

- Construction and tests. Standard: **IEC 60228, EN 60228, UNE-EN 60228**
- Compliance with the **Low Voltage Directive (LVD): 2014 / 35 / EU**
- Certified by **AENOR** (Nº 042/000592 – Product range: From 1x6 up to 1x300 mm²)
- **RoHS** compliant

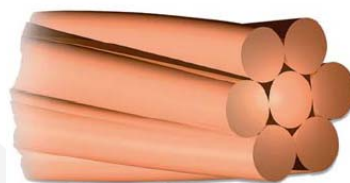
1. CABLE DESCRIPTION.

1.1. Construction.

Manufactured according to standard International, European & Spanish standards IEC 60228, EN 60228 & UNE-EN 60228¹.

- Conductor.

Bare copper conductor. Annealed, stranded copper conductor, class 2 according to International, European and Spanish standards IEC 60228, EN 60228 & UNE-EN 60228.



Bare copper conductor, annealed, stranded,
class 2

2. APPLICATIONS

2.1. Type of Installation.

Fixed installation for grounding, bonding and earthing installations.

2.2. User's Guide

They are specially designed for ground and earthing networks.

Grounding installations are required in industrial and domestic applications, such as operation of production systems, or distribution of electrical energy.

The most important reasons by which a correct installation of ground wiring must be:

- 1.-To protect people from electrocution.
- 2.-To balance potentials between the components of a same electrical system.
- 3.-To reduce the difference of potential between ground and the structures that can accumulate static electricity.
- 4.-Enable safe way to ground against currents produced by atmospheric lightnings and rays.
- 5.-Enable connection of low impedance between the parts of an electrical system in order to coordinate the protection devices.
- 6.-To minimize communication systems interferences.

¹ EN 60228/ IEC 60228. Insulated conductor cables.

2.3. Suitable methods of installation²

Suitable for buried installation.

Not allowed to use in overhead lines.

Terranax, bare copper conductors, must be joined to earthing ground electrodes, rods or other components of the grounding system ensuring a perfect connection between elements by using:

- aluminothermic welding
- devices with tightening screws, connection clamps or similar devices
- other approved alternatives methods.

The connections between the different components must be good, permanent, mechanically robust, have good corrosion resistance and low electrical resistivity. It is recommended to avoid unnecessary junctions and connections.

The splices, connections and derivations must be carried out using the appropriate techniques that avoid the deterioration of the conductor or the rest of the materials due to the appearance of dangerous potentials caused by the effects of galvanic pairs.

The type of joint can influence the size (nominal cross section) of the conductor used due to the different maximum allowable temperatures for the different joints. Likewise, the type of insulation / covering material of the cables that run parallel and in contact with the bare conductor can limit the maximum admissible current of the bare copper conductor.

MINIMUM BENDING RADIUS:

20 times the diameter of the bare conductor expressed in millimetres (mm).

PULLING AND TORSIONAL FORCES:

In laying operations, the traction/pulling forces applied to the conductor shall not exceed a value of **$F = 50 \times S$** (Newton, N), where "S" is the cross-sectional area of the conductors (mm²) and 50 N/mm² is the permissible tensile stress, with a maximum of **1 500 N** (newtons).

The product must not be exposed to constant tensile stresses.

During the laying and handling operations, special care and measures shall be taken to avoid torsional stresses on the conductor. The conductor must not be subjected to torsional stresses.

² It must be respected the methods of installation established by the standards and regulations that will affect each individual case.

3. DIMENSIONAL CHARACTERISTICS

Code *	Cross sectional area mm ²	Number of wires	Overall Ø mm	Total Weight kg / km	Maximum electrical resistance at 20°C (D.C.) Ω/km
8700010006099	6	7	3,0	50	3,08
8700010010099	10	7	3,8	84	1,83
8700010016099	16	7	4,9	135	1,15
8700010025099	25	7	6,2	216	0,727
8700010035099	35	7	7,1	297	0,524
8700010050099	50	19	8,6	403	0,387
8700010070099	70	19	10,5	583	0,268
8700010095099	95	19	12,3	806	0,193
8700010120099	120	37	13,9	1025	0,153
8700010150099	150	37	15,6	1270	0,124
8700010185099	185	37	17,5	1600	0,0991
8700010240099	240	61	19,5	2075	0,0754

Weight and overall diameter values are approximate and subject to normal manufacturing tolerances

* The article code must be completed with the packaging characters (at the end of the code).
 For more information, please contact our Sales department.