Package with Roll



Fumigation Certificate

Warm Tips:

- Cable in stock, ship same day.
- 2KM/roll for satandard package.
- Other length is also available without MOQ.



Test Report

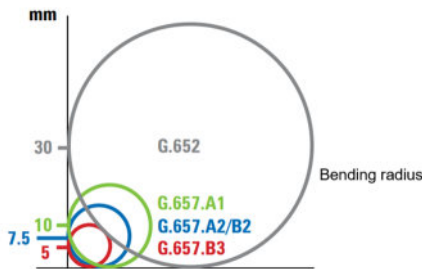
Package with Carton



# Indoor Soft FO Cable

## Optical fiber technical parameters-SMF

Item	Unit	Specification
Attenuation	dB/km	1310nm ≤ 0.4 ; 1550nm ≤ 0.3
Dispersion	Ps/nm. km	1285~1330nm ≤ 3.5, 1550nm ≤ 18.0
Zero dispersion wavelength	Nm	1300~1324
Zero dispersion slope	Ps/nm. km	≤ 0.095
Fiber cutoff wavelength	Nm	≤ 1260
Mode field diameter	Um	9.2±0.5
Mode field concentricity	Um	≤ 0.8
Cladding diameter	um	125±1.0
Cladding non-circularity	%	≤ 1.0
Coating/cladding concentricity error	Um	≤ 12.5
Coating diameter	um	245±10
Bending, dependence induced attenuation	1550nm, 1turns,32mm diameter 100rums,60mm diameter	≤ 0.5 dB
Proof test	kpsi	≥ 100



ITU recommendation G.657 specifies two classes of single-mode bend insensitive fiber patch cables: G.657 A and G.657 B. Each category (A and B) is then divided into two sub-categories: G.657.A1, G.657.A2 and G.657.B1, G.657.B2. The minimum bend radius of G.657.A1 fibers is 10 mm, of the G.657.A2 and G.657.B1 fibers is 7.5 mm and of the G.657.B2 fibers is 5 mm. Among, ITU-T G.657.A1 and ITU-T G.657.A2 fibers are fully compliant with ITU-T G.652.D fibers.

## Optical fiber technical parameters-MMF

Item	Unit	Specification	
Attenuation	dB/km	850nm ≤ 3.5	
Bandwidth	MHz*km	50/125μm	62.5/125μm
		850nm ≥ 200	850nm ≥ 160
		1300nm ≥ 200	1300nm ≥ 200
Step	dB	≤ 0.1	
Irregularities over fiber length and point discontinuity	dB	≤ 0.1	
Difference backscatter coefficient	dB/km	50/125μm	62.5/125μm
		≤ 0.08	≤ 0.1
Cladding diameter	um	125±1.0	
Cladding non-circularity	%	≤ 1.0	
Coating/cladding concentricity error	Um	≤ 12.5	
Coating diameter	um	245±10	
Bending, dependence induced attenuation	850nm, 1300nm 100 turns,75mm diameter	≤ 0.5 dB	
Proof test	kpsi	≥ 100	

# Indoor Soft FO Cable

## Technical Data-Transmission

Fiber type	Attenuation				OFL bandwidth	Effective modal bandwidth	10 Gigabit Ethernet SX	Min bend radius
	1310/1550nm		850/1300nm					
Conditions	Typical	Maximum	Typical	Maximum	850/1300nm	850nm	850nm	/
Unit	dB/km	dB/km	dB/km	dB/km	MHZ.km	MHZ.km	m	mm
G652D	0.36/0.22	0.5/0.4	---	---	---	---	---	16
G657A1	0.36/0.22	0.5/0.4	---	---	---	---	---	10
G657A2	0.36/0.22	0.5/0.4	---	---	---	---	---	7.5
50/125	---	---	3.0/1.0	3.5/1.5	≥500/500	---	---	30
62.5/125	---	---	3.0/1.0	3.5/1.5	≥200/500	---	---	30
OM3	---	---	3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	30
OM4	---	---	3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	30
BIF-OM3	---	---	3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	7.5
BIF-OM4	---	---	3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	7.5