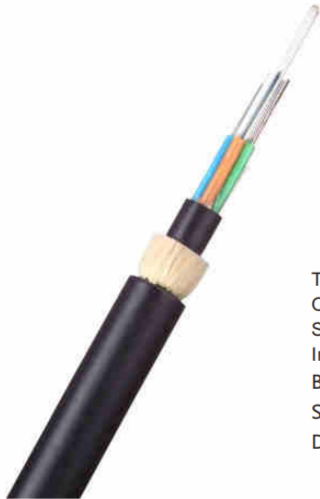


All Dielectric Self-Supporting Aerial Cable



Temperature Range  
 Operating : -40°C to +70°C  
 Storage : -50°C to +70°C  
 Installation : -30°C to +70°C  
 Bending Radius:  
 Static 10D  
 Dynamic 20D

Features

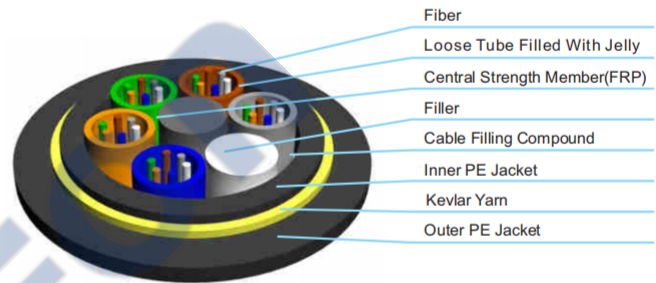
Can be installed without shutting off the power.  
 Excellent AT performance. The maximum inductive at the operating point of AT jacket can reach 25kV.  
 Light weight and small diameter reducing the load caused by ice and wind and the load on towers and backrops.  
 Large span lengths and the largest span is over 200m.  
 Good performance of tensile strength and temperature.  
 The design life span is over 30 years.

Description

ADSS (All-Dielectric Self-Supporting) cable is ideal for installation in distribution as well as transmission environments, even when live-line installations are required. As it's name indicates, there is no support or messenger wire required, so installation is achieved in a single pass, making ADSS an economical and simple means of achieving a fiber optic network. EFON manufactures its own line of attachment hardware as well as supplies formed wire fittings when preferred.

Applications

The actual status of overhead power lines is taken into full consideration when ADSS cable is being designed.  
 For overhead power lines under 110kV, PE outer sheath is applied.  
 For power lines equal to or over 110kV, AT outer sheath is applied.  
 The dedicate design of aramid quantity and stranding process can satisfy the demand on various spans.



Optical Characteristics

Fiber Type		G.652	G.655	50/125μm	62.5/125μm
Attenuation (+20°C)	850 nm			≤3.0 dB/km	≤3.3 dB/km
	1300 nm			≤1.0 dB/km	≤1.0 dB/km
	1310 nm	≤0.36 dB/km	≤0.40 dB/km		
	1550 nm	≤0.22 dB/km	≤0.23 dB/km		
Bandwidth	850 nm			≥500 MHz-km	≥200 Mhz-km
	1300 nm			≥500 MHz-km	≥500 Mhz-km
Numerical Aperture				0.200±0.015 NA	0.275±0.015 NA
Cable Cut-off Wavelength λ <sub>cc</sub>		≤1260 nm	≤1450 nm		

Cable Structure

Structure and Technical Specifications

Ref. Outer Diameter (mm)	Ref. Weight (kg/km)		Rec. Daily Max. Working Tension (kN)	Max Allowable Working Tension (kN)	Break Strength (kN)	Strength Member CSA (mm²)	Modulus of Elasticity CSA (kN/mm²)	Heat Expansion Coefficient (×10 <sup>-6</sup> /K)	Suitable Span (NESC Standard,m)			
	PE Jacket	AT Jacket							A	B	C	D
12.5	125	136	1.5	4	10	4.6	7.6	1.8	160	100	140	100
13.0	132	142	2.25	6	15	7.6	8.3	1.5	230	150	200	150
13.3	137	148	3.0	8	20	10.35	9.45	1.3	300	200	290	200
13.6	145	156	3.6	10	24	13.8	10.8	1.2	370	250	350	250
13.8	147	159	4.5	12	30	14.3	11.8	1.0	420	280	400	280
14.5	164	177	5.4	15	36	18.4	13.6	0.9	480	320	460	320
14.9	171	185	6.75	18	45	22.0	16.4	0.6	570	380	550	380
15.1	179	193	7.95	22	53	26.4	18.0	0.3	670	460	650	460
15.5	190	204	9.0	26	60	32.2	19.1	0.1	750	530	750	510

**Note:** Only a part of ADSS cables are listed in the table. ADSS cables with other spans can be inquired from EFON directly. Specifications in the table are got on condition that there is no height difference and the installation sag is 1%. Fiber count is 2 to 72. The identification of fibers complies with the national standard. This datasheet can only be a reference, but not a supplement to the contract. Please contact our sales people for more detailed information.