

### **Cytech Technology**

Transforming Connectivity with Cutting-Edge Fiber Optic Solutions



30 Years of Experience

400+ R&D Experts

5.5M

Fiber KM Annual Output

Cytech fiber was set up in line with the development of information in the 21st century and based on modern Enterprise mechanism. Since the establishment in 1993, as a professional manufacture of optical fiber cables standing at the far front of the optical communication field. We are dedicated to the research and development of latest optical fiber cable technology ,with the first -class technologies ,excellent talents and world-advanced production testing equipment imported from Austria ,the

Cytech has provided for the market with some major series of central tube fiber optical cables, loose tubes stranded optical cables, optical fiber ribbon cables. ADSS (All Dielectric self-supporting ) cables, Figure 8 shape optical cables and special custom-made cables, with an annual output up to 5.5 million fiber kilometers.

100+
Countries and Regions









Cytech has obtained certificate of ISO9001:2000 in 2001 and our optical fiber cable has acquired network access licenses of the ministry of information industry.PRC. the General Office of Broadcasting &Television,the General Staff of China National defense. Our products are widely applied in national trunk and major provincial and municipal project such as China mobile,china unicom ,china electric power communication,railway and national defense.

We focus on providing a comprehensive and systematic solution for domestic and foreign telecommunication operations, electric power and broadcasting. Products are widely used, involving communication, electrical and electronic control equipment, communication base stations, computer rooms, and so on. The performance of the product is stable and reliable. Business covers China, US Market ,Asia, Middle East, Europe and Africa.

With "integrity, principle and innovation" as the spirit of enterprise, ytech Cooperate with each other and advance to each other. It won the customer's lasting praise with a perfect working process and considerate after-sale service.





### CONTENTS

01 / FTTH Drop Cable	
FTTH indoor optical fiber cable GJXH	07
FTTH indoor optical fiber cable GJXFH	- 08
FTTH indoor optical fiber cable GJYXCH	
FTTH indoor optical fiber cable GJYXFCH	10
FTTH indoor optical fiber cable GJYXHA	- 11
02 / Indoor Fiber Cable	
Indoor optical fiber cable GJFJZH	
Indoor optical fiber cable GJBFJV	
Indoor optical fiber cable GJPFJV	- 15
03 / Outdoor Fiber Cable	
All dielectric self-supporting optical cable ADSS-I	- 17
All dielectric self-supporting optical cable ADSS-II	- 18
All dielectric self-supporting optical cable ASU	19
Fig-8 self-support aerial optical fiber cable GYXTC8Y	- 20
Fig-8 self-support aerial optical fiber cable GYTC8Y	- 21
Fig-8 self-support aerial optical fiber cable GYTC8S	22
<ul> <li>Central gel-filled loose tube metallic strength member armored cable GYXTW</li> </ul>	23
Pipeline and non-self-supporting aerial optical cable GYFXTY	24
Pipeline and non-self-supporting aerial optical cable GYFTY	25
Pipeline and non-self-supporting aerial optical cable GYTA	26
Pipeline and non-self-supporting aerial optical cable GYTS	27
Armored direct buried optical cable GYTA53	28
Armored direct buried、underwater optical cable GYTA33	29
04 / Coal Mine Flame Retardant Fiber Cable	
Coal mines communication optical cable MGTSV	31
05 / Electric Fiber Cable	
Optical fiber composite overhead ground wire OPGW(Central tube type)	33
Optical fiber composite overhead ground wire OPGW(layer stranded)	35
44, 44, 44, 44, 44, 44, 44, 44, 44, 44,	

# 01

# FTTH DROP CABLE

- FTTH indoor optical fiber cable GJXH
- FTTH indoor optical fiber cable GJXFH
- FTTH indoor optical fiber cable GJYXCH
- FTTH indoor optical fiber cable GJYXFCH
- FTTH indoor optical fiber cable GJYXHA

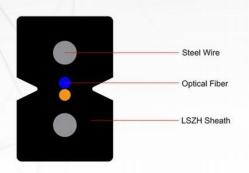


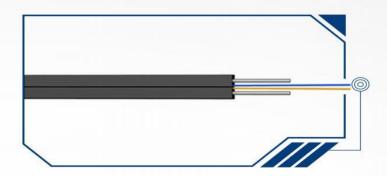


### FTTH Drop Cable FTTH indoor optical fiber cable GJXH

#### **Product Introduction**

The GJXH optic fiber unit is positioned in the center. Two parallel steel wire are placed at the two sides, then the cable is completed with a black or color LSZH sheath.





#### **Product Feature**

- 1. Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- 2.Two parallel steel wire strength members ensure good performance of crush resistance to protect the fiber;
- 3. Simple structure, light weight and high practicability;
- 4. Novel flute design, easily strip and splice, simplify the installation and maintenance;
- 5.Low smoke, zero halogen and flame retardant sheath;

#### **Product Performance**

- Applications
  - Access network, fiber to the home(FTTH);
- Laying method

Indoor integrated wiring;

- Working temperature
  - -20°C~+60°C;
- Bend Radius

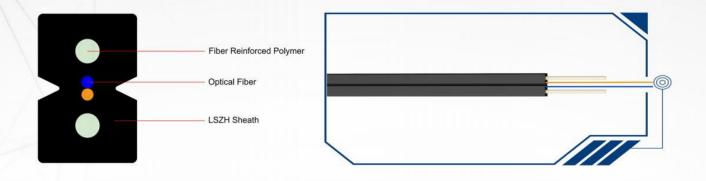
Static 20mm; Dynamic: 40mm.

Fiber	Cable size	Cable Weight	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
count W*H(mm)	(KG/KM)	Short Term	Long Term	Short Term	Long Term	
1	2.0*3.0	10	≥120	≥60	≥2200	≥1000
2	2.0*3.0	10	≥120	≥60	≥2200	≥1000
4	2.0*3.0	10	≥120	≥60	≥2200	≥1000

#### **FTTH Drop Cable** FTTH indoor optical fiber cable GJXFH

#### **Product Introduction**

The GJXFH optic fiber unit is positioned in the center. Two parallel Fiber Reinforced Plastics(FRP) are placed at the two sides, then the cable is completed with a black or color LSZH sheath.



#### **Product Feature**

- 1. Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- 2.Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber;
- 3. Simple structure, light weight and high practicability;
- 4. Novel flute design, easily strip and splice, simplify the installation and maintenance;
- 5.Low smoke, zero halogen and flame retardant sheath;

#### **Product Performance**

- Applications Access network, fiber to the home(FTTH);
- Laying method Indoor integrated wiring;

- Working temperature -20°C~+60°C;
- Bend Radius Static 20mm; Dynamic: 40mm.

	Fiber		Cable Weight	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
	count W*H(mm)	(KG/KM)	Short Term	Long Term	Short Term	Long Term	
j	1	2.0*3.0	9	≥80	≥40	≥1000	≥500
	2	2.0*3.0	9	≥80	≥40	≥1000	≥500
	4	2.0*3.0	9	≥80	≥40	≥1000	≥500

#### **FTTH Drop Cable** FTTH indoor optical fiber cable GJYXCH

#### **Product Introduction**

The GJYXCH optic fiber unit is positioned in the center. Two parallel steel wire are placed at the two sides, place a steel wire reinforcement on the outside. then the cable is completed with a black or color LSZH sheath.





#### **Product Feature**

- 1. Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- 2.Two parallel steel wire strength members ensure good performance of crush resistance to protect the fiber;
- 3. Simple structure, light weight and high practicability;
- 4. Novel flute design, easily strip and splice, simplify the installation and maintenance;
- 5.Low smoke, zero halogen and flame retardant sheath;

#### **Product Performance**

- Applications Access network, fiber to the home(FTTH);
- Laying method Indoor integrated wiring;

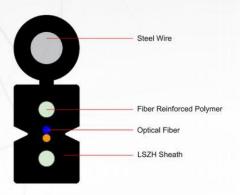
- Working temperature -20°C~+60°C;
- Bend Radius Static 20mm; Dynamic: 40mm.

	Fiber	Cable size	Cable Weight	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
ı	count	W*H(mm)	(KG/KM)	Short Term	Long Term	Short Term	Long Term
	1	2.0*5.0	20	≥600	≥300	≥2200	≥1000
	2	2.0*5.0	20	≥600	≥300	≥2200	≥1000
	4	2.0*5.0	20	≥600	≥300	≥2200	≥1000

### FTTH Drop Cable FTTH indoor optical fiber cable GJYXFCH

#### **Product Introduction**

The GJYXFCH optic fiber unit is positioned in the center. Two parallel Fiber Reinforced Plastics(FRP) are placed at the two sides, place a steel wire reinforcement on the outside. then the cable is completed with a black or color LSZH sheath.





#### **Product Feature**

- 1. Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- 2.Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber:
- 3. Simple structure, light weight and high practicability;
- 4. Novel flute design, easily strip and splice, simplify the installation and maintenance;
- 5.Low smoke, zero halogen and flame retardant sheath;

#### **Product Performance**

- Applications
   Access network, fiber to the home(FTTH);
- Laying method
   Indoor integrated wiring;

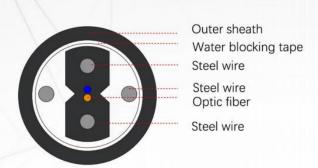
- Working temperature
   -20°C~+60°C;
- Bend Radius
   Static 20mm; Dynamic: 40mm.

	Fiber	Cable size	Cable Weight	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
	count W*H(mm)	(KG/KM)	Short Term	Long Term	Short Term	Long Term	
	1	2.0*5.0	19	≥600	≥300	≥2200	≥1000
	2	2.0*5.0	19	≥600	≥300	≥2200	≥1000
	4	2.0*5.0	19	≥600	≥300	≥2200	≥1000

### FTTH Drop Cable FTTH indoor optical fiber cable GJYXHA

#### **Product Introduction**

The GJYXFCH optic fiber unit is positioned in the center. Two parallel Steel wire are placed at the two sides, then the cable is completed with a black or color LSZH sheath, Then add two more steel wires and wrap them with a layer of polyethylene outer sheath.





#### **Product Feature**

- 1. Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- 2.Strong strength members ensure good performance of crush resistance to protect the fiber;
- 3. Simple structure, light weight and high practicability;
- 4. Novel flute design, easily strip and splice, simplify the installation and maintenance;
- 5.Low smoke, zero halogen and flame retardant sheath;

#### **Product Performance**

- Applications
  - Access network, fiber to the home(FTTH);
- Laying method

Indoor integrated wiring;

- Working temperature
  - -20°C~+60°C;
- Bend Radius

Static 10mm; Dynamic: 20mm.

Fiber	Fiber Cable Diameter		Max.tensile strength(N)		Max.Crush resistance(N/100m)	
count (mm)			Short Term	Long Term	Short Term	Long Term
1	6.2	25	≥600	≥300	≥2200	≥1000
2	6.2	25	≥600	≥300	≥2200	≥1000
4	6.2	25	≥600	≥300	≥2200	≥1000

# 02

# INDOOR FIBER CABLE

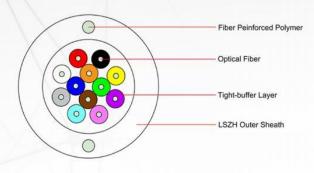
- Indoor optical fiber cable GJFJZH
- Indoor optical fiber cable GJBFJV
- Indoor optical fiber cable GJPFJV



#### Indoor optical fiber cable GJFJZH

#### **Product Introduction**

The GJFJZY optical cable structure is made by using 900um tight-buffered fiber as the basic unit, and extruding a layer of flame retardant and fire-resistant LSZH outer sheath containing two parallel FRP reinforcements on the outside of multiple tight-buffered fibers.





#### **Product Feature**

- 1. Tight-buffered optical fiber is easy to peel off and easy to connect;
- 2.Two parallel FRP reinforcements are entrained in the sheath to provide good tensile strength and lateral pressure resistance;
- 3. The low-smoke, low-halogen flame-retardant sheath has anti-flame and self-extinguishing properties, and is suitable for indoor environments such as computer rooms, cable shafts, and wiring in walls.

#### **Product Performance**

#### Applications

Building backbone wiring, jumpers and pigtails, connecting lines between equipment and instruments;

#### Working temperature

-20°C~+60°C;

#### Bend Radius

Static 15 times the cable diameter, Dynamic 30 times the cable diameter.

Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
count	(mm)		Short Term	Long Term	Short Term	Long Term	
2	7.0	45	600	300	1000	300	
4	7.0	45	600	300	1000	300	
6	7.5	50	600	300	1000	300	
8	9.0	80	800	400	1000	300	
10	9.5	88	800	400	1000	300	
12	10.0	95	800	400	1000	300	

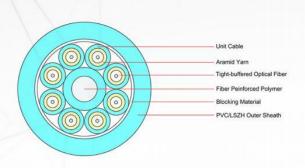


#### **Indoor Fiber Cable**

#### Indoor optical fiber cable GJBFJV

#### **Product Introduction**

The GJBFJV optical cables sets 250um optical fiber into a PVC tube to form a 0.9mm tight-buffered optical fiber. After adding aramid outside the tight-sleeve, it is extruded into a 2.0mm or 3.0mm sheathed sub-cable. Multiple sub-cables are distributed according to a reasonable structure, and then the outer sheath is extruded.





#### **Product Feature**

- 1. Multi -core integration, easy to use and maintain;
- 2. This cable have excellent flame-retardant performance;
- 3. High strength aramid yarn offers high tensile strength;
- 4. Soft, flexible, convenient to connect, and support large-capacity data transmission;
- 5. Meet various requirements of the market and users.

#### **Product Performance**

#### Applications

Indoor pipe and ODF wiring system,To make patch cord and pigtail,Connecting for indoor equipment;

#### Working temperature

-20°C~+60°C;

#### Bend Radius

Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

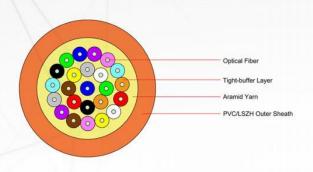
Fiber	Cable Diameter (mm)	Cable Weight (KG/KM)	Max.tensile	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
count			Short Term	Long Term	Short Term	Long Term	
4	7.0	42		≥200	≥1000	≥200	
6	8.5	63					
8	9.8	75	≥660				
12	11.0	100					
24	14.5	190					



#### Indoor optical fiber cable GJPFJV

#### **Product Introduction**

The GJPFJV indoor multi-cores optical cable uses multiple tight-buffered optical fibers as the basic unit, high modulus aramid yarn as the reinforcing element, and the sheath is made of polyvinyl chloride (PVC) or low-smoke halogen-free flame -retardant polyolefin(LSZH).





#### **Product Feature**

- 1.Soft, small bending radius, easy to strip fiber;
- 2. High strength aramid yarn offers high tensile strength;
- 3. Good flame retardant properties;
- 4.It's available under high and low temperature;
- 5. Meet the various requirements of the market and users.

#### **Product Performance**

#### Applications

Indoor pipe wiring system,tomake patch cord and pigtail,connecting for indoor equipment;

#### Working temperature

-20°C~+60°C;

#### Bend Radius

Static 10 times the cable diameter, Dynamic 20 times the cable diameter.

Fiber		Cable Weight (KG/KM)	Max.tensile strength(N)		Max.Crush resistance(N/100m)	
count	(mm)		Short Term	Long Term	Short Term	Long Term
4	4.8	17		≥200	≥1000	≥200
8	5.8	30	> 660			
12	6.3	38	≥660			
24	8.5	60				

## 03

# OUTDOOR FIBER CABLE

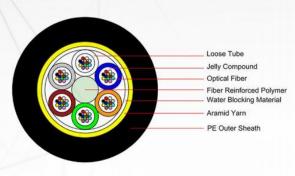
- All dielectric self-supporting optical cable ADSS-I
- All dielectric self-supporting optical cable ADSS-II
- All dielectric self-supporting optical cable ASU
- Fig-8 self-support aerial optical fiber cable GYXTC8Y
- Fig-8 self-support aerial optical fiber cable GYTC8Y
- Fig-8 self-support aerial optical fiber cable GYTC8S
- Central gel-filled loose tube metallic strength member armored cable GYXTW
- Pipeline and non-self-supporting aerial optical cable GYFXTY
- Pipeline and non-self-supporting aerial optical cable GYFTY
- Pipeline and non-self-supporting aerial optical cable GYTA
- Pipeline and non-self-supporting aerial optical cable GYTS
- Armored direct buried optical cable GYTA53
- Armored direct buried、underwater optical cable GYTA33



All dielectric self-supporting optical cable ADSS-I

#### **Product Introduction**

The ADSS optical cable is an all-dielectric self-supporting optical cable, which is a special optical cable for electric power system that is composed of all-dielectric materials, contains necessary supporting systems, and can be directly suspended on power poles.





#### **Product Feature**

- 1.Small cable diameter, light weight, low additional load on the tower;
- 2. High tensile strength;
- 3. Non-metallic structure, good insulation performance, lighting protection;
- 4. Excellent production process, uniform aramid yarn, excellent stress and strain performance;
- 5.Excellent lighting resistance, best anti-corrosion performance, and can adapt to harsh weather conditions;
- 6.Can be constructed without power failure, power line failure does not affect the normal transmission of optical cable.

#### **Product Performance**

#### Applications

Communication lines of high-voltage power transmission systems;

Laying method

Overhead

#### Working temperature

-40°C~+70°C;

#### Bend Radius

Static 15 times the cable diameter, Dynamic 25 times the cable diameter.

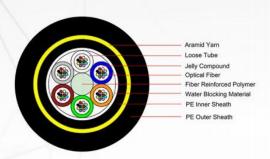
Fiber	i Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)	
count	(mm)		RTS	MAT	Short Term	Long Term
2-30	9.4	66		According to the		≥300
32-60	10.0	75			≥1000	
62-72	10.6	83	According to the			
74-96	11.9	105	span	span	≥ 1000	
98-120	13.4	135	оран			
122-144	14.9	166				



All dielectric self-supporting optical cable ADSS-II

#### **Product Introduction**

The ADSS optical cable is an all-dielectric self-supporting optical cable, which is a special optical cable for electric power system that is composed of all-dielectric materials, contains necessary supporting systems, and can be directly suspended on power poles.





#### **Product Feature**

- 1. Small cable diameter, light weight, low additional load on the tower;
- 2. High tensile strength;
- 3. Non-metallic structure, good insulation performance, lighting protection;
- 4. Excellent production process, uniform aramid yarn, excellent stress and strain performance;
- 5.Excellent lighting resistance, best anti-corrosion performance, and can adapt to harsh weather conditions;
- 6.Can be constructed without power failure, power line failure does not affect the normal transmission of optical cable.

#### **Product Performance**

- Applications
  - Communication lines of high-voltage power transmission systems;
- Laying method
   Overhead

- Working temperature
  - -40°C~+70°C;
- Bend Radius

Static 15 times the cable diameter, Dynamic 25 times the cable diameter.

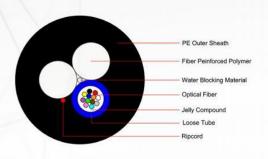
-	Fiber	Fiber Cable Diameter	Cable Weight	Max.tensile	strength(N)	Max.Crush resistance(N/100m)	
	count	(mm)	(KG/KM)	RTS	MAT	Short Term	Long Term
	2-30	10.7	85		According to the	≥1000	≥300
	32-60	11.2	95				
	62-72	11.9	104	According to the			
	74-96	13.2	130	span	span	≥ 1000	
	98-120	14.7	162	оран			
	122-144	16.2	197				



#### All dielectric self-supporting optical cable ASU

#### **Product Introduction**

The ASU cable is constructed by inserting 250um fiber into a loose tube made of a high-modulus material filled with a water-repellent compound. The loose tube is provided with a water blocking material to ensure the longitudinal blocking of the cable, and two parallel glass fiber reinforced plastics (FPR) are placed beside the loose tube to extrude the polyethylene sheath to from a cable.





#### **Product Feature**

- 1.Good mechanical and temperature properties;
- 2. The loose tube material itself has good hydrolysis resistance and high strength;
- 3. The tube is filled with a special grease to protect the fiber;
- 4.Two FRPs ensure the tensile strength of the cable;
- 5.PE jacket has good resistance to UV radiation;
- 6.Small diameter, light weight and easy to lay.

#### **Product Performance**

Applications

Long-distance communication, inter-office communication and fiber optic cable entry;

Laying method

Strong current area, Overhead;

Working temperature

-40°C~+70°C;

Bend Radius

Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

Fiber	Diameter Cable Weight	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count	(mm)	(KG/KM)	RTS	MAT	Short Term	Long Term
2-24	6.8-8.4	35-50	≥2000	≥800	≥2200	≥1000



#### Fig-8 self-support aerial optical fiber cable GYXTC8Y

#### **Product Introduction**

GYXTC8Y fiber optic cable is a central tube loose-filled, fig-8 self-support outdoor optical fiber cable for communication.





#### **Product Feature**

- 1. Full section water blocking structure ensures good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. Galvanized steel strands are used as self-supporting parts, with high tensile strength and convenient construction;
- 4. Reasonable design, precise residual length control and cable forming technology for superior mechanical and environmental performance;
- 5. Product life more than 30 years.

#### **Product Performance**

- Applications Long-distance communication, inter-office communication;
- Laying method Overhead;

- Working temperature -40°C~+70°C;
- Bend Radius Static 10 times the cable diameter. Dynamic 20 times the cable diameter.

1	Fiber	Fiber Cable Diameter (mm)	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
COL	count			RTS	MAT	Short Term	Long Term	
	2-8	4.2*10.3	49					
	10-12	4.4*10.5	50	≥1500	≥600	≥1000	≥300	
	14-24	5.2*11.3	56					



#### Fig-8 self-support aerial optical fiber cable GYTC8Y

#### **Product Introduction**

GYTC8Y optic cable is economic fig-8 self-support stranded optical cable, the sheath is polyethylene sheath, which is mainly used for self-support aerial laying and is widely used in outdoor local area networks.





#### **Product Feature**

- 1. Full section water blocking structure, ensuring good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. Phosphating steel wire center strengthening member high modulus, corrosion resistance;
- 4. Fig-8 self-support structure with high tensile strength, easy to lay overhead, low installation cost;
- 5. Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 6. Polyethylene sheath makes the cable have good UV resistance;
- 7. Product life more than 30 years.

#### **Product Performance**

- Applications Long-distance communication, inter-office communication;
- Laying method Overhead:

- Working temperature -40°C~+70°C:
- Bend Radius Static 10 times the cable diameter, Dynamic 20 times the cable diameter.

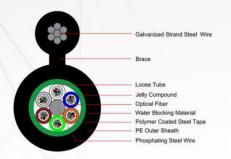
	Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
	count	(mm)		RTS	MAT	Short Term	Long Term	
1	2-30	7.9*16.6	120		≥2300	≥1000	≥300	
	32-60	8.4*17.1	128					
	62-72	9.0*17.7	147					
	74-96	10.2*19.2	176	≥4500				
	98-120	11.5*20.5	198	≥4300	_2000			
	122-144	12.7*21.9	222					
	146-216	12.8*23.6	250					
	218-300	14.6*25.4	293					



#### Fig-8 self-support aerial optical fiber cable GYTC8S

#### **Product Introduction**

The GYTC8S optic cable is metal reinforcing member, loose tube layer stranded filling type, steel-polyethylene bonded jacket, Fig-8 self-support outdoor optical communication cable.





#### **Product Feature**

- 1.Full section water blocking structure, double-sided coated steel strip longitudinal package, ensuring good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. Phosphating steel wire center strengthening member high modulus, corrosion resistance;
- 4. Fig-8 self-support structure with high tensile strength, easy to lay overhead, low installation cost;
- 5.Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 6. Polyethylene sheath makes the cable have good UV resistance;
- 7. Product life more than 30 years.

#### **Product Performance**

- Applications
   Long-distance communication, inter-office communication;
- Laying method Overhead;

- Working temperature -40°C~+70°C;
- Bend Radius
   Static 10 times the cable diameter,
   Dynamic 20 times the cable diameter.

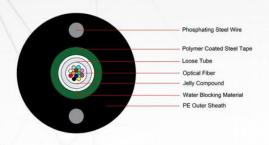
Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
coun	t (mm)		RTS	MAT	Short Term	Long Term	
2-30	8.9*17.6	145		≥2300	≥3000	≥1000	
32-60	9.4*18.1	154					
62-72	10.0*18.7	175					
74-96	11.2*20.2	208	≥4500				
98-120	12.5*21.5	237	≥4500	22000			
122-14	4 13.7*22.9	266					
146-216	6 13.8*24.6	300					
218-300	15.6*26.4	343					



Central gel-filled loose tube metallic strength member armored cable GYXTW

#### **Product Introduction**

The GYXTW type optical cable is a steel-polyethylene bonded sheath with metal strengthening members, center tube filling type, and parallel steel wires. It is an outdoor optical cable for communication.





#### **Product Feature**

- 1.Full section water blocking structure, double-coated steel tape longitudinal package, ensuring good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3.Two parallel round steel wires resist tension and side pressure;
- 4. Optical fiber cable with small outside diameter, light weight, excellent bending performance;
- 5. The loose tube is located in the physical center of the cable, convenient for construction and operation;
- 6.Polyethylene sheath makes the cable have good UV resistance;
- 7. Product life more than 30 years.

#### **Product Performance**

- Applications Long-distance communication, inter-office communication;
- Laying method Overhead, pipeline, buried directly;

- Working temperature -40°C~+70°C;
- Bend Radius Static 10 times the cable diameter, Dynamic 20 times the cable diameter.

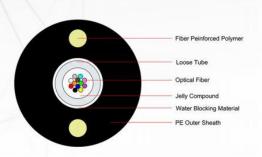
1	Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
	count	(mm)		RTS	MAT	Short Term	Long Term	
	2-8	7.7	58	≥1500	≥600	≥1000	≥300	
	10-12	7.9	60					
	14-24	8.5	68					



#### Pipeline and non-self-supporting aerial optical cable GYFXTY

#### **Product Introduction**

The GYFXTY cable is constructed by inserting 250um fiber into a loose tube made of a high-modulus material filled with a water-repellent compound. The loose tube is provided with a water blocking material to ensure the longitudinal blocking of the cable, and two parallel glass fiber reinforced plastic(FRP) are placed on both sides to extrude the polyethylene sheath to form a cable.





#### **Product Feature**

- 1.Good mechanical and temperature properties;
- 2. The loose tube material itself has good hydrolysis resistance and high strength;
- 3. The tube is filled with a special grease to protect the fiber;
- 4.Two parallel FRPs ensure the tensile strength of the cable;
- 5.PE jacket has good resistance to UV radiation;
- 6.Small diameter, light weight and easy to lay;

#### **Product Performance**

Applications

Long-distance communication, inter-office communication and fiber optic cable entry;

Laying method

Strong current area, Overhead;

Working temperature

-40°C~+70°C;

Bend Radius

Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

Fiber		Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count			RTS	MAT	Short Term	Long Term	
2-24	5.5-7.0	21-35	≥1500	≥600	≥1000	≥300	



#### Pipeline and non-self-supporting aerial optical cable GYFTY

#### **Product Introduction**

The GYFTY type optical fiber cable is non-metallic strengthening member, loose tube layer stranded filling type, polyethylene sheathed outdoor optical fiber cable for communication.





#### **Product Feature**

- 1. Full section water blocking structure ensures good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. High modulus glass fiber reinforced plastic rod(FRP) center strength member;
- 4.Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 5. Polyethylene sheath makes the cable have good UV resistance;
- 6.Product life more than 30 years.

#### **Product Performance**

#### Applications

Long-distance communication, inter-office communication and fiber optic cable entry;

#### Laying method

Strong current area, overhead;

#### Working temperature

-40°C~+70°C;

#### Bend Radius

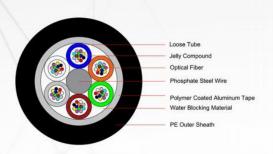
Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

Fibe	Cable Diameter	Cable Weight	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
cou	nt (mm)	(KG/KM)	RTS	MAT	Short Term	Long Term	
2-30	8.0	52					
32-6	8.5	58		≥600	≥1000	≥300	
62-7	9.0	68					
74-9	6 10.2	87	≥1500				
98-12	0 11.5	109	≥1500				
122-1	12.7	133					
146-2	16 12.8	135					
218-3	00 14.6	175					

#### Pipeline and non-self-supporting aerial optical cable GYTA

#### **Product Introduction**

The GYTA optical cable is an outdoor optical cable for communication with metal strengthening member, loose tube layer stranded filling type, aluminum -polyethylene bonded sheath.





#### **Product Feature**

- 1. Full section water blocking structure ensures good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. High modulus glass fiber reinforced plastic rod(FRP) center strength member;
- 4.Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 5. Polyethylene sheath makes the cable have good UV resistance;
- 6.Product life more than 30 years.

#### **Product Performance**

#### Applications

Long-distance communication, inter-office communication and fiber optic cable entry;

#### Laying method

Strong current area, overhead;

#### Working temperature

-40°C~+70°C;

#### Bend Radius

Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

Fiber	Cable Diameter (mm)	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count			RTS	MAT	Short Term	Long Term	
2-30	8.9	72					
32-60	9.4	79		≥600	≥1000	≥300	
62-72	10.0	100					
74-96	11.2	120	≥1500				
98-120	12.5	144	≥1500	≥000			
122-144	13.7	170					
146-216	13.8	172					
218-300	15.6	214					



#### Pipeline and non-self-supporting aerial optical cable GYTS

#### **Product Introduction**

The GYTS optical cable is an outdoor optical cable for communication with metal strengthening members, loose tube stranded and filled, steel-polyethylene bonded sheath.





#### **Product Feature**

- 1. Full section water blocking structure ensures good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. High modulus glass fiber reinforced plastic rod(FRP) center strength member;
- 4.Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 5. Polyethylene sheath makes the cable have good UV resistance;
- 6.Product life more than 30 years.

#### **Product Performance**

- Applications Long-distance communication, inter-office communication:
- Laying method pipeline, overhead;

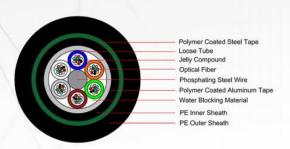
- Working temperature -40°C~+70°C;
- Bend Radius Static 10 times the cable diameter, Dynamic 20 times the cable diameter.

Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count	(mm)		RTS	MAT	Short Term	Long Term	
2-30	8.9	84					
32-60	9.4	92		≥600	≥1000	≥300	
62-72	10.0	114					
74-96	11.2	136	≥1500				
98-120	12.5	166	≥ 1300	≥000			
122-144	13.7	192					
146-216	13.8	195					
218-300	15.6	242					

#### Armored direct buried optical cable GYTA53

#### **Product Introduction**

The GYTA53 type optical cable is an outdoor optical cable for communication with metal strengthening member, loose tube layer stranded filling type, aluminum-polyethylene bonded inner sheath, steel-polyethylene bonded sheath.





#### **Product Feature**

- 1.Full section water blocking structure, double-coated aluminum tape longitudinal package, ensuring good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. High modulus of phosphating steel wire center strength member, corrosion resistance;
- 4. Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 5. Longitudinal double-sided coated steel tape armored, effectively improving the cable resistance to pressure measurement;
- 6.Polyethylene sheath makes the cable have good UV resistance;
- 7. Product life more than 30 years.

#### **Product Performance**

- Applications
  - Long-distance communication, inter-office communication;
- Laying method Buried directly;

- Working temperature
  - -40°C~+70°C;
- Bend Radius

Static 12.5 times the cable diameter, Dynamic 25 times the cable diameter.

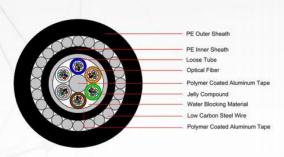
Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count	(mm)		RTS	MAT	Short Term	Long Term	
2-30	11.7	138					
32-60	12.2	152			≥3000	≥1000	
62-72	12.8	178					
74-96	14.0	205					
98-120	15.3	239	≥3000	≥1000			
122-144	16.5	271					
146-216	16.6	275					
218-300	18.4	328					



#### Armored direct buried, underwater optical cable GYTA33

#### **Product Introduction**

The GYTA33 type optical cable is an outdoor optical cable for communication with metal center strengthening member, loose tube layer stranded filling type, aluminum polyethylene bonded inner sheath, low carbon steel wire wrapped armor, and polyethylene outer sheath.





#### **Product Feature**

- 1.Full section water blocking structure, ensures good water and moisture resistance;
- 2.Loose sleeve filled with special ointment for critical fiber protection;
- 3. High modulus of phosphating steel wire center strength member, corrosion resistance;
- 4.Adopt SZ twisted structure, easy to branch and ensure the optical fiber is not stressed under harsh environment;
- 5.Longitudinal double-sided coated wrinkle aluminum strip, fine round wire wrapped around the package to ensure the mechanical compression, tensile, rat-proof, elastic energy of the cable, to meet the application requirements of vertical burying, underwater laying etc;
- 6.Product life more than 30 years.

#### **Product Performance**

- Applications
   Long-distance communication, inter-office communication;
- Laying method
   Buried directly,underwater;

- Working temperature -40°C~+70°C;
- Bend Radius
   Static 12.5 times the cable diameter,
   Dynamic 25 times the cable diameter.

Fiber	Cable Diameter	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count	count (mm)		RTS	MAT	Short Term	Long Term	
2-30	13.7	363				≥3000	
32-60	14.2	385					
62-72	14.8	421		1000			
74-96	16.0	469	> 1000		≥5000		
98-120	17.3	537	≥1000	≥4000	≥5000		
122-144	18.5	603					
146-216	18.6	606					
218-300	20.4	703					

## 04

# COAL MINE FLAME RETARDANT FIBER CABLE

Coal mines communication optical cable MGTSV



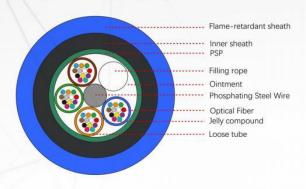


#### **Coal Mine Flame Retardant Fiber Cable**

#### Coal mines communication optical cable MGTSV

#### **Product Introduction**

The MGTSV type optical cable is an outdoor communication optical cable with metal reinforced components, loose layer twisted filling type, steel polyethylene bonding sheath, wrapped steel wire armor, and blue polyvinyl chloride flame retardant sheath.





#### **Product Feature**

- 1.Full interface water blocking structure, double-sided coated steel strip longitudinal wrapping, ensuring good water blocking performance and lateral pressure resistance;
- 2. Fill the loose tube with special grease to provide critical protection for the optical fiber;
- 3. Phosphated steel wire center reinforcement component has high modulus and corrosion resistance:
- 4. The LSZH sheath endows the optical cable with excellent flame retardant properties;
- 5. The product has a service life of over 30 years.

#### **Product Performance**

- Applications Suitable for communication in coal mines;
- Laying method pipeline, overhead;

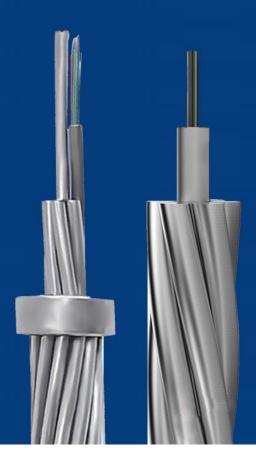
- Working temperature -40°C~+70°C;
- Bend Radius Static 10 times the cable diameter, Dynamic 20 times the cable diameter.

Fiber	Cable Diameter (mm)	Cable Weight (KG/KM)	Max.tensile	strength(N)	Max.Crush resistance(N/100m)		
count			Short Term	Long Term	Short Term	Long Term	
2	7.0	45	600	300	1000	300	
4	7.0	45	600	300	1000	300	
6	7.5	50	600	300	1000	300	
8	9.0	80	800	400	1000	300	
10	9.5	88	800	400	1000	300	
12	10.0	95	800	400	1000	300	

# 05

# ELECTRIC FIBER CABLE

- Optical fiber composite overhead ground wire OPGW(Central tube type)
- Optical fiber composite overhead ground wire OPGW(layer stranded)



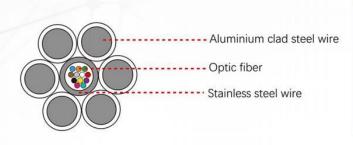


Optical fiber composite overhead ground wire OPGW(Central tube type)

#### **Product Introduction**

OPGW optical cable, also known as fiber optic composite overhead ground wire, places optical fibers in the ground wire of overhead high-voltage transmission lines to form a fiber optic communication network on the transmission lines. This structural form has dual functions of spacing between ground wires and communication.

The central tube type OPGW optical cable adopts a design where stainless steel tube fiber units are twisted together with other metal wires. The fiber is placed inside the stainless steel tube to obtain better surplus length, ensuring the electrical performance, mechanical and physical properties, and thermal stability of the optical cable.





#### **Product Feature**

- 1. Adopting advanced stainless steel tube production technology, the tube is filled with water-resistant compounds, which can effectively protect the optical fiber;
- 2. Combining the dual functions of ground wire and communication optical cable, eliminating the huge cost of repeated installation and maintenance;
- 3.Installed on the top of power overhead line towers, without considering factors such as optimal hanging points and electrical corrosion;
- 4. During the renovation process of the old line, the outer diameter and tensile strength of the optical cable are better matched than pulling another ground wire;
- 5. Large transmission capacity, high communication quality, good reliability, and superior mechanical and electrical performance.

#### **Application Scenarios of OPGW Optical Cable**

- Power system
- Railway system

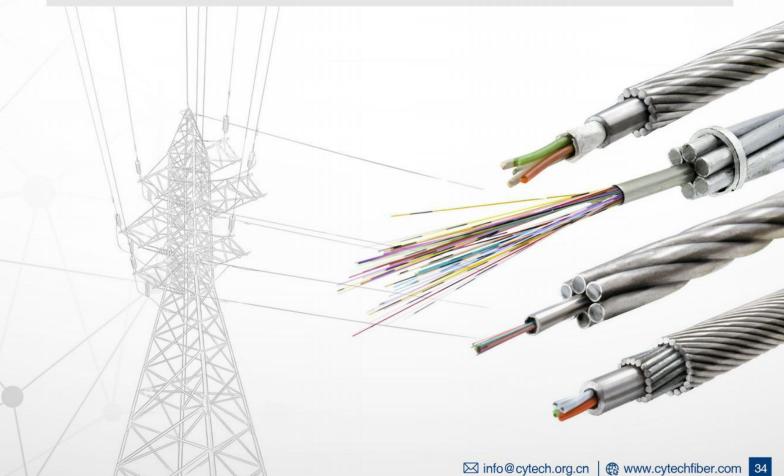
- Communication system
- Oil and gas industry



#### **Electric Fiber Cable**

Optical fiber composite overhead ground wire OPGW(Central tube type)

	Cen	ter(stainles	s steel)		outer lay	er	Cable	Weight
Model	root	Diameter (mm)	Fiber Qty	root	Diameter (mm)	Material	diamter (mm)	(KG/km)
OPGW-24B1-40	1	3.00	24B1	6	3.00	LB20	9.00	303.6
OPGW-30B1-50	1	3.20	30B1	6	3.20	LB20	9.60	342.7
OPGW-30B1-50	1	3.20	30B1	6	3.20	LB27	9.60	309.1
OPGW-36B1-55	1	3.40	36B1	6	3.40	LB20	10.20	389.3
OPGW-36B1-55	1	3.40	36B1	6	3.40	LB27	10.20	351.3
OPGW-40B1-60	1	3.50	40B1	6	3.50	LB20	10.50	411.1
OPGW-40B1-60	1	3.50	40B1	6	3.50	LB27	10.50	370.8
OPGW-40B1-60	1	3.60	40B1	6	3.60	LB20	10.80	433.4
OPGW-40B1-60	1	3.60	40B1	6	3.60	LB27	10.80	390.9
OPGW-48B1-70	1	3.80	48B1	6	3.80	LB20	11.40	480.1
OPGW-48B1-70	1	3.80	48B1	6	3.80	LB27	11.40	432.6



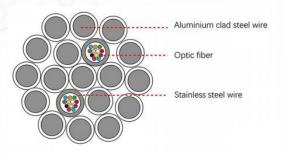
#### **Electric Fiber Cable**

#### Optical fiber composite overhead ground wire OPGW(layer stranded)

#### **Product Introduction**

OPGW optical cable, also known as fiber optic composite overhead ground wire, places optical fibers in the ground wire of overhead high-voltage transmission lines to form a fiber optic communication network on the transmission lines. This structural form has dual functions of spacing between ground wires and communication.

The layer twisted OPGW optical cable adopts a design where stainless steel tube fiber optic units are twisted together with other metal wires at the same time. The fiber optic units are located on the second layer and generate larger and more stable tensile residual length through twisting.





#### **Product Feature**

- 1. Adopting advanced stainless steel tube production technology, the tube is filled with water-resistant compounds, which can effectively protect the optical fiber;
- 2. Combining the dual functions of ground wire and communication optical cable, eliminating the huge cost of repeated installation and maintenance;
- 3.Installed on the top of power overhead line towers, without considering factors such as optimal hanging points and electrical corrosion;
- 4. During the renovation process of the old line, the outer diameter and tensile strength of the optical cable are better matched than pulling another ground wire;
- 5. Large transmission capacity, high communication quality, good reliability, and superior mechanical and electrical performance.

#### **Application Scenarios of OPGW Optical Cable**

- Power system
- Railway system

- Communication system
- Oil and gas industry

		Center	10		Inner layer	yer	,	Inner layer	ayer		Stainless	less	Diameter	Weight
Model					(Filstiay			DECOILO	ayei)		SICCI	enne		100
	Root	Diameter (mm)	Material Qty	Root	Diameter (mm)	Material	Root	Diameter (mm)	Material	Root	Diameter (mm)	Fiber Qty	(mm)	(KG/KM)
OPGW-24B1-90	-	2.60	LB20	5	2.50	LB20	12	2.50	LB20	-	2.50	24B1	12.60	615.4
OPGW-24B1-90	-	2.60	LB27	2	2.50	LB27	12	2.50	LB27	-	2.50	24B1	12.60	553.4
OPGW-24B1-100	-	2.60	LB20	2	2.50	LB20	F	2.85	LB20	-	2.50	24B1	13.30	691.2
OPGW-24B1-100	-	2.60	LB27	2	2.50	LB27	Ξ	2.85	LB27	-	2.50	24B1	13.30	621.3
OPGW-24B1-115	-	2.60	LB20	2	2.50	LB20	10	3.25	LB20	-	2.50	24B1	14.10	777.2
OPGW-24B1-115	-	2.60	LB27	2	2.50	LB27	10	3.25	LB27	-	2.50	24B1	14.10	698.3
OPGW-24B1-115	-	2.60	LB20	2	2.50	LB20	10	3.25	LHA2	-	2.50	30B1	14.10	447.6
OPGW-30B1-120	-	2.85	LB20	2	2.75	LB20	Ξ	3.10	LB20	-	2.70	30B1	14.55	819.2
OPGW-30B1-120	-	2.85	LB27	2	2.75	LB27	Ξ	3.10	LB27	-	2.70	30B1	14.55	735.9
OPGW-30B1-120	-	2.85	LB20	2	2.75	LB20	Ξ	3.10	LHA	-	2.70	30B1	14.55	489.3
OPGW-36B1-135	-	3.20	LB20	2	3.10	LB20	12	3.10	LB20	-	3.00	36B1	15.60	934.7
OPGW-36B1-135	-	3.20	LB27	2	3.10	LB27	12	3.10	LB27	-	3.00	36B1	15.60	839.4
OPGW-36B1-135	-	3.20	LB30	2	3.10	LB30	12	3.10	LB30	-	3.00	36B1	15.60	798.8
OPGW-36B1-135	-	3.20	LB40	2	3.10	LB40	12	3.10	LB40	-	3.00	36B1	15.60	662.8
OPGW-36B1-145	-	3.30	LB20	2	3.20	LB20	12	3.20	LB20	-	3.10	36B1	16.10	994.6
OPGW-36B1-145	-	3.30	LB27	2	3.20	LB27	12	3.20	LB27	-	3.10	36B1	16.10	893.0
OPGW-36B1-145	-	3.30	LB30	2	3.20	LB30	12	3.20	LB30	-	3.10	36B1	16.10	849.7
OPGW-36B1-145	-	3.30	LB40	2	3.20	LB40	12	3.20	LB40	-	3.10	36B1	16.10	704.9
OPGW-48B1-165	-	3.50	LB20	2	3.40	LB20	12	3.40	LB20	-	3.30	48B1	17.10	1125.0

### **Cytech Main Fiber List**

- 50/125 um multiple mode fiber
- 62.5/125 um multiple mode fiber
- OM3 10G multiple mode fiber
- B1.3-G652D single mode fiber
- B4-G655D single mode fiber
- B6-G657 single mode fiber

At present, the color of the optical fiber and fiber casing within the fiber optic cable is generally identified by full chromatography, and the use of natural color is allowed without affecting the identification.

#### The Chromatography of Loose Tube And Fibe Core

The chromatographic arrangement of the loose tube within a general fiber optic cable and the chromatographic arrangement of the fiber within the loose tube is shown below:

#### 01

### Chromatographic Arrangement in Loose Tube Sleeves (International Fiber Chromatography)

	1	2	3	4	5	6
Color code	Blue	Orang	Green	Brown	Slate	Write
serial code	7	8	9	10	11	12
	Red	Black	Yellow	Purple	Pink	Aqua

#### **Notice**

- When the number of sleeves in the optical fiber is less than 12, select continuously from sequence 1;
- It can also be customized according to the special requirements of customers.

#### 02

#### Chromatography Arrangement in Loose Tube Sleeves (Lead Chromatography)

	1	2	3	4	5	6
Tube Color	Red	Green	Natural	Natural	Natural	Natural
serial code	7	8	9	10	11	12
	Natural	Natural	Natural	Natural	Natural	Natural

#### **Notice**

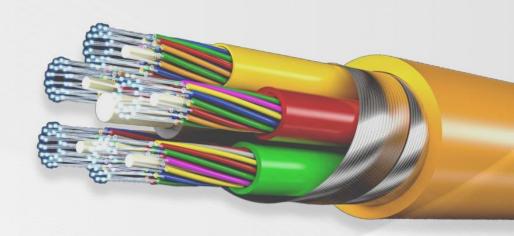
- If the structure includes a filling rope, it can be indicated by filling rope collar (No. 1 and No. 2 are filling ropes), or by loose sleeve collar (No. 1 and No. 2 are loose sleeves);
- It can also be customized according to the special requirements of customers.

#### O3 Chromatography of Fiber Core (International Fiber Chromatography)

	1	2	3	4	5	6
Tube Color	Blue	Orang	Green	Brown	Slate	Write
serial code	7	8	9	10	11	12
	Red	Black	Yellow	Purple	Pink	Aqua

#### **Notice**

- When the number of sleeves in the optical fiber is less than 12, select continuously from sequence 1;
- It can also be customized according to the special requirements of customers.





#### **Cytech Technology**

Website:www.cytechfiber.com Email:info@cytech.org.cn