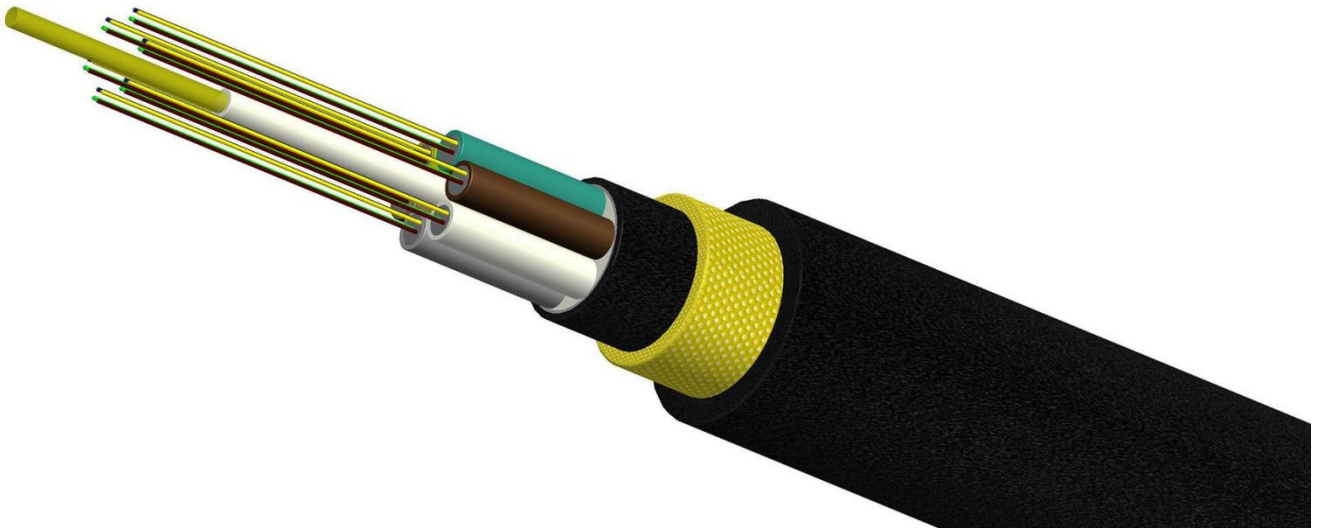




All Dielectric Self-supporting Aerial Cable (ADSS)



Shenzhen Optostar Optoelectronics Co., Ltd

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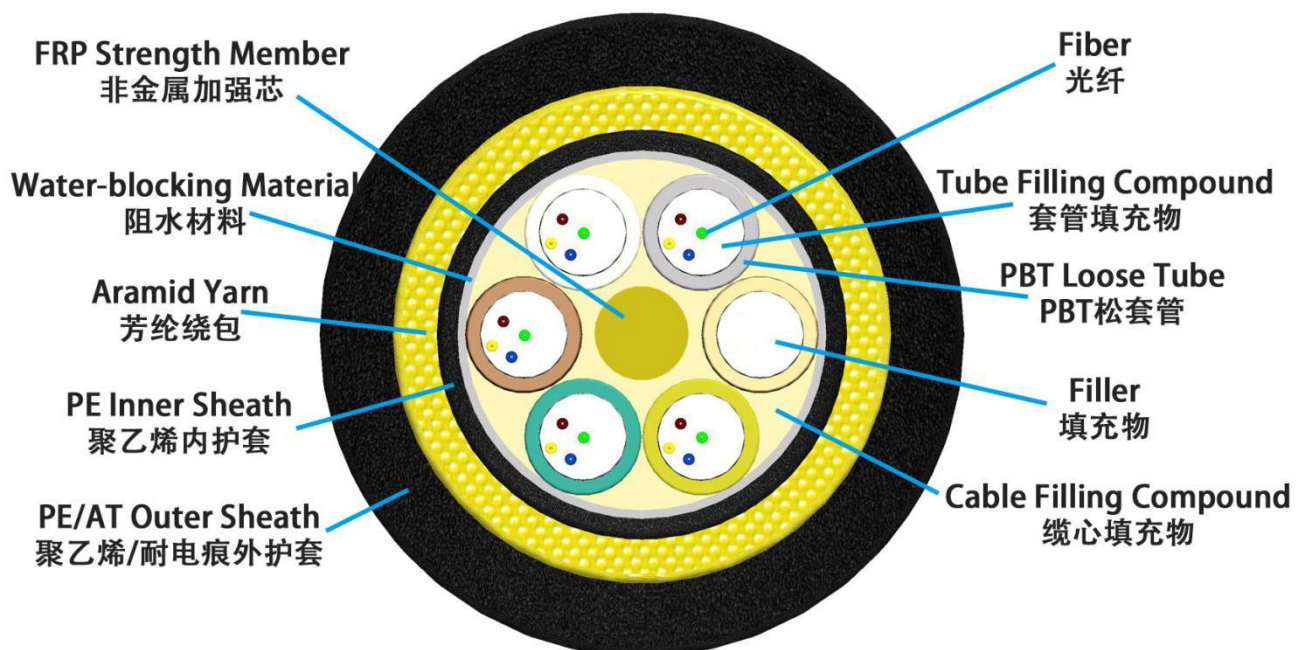
Overview

ADSS cable is loose tube stranded. Fibers, 250 μ m, are positioned into a loose tube made of high modulus plastics. The tubes are filled with a water-resistant filling compound. The tubes (and fillers) are stranded around a FRP (Fiber Reinforced Plastic) as a non-metallic central strength member into a compact and circular cable core. After the cable core is filled with filling compound, it is covered with thin PE (polyethylene) inner sheath. After stranded layer of aramid yarns are applied over the inner sheath as strength member, the cable is completed with PE or AT (anti-tracking) outer sheath.

Product Features

- Can be installed without shutting off the power
- Excellent AT performance, The maximum inductive at the operating point of AT sheath can reach 25kV
- Light weight and small diameter reducing the load caused by ice and wind and the load on towers and backprops
- Large span lengths and the largest span is over 1000m
- Good performance of tensile strength and temperature
- The design life span is 30 years

Product Structure





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Optical Characteristics

		G. 652	G. 655	50/125 μ m	62.5/125 μ m
Attenuation (+20 $^{\circ}$ C)	@850nm			≤ 3.0 dB/km	≤ 3.0 dB/km
	@1300nm			≤ 1.0 dB/km	≤ 1.0 dB/km
	@1310nm	≤ 0.36 dB/km	≤ 0.40 dB/km		
	@1550nm	≤ 0.22 dB/km	≤ 0.23 dB/km		
Bandwidth (Class A)	@850nm			≥ 500 MHz \cdot km	≥ 200 MHz \cdot km
	@1300nm			≥ 1000 MHz \cdot km	≥ 600 MHz \cdot km
Numerical Aperture				0.200 ± 0.015 NA	0.275 ± 0.015 NA
Cable Cut-off Wavelength λ_{cc}		≤ 1260 nm	≤ 1480 nm		

Technical Parameters

Ref. outer diameter mm	Ref. weight kg/km		Ref. daily max. working tension kN	Max allowable working tension kN	Break strength kN	Strength member CSA mm ²	Modulus of elasticity kN/mm ²
	PE sheath	AT sheath					
12.5	125	136	1.5	4	10	4.6	7.6
13.0	132	142	2.25	6	15	7.6	8.3
13.3	137	148	3.0	8	20	10.35	9.45
13.6	145	156	3.6	10	24	13.8	10.8
13.8	147	159	4.5	12	30	14.3	11.8
14.5	164	177	5.4	15	36	18.4	13.6
14.9	171	185	6.75	18	45	22.0	16.4
15.1	179	193	7.95	22	53	26.4	18.0
15.5	190	204	9.0	26	60	32.2	19.1
15.6	194	208	10.5	28	70	33.0	19.6



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16.3	211	226	12.75	34	85	40.0	20.1
16.8	226	242	15.45	41	103	48.0	24.0
17.2	236	253	16.2	45	108	51.0	25.1
17.9	249	266	18.0	50	120	58.8	26.1

Heat expansion coefficient $\times 10^{-6} /k$	Ref. outer diameter mm	Suitable span (m) (NESC Standard, m)			
		A	B	C	D
1.8	12.5	160	100	140	100
1.5	13.0	230	150	200	150
1.3	13.3	300	200	290	200
1.2	13.6	370	250	350	250
1.0	13.8	420	280	400	280
0.9	14.5	480	320	460	320
0.6	14.9	570	380	550	380
0.3	15.1	670	460	650	460
0.1	15.5	750	530	750	510
0.1	15.6	800	560	800	560
0.1	16.3	880	650	880	650
-0.4	16.8	1000	750	1000	760
-0.5	17.2	1100	800	1100	830
-0.8	17.9	1180	880	1180	900

Storage/Operating Temperature : -40°C to + 70°C

Important Notice

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