



Warranty conditions and correct use of CAVEL cables

The **EN 50117 Specs.** split coaxial cables in two main categories:

- ❑ **Coaxial cables for underground installations** (also called distribution or trunk cables) and **for outdoor use** (messengered cables or for external sections to the antenna).

For these applications Specs. prescribe the use of cables with **polyethylene sheath** or **low smoke and fume and zero halogen compounds (LSZH)** cables; for outdoor installation it is also required an UV rays additive to make the sheath resistant to UV. These materials are also the most indicated in presence of water and humidity thanks to their water-proof feature. Moreover, LSZH cables delay the propagation of fire and do not emit opaque and harmful fumes. Besides, some manufacturers, same as CAVEL, add an insulating petrochemical substance between sheath and braid, called **petrol-jelly**, to seal further the cable from dampness and external contaminations.

- ❑ **Coaxial cables for indoor installations** (branches and drop cables).

For these applications Specs. prescribe the use of **PVC** or **LSZH outer sheaths**. Both are self-extinguishing contrarily to polyethylene. In spite of PVC, **LSZH compound** grants higher safety in case of fire because it reduces opaque fumes, corrosive and fatal gas emissions.

WARNING: respecting following instructions for use is mandatory to preserve warranty conditions offered by ITALIANA CONDUTTORI.

In case of not conformity with the Specs. and inappropriate use, our warranty expires and no responsibility can be debited to cable manufacturer.

Besides CAVEL warranty only covers the cable cost and all other expenses due to an incorrect installation are to be intended on installer's account.



Correct installation rules according to Specifications

❑ **Indoor Cables** (PVC and LSZH outer sheath)

1. Use cables that fit the type of installation required and handle them according to the appropriate technical tips.
2. The connectors used are of quality and those suggested for indoor installation.
3. Cables must not come into contact with the following chemicals:
dichloromethane, ethyl ether, fluorinated hydrocarbons, methanol, mineral oil and fat, detergents, ozone, perchlorate ethylene, hydrochloric and sulphuric acid 35/40%, alimentary fat and oil, toluene, trichloroethylene, laundry residues, hot water, alcohol, acetone, petrol, benzene, petroleum naphtha.
4. Cables must not be subjected to physical and mechanical stresses over their tolerances both during installation and during its operability, like: crushing, traction, damages on the sheath and due to inappropriate human activities.
5. Cables must not be damaged caused by extraordinary adverse natural phenomena such as: floods, earthquakes, tornadoes, etc.
6. As per storage and operating temperatures, the following must be respected:
 - -30°C / +80°C for cables with PVC sheath;
 - -25°C / +80°C for cables with LSZH sheath.
7. Cables have to be used to distribute the following signals only:
 - Audio and video, analogical or digital;
 - Radio frequency;
 - Low-voltage DC current, within current limits specified in our catalogue.



❑ Cables for outdoor, underground and hung-up installation

1. Use cables that fit the type of installation required and handle them according to the appropriate technical tips. Moreover, a proper pipe line has to be installed in order to protect the cable from external agents and to make the maintenance easier.

2. Connectors used are the ones suggested for underground or external use. Connector used is completely sealed off or a waterproofing and sealing system has been disposed (vulcanised rubbers, wax, silicone sealers, etc).

3. Cables must not come into contact with the following chemicals:

Ethyl ether, fluorinated hydrocarbons, ozone, perchlorate ethylene, toluene, trichloroethylene, acetone, petrol, benzene, dichloromethane.

4. Cables must not be subjected to physical and mechanical stresses over their tolerances both during installation and during its operability, like: crushing, traction, damages on the sheath and due to inappropriate human activities like: asphaltting, excavations, ploughing, etc.

5. Cables must not be damaged caused by extraordinary adverse natural phenomena such as: floods, earthquakes, tornadoes, etc.

6. As per storage and operating temperatures, the following must be respected:

- -40°C / $+80^{\circ}\text{C}$ for cables with PE sheath.

7. Cables have to be used to distribute the following signals only:

- Audio and video, analogical or digital;
- Radio frequency;
- Low-voltage DC current, within current limits specified in our catalogue.



Probably due to the denomination “underground cables”, frequently installers bury cables directly in the ground without any protection. On the contrary, a canalisation is always recommended because it preserves the integrity of the cable and its duration, allowing an easier replacement and maintenance. In our opinion the initial cost for a protective canalisation extends the cable lifespan avoiding coming and expensive excavations.

CAVEL suggest the use of connectors of high quality and completely sealed off, more expensive but more reliable. Remember that the most frequent access of humidity in the cable is by the head connections, that might be realized carefully.

WARNING: the guarantee CAVEL covers only the cost of cable; in case of wrong header of the cable the CAVEL warranty decays.

At last, we recommend the respect of **use for the restrictions** of what concerns electrical and mechanical parameters defined in our catalogue (minimal radius of curvature, maximum current conveyable, maximum pulling strength, electrical tension applicable to the sheath, etc.) for an optimal use of our cables.

Italiana Conduttori provides for all coaxial cables a **Certificate of Warranty** as well as one Certificate of Conformity to the EN50117 Specs. per each set of cables, split in families according to Screening Classes and application; documents can be downloaded from our web site under the Technical Support menu. They certify that the cable has been produced respecting nominal values and fixed tolerances; this grants that the cable works free from imperfections for the specified period.

In case of claim, in order to facilitate resolution of the problem, costumers are kindly requested to supply CAVEL Quality Department with following information:

- **Details on installation** realized;
- Cable **lot number** (stamping of month/year on the sheath);
- Results of **measurements made on the plant** ;
- **Samples** of the faulty cable.

