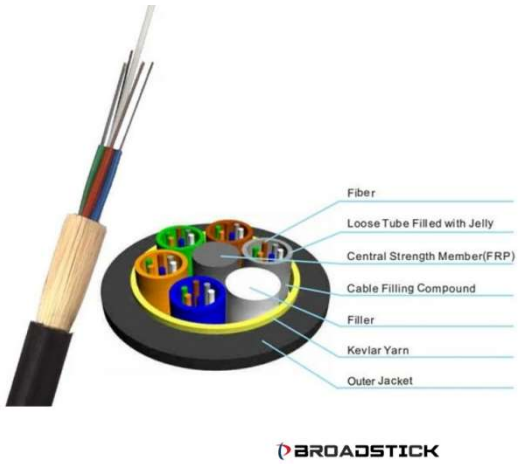
Fiber Optic Single mode Cable ADSS

Broadstick provides fiber optic cable that exceeds the ANSI/TIA 568-C.2 Single mode.

The Broadstick fiber cable provides a high quality connection; it is ADSS All Dielectric Self-Supporting

The mechanical performance of ADSS optical cable is mainly embodied in the maximum permissible tension (Maximum Allowable Tension, MAT), the average annual operating tension (Every Day Strength, EDS) and ultimate tensile strength (Ultimate Tensile Strength, for short).

The ability to tolerate extreme weather (strong winds and icing) is strong.



The ADSS fiber cable has different structure from the overhead wire. Its tensile strength is borne by the aramid rope. The elastic modulus of the aramid rope is more than half that of the steel. The thermal expansion coefficient is one of the parts of the steel. This determines that the ADSS cable sag is more sensitive to the change of the external load. Under the condition of icing, the length of ADSS fiber cable can reach 0.6%, and the wire is only 0.1%; the sag is rather dull to the temperature change, and the sag of the arc is basically unchanged when the temperature changes. In the wind condition, the wind deflection angle is very large. When the wind speed is 30m/s, the wind deflection angle is up to 80 degrees, and the wind deflection angle of the wire is only about half of the cable

The outer sheath of ADSS optical cable is AT or PE material. It operates in strong electric field, and there is corrosion problem. ADSS fiber cable will have wind vibration. Smooth and stable transverse wind to the cable will cause wind vibration and fatigue damage at the hanging point. ADSS cable has a certain resistance to pressure and can withstand the greater grip strength of the tension clamp.

Characteristics

- Can be installed without shutting off the power
- 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

BROADSTICK

Details

Part Number	BSF-OSM*AD
Fiber Cores	Can be 6,12,24, or 48
Optical fiber type	Single Mode OS1/OS2
Span (Meters)	150
Nominal Radian(%)	1-3
Nominal Load （N）	800-100000
Wind Speed （m/s）	<30
Cable outer diameter OD (mm)	10.5
Cable weight (kg/km)	130-260
Tensile Strength(N/100mm)	2200
Min Bending Radius Static(mm)	15D
Min Bending Radius Dynamic (mm)	25D

Fiber characteristic

Fiber style Unit	G657a1
condition nm	1310/1550
attenuation dB/km	≤0.34/0.20
Dispersion 1310 - Ps/(nm*km)	≤18
Dispersion 1550 - Ps/(nm*km)	≤22
Zero dispersion wavelength nm	≤1322
Zero dispersion slope nm	≤0.091
PMD Maximum Individual Fiber ≤0.2	≤0.2
PMD Design Link Value Ps(nm2*km)	≤0.08
Fiber cutoff wavelength λc (nm)	≧1180,≤133
Cable cutoff wavelength λcc (nm)	≤1260
MFD 1310nm (um)	9.2±0.4
MFD 1550nm (um)	10.4±0.8
Step(mean of bidirectional measurement) (db)	≤0.05
Irregularities over fiber length and point discontinuity (db)	≤0.05
Difference backscatter coefficient (db)	≤0.03
Attenuation uniformity (dB/km)	≤0.01
Cladding diameter (um)	125.0±0.1
Cladding non-circularity (%)	≤1.0
Coating diameter (um)	242±7
Coating non circularity (%)	≤6.0
Curl(radius) (um)	≤4