

## ZTT CABLE

ZTT is a leading and global manufacturer of cable systems, which provides package solutions for telecommunication and power applications around the world. With its rich heritage of highly advanced R&D results, ZTT owns the cutting-edge technology within the industry.

ZTT was established in 1992 and became a listed company in 2002. Up to now, ZTT has developed to be a Group Company with 50 subsidiaries in China. Our products are widely used in telecommunication industry, power transmission industry, mining cable industry, marine and submarine cable industry, railway industry, cable manufacturing and so on.

ZTT has always committed to be market-oriented, meeting various demands of our customers and providing economical & reliable solutions. With innovative product design, ZTT can also guarantee the high-end engineering capabilities and life cycle maintenance services.



## Optic Fiber Cables



## Company Profile

A central graphic of a blue and white globe with several glowing white orbital lines around it, set against a background of blue and white abstract wave patterns.

***Your Partner in Cable***

ZTT Cable was established in 1992 and issued stock in 2002. As the backbone of this public company, optical cable factory manufactures ZTT's all kinds of optical cables. With the development of enterprise scale and the expansion of market scale, the cable factory consists of four domestic major production bases and two overseas factories. Four production bases are respectively in Nantong city, Guangdong province, Shenyang city and Sichuan province. The overseas production bases are in India and Brazil. As the major cable production base, Nantong base consists of two parts: conventional and special cable factory and FTTX factory. The annual capacity can reach 1million kilometers total from 7 subsidiary corporations of 6 production bases.

ZTT's optical cables have been sold all over the world, more than 138 countries, more than 5,000,000 km.

ZTT cables have been widely used by Telecommunication and Power Operators all over the world, such as TOT, TRUE, Telefonica, CAT, ICE, Qatar Telecom, Electricity of Vietnam (PC1,PC2 and PC3), HK PCCW and so on.

ZTT cables have been widely used in various fields, mainly including Railways, Mobile and Communication Operators, Internet Providers, Subways, Mines, Signal Acquisitions, the Military (for national defense) and so on.

## Type of Fiber Optic Cables

- Duct Cable
- Buried Cable
- Figure-8 Self-supporting Aerial Cable
- ADSS
- Micro Fiber and Cable
- Underwater Cable
- Ribbon Cable
- All Dry Cable
- Color Stripe Cable
- 3-Strand Light Short Span Aerial Cable
- Easy Branch Figure-8 Self-supporting Aerial Cable
- Lightning Protective Light Cable
- FTTx Cable
- Flame-retardant Cable and Fire-resistance Cable
- Micro Bundle Cable
- Low Friction Drop Cable
- Invisible Drop Cable
- Anti-rodent or Anti-termite Cable
- Sewer Cable
- Pavement Cable
- Detection Cable



## Typical Experiences



■ National Stadium (Bird's Nest)—Flame-resistance Cable



■ ICE-Figure-8 Self-supporting Cable



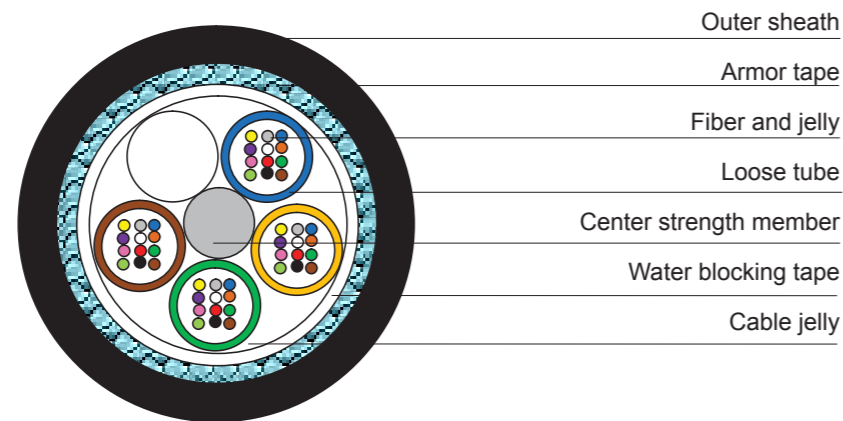
■ Congo River—Underwater Cable



■ HK PCCW —FTTx Cable

# Duct Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 624 fibers) or central tube structure (up to 144 fibers)
- Metallic, non-metallic armored or unarmored
- Steel wire or FRP for center strength member
- Good water penetration, mechanical and environmental performance
- With simple structure easy to install
- PE or LSZH sheath materials
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Unarmored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S1	24	9.5	75	1000	1000
OFC-24-SD-S1	24	8.7	70	1500	1000

### Metallic armored, loose tube stranded cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-24-FStD-S1	24	10.7	115	1000	2000
OFC-24-SStD-S1	24	9.9	110	1500	2000
OFC-24-FAID-S1	24	10.5	95	1000	1500
OFC-24-SAlD-S1	24	9.7	90	1500	1500

### Non-metallic armored, loose tube stranded cable

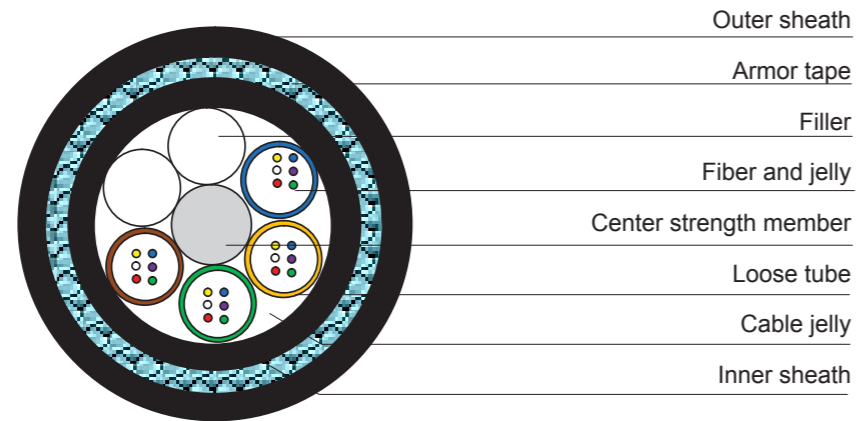
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-24-FAD-S1	24	9.7	78	1500	1500
OFC-24-SAD-S1	24	8.9	72	2000	1500
OFC-24-FGD-S1	24	9.8	80	1500	1500
OFC-24-SGD-S1	24	9.0	73	2000	1500

### Central tube structure cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-24-CAD-S1	24	7.0	48	1000	1500
OFC-24-CGD-S1	24	7.0	50	1000	1500

# Buried Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 624 fibers) or central tube structure (up to 144 fibers)
- Metallic or non-metallic armor providing good crush resistance
- Steel wire or FRP for center strength member
- Good water penetration, mechanical and environmental performance
- PE or LSZH sheath materials
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Metallic armored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FStDB-S1	24	12.5	145	2000	3000
OFC-24-SStDB-S1	24	11.1	148	2000	3000
OFC-24-FAIStDB-S1	24	13.5	175	2000	3000
OFC-24-SAIStDB-S1	24	12.1	180	2000	3000

### Non-metallic armored, loose tube stranded

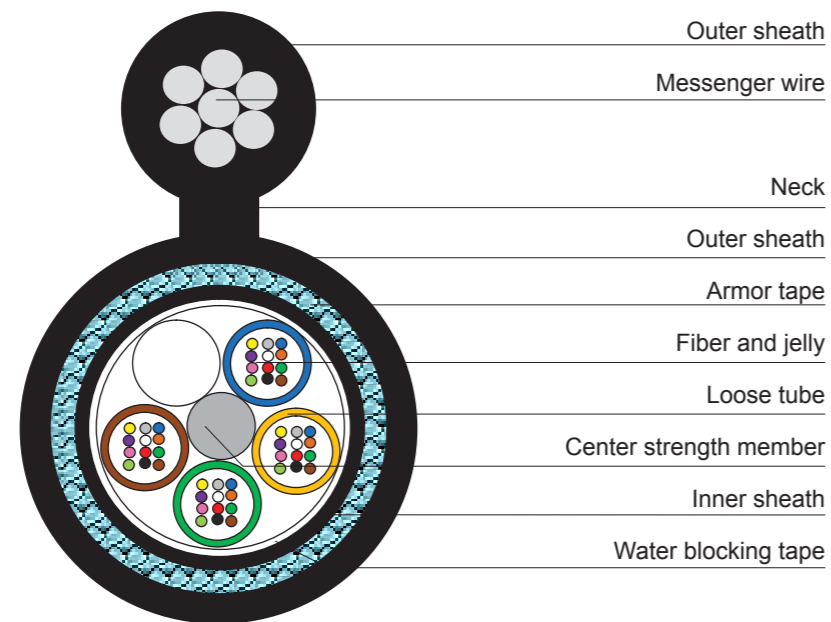
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FADB-S1	24	11.5	105	2000	3000
OFC-24-SADB-S1	24	10.1	90	2000	3000
OFC-24-FGDB-S1	24	11.6	106	2000	3000
OFC-24-SGDB-S1	24	10.2	92	2000	3000

### Central tube structure

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-CStSwDB-S1	24	10.2	120	1500	3000
OFC-24-CGDB-S1	24	8.4	65	1500	3000
OFC-24-CADB-S1	24	8.5	65	1500	3000

# Figure-8 Self-supporting Aerial Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 312 fibers) or central tube structure (up to 144 fibers)
- Metallic, all-dielectric armored or unarmored
- Steel wire or FRP for center strength member
- The messenger wire can be steel wire or FRP
- Good water penetration, mechanical and environmental performance
- PE or LSZH sheath materials
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Unarmored, loose tube stranded

Cable type	Fiber count	Nominal diameter (W×H mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FSF-S1	24	9.1×16.6	135	3000	1500
OFC-24-SSF-S1	24	8.1×15.6	130	3000	1500

### Metallic armored, loose tube stranded

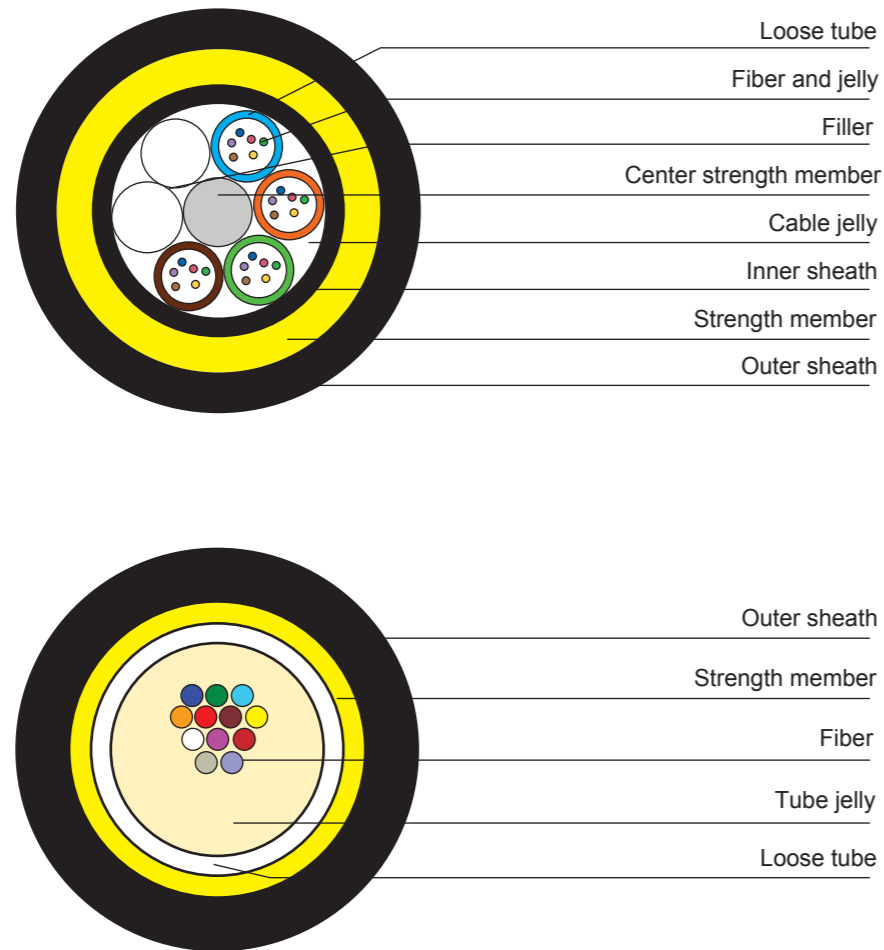
Cable type	Fiber count	Nominal diameter (W×H mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FStSF-S1	24	10.3×17.8	175	3000	2000
OFC-24-SStSF-S1	24	9.3×16.8	170	3000	2000
OFC-24-FAISF-S1	24	10.1×17.6	155	3000	2000
OFC-24-SAISF-S1	24	9.1×16.6	150	3000	2000

### Central tube structure

Cable type	Fiber count	Nominal diameter (W×H mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-CSF-S1	24	6.5×13.7	115	3000	1500
OFC-24-CStSF-S1	24	8.0×15.2	145	3000	2000
OFC-24-CAISF-S1	24	8.0×15.2	130	3000	1500

# ADSS

## Cross Section Drawing:



## Characteristic and Application:

- ADSS are mainly installed at existing 220kV or lower voltage power lines.
- Layer or central tube design.
- Aramid yarn is used as the strength member to assure the tensile and strain performance, and Du Pont is our only partner.
- Outer sheath can be classified into PE and Tracking resistance PE to correspond the space potential below and more than 12kV.
- ADSS(stranded layer type)maximum fiber count: 312.
- ADSS(stranded layer type)maximum span can be up to 1500m.

## Typical Parameters:

### Stranded Layer Type

ZTT Standard	Weather conditions	Max Span (m)	RTS (kN)	MAT (kN)	Crush (N/10cm)	Weight (kg/km)		Diameter (mm)
						PE	AT	
OFC-24-FASA-S1	Temperature range: -40~+70℃ Max.ice thickness: 5mm Max wind speed: 25m/s	100	8.5	3.4	2200	124	133	11.6
OFC-24-FASA-S1		200	15.3	6.1	2200	131	139	12.0
OFC-24-FASA-S1		300	20.4	8.2	2200	136	145	12.3
OFC-24-FASA-S1		400	25.5	10.2	2200	141	150	12.5
OFC-24-FASA-S1		500	30.6	12.2	2200	146	156	12.8
OFC-24-FASA-S1		600	39.1	15.6	2200	166	176	13.8
OFC-24-FASA-S1		700	45.9	18.4	2200	179	190	14.2
OFC-24-FASA-S1		800	52.7	21.1	2200	186	197	14.5
ADSS-24B1-900m		900	59.5	23.8	2200	192	204	14.8
OFC-24-FASA-S1		1000	66.3	26.5	2200	197	209	15.1
OFC-24-FASA-S1		1100	71.4	28.6	2200	202	214	15.3
OFC-24-FASA-S1		1200	76.5	30.6	2200	215	226	15.5
OFC-24-FASA-S1		1500	90.0	36.0	2200	230	245	16.1

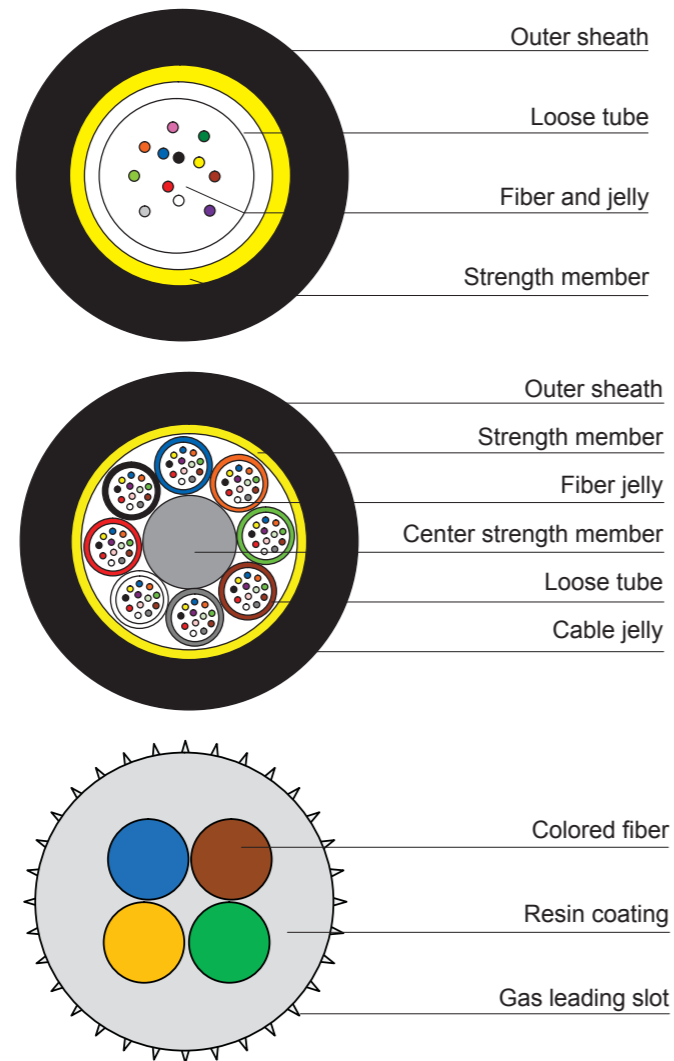
### Central Tube Type

ZTT Standard	Weather conditions	Max Span (m)	RTS (kN)	MAT (kN)	Crush (N/10cm)	Weight (kg/km)		Diameter (mm)
						PE	AT	
OFC-24-CASA-S1	Temperature range: -40~+70℃ Max.ice thickness: 5mm Max wind speed: 25m/s	50	5.0	2.0	2200	55	59	8.0
OFC-24-CASA-S1		100	7.5	3.0	2200	57	61	8.2
OFC-24-CASA-S1		200	12.5	5.0	2200	65	70	8.6

\* The above designs are ZTT's typical options, and ZTT can provide any specific cable according to your requirement.

# Micro Fiber and Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 144 fibers) or central tube structure (up to 96 fibers)
- Air blown fibers (2-12 fibers), outer surface promoting low-friction
- Aramid yarns for strength member
- Light weight, small size, easy for blowing
- Saving the source of duct
- Good water penetration, mechanical and environmental performance
- PE or LSZH sheath materials
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Unarmored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FMD-S1	24	5.0	25	150	500

### Central tube structure

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-CAMD-S1	24	4.8	22	150	500

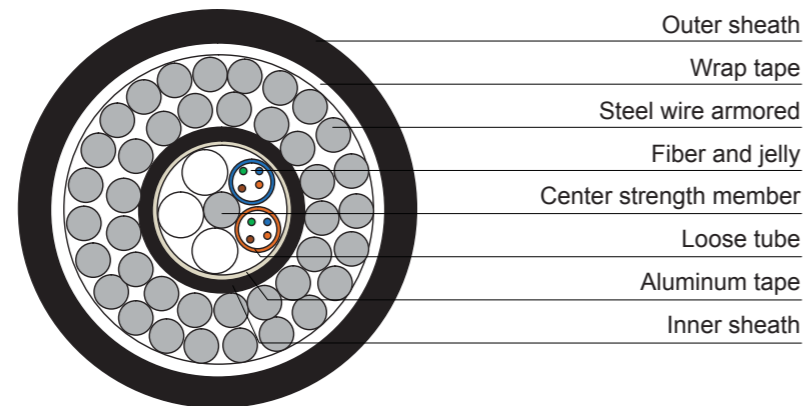
### Blow fiber unit

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)
EPFU	2~12	1.1~1.8	1.0~2.7



# Underwater Installation Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 216 fibers)
- Steel wire or FRP for center strength member
- Could be installed in the island, river or lake
- Could also be used for directly buried installation
- Good water penetration, mechanical and environmental performance
- In accordance with IEC, ITU and EIA standards

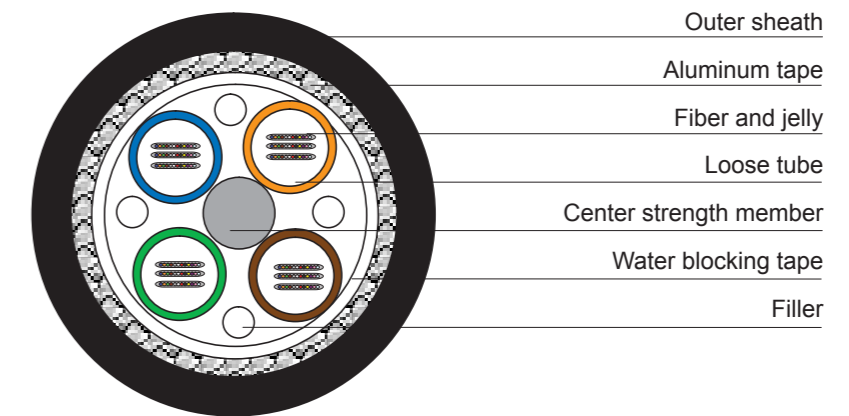
## Typical Parameters:

Metallic armored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FSwUW-S1	24	15.3	380	10000	5000
OFC-24-SSwUW-S1	24	15.7	410	10000	5000
OFC-24-FSw2UW-S1	24	18.9	800	20000	6000
OFC-24-SSw2UW-S1	24	19.3	860	20000	6000

# Ribbon Cable

## Cross Section Drawing:

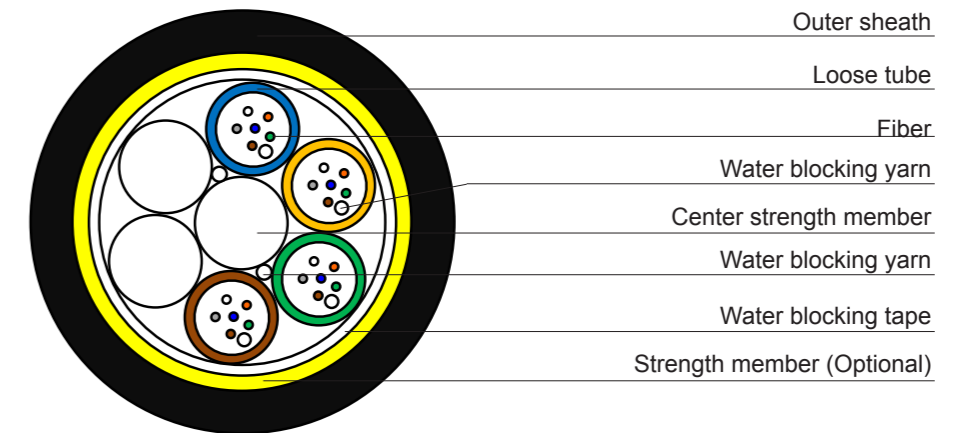


## Characteristic and Application:

- S-Z stranded (up to 1152 fibers) or central tube structure (up to 576 fibers)
- Metallic, non-metallic armored or unarmored
- Steel wire or FRP for center strength member
- Good water penetration, mechanical and environmental performance
- PE or LSZH sheath materials
- In accordance with IEC, ITU and EIA standards

# All Dry Cable

## Cross Section Drawing:



## Characteristic and Application:

- Gel-free cable core, using dry water-blocking material to provide good water resistance performance
- Convenient for installation, reduce cable preparation and installation time
- Speed fiber access and cleanup
- Reduce the number of tools required
- Metallic, non-metallic armored or unarmored
- Duct, directly bury or aerial installation

## Typical Parameters:

### Unarmored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-144-R-FD-S1	144	15.5	175	1500	1500
OFC-144-R-SD-S1	144	15.5	200	1500	1500

### Metallic armored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-144-R-FAID-S1	144	16.5	205	1500	1500
OFC-144-R-FStD-S1	144	16.7	230	1500	2000
OFC-144-R-FStDB-S1	144	18.5	285	1500	3000
OFC-144-R-FAStD-S1	144	18.3	260	1500	3000

### Non-metallic armored, loose tube stranded

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-144-R-FAD-S1	144	15.7	180	2000	1500
OFC-144-R-FGD-S1	144	15.7	180	2000	1500

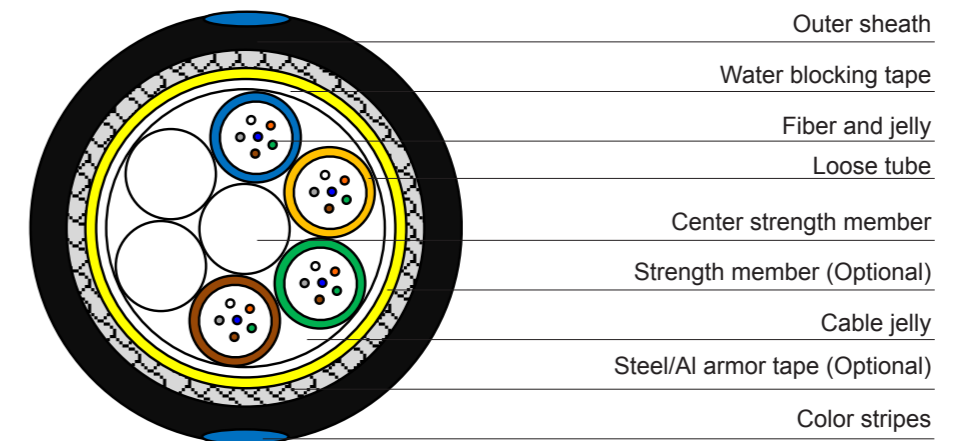
### Central tube structure

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-144-R-CStSwD-S1	144	15.0	280	1500	2000



# Color Stripe Cable

## Cross Section Drawing:



## Characteristic and Application:

- Easy to distinguish with color stripes along cable jacket
- Provide one or more stripes
- Provide color customized according to requirement
- Color stripe with ultraviolet resistant
- Metallic, non-metallic armored or unarmored
- Duct, directly bury or aerial installation

## Typical Parameters:

### Duct

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S1	24	9.5	70	1000	1000
OFC-24-FStD-S1	24	10.7	110	1000	2000
OFC-24-FAD-S1	24	9.7	74	1000	1000

### Directly bury

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FStDB-S1	24	13.5	155	2000	3000
OFC-24-FADB-S1	24	11.5	100	2000	3000

### Aerial (According to different span and weather conditions)

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FASA-S1 (100m)	24	10.9	93	3000	2200
OFC-24-FSF-S1 (100m)	24	9.5*17.0	130	3000	2200



# 3-Strand Light Short Span Aerial Cable

## Cross Section Drawing:



## Characteristic and Application:

- Small size and light weight
- Two FRP as strength member to provide good tensile performance
- Gel filled or gel free, good waterproof performance
- Low price, high fiber capacity;
- Supply to Brazil more than 5000km;
- Applicable for short span aerial and duct installation

## Typical Parameters:

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-12-FSA-S1	12	7.2	47	1000	1000

## Typical Parameters:

### Duct

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S1	24	9.5	75	1000	1000
OFC-24-FStD-S1	24	10.7	115	1000	2000
OFC-24-FAD-S1	24	9.7	78	1000	1000

### Directly bury

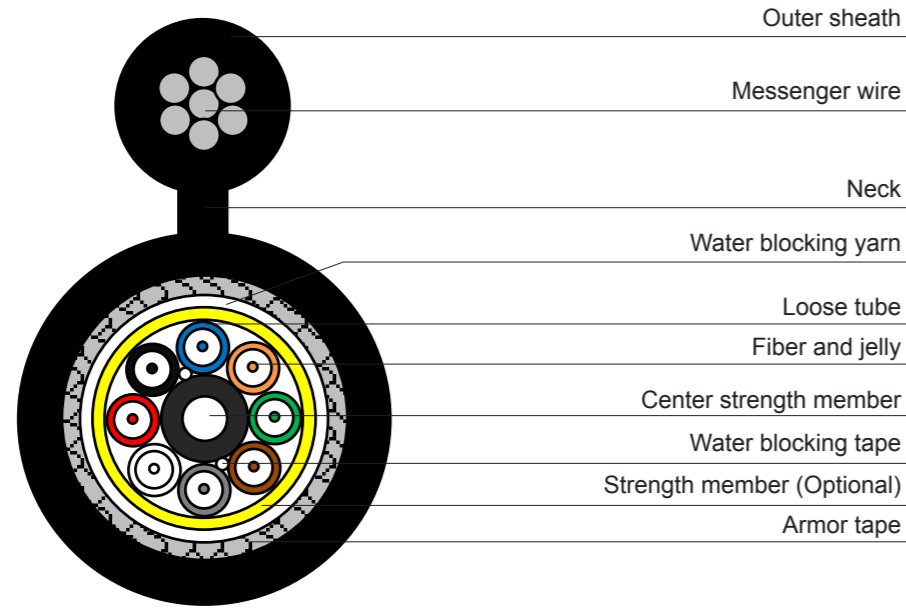
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FStDB-S1	24	13.1	145	2000	3000
OFC-24-FADB-S1	24	11.5	105	2000	3000

### Aerial (According to different span and weather conditions)

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FASA-S1 (100m)	24	10.9	97	3000	2200
OFC-24-FSF-S1 (100m)	24	9.5*17.0	135	3000	2200

# Easy Branch Figure-8 Self-supporting Aerial Cable

## Cross Section Drawing:



## Characteristic and Application:

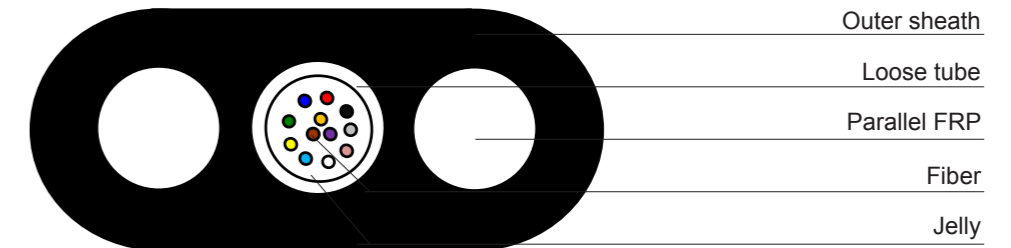
- One fiber per tube, easy to deploy
- S-Z stranded (up to 24 fibers)
- Optional notch opposite along sheath, convenience for cable stripe
- Supply to Indonesia more than 25000km;
- Applicable for self-supporting aerial installation

## Typical Parameters:

Cable type	Fiber count	Nominal diameter (W*H mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-8-FAAISA-S1	8	8.6*16.2	140	3000	2200
OFC-12-FAAISA-S1	12	10.2*17.8	160	3000	2200
OFC-24-FAAISA-S1	24	12.2*19.8	195	3000	2200

# Lightning Protective Light Cable

## Cross Section Drawing:



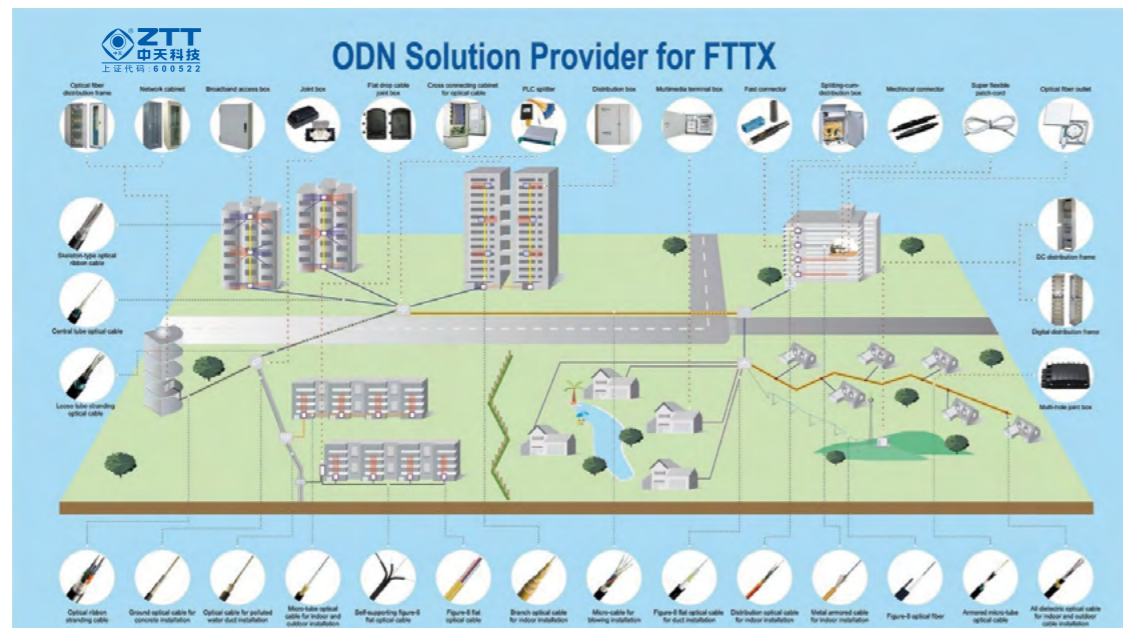
## Characteristic and Application:

- Using nonmetal reinforcement, eliminate lightning hazards
- With light weight, suitable for laying different environment
- Prevent the birds peck, rodent resistance
- Production simplification, energy conservation and environment protection
- Applicable for short span aerial and duct installation

## Typical Parameters:

Cable type	Fiber count	Nominal diameter (W*H mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-12-CFSA-S1	12	4.1*8.1	36	1500	2000

# FTTx Cable



## Characteristic and Application:

- Tight buffer fiber or colored fiber
- Aramid yarns, steel wire or FRP for strength member
- Easy for connection between equipments
- Bending-loss insensitive
- PVC, LSZH sheath materials
- Indoor or outdoor installation
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Round FTTx cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-2-DiC-S5	2	3.0	9	100	500
OFC-2-BC-S5	2	5.5	17	100	500

### Ribbon FTTx cable

Cable type	Fiber count	Nominal diameter (W×Hmm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-2-R-DiC-S5	12	5.0×2.9	10	200	500

### Spiral steel wire armored FTTx cable

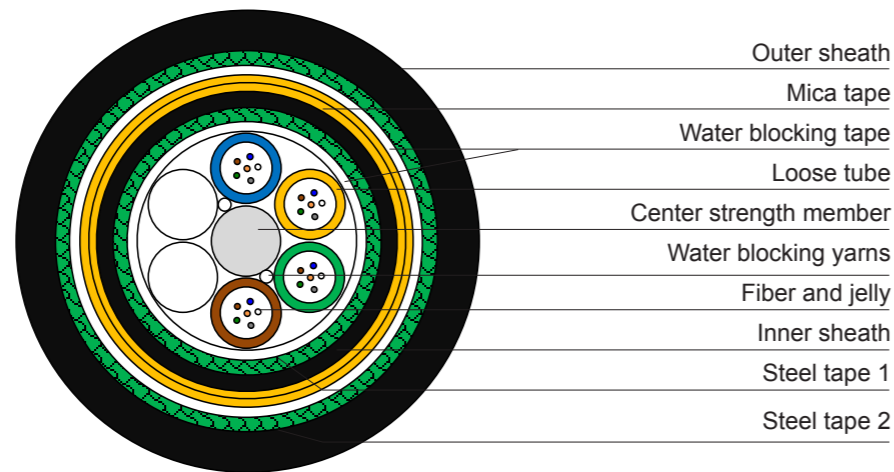
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-2-ADC-S5	2	4.0	22	200	3000

### Flat drop FTTx cable

Cable type	Fiber count	Nominal diameter (W×H mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-2-DC-S5	2	4.0×2.0	15	180	1000
OFC-2-FDC-S3	2	5.5×2.0	22	600	1000

# Flame-retardant Cable and Fire-resistance Cable

## Cross Section Drawing:



## Characteristic and Application:

- Up to 312 fibers
- Good water penetration, mechanical and environmental performance
- Retardant PE or LSZH sheath materials
- Mica tape is optional
- In accordance with the standard IEC 60331 or IEC 60332

## Typical Parameters:

### Flame-retardant cable

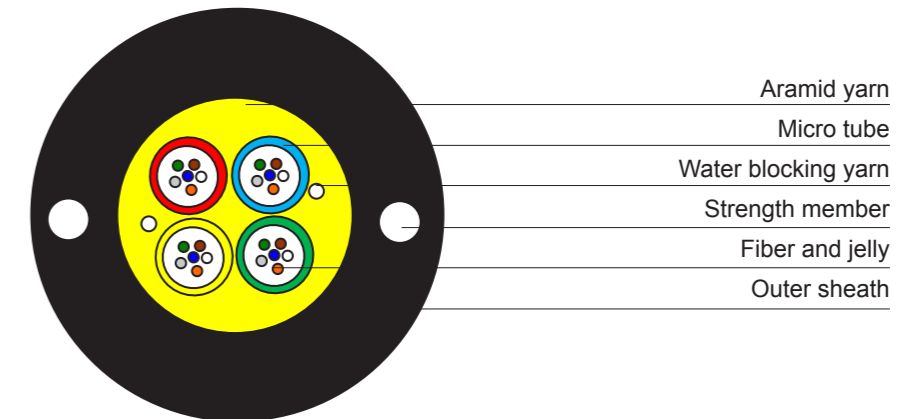
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S3	24	10.1	105	1000	1000
OFC-24-SD-S3	24	10.1	100	1500	1000

### Fire-resistance cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-SStMtStD-S3	24	17.3	345	2000	4000

# Micro Bundle Cable

## Cross Section Drawing:



## Characteristic and Application:

- Micro bundle type (up to 288 fibers)
- Gel-filled or Gel-free for micro tube
- Parallel FRP for strength member
- PE or LSZH for outer sheath
- Fibers could be taken from tubes striped with finger, and convenience for installation
- Could be used for duct, indoor and self-supporting installation
- Good water penetration(if necessary), mechanical and environmental performance
- In accordance with IEC,ITU and EIA standards

## Typical Parameters:

### ADSS

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-CASA-S1	24	11.6	110	3000	2000

### Duct

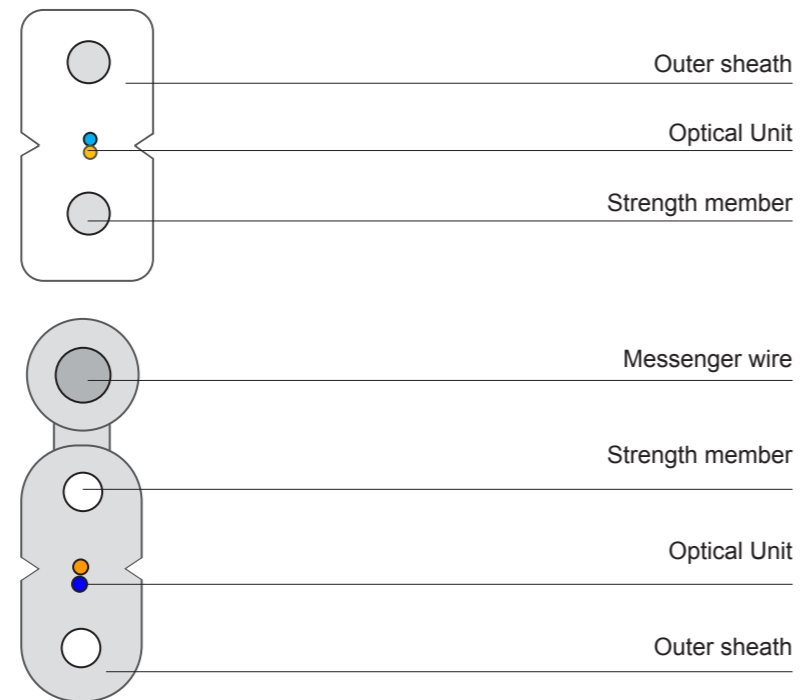
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-CAD-S1	24	8.5	60	1000	2000

### Indoor

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-DiC-S3	24	8.0	75	600	1000

# Low Friction Drop Cable

## Cross Section Drawing:



## Characteristic and Application:

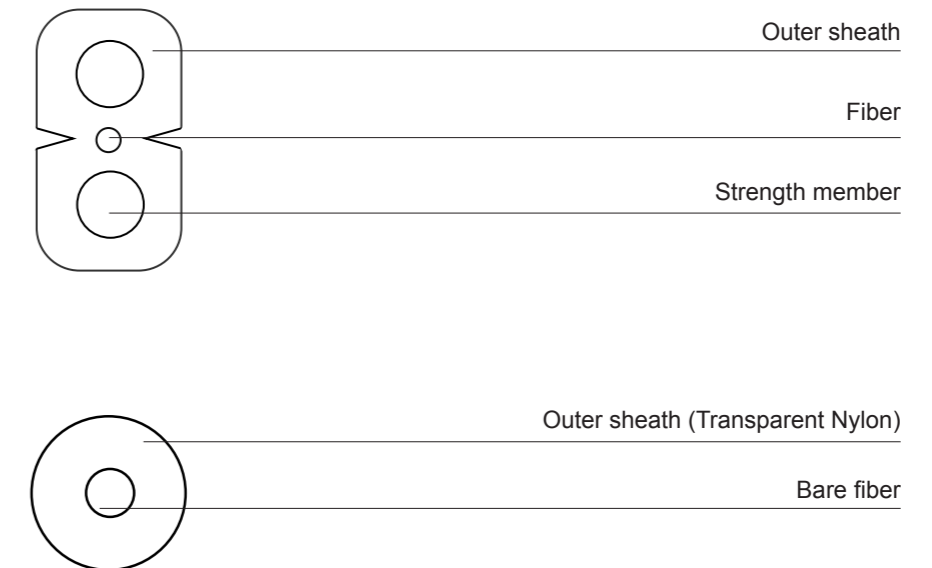
- Colored fiber used as optical unit
- Steel wire as strength member
- Low friction coefficient  $\leq 0.25$  for figure-8 drop cable, and low friction coefficient  $\leq 0.15$  for indoor drop cable
- Sheath color according to customer requirement
- Could be used for indoor/outdoor distribution
- Easy and convenience installation and connection
- Good flame retardant, mechanical and environmental performance
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-1-DC-S3	1	1.6*2.0	7	100	1000
OFC-1-FDC-S3	1	2.0*5.3	20	600	2200

# Invisible Drop Cable

## Cross Section Drawing:



## Characteristic and Application:

- Installed cable almost undetectable to the casual observer
- Fast installation
- Apply to all kinds of indoor environment
- Cable with adhesive glue is against the wall tightly after construction, but it can be taken with strong strength and it's not easy to damage the lager area walls

## Typical Parameters:

### Round type

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-1-DC-S6	1	0.9	0.9	4	10

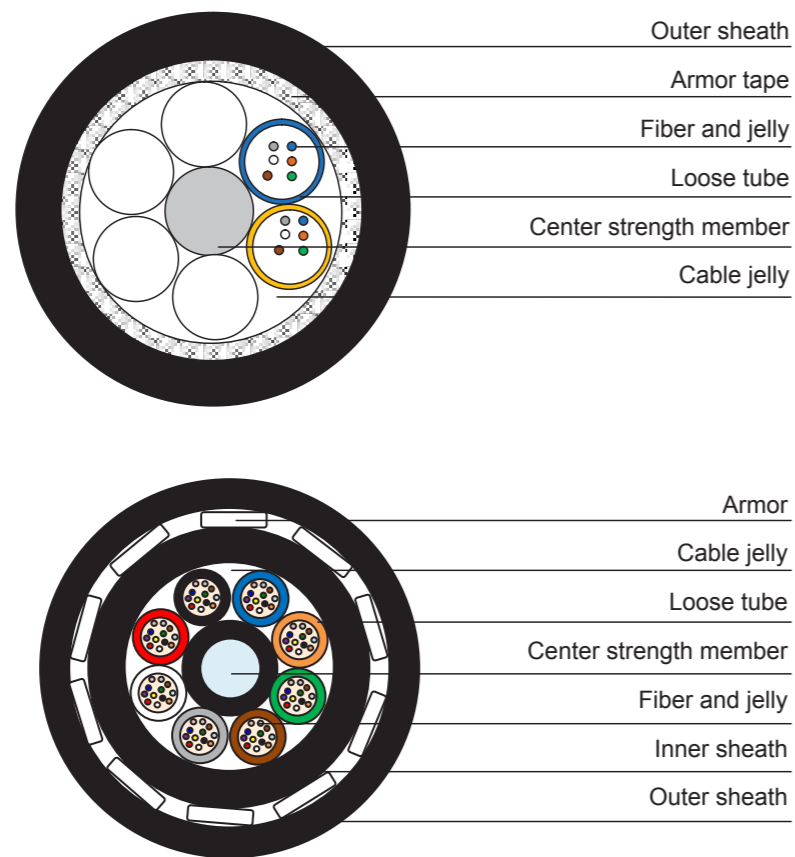
### Flat type

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-1-DC-S3	1	2.0*3.0	9	80	1000



# Anti-rodent or Anti-termite Cable

## Cross Section Drawing:



## Characteristic and Application:

- S-Z stranded (up to 624 fibers) or central tube structure (up to 144 fibers)
- Metallic, non-metallic armored or unarmored
- Steel wire or FRP for center strength member
- Good water penetration, mechanical and environmental performance
- Glass yarns, flat FRP or round FRP armor providing good anti-rodent performance
- Nylon sheath providing good anti-termite performance
- In accordance with IEC, ITU and EIA standards

## Typical Parameters:

### Anti-rodent or anti-termite additive material cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S1	24	9.5	80	1000	1500

### Steel tape armored anti-rodent cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-SStD-S1	24	9.7	108	2000	2000

### Glass yarns armored anti-rodent cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FGD-S1	24	10.3	95	2000	2000
OFC-24-SGD-S1	24	9.1	90	2000	2000

### FRP armor anti-rodent cable

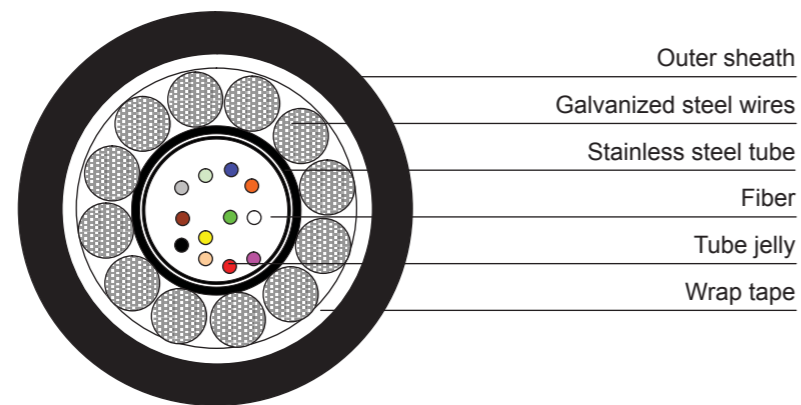
Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FGDB-S1(Flat)	24	13.5	170	4000	3000
OFC-24-FGDB-S1(Round)	24	15.8	220	4000	3000

### Nylon sheath anti-termite cable

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force (N)	Nominal crush resistance (N/10cm)
OFC-24-FD-S6	24	10.2	90	1000	2000

## Sewer Cable

### Cross Section Drawing:



### Characteristic and Application:

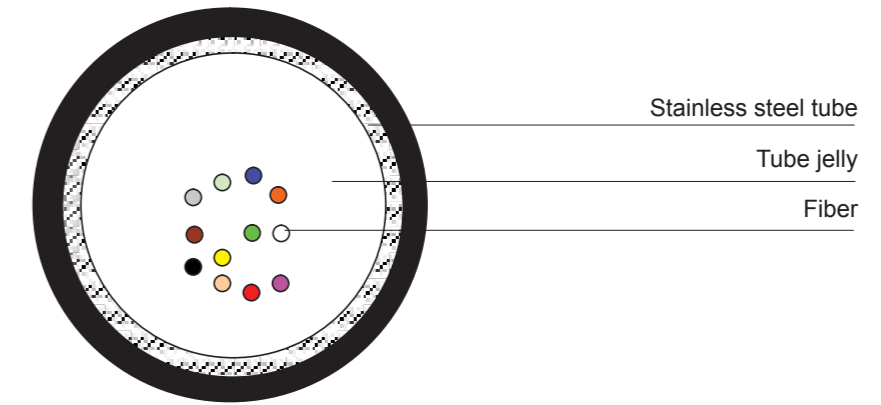
- Up to 96 fibers
- Good water penetration, mechanical and environmental performance
- Good corrosion resisting, anti-rodent and anti-insect performance
- In accordance with IEC, ITU and EIA standards

### Typical Parameters:

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-24-CPSwD-S1	24	7.8	175	3000	6000

## Pavement Cable

### Cross Section Drawing:



### Characteristic and Application:

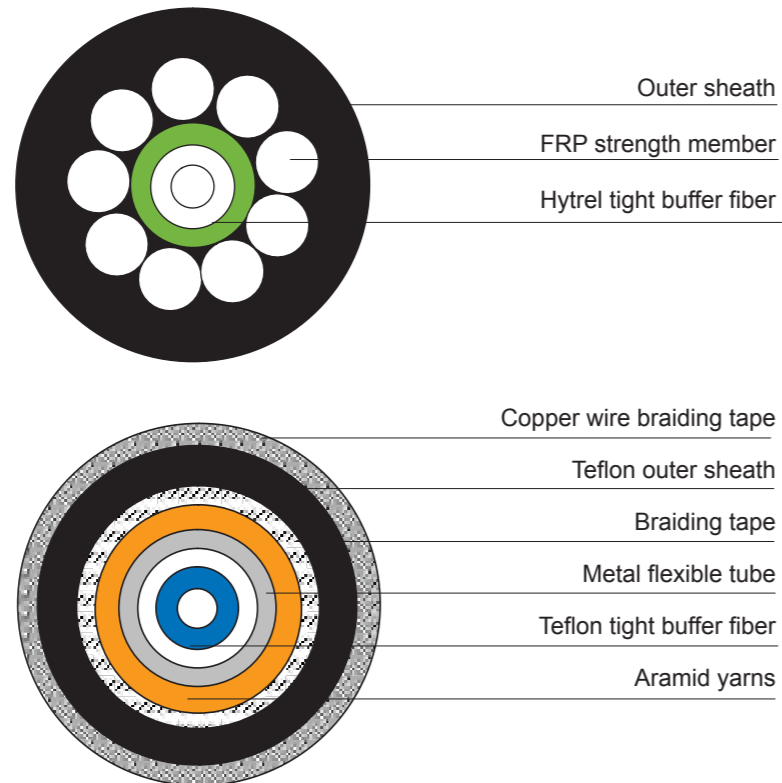
- Up to 96 fibers
- Good water penetration, mechanical and environmental performance
- Good crush resistance for concrete road embedding installation with low depth of digging
- In accordance with IEC, ITU and EIA standards

### Typical Parameters:

Cable type	Fiber count	Nominal diameter (mm)	Nominal weight (kg/km)	Nominal pulling force(N)	Nominal crush resistance (N/10cm)
OFC-24-CPD-S1	24	4.8	30	500	2000

# Detection Cable

## Cross Section Drawing:



## Characteristic and Application:

- Detect the point of continuity; comprehensively detect the various points of the object.
- Anti-high pressure and strong electromagnetic fields, radiation-resistant; can be used in a variety of hazardous working environments.
- Simple to install, and can be used in various occasions for a long time.
- Has a good performance of lateral compression resistance.
- Used for stress sensing of dams, bridges and high buildings to prevent building collapse.
- Used for the temperature and pressure measurement of oil wells and coal mines.
- Used for the temperature monitoring and detection of power plants and substations.
- Used for monitoring cables and transmission lines.



ZTT has established a complete, advanced quality inspection center of controlling raw materials and products quality. To ensure high quality of fiber optic cables, ZTT always selects raw materials of international and domestic brands. ZTT also has received authentications of ISO9001, ISO14001 and OHSAS 18001.

## Excellent Test Facilities



ZTT has passed the tests by authoritative institutions at home and abroad. The authoritative institutions include Quality Supervision & Inspection Center of Optical Communication Products, Ministry of Information Industry of P.R.C, Shanghai Electric Cable Research Institute, State Grid Electric Power Research Institute.

## References

### Overseas Reference

Country	Total length
Vietnam	145134km
Mexico	47070km
Hongkong	35445km
Thailand	34428km
Indonesia	33654km
Brazil	16324km
Qatar	14693km
China Taipei	12805km
Philippine	9609km
Chile	8454km

### Reference in China

Country	Total length	Consumer
China	1500000 km	China Telecom
China	1700000 km	China Mobile
China	600000 km	China Electricity
China	600000 km	China Unicom
China	250000 km	China Sarft
China	100000 km	China Railway