

Fiber Optic Cables



CATALOG



Starting at 2002 in China, HOC helps wholesalers and brand owners fulfill their fiber optic cable wholesale by top-end turnkey manufacturing.

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Central Uni-Tube Steel Tape Light Armored Fiber Optic Cable



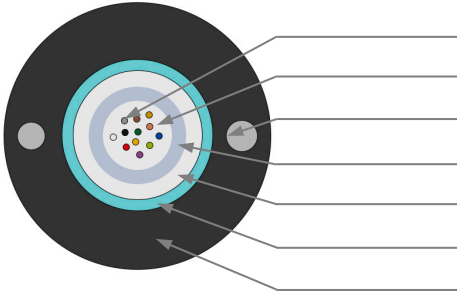
Description

It is an outdoor application fiber optic cable with central uni-tube and light-armored with double side plastic coated steel tape (PSP) and 2 parallel steel wires. It's suitable for laying in pipelines and overhead communication system. All fibers are housed in a central high-modulus plastic loose tubes with fiber filling compound for protection.

Features

- Good pressure resistance and flexibility
- Small diameter, light weight which is easy to lay
- Two parallel steel wire ensure tensile strength
- Double side plastic coated steel tape for moisture resistance
- Fiber filling compound protection
- Water-blocking materials
- Black outer PE sheath

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Steel Wire
- 4 Loose Tube
- 5 Water-blocking Materials
- 6 Steel Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Weight (kg/km)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~12	82	300/1000	600/1500	10D/20D
2~12	124	300/1000	1000/3000	10D/20D
12~24	127	300/1000	1000/3000	10D/20D

Applications: Duct, Aerial

Central Uni-Tube Corrugated Steel Tape Armored Fiber Optic Cable



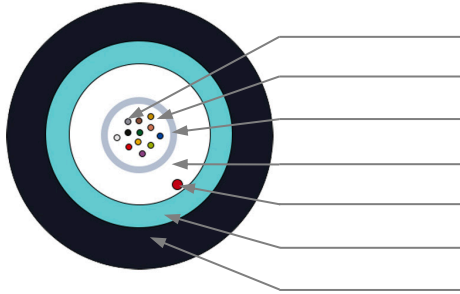
Description

The CST fiber optic cable has a metal protect layer of corrugated steel tape between the loose tube and outer cable sheath. All optical fiber is placed into a fiber jelly filled loose tube, and an extra fiber glass yarn inside the CST armor. With large fiber count, a central strength member and will be added among the multi loose tubes. And cable is finished with a PE, LSZH cable sheath.

Features

- Corrugated steel tape as cable armoring
- Low cost and small uni-tube diameter for easy installation
- Water blocking materials and hydrolysis resistant high strength loose tube
- Excellent crush and tensile pressure resistance
- Good mechanical and temperature characteristics
- Long delivery length
- Choices for optical fiber and fiber count

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Water-blocking Glass Yarn
- 5 Rip Cord
- 6 Corrugated Steel Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Loose Tube Structure	Fiber per Tube	Loose Tube Diameter (mm)	CSM / pad Diameter (mm)	Outer Sheath Thickness (mm)	Cable Diameter (mm)	Tensile Strength Short Term (N)	Crush Short Term (N/100mm)
4	1	4	2.4±0.1	-	1.5±0.1	8.1±0.5	1100N	1000N
8	1	8	2.4±0.1	-	1.5±0.1	8.1±0.5		
12	1	12	2.4±0.1	-	1.5±0.1	8.1±0.5		
24	1	24	3.2±0.1	-	1.5±0.1	8.7±0.5		
48	1+6	12	2.0±0.1	2.3/2.3	1.6±0.1	12.2±0.5	2600N	1000N
96	1+8	12	2.0±0.1	3.4/3.4	1.6±0.1	13.1±0.5		
144	1+12	12	2.0±0.1	3.4/6.3	1.6±0.1	15.9±0.5		
288	1+9+5	12	2.0±0.1	3.0/4.2	1.6±0.1	17.8±0.5		

Applications: Duct, Aerial

Stranded Loose Tube Steel Tape Light Armored Fiber Optic Cable



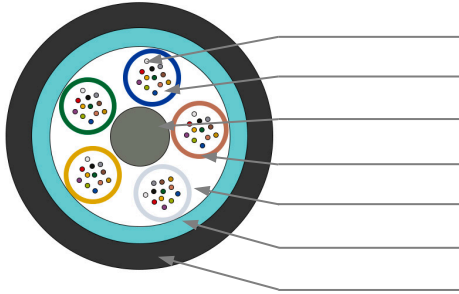
Description

This loose tube light armored fiber optic cable comes with stranded loose tube, PSP steel tape and a central strength member. All loose tubes and fillers are stranded around the central strength member into a compact and circular cable core. It's installed in aerial and duct for backbone network, metropolitan area network and FTTH feeder.

Features

- Good pressure resistance and flexibility
- Single steel wire as central strength member
- Complete cable core filling
- Double side plastic coated steel tape for moisture resistance
- Fiber filling compound protection
- Stranded loose tube for large fiber counts
- PE sheath has good ultraviolet radiation resistance

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Central Strength Member
- 4 Loose Tube
- 5 Cable Filling Compound
- 6 Corrugated Steel Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Weight (kg/km)	Tensile Long/Short Term (N/100mm)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~30	1~5	4~0	96	600/1500	300/1000	10D/20D
32~36	6	0	105			
38~60	4~5	1~0	111			
62~72	6	0	138			
74~96	7~8	1~0	168			
98~120	9~10	1~0	195			
122~216	11~18	5~0	228			
288	24	0	283			

Applications: Duct, Aerial

Stranded Multi Loose Tube Aluminum Tape Light Armored Fiber Optic Cable



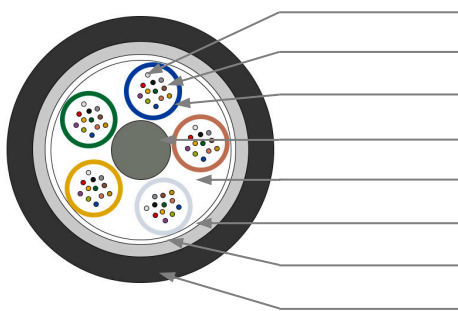
Description

This MLT (multi loose tube) armored fiber optic cable has a central strength member among multi loose tube and fillers, and an aluminum armor tape outside the loose tubes. They provide optical fiber inside critical protection from outside impact and tensile pressure.

Features

- Steel wire used as the central strength member
- Aluminum tape enhancing moisture-proof and protection
- Good mechanical and temperature performance
- High strength hydrolysis resistant loose tube
- Fiber filling compound protection
- Crush resistance and flexibility
- PE sheath protect cable from ultraviolet radiation

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Central Strength Member
- 5 Cable Filling Compound
- 6 Water-blocking Materials
- 7 Corrugated Aluminum Tape (APL)
- 8 PE Sheath

Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Weight (kg/km)	Tensile Long/Short Term (N/100mm)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~30	1~5	4~0	76	600/1500	300/1000	10D/20D
32~36	6	0	85			
38~60	4~5	1~0	90			
62~72	6	0	113			
74~96	7~8	1~0	136			
98~120	9~10	1~0	163			
122~216	11~18	5~0	190			
288	24	0	239			

Applications: Duct, Aerial

Stranded Loose Tube Non-Metallic CSM Non-Armored Fiber Optic Cable



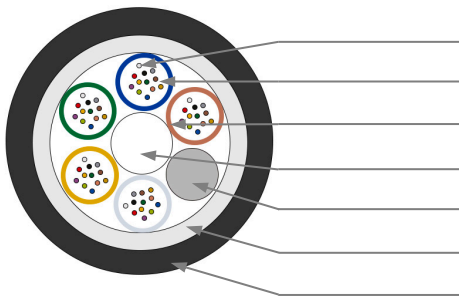
Description

It is an outdoor communication cable with non-metallic FRP (fiber reinforced plastic glass) or PE-coated FRP central strength member and non armored structure. It's especially suitable for laying in pipelines and overhead communication system. All fibers are housed in stranded high-modulus plastic loose tubes with fiber filling compound for protection.

Features

- Small size and light weight
- Good pressure resistance and flexibility
- Stranded loose tube
- Central strength member of FRP or PE-coated FRP
- Fiber filling compound protection
- Water-blocking tape or cable filling compound
- Black outer PE sheath

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member (CSM)
- 5 Fillers
- 6 Water-blocking Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Weight (kg/km)	Tensile Long/Short Term (N/100mm)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~36	1~6	5~0	86	400/1000	300/1000	10D/20D
38~109	4~6	2~0	109			
2~42	1~7	6~0	98	600/1500		
44~72	4~6	2~0	115			
2~48	1~8	7~0	119	1000/3000		
50~96	5~8	3~0	125			
98~120	9~10	1~0	149			
122~144	11~12	1~0	179			

Applications: Duct, Aerial

Figure 8 Uni-Tube Non-Armored Self-Supporting Aerial Cable



Description

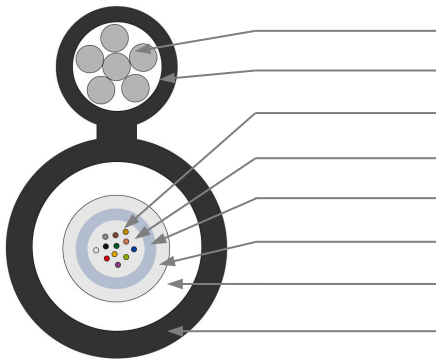
This aerial fiber optic cable is a non armored uni-tube fiber optic cable with a stranded wire self supporting unit alongside. The cable is composed of central loose tube with up to 2-24 fibers.

It's an ideal outdoor self-supporting aerial cable. It is a small size figure 8 fiber optic cable. With advantages of light, flexible and easy to construction, it's one of the alternative cable for FTTH cabling network.

Features

- Small diameter and figure 8 structure
- Easy to install with self-supporting aerial fiber cable structure
- Good performance of mechanical and temperature
- High strength loose tube that is hydrolysis resistant
- Medium density, high density polyethylene jacket, low friction installation
- Water-blocking materials protection

Cable Structure



- 1 Stranded Wire
- 2 PE Sheath
- 3 Optical Fiber
- 4 Tube Filling Compound
- 5 Uni Tube
- 6 Cable Filling Compound
- 7 Water-blocking Material
- 8 PE Sheath

Technical Characteristics

Fiber Count	Diameter (±0.5mm)	Cable Weight (kg/km)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)	Tensile Long/Short Term (N/100mm)
2~12	7.5	60±10	300/1000	10D/20D	According to the Diameter of Stranded Wire
12~24	8.5	70±10	300/1000	10D/20D	

Applications: Self-supporting Aerial

Figure 8 Layer Stranded Non-Armored Self-Supporting Aerial Cable



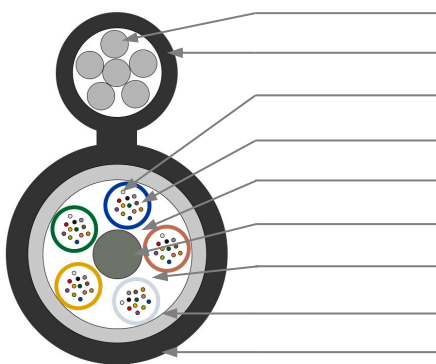
Description

This aerial figure 8 self supporting armored fiber cable comes with stranded loose tube, APL aluminum tape and central strength member. Other than that, it's also accompanied with a stranded wire for self-supporting aerial installation.

Features

- Good pressure resistance and flexibility
- Extremely high tensile strength, which is convenient for self-supporting overhead laying
- Reduce installation time and costs
- Single steel wire as central strength member
- Fiber filling compound protection
- Plastic coated aluminum tape (APL) moisture proof layer
- PE sheath has good ultraviolet radiation resistance

Cable Structure



- 1 Stranded Wire
- 2 PE Sheath
- 3 Optical Fiber
- 4 Tube Filling Compound
- 5 Loose Tube
- 6 Central Strength Member
- 7 Cable Filling Compound
- 8 APL Aluminum Tape
- 9 PE Sheath

Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Weight (kg/km)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~6	1	4	158	300/1000	According to the Diameter of Stranded Wire	10D/20D
8~12	2	3	158			
14~18	3	2	158			
20~24	4	1	158			
26~30	5	0	158			
32~36	6	0	167			
38~48	4	1	172			
50~60	5	0	172			

Applications: Self-supporting Aerial

Aerial Flat Self-Supporting Non-Armored Fiber Optic Cable



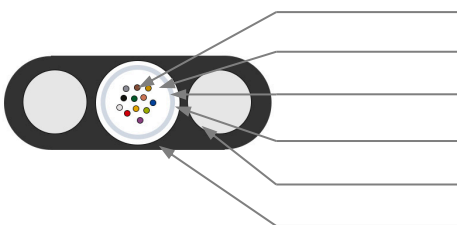
Description

This aerial drop cable is a flat shape non armored cable. It consists of 1-24 fibers uni-tube, 2 parallel FRP strength member, water blocking materials and flat outer PE jacket. The cable is usually used in rural areas as self-supporting drop cable, enable subscribers access to the distribution network.

Features

- Uni-tube, small size and diameter, easy to strip for rural area network
- Non armored all dielectric materials, light weight structure for easy
- 2 parallel FRP strength member close to the uni-tube, ensures tensile strength
- Excellent crush resistance because of the flat shape jacket
- Good mechanical and temperature performance
- PE sheath protects cable from ultraviolet radiation

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Water-blocking Materials
- 5 FRP Strength Member
- 6 PE Sheath

Technical Characteristics

Fiber Count	Loose Tube	Max. Fibers per Tube	Cable Diameter (mm)	Weight ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)
1~12	1	24	5.0*7.0	40	300/1100	300/1000
14~24	1	24	5.5*7.5	45		

Applications: Aerial

Stranded Loose Tube Aluminum/Steel Tape Double Sheath Armored Fiber Optic Cable



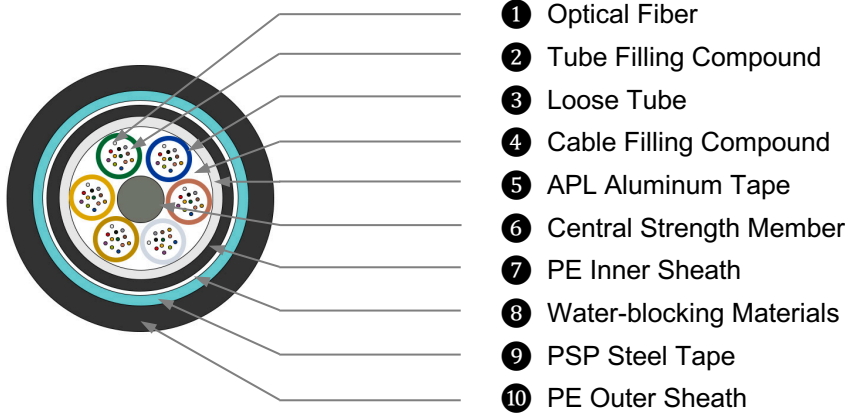
Description

It is a fiber optic cable which has good performance of resisting external mechanical damage and preventing soil erosion. Fiber optic units are armored with metal aluminum table, water-blocking materials, steel tape and double sheath outside, which makes it is available for directly buried in the ground.

Features

- Good mechanical properties and temperature characteristics
- Single steel wire as central strength member
- Plastic coated aluminum tape (APL) moisture-proof layer
- Double side plastic coated steel tape (PSP)
- Fiber filling compound protection
- Stranded loose tube for large fiber counts
- Water-blocking materials
- Double PE sheath

Cable Structure



Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Weight (kg/km)	Tensile Long/Short Term (N/100mm)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~36	1~6	5~0	177	1000/3000	1000/3000	12.5D/25D
38~60	4~5	1~0	194			
62~72	6	0	204			
74~96	7~8	1~0	239			
98~120	9~10	1~0	275			
122~216	11~18	5~0	312			

Applications: Buried, Duct

Stranded Loose Tube Steel Wire Steel Tape Armored Fiber Optic Cable



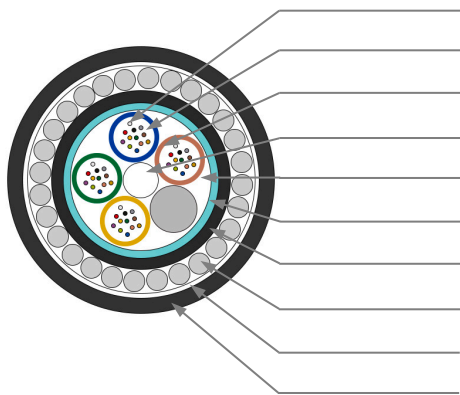
Description

This steel wire and steel tape double armored fiber optic cable has excellent crush resistance because of the heavy armoring. Fiber optic units is armored with corrugated steel tape, steel wire, double sheath and water blocking filling compound, therefore make it suitable for buried and undersea communication.

Features

- Double armored fiber optic cable with corrugated steel tape and steel wire
- Steel wire armoring (SWA) improves tensile and impact resistance
- Double PE sheath, excellent moisture resistance
- Corrugated steel tape outside the stranded loose tube unit
- Water blocking filling compound in loose tube
- APL moisture barrier

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member
- 5 Fillers
- 6 Corrugated Steel Tape
- 7 PE Inner Sheath
- 8 Steel Wire
- 9 Water-blocking Materials
- 10 PE Outer Sheath

Technical Characteristics

Fiber Count	Tubes	Fillers	Cable Weight Ref. (kg/km)	Tensile Strength Long/ Short Term (N/100mm)	Crush Resistance Long/ Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
2~36	1~6	5~0	801	4000/10000	3000/5000	12.5D/25D
2~36	1~6	5~0	984	10000/20000		

Applications: Duct, Buried, Underwater

Underwater Steel Wire Armored SWA Fiber Optic Cable



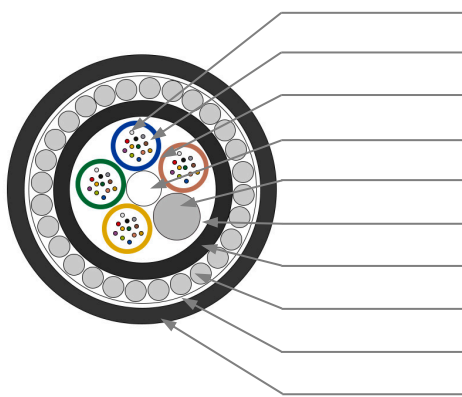
Description

This is an underwater fiber optic cable which adopts a steel wire armor, it is also known as SWA. And the fiber cable sheath and water blocking materials is considered comprehensively according to the hydrogeological conditions of the river.

Features

- Steel wire armoring (SWA) improves tensile and impact resistance
- Double PE sheath, excellent moisture resistance
- Good hydrolysis resistance and high strength
- Water-blocking tape and materials
- Good mechanical properties and temperature characteristics
- Loose tube filled with special tube filling compound ensure critical protection for fiber
- Crush resistance and flexibility

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member (CSM)
- 5 Fillers
- 6 Water-blocking Materials
- 7 PE Inner Sheath
- 8 Steel Wire Armor
- 9 Aramid Yarn
- 10 PE Outer Sheath

Technical Characteristics

Fiber Count	Loose Tubes + Fillers	Fibers per Tube	CSM Diameter (mm)	Cable Diameter (mm)	Weight (kg/km)	Tensile Short Term	Crush Short Term	Min. Bending Radius Static/ Dynamic
8	1	8	-	11.8±0.5	230	4000N	4000N	12.5D/25D
24	1	24	-	11.8±0.5	231			
48	1+5	12	1.5/1.5	13.1±0.5	298	8000N	5000N	12.5D/25D
96	1+8	12	2.6/3.5	15.1±0.5	385			
144	1+12	12	3.0/6.3	17.9±0.5	513			

Applications: Buried, Underwater

All-Dielectric Self-Supporting Aerial Standard ADSS Fiber Optic Cable



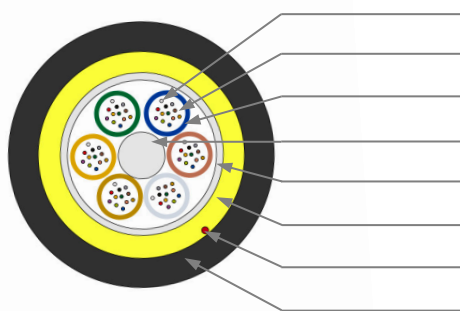
Description

This ADSS aerial fiber optic cable has great performance of tension resistance and self-supporting. In addition to its non-conductivity, the ADSS fiber optic cable can be installed with newly erected communication lines or existing power line system.

Features

- Can be set up with uninterruptible power supply
- All dielectric metal free cable materials
- Light weight and small cable diameter
- Excellent tensile properties and temperature characteristics
- Large span, maximum more than 1000M
- Using AT sheath with superior tracking resistance
- PE sheath has good ultraviolet radiation resistance

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member
- 5 Water-blocking Materials
- 6 Aramid Yarn
- 7 Rip Cord
- 8 PE/AT Sheath

Technical Characteristics

Ref. Outer Diameter (mm)	Ref. Weight (Kg/km)		Recommended Daily Max. Work Tension (kN)	Max. Allowable Working Tension (kN)	Breaking Strength (kN)	Tensile Element Cross-sectional (mm ²)	Modulus of Elasticity (kN/mm ²)	Thermal Expansion Coefficient ×10 ⁻⁶ /K	Suitable Span (NESC Standard, m)			
	PE	AT							A	B	C	D
11.8	117	124	1.50	4	10	4.60	7.6	1.8	160	100	140	100.00
12.0	121	129	2.25	6	15	7.60	8.3	1.5	230	150	200	150.00
12.3	126	134	3.00	8	20	10.35	9.45	1.3	300	200	290	200.00
12.6	133	141	3.60	10	24	13.80	10.8	1.2	370	250	350	250.00
12.8	138	145	4.50	12	30	14.30	11.8	1	420	280	400	280.00
13.1	145	153	5.40	15	36	18.40	13.6	0.9	480	320	460	320.00
13.5	155	163	6.75	18	45	22.00	16.4	0.6	570	380	550	380.00
13.8	163	171	7.95	22	53	26.40	18	0.3	670	460	650	460.00
14.4	177	186	9.00	26	60	32.20	19.1	0.1	750	530	750	510.00
14.6	182	191	10.50	28	70	33.00	19.6	0.1	800	560	800	560.00
14.8	195	204	12.75	34	85	40.00	20.1	0.1	880	650	880	650.00

Applications: Self-supporting, Aerial

ADSS All-Dielectric Self-Supporting Aerial Double Sheath Fiber Optic Cable



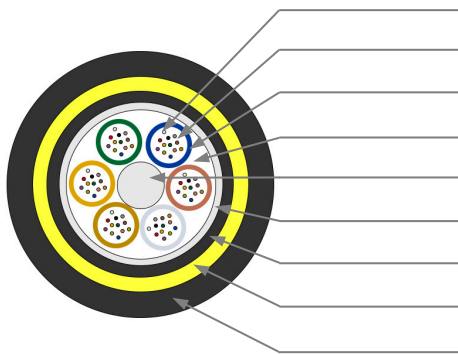
Description

ADSS fiber optic cable is also known as all-dielectric self-supporting fiber optic cable. With light weight itself and aramid yarn protection, it is strong enough to support itself between poles or tower without using conductive metal elements.

Features

- Can be set up with uninterruptible power supply
- All dielectric metal free cable materials
- Light weight and small cable diameter
- Excellent tensile properties and temperature characteristics
- Large span, maximum more than 1000M
- Using AT sheath with superior tracking resistance
- PE sheath has good ultraviolet radiation resistance

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Cable Filling Compound
- 5 FRP Central Strength Member
- 6 Water-blocking Materials
- 7 PE Inner Sheath
- 8 Aramid Yarn
- 9 PE/AT Outer Sheath

Technical Characteristics

Ref. Outer Diameter (mm)	Ref. Weight (Kg/km)		Recommended Daily Max. Work Tension (kN)	Max. Allowable Working Tension (kN)	Breaking Strength (kN)	Tensile Element Cross-sectional (mm ²)	Modulus of Elasticity (kN/mm ²)	Thermal Expansion Coefficient $\times 10^{-6}/K$	Suitable Span (NESC Standard, m)			
	PE	AT							A	B	C	D
11.8	117	124	1.50	4	10	4.60	7.6	1.8	160	100	140	100.00
12.0	121	129	2.25	6	15	7.60	8.3	1.5	230	150	200	150.00
12.3	126	134	3.00	8	20	10.35	9.45	1.3	300	200	290	200.00
12.6	133	141	3.60	10	24	13.80	10.8	1.2	370	250	350	250.00
12.8	138	145	4.50	12	30	14.30	11.8	1	420	280	400	280.00
13.1	145	153	5.40	15	36	18.40	13.6	0.9	480	320	460	320.00
13.5	155	163	6.75	18	45	22.00	16.4	0.6	570	380	550	380.00
13.8	163	171	7.95	22	53	26.40	18	0.3	670	460	650	460.00
14.4	177	186	9.00	26	60	32.20	19.1	0.1	750	530	750	510.00
14.6	182	191	10.50	28	70	33.00	19.6	0.1	800	560	800	560.00
14.8	195	204	12.75	34	85	40.00	20.1	0.1	880	650	880	650.00

Applications: Self-supporting, Aerial

ASU Aerial Self-Supporting Non-Armored Fiber Optic Cable



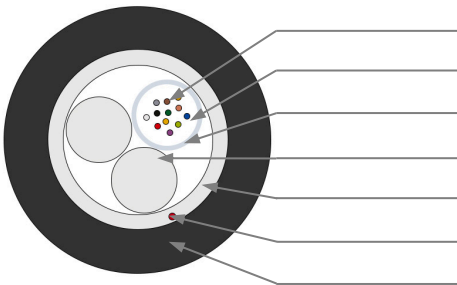
Description

This ASU FO of 2~12 core is a mini adss fiber optic cable. Due to it's all dielectric self-supporting design and material, it's widely used in FTTH fiber to the home networking. 80 meter and 120 meter are the most common 2 span for this cable. But other span and cable structure can be customized and manufactured.

Features

- 2 FRP as strength member, non-metallic structure
- Water blocking material inside the cable
- Loose tube with fiber jelly compound give fibers protection
- Rip cord for easily stripe and construction
- Outer sheath PE, MDPE and HDPE for excellent environment mechanical performance
- Span 80 meter and 120 meter, customization is also available

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Strength Member
- 5 Glass Yarn
- 6 Rip Cord
- 7 PE Sheath

Technical Characteristics

Loose Tubes	Loose Tube Diameter (mm)	Cable Diameter (mm)	Weight (kg/km)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)
2~12	1.8/2.1	7.0	55	300/1000	150/300
16~24	2.2/2.5	7.0	55		

Applications: Self-supporting, Aerial

Indoor/Outdoor Bow Type FTTH Fiber Drop Cable



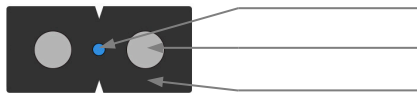
Description

This FTTH cable is a butterfly drop cable with 2 wire metal reinforcement and low smoke halogen free (LSZH) flame retardant polyolefin sheath. It's an indoor/outdoor optical cable specially developed for FTTH (Fiber to the Home) access.

Features

- Small diameter, light weight and strong practicability
- Good compressive, tensile and aging resistance
- Simple and reasonable structure
- Easy to peel off with groove 8 design
- Small bending radius and excellent flexibility
- Highest cost performance of ITU G.657 standard
- Ideal LSZH sheath for indoor application

Cable Structure



- 1 Optical Fiber
- 2 Steel or FRP Strength Member
- 3 LSZH Jacket (Black / White)

Technical Characteristics

Fiber Count	Cable Size (mm)	Cable Weight (Ref kg/km)	Tensile Long/ Short Term N	Crush Resistance Long/ Short Term N/100mm	Bending Radius Static/Dynamic mm
1	(2.0±0.1)x(3.0±0.1)	8	40 / 80	500 / 1000	15D / 30D
2	(2.0±0.1)x(3.0±0.1)	8.5			

Applications: Drop Cable

Self-Supporting Indoor/Outdoor Bow Type FTTH Fiber Drop Cable



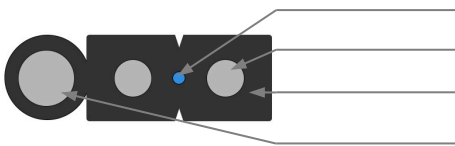
Description

This is an indoor and outdoor self supporting and bow type FTTH drop cable. The fibers are in the cable center and protected by 2 parallel steel wires on the bow type structure. Alongside the cable part, a cable messenger is formed with another steel wire and out sheath. Cable and messenger are formed together to get this self-supporting drop cable.

Features

- Simple structure, light weight and high practicability
- 2 parallel steel wire strength member provides good performance of crush resistance
- Single steel wire as an additional strength member for self supporting
- Unique groove design which is easy to strip and splice
- Simplify installation and maintenance
- Low smoke and zero halogen environment friendly sheath
- Flame retardant jacket suitable for indoor application

Cable Structure



- 1 Optical Fiber
- 2 Steel or FRP Strength Member
- 3 LSZH Jacket (Black / White)
- 4 Steel Wire

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight Ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)	Storage and Operating Temperature (°C)
1	(2.0±0.1)x(5.2±0.3)	21	300/600	1000/2200	15/30	-20 ~ +60
2	(2.0±0.1)x(5.2±0.3)	21	300/600	1000/2200	15/30	-20 ~ +60

Applications: Self-supporting, Drop Cable

Simplex Tight-Buffer Interconnect Indoor Fiber Cable

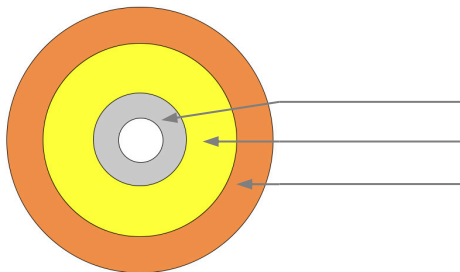


Description

This simplex fiber optic cable is a cable composed of tight buffer fiber. Tight buffer fiber has great flame retardant performance and protection for the fiber. In addition, to add the tensile characteristics for the simplex cable, a layer of aramid yarn is wrapping the tight buffer fiber. Outside jacket can choose from PVC or LSZH material. Both have corrosion and water resistant. LSZH is also flame retardant and environment friendly, which is suitable for indoor cabling.

Features

- Low attenuation for long distance transmission
- Excellent tensile performance with aramid yarn
- Corrosion and water resistance protection from cable jacket
- Easy for strip with tight buffer fiber
- Tight buffer fiber also flame retardant
- Environment friendly and flame retardant LSZH sheath material



Cable Structure

- 1 Tight Buffer Fiber
- 2 Aramid Yarn
- 3 Jacket

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight ref. (Kg/km)		Diameter of Tight Buffer Fiber (μm)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)	Bending Radius Dynamic/Static (mm)
		PVC	LSZH				
1	1.6±0.2	2.4	2.6	600±50	40/80	100/500	60/30
1	1.9±0.2	3.5	4.5	600±50	60/100		
1	2.8±0.2	6	7.5	600±50	60/100		

Applications: Indoor distribution, Interconnect between equipment, Patch cords

Duplex Zip-Cord Tight-Buffer Interconnect Indoor Fiber Cable



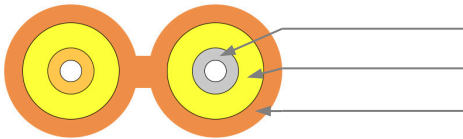
Description

This zip cord fiber optic patch cable is a duplex cable in figure 8 structure. First, a tight buffer fiber is placed in the center. Then the fiber is wrapped by a layer of aramid yarn as strength member. Finally, the cable is finished with PVC or LSZH jacket in figure 8 structure.

Features

- Easy for stripping with tight buffer fiber
- Tight buffer fiber has excellent flame retardant performance
- Strength member of aramid yarn assures good tensile strength
- Figure 8 structure sheath is easy for strip and distribution
- Corrosion resistant and waterproof outer jacket
- Flame retardant and environment friendly sheath material

Cable Structure



- 1 Tight Buffer Fiber
- 2 Aramid Yarn
- 3 Jacket

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight ref. (Kg/km)		Diameter of TBF (μm)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)	Bending radius Dynamic/Static (mm)
		PVC	LSZH				
2	(1.6±0.2) x (3.3±0.2)	4.8	5.3	600±50	40/80	100/500	60/30
2	(1.8±0.2) x (3.7±0.2)	8.0	8.7	600±50	100/200		
2	(2.0±0.2) x (4.1±0.2)	8.2	9.0	600±50	100/200		
2	(2.8±0.2) x (5.8±0.2)	11.6	14.8	900±50	100/200		

Applications: Indoor distribution, Interconnect between equipment, Patch cords

Indoor Multiple Purpose Tight-Buffer Breakout Fiber Cable

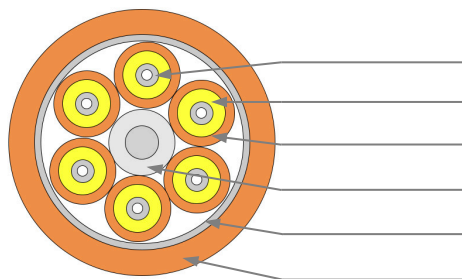


Description

This fiber breakout cable is a stranded multi purpose cable. All tight buffer fiber is wrapped by aramid yarn and protected. Tight buffer fiber and aramid yarn is completed with subunit jacket separately. Then all fiber units are stranded around a fiber reinforcement plastic central strength member. Water blocking tape can be added between the stranded unit and outside PVC or LSZH sheath.

Features

- Central FRP strength member
- Stranded tight buffer fiber units provides excellent tensile performance
- Corrosion resistant and waterproof outer sheath
- Environment friendly jacket material
- Flame retardant outer sheath for indoor and building safety application
- Aramid yarn in tight buffer fibers also improves the tensile standard



Cable Structure

- 1 Tight Buffer Fiber
- 2 Aramid Yarn
- 3 Subunit Jacket
- 4 FRP Strength Member
- 5 Water-blocking Materials
- 6 Jacket

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight ref. (Kg/km)		Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)	Bending Radius Dynamic/Static (mm)
		PVC	LSZH			
4	7.4±0.5	50	56	130/440	300/1000	20D / 10D
6	8.4±0.5	66	74	200/660		
8	9.8±0.5	91	101	200/660		
12	12.4±0.5	140	155	200/660		
18	12.4±0.5	140	155	400/1320		
24	14.4±0.5	181	201	400/1320		
36	16.4±0.5	208	255	400/1320		
48	10.0±0.5	280	344	400/1320		

Applications: Indoor distribution, Backbone distribution

Indoor Multiple Purpose Tight-Buffer Distribution Fiber Cable

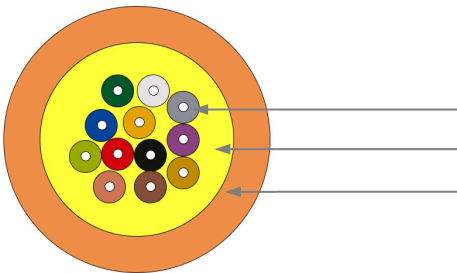


Description

This is an indoor nonmetallic flame retardant distribution fiber optic cable with tight buffer optical fiber bundle. Several color-coded tight buffer fiber are wrapped by a layer of aramid yarn. And outside the optical fiber bundle, the cable is completed with a jacket of PVC or LSZH materials.

Features

- Multiple tight buffer fiber bundle, easy for construction
- Tight buffer fiber is also flame retardant
- Excellent tensile strength because of the aramid yarn strength member
- Corrosion and water-resistant jacket
- Anti ultraviolet radiation and environment friendly sheath material



Cable Structure

- 1 Tight Buffer Fiber
- 2 Aramid Yarn
- 3 Jacket

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight ref. (Kg/km)		Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)	Bending Radius Dynamic/Static (mm)
		PVC	LSZH			
4	4.8±0.3	16.0	18.0	130/440	300/1000	20D / 10D
6	5.1±0.3	20.0	23.0	130/440		
8	5.6±0.3	27.0	31.0	130/440		
12	6.2±0.3	32.0	36.0	140/440		
24	8.1±0.3	53.0	57.0	200/660		

Applications: Indoor distribution, Backbone distribution, Multi core patch cord

Optical Fiber Nonconductive Riser OFNR Distribution Cable

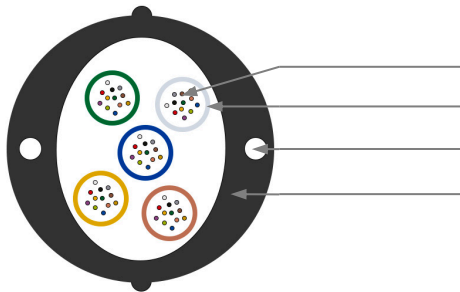


Description

OFNR is also known as optical fiber, nonconductive, riser, which is a type of interior fiber optic cable. This cable has no electrically conductive components, and it makes the cable suitable for riser application. In addition, all sub cable and outer jacket is LSZH material, which can prevent spread of fire from floor to floor in buildings.

Features

- 2 parallel FRP as strength member improves crush properties
- Nonconductive cable materials suitable for riser areas in buildings
- LSZH subunit sheath and outer jacket is flame retardant
- Environment friendly cable materials for indoor application
- Loose tube fiber units can be easily operation for distribution and construction



Cable Structure

- 1 Colored Coating Fiber
- 2 Sub Cable Element
- 3 FRP Strength Member
- 4 LSZH Sheath

Technical Characteristics

Fiber Count	Sub Cable Diameter (mm)	Loose Tube Diameter (mm)	FRP Diameter (mm)	Cable Diameter (mm)	Min. Bending Radius Dynamic/Static (mm)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)
24	1.4±0.1	1.8/2.1	0.5	7.0±0.3	25D/12.5D	300/1000	50/100
48	1.3	2.2/2.5	1.0	8.5±0.3	20D/10D	300/1000	250/500

Applications: Distribution, Building Riser

Multi Core Breakout Spiral Steel Tube Armored Fiber Optic Cable



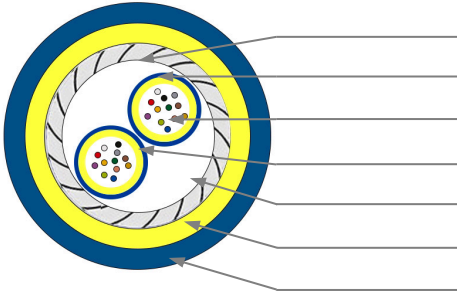
Description

This multi core breakout armored fiber cable is a spiral steel armored structure. Optical fibers are protected with aramid yarn in the subunit inner sheath. All subunit are protected by outside stainless spiral steel tube armor and another layer of aramid yarn. Outside cable PVC or LSZH sheath are available for specific applications.

Features

- Subunit is easy for stripping and operation
- Inner sheath and aramid yarn has good tensile and anti crush performance
- Spiral steel armor provides the cable enough tensile and pressure strength
- Available for adding stainless steel weave mesh for further performance
- Great anti rat biting protection
- Small diameter, good bending radius, easy for operation

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member (CSM)
- 5 Fillers
- 6 Water-blocking Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Inner Cable Diameter (mm)	Inner Cable Count	Cable Diameter (mm)	Tensile long/short (N)	Crush Long/Short (N)	Bending Radius Dynamic/Static (mm)	Cable Weight (kg/km)	Cable Weight
2~4	2	2~4	7	500/1200	500/2000	10D/20D	65	7/9
4~12	3	1	5	350/800	500/2000	10D/20D	45	10
14~24	3	2	9.5	500/1200	500/2000	10D/20D	100	28
24~48	3	4	9.5	500/1200	500/2000	10D/20D	110	28

Applications: Duct, Aerial

Enhanced Performance Fiber Unit

Air Blown Fiber Cable

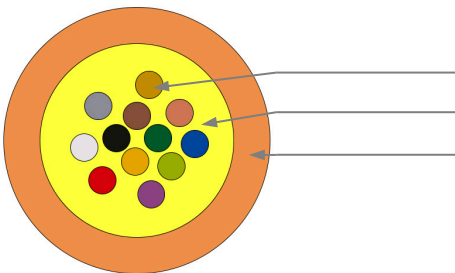


Description

This EPFU (enhanced performance fiber unit) is a air blown fiber cable. It's used in end user's network with a handheld air cable blower from fiber distribution point on the road to households. Fiber bundle of this cable is formed by curing optical fiber or fillers into photosensitive resin in a certain arrangement. And outside extruding a special low friction sheath.

Features

- Small size, light weight
- Easy to install with handheld cable air blowing machine
- Compatible with industry standard air blowing equipment
- G.657A2 fiber with small bending radius, suitable for indoor wiring application
- Low friction and resin sheath ensures good air blowing performance



Cable Structure

- 1 Optical Fiber
- 2 Aramid Yarn
- 3 Jacket

Technical Characteristics

Fiber Count	Diameter Ref. (mm)	Weight (kg/km)	Crush Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)	Duct Diameter (mm)	Blowing Pressure (bar)	Blowing Distance (m)	Blowing Time (min)
2	1.1	1.1	100	0.15G/0.5G	5.0 / 3.5	8 / 10	500 / 1000	15 / 30
4	1.1	1.1	100	0.15G/0.5G	5.0 / 3.5	8 / 10	500 / 1000	15 / 30
6	1.3	1.3	100	0.15G/0.5G	5.0 / 3.5	8 / 10	500 / 1000	15 / 30
8	1.5	1.8	100	0.15G/0.5G	5.0 / 3.5	8 / 10	500 / 1000	15 / 30
12	1.6	2.2	100	0.15G/0.5G	5.0 / 3.5	8 / 10	500 / 800	15 / 30

Applications: Air Blown, Duct

Uni-Tube Non-Metallic Micro Blown Fiber Optic Cable

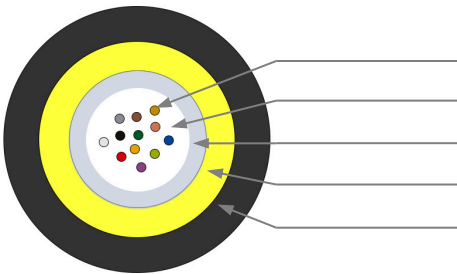


Description

This is a central unitube micro duct fiber air blown cable. Optical fibers are placed in a high modulus loose tube. Tube filling compound is filled in the central tube to protect fibers. In addition, a layer of aramid yarn is surrounding the unitube as the strength member.

Features

- Connects distribution branch and end user's access point
- Blow out to replace with new cable is easy to operate
- Small diameter and light weight provides good air blowing performance
- Save costs in construction and splicing equipment
- Blowing by phases laying method reduces initial investment costs
- Tube filling compound and aramid yarn provides excellent protection for optical fibers



Cable Structure

- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Aramid Yarn
- 5 PE Sheath

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Weight ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)
2	2.3	4	60/150	150/450
4	2.3	4		
6	2.3	4		
8	2.3	4		
12	2.3	4		
24	2.7	6.5		

Applications: Air blown, Duct

Layer Stranded Non-Metallic Micro Blown Fiber Optic Cable



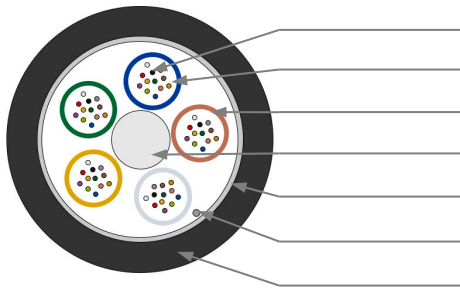
Description

This is a blown fiber optic cable which is nonmetallic, non armored and strand loose tube structure. It's easy to bend when laying by air blown because of its small diameter, light weight and moderate hardness. This cable is suitable for construction in crowded metropolitan area network pipelines and avoiding destructive excavation in the past.

Features

- Low friction coefficient sheath design and materials assures long air blowing distance
- All nonmetallic structure, so there is no requirements for grounding
- Easy to bend, laying and operate with small diameter, light weight
- Make full use of pipelines resources, fast construction of air blowing laying method
- Save costs for splicing joint and distribution management

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Strength Member
- 5 Water-blocking Materials
- 6 Rip Cord
- 7 PE Sheath

Technical Characteristics

Fiber Count	Loose Tube	Fibers per Tube	Cable Diameter (mm)	Weight ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)
12~24	2~6	6	4.5	16	0.3G/1.0G	150/500
24~72	2~4	12	5.4	26		
96	8	12	6.1	33		
144~216	12~18	12	7.9	52		
288	24	12	9.3	80		
144	6	24	7.3	42		
192	8	24	8.8	76		
288	12	24	11.4	110		
432	18	24	11.4	105		
576	24	24	13.4	140		

Applications: Air blown, Duct

Optical Composite Light Armored Hybrid Fiber Power Cable



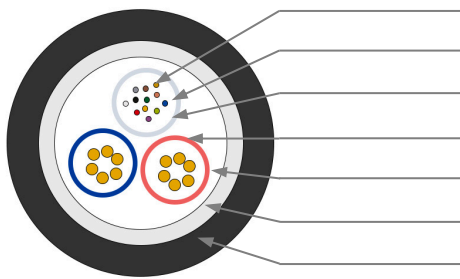
Description

This hybrid fiber cable intergrade the fiber cable and copper conductor together. Composite fiber and power solved the problem of power supply for equipment and data transmission. It provides the possibility of concentrated surveillance and maintenance of power supply and communications.

Features

- Save cable costs and installation costs
- Aluminum tape around the fiber and power unit, good mechanical performance
- This cable enables management of the power supply system
- Reduce maintenance of power supply separately
- Power supply and communications solve at the same time

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Copper Conductor
- 5 Water-blocking Materials
- 6 Aluminum Tape (APL)
- 7 PE Sheath

Technical Characteristics

Fiber Core	Copper Conductor	Cable Diameter Ref. (mm)	Cable Weight Ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)
2~24	2x1.5	11.2	132	600/1500	300/1000
2~24	2x2.5	12.3	164		
2~24	2x4.0	13.4	212		
2~24	2x5.0	14.6	258		
2~24	2x6.0	15.4	287		
2~24	2x8.0	16.5	350		

Applications: Duct, Aerial

Multi Loose Tube Steel Tape Armored Hybrid Fiber Power Cable



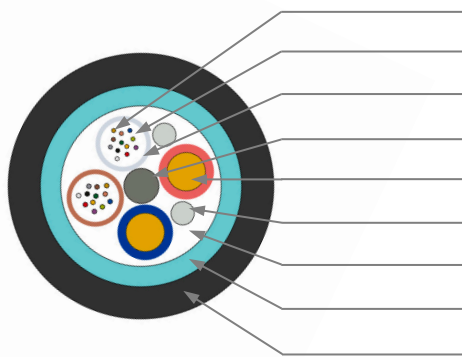
Description

This hybrid cable is a new type of fiber optic cable, which is used for transmission line in broadband access network system. It integrates optical and copper wire in the same cable, solved the problem of access broadband, remote device power supply and signal transmission.

Features

- Small diameter and light weight for combine fiber and copper in the same cable
- Save costs for procurement and installation of fiber optic cable and copper cable separately
- Remote power supply for outdoor equipment
- Variety method of transmission, hybrid cable fiber and power
- Suitable for security system, easy to manage and maintain

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Metal Central Strength Member (CSM)
- 5 Cooper Conductor
- 6 Fillers
- 7 Water-blocking Materials
- 8 Steel Tape (PSP)
- 9 PE Sheath

Technical Characteristics

Fiber Core	Copper Conductor	Tubes	Cable Diameter Ref. (mm)	Cable Weight Ref. (Kg/km)	Tensile Strength Long/Short Term (N)	Crush Long/Short Term (N/100mm)
2~24	2x1.5	4	12.2	190	600/1500	300/1000
2~24	2x2.5	4	12.8	228		
2~24	2x4.0	4	13.8	266		
2~24	2x6.0	4	15.6	300		

Applications: Duct, Aerial

Military Non-Metallic Tight Buffer Tactical Fiber Optic Cable

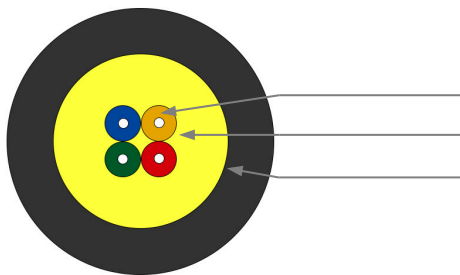


Description

Tactical fiber optic cable are fiber optic cable that is designed specifically for use in military field operations and complex environments that requires rapid wiring or repeated retracting and use conditions. It is light-weight and convenient to carry, also resistant to tension, pressure and has high strength / weight ratio.

Features

- Tight buffered optical fiber is easy for stripping and operation, it also has good flame retardant performance
- Aramid yarn strength member provides excellent tensile
- Excellent distortion resistance
- Outer protective sheath resistant to wear, aging, and oil
- Flame retardant outer protective material
- All dielectric material and structure, free from electromagnetic interference
- Rigorous processing technology, scientific and reasonable design



Cable Structure

- 1 Tight Buffer Fiber
- 2 Aramid Yarn
- 3 Outer Sheath

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)
1	3.0	800/400	200/1000	10D/20D
2	5.2			
4	5.2			
6	6			

Applications: Duct, Buried

Indoor/Outdoor Spiral Steel Tube Armored Tactical Fiber Optic Cable



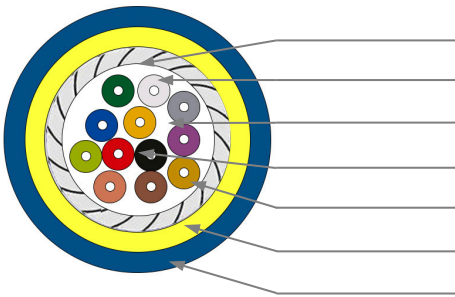
Description

This indoor armored tactical fiber has both aramid yarn and spiral steel tube for strength member, which is perfect for anti-rat application. Multiple tight buffered fibers are well protected within the outside cable sheath, aramid yarn and spiral steel tube.

Features

- Tight buffered optical fiber is easy for stripping and operation
- Tight buffered fiber also has good flame retardant performance
- Aramid yarn strength member provides excellent tensile characteristics
- Stainless steel tube provides extra tensile and pressure strength
- Available for adding stainless steel woven mesh for further tension and anti-rats performance
- Small circular cable for convenient laying
- Flexible and good bending radius in operation

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 FRP Central Strength Member (CSM)
- 5 Fillers
- 6 Water-blocking Tape
- 7 PE Sheath

Technical Characteristics

Fiber Count	Cable Diameter (mm)	Crush Long/Short Term (N/100mm)	Tensile Long/Short Term (N/100mm)	Bending Radius Dynamic/Static (mm)	Attenuation 1310/ 1550nm	Attenuation 850/ 1300nm	Operation Temperature °C	Cable Weight (kg/km)
1	2.0/2.4	400/600	3000/4000	48D/24D	≤0.4	≤0.3	-40 ~ 80	7/9
2	2.8	400/600	3000/4000	48D/24D	≤0.4	≤0.3	-40 ~ 80	10
2	4	1200/1500	3000/4000	80D/40D	≤0.4	≤0.3	-40 ~ 80	28
4	4	1200/1500	3000/4000	80D/40D	≤0.4	≤0.3	-40 ~ 80	28
6	5	1200/1500	3000/4000	100D/50D	≤0.4	≤0.3	-40 ~ 80	32

Applications: Duct, Buried

Stranded Loose Tube Mining Flame Retardant Fiber Optic Cable



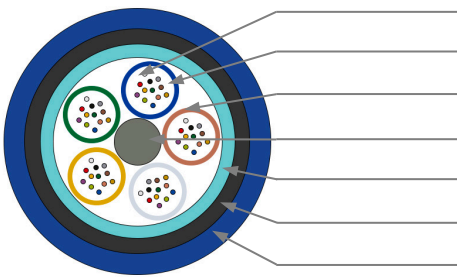
Description

Flame retardant fiber optic cable is also known as mining fiber cable. It is an optical cable that specially used in mines for coals, iron and gold. In order to transmit signals under these environment, mining fiber cable is required to be flame retardant, anti-rodent, and sometime heavy armored for specific applications.

Features

- Special sheath material ensures excellent flame retardant performance
- Good mechanical and temperature performance
- Anti-rodent and steel wire armor available
- Steel tape enhances moisture proof protection
- Central strength member of steel wire
- High strength hydrolysis loose tube filled with fiber filling compound
- Crush resistance and flexibility, 100% cable core filling

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Steel Central Strength Member (CSM)
- 5 Steel Tape
- 6 PE Sheath
- 7 Flame Retardant Sheath

Technical Characteristics

Fiber Count	Loose Tubes	Fillers	Cable Weight (kg/km)	Tensile Long/Short (N)	Crush Long/Short (N)	Bending Radius Dynamic/Static (mm)
2~30	1~5	4~0	118	600/1500	300/1000	20D/10D
32~36	6	0	131			
38~60	4~5	1~0	139			
62~72	6	0	170			
74~96	7~8	1~0	200			
98~120	9~10	1~0	230			
122~144	11~12	1~0	268			

Applications: Duct, Buried

Overhead Central Loose Tube OPGW Fiber Optic Ground Wire Cable



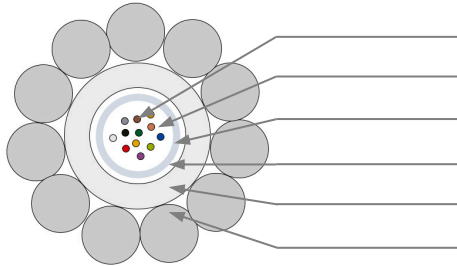
Description

OPGW cable is also known as Optical Fiber Composite Overhead Ground Wire. Fiber unit is placed in high-voltage overhead transmission line ground wire. So, this cable is a composite structure of both overhead ground wire and fiber communications, which forms the fiber communication network on the power transmission line. And suitable for new design or replacement of ground wire.

Features

- Metal conductor wrapped opgw cable is more reliable and stable
- Superior mechanical properties for aluminum clad or aluminum alloy wire
- Low cost of installation when overhead ground wire and optical cable combined
- Commercial for new laying or upgrade of existing ground wire

Cable Structure



- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Thermal Barrier
- 5 Aluminum Tape
- 6 Aluminum Clad Steel Wire

Technical Characteristics

Fiber Count	Fiber Unit	Nominal Diameter (mm)	Weight (kg/km)	Rated Breaking Force (kN)	20°C DC Resistance (Ω/km)
OPGW 24	1	12.6	615.4	107.4	0.9718
OPGW 30	1	14.55	819.2	143.64	0.7244
OPGW 36	1	15.6	934.7	164.44	0.6326
OPGW 48	1	17.1	1125	193.32	0.526

Applications: Duct, Aerial

Overhead Stainless-Steel Tube OPGW Fiber Optic Ground Wire Cable



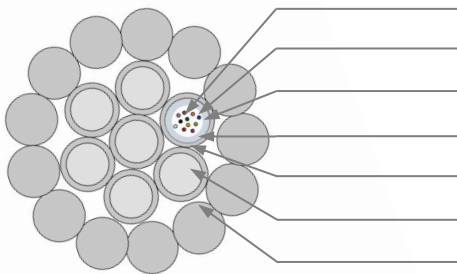
Description

When aluminum clad steel wire or aluminum alloy wire is used on the opgw fiber cable, it's equivalent to erecting a good conductor overhead ground wire. Which can reduce the secondary arc current of transmission line, reduce the power frequency overvoltage. And also improve the protection of interference and danger of power line on transmission line.

Features

- OPGW fiber is protected by aluminum clad steel wire or aluminum alloy wire, highly stable and reliable
- Save installation costs without hanging cable required
- Hanging position and electromagnetic corrosion worry free for fiber unit
- Commercial for newly erected lines and replacement for existing ground lines

Cable Structure

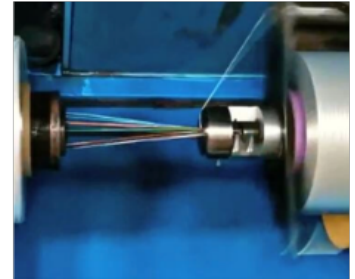
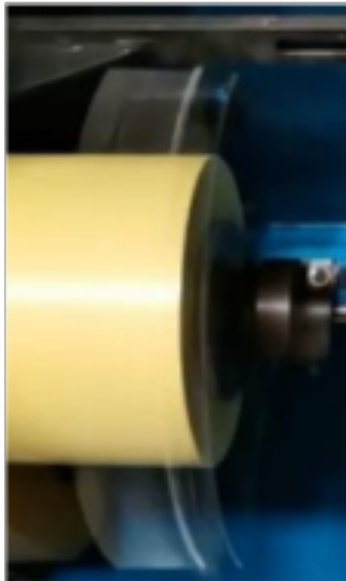


- 1 Optical Fiber
- 2 Tube Filling Compound
- 3 Loose Tube
- 4 Thermal Barrier
- 5 Aluminum Tape
- 6 Aluminum Clad Steel Wire
- 7 Aluminum Alloy Wire

Technical Characteristics

OPGW Fiber	Strand Unit	Nominal Diameter (mm)	Material	Total Breaking Force (kN)	Elastic Modulus (Gpa)
OPGW 24	5	12.6	20AS	17.75	162
OPGW 30	5	14.55	20AS	17.99	162
OPGW 36	5	15.6	20AS	17.95	162
OPGW 48	5	17.1	20AS	17.53	162

Applications: Duct, Aerial



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About HOC

HOC, leading in high quality fiber optic cables and FTTH turnkey solutions, delivers a comprehensive fiber product portfolio designed to meet the optical communication network infrastructure needs of industrial, enterprise and FTTH markets. Founded in 2002, the company is headquartered in Chengdu, China, and has manufacturing and supplying capabilities for global markets.