

MIGUÉLEZ ARTICLE GROUP **TERRANAX** 



















- Description: Soft-drawn (annealed) bare copper conductor for earthing and grounding networks.
- Standards (construction/tests): UNE-EN 60228, EN 60228 and IEC 60228.
- Construction: Soft-drawn (annealed) bare copper conductor, class 2 according to standards EN 60228 & IEC 60228.
- Range: Nominal cross-sectional areas from 6 to 300 mm<sup>2</sup>.
- Applications: Fixed installation. Especially recommended for earthing and grounding networks.

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. It is recommended to avoid unnecessary junctions and connections.

- Minimum bending radius: 20 times the diameter of the bare conductor expressed in millimetres (mm).
- Pulling forces: (during laying operations)

Pulling forces applied to the conductor shall not exceed a value of

 $F = 50 \times S$  (Newton, N), where "S" is s the cross-sectional area of the conductors (mm<sup>2</sup>) and 50 N/mm<sup>2</sup> 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.

- Functional properties:
- Resistant to underground corrosion: This is a typical copper quality. The copper oxide patina (verdigris), created on the surface layer by oxidation, acts as an insulator, preventing corrosion (on normal soils).
- Easy to install: They are supplied as coils with an oversized winding core to avoid deformation and facilitate installation.
- Packaging: Drum/cut to length.

Also available in coils (25 and 50 kg ( $S \le 50 \text{ mm}^2$ )).

Code*	Nominal cross-sectional area	Number of wires	Overall diameter	Total weight	Maximum electrical resistance at 20°C (DC)
	mm <sup>2</sup>		mm	kg/km	Ω/km
87000100060	1 x 6	7	3,0	50	3.08
87000100100	1 x 10	7	3,8	84	1.83
87000100160	1 x 16	7	4,9	136	1.15
87000100250	1 x 25	7	6,2	217	0.727
87000100350	1 x 35	7	7,2	298	0.524
87000100500	1 x 50	19	8,7	405	0.387
87000100700	1 x 70	19	10,5	588	0.268
87000100950	1 x 95	19	12,2	809	0.193
87000101200	1 x 120	37	14,0	1030	0.153
87000101500	1 x 150	37	15,8	1274	0.124
87000101850	1 x 185	37	17,5	1576	0.0991
87000102400	1 x 240	61	19,5	2105	0.0754

Nominal cross-sectional area	Coil weight	Quantity per pallet
mm <sup>2</sup>	kg	kg
16	25	500
10	50	500
25	25	500
25	50	500
35	25	500
33	50	500
F0	25	500
50	50	500

<sup>\*</sup> Short product code. Must be completed with the corresponding characters for 'oversheath colour' and 'packaging'. Check the 'Miguélez product code' section on our web page, in 'Downloads'.

\*\* Check the CPR-classified range and the range included in the certifications indicated for each product, as well as much more information about our products, on the website: www.miguelez.com

\*\*\* Dimensional and weight values are approximate and subject to normal manufacturing tolerances.

\*\*\* It is the sole responsibility of the end user to determine suitability of this product for is intended use and application. Please, consult the regulations, laws or standards that are applicable to each particular case.

The installation systems and additional requirements established by any regulation, law and/or standards applicable to each particular case must be met.