



▶ GRAPHITE ELECTRODE

High-performance graphite electrode for grounding systems.

▶ applications

The graphite electrode is suitable for soils with a high rate of corrosion or extreme temperatures. They can be installed as deep grounding electrodes and for the improvement of ground networks of pike or plate electrodes.

▶ characteristics & benefits

- Rigid graphite electrode with connecting sleeve for brass round 50-70 mm² conductor.
- High performance and highly conductive electrode.
- It comes inside an organic cotton bag stuffed with powdered graphite and conductive salts.
- Presents good resistance to chemical corrosion, typical of grounding systems (redox reaction, or oxide reduction).
- Longer life than most metal electrodes, due to its low corrosion degradation.
- Improved electrical contact properties between the graphite electrode and the ground by conducting salts and graphite powder, ensuring that the cracks in the ground around the electrode are firm.

▶ installation

Graphite electrode composed by:

Graphite rod, connection device, bag, 10kg Quibacsol mineral compound.

Components are supplied separated. Mounting shall be performed during the installation.

1. Make a Ø200mm and a minimum of 2 m long hole in the terrain.
2. Insert the cable into the connection sleeve and attach it securely.
3. Place the electrode vertically inside the hole without removing the cotton bag that wraps it.
4. Fill the hole adding alternate layers of QUIBACSOL mineral compound and landfill (used when the removed topsoil does not offer an adequate level of conductivity).
5. Compact the ground ensuring that the landfill and QUIBACSOL have good contact with the bag containing the electrode.
6. Install a registration system (check chamber and bridge) that allows for future revisions.

▶ standards & tests

· IEC 62305 · N-FC 17-102:2011 · UNE 21186:2011 · REBT · IEC 62561/2

▶ technical specifications

Electrical resistivity	950 $\mu\Omega/\text{cm}$
Empirical resistance	0,4 - 0,6 Ω
Maximum thickness of grain	1,6mm
Coefficient of expansion	$3,00 \times 10^{-6} \text{ }^\circ\text{C}$
Apparent density	1,54 g/cm^3
Tensile breaking load	75 kg/cm^2
Tensile strength in bending	150 kg/cm^2
Compression breaking load	215 kg/cm^2

Description	Ref.	Mat.	D1 (mm)	D2 (mm)	L (mm)	Weight (kg)
Graphite electrode	252039	Graphite	50	12,5	500	8



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