

COMPATIBILITY BETWEEN ADSS CABLE AND ACCESSORIES

What is an ADSS cable ?

ADSS = All Dielectric Self Supported

It is a entirely dielectrical cable of telecommunication, i.e. without metal component, self-supported, containing one or more optical fibers.

Usually used on overhead networks, these cables can be installed on various supports:

- Energy transmission network towers (HV OHTL/HTB)
- Overhead line distribution network poles (MV-LV OHL/HTA-BT)
- Telecom network poles
- Between buildings
- On railways catenaries
- On any other aerial poles
- In tunnels,

Some ADSS cables can be used for multi-applications, i.e, without discontinuity between sections in aerial, underground, tunnels.



Compatibility between ADSS cable and accessories

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General Information on ADSS cables



Various type of ADSS cables

The ADSS cables being made in composite materials, it exists in a great diversity of construction designs, specific to each supplier, with segmentations according to their characteristics and the targeted application, for example:

- Mechanical characteristics according to the span length, sag, climatic conditions such as wind speed, ice weight, temperature.
- Buffer tubes design: loose tubes, frequently used for long distance cables, or micromodules structure, privileged for distribution cables thanks to its flexibility and to the easy accessibility to the fibers.
- Maximum authorised diameter of the cable.
- Characteristics of the optical fibers.
- Adaptation to environments with electromagnetic field.
- Environmental risks such as leads shot, rodents...

Generally the shape of the cable is round, but flat cables can be proposed for the premise aerial drops.

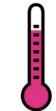


Aerial networks are subject to repetitive climatic stress during several decades.

The optical cable and its accessories, in particular the anchoring and suspension clamps, constitute an interdependent component of the complete system that must withstand during its all live time to the various loads induced by wind pressure, ice sleeve weight, Aeolian vibrations, temperature variations, and be resistant to corrosion, UV radiation.







The choice of accessories duly compatible with the cable and the use made of it is essential for a quick and safe installation, to facilitate the operation and ensure a long-term reliability of the network.

When the cables accessories are not yet validated by the project contractor or its project supervisor, it is recommended to check the compatibility of the system "cable & accessories" with the cable manufacturer or the accessories manufacturer who could eventually perform qualification tests.

Do not hesitate to contact us if you need a support for the pre-selection of cable accessories according to your needs.

It will be required to supply the detailed data sheet of the cable used, or provide the principal characteristics such as the diameter of the external sheath, the acceptable maximum loading (MAT= Maximum Allowable Tension) or short-term load, the minimum bending radius of the cable, as well as the climatic conditions of the place of installation and the type of pole to be used.

