

## Cables



- ▶ Excellent resistance to atmospheric agents
- ▶ Excellent chemical resistance
- ▶ Reduced outer diameter
- ▶ Excellent resistance to atmospheric agents, ozone and UV rays and a wide range temperature for external use
- ▶ Excellent resistance to solutions of ammonia and biogas
- ▶ Suitable for use in the chemical sector, composting plants, purification plants
- ▶ Resistant to sulphuric acid (maximum 20% concentration)

Cables with fine bare copper wires, conductor insulation in special PP, conductors stranded in concentric layers and numbered. The cables have special TPE outer black sheath.

The cables have an excellent chemical resistance to hydraulic fluids based on esters, they are resistant to ozone, UV rays and atmospheric agents according to EN 50396 and HD 605 S3. They are flexible up to -40 ° C.

They are suitable for harsh environments, both buried or laid on surface, for use in the chemical sector, composting plants and purification plants.

### Technical Specifications

<b>Cables</b>	Application	Industrial environments, chemical industry, composting plants, sewage works
	Resistant to	Ammonia compounds and bio-gases, ozone, UV radiation and weather-resistant
	Conformity to norms	EN 50396, HD 605 S2, VDE 0250 / 0285, EN 50565-2
	Protection	Additional anti-rodent sheath (optional)
	Nominal voltage	U0/U: 300/500 V
	Test voltage	4000 V
	Operating temperature	<ul style="list-style-type: none"> <li>• During installation: -40...80 °C</li> <li>• Fixed operations (after installation): -50...80 °C</li> </ul>
<b>Electrodes</b>	Material	Stainless steel AISI 316
	Type	<ul style="list-style-type: none"> <li>• Plates: for horizontal installation or vertical</li> <li>• Rods: for temporary installation</li> </ul>
	Dimensions	<ul style="list-style-type: none"> <li>• Plate: 40 x 150 mm or 200 x 150 mm, width 1 mm</li> <li>• Rod: length 400 mm, diameter 10 mm</li> </ul>

PN	CCECB0110	CCECB0210	CCECB0310	CCECB0510	CCECB0111	CCECB0211	CCECB0911	CCECB0311
<b>Electrode distance</b>	1.0 m	2.0 m	3.0 m	5.0 m	1.0 m	2.0 m	2.5 m	3.0 m
<b>Initial stretch length</b>	4.0 m	4.0 m	4.5 m	4.5 m	4.0 m	4.0 m	3.0 m	4.5 m
<b>Length EL 1-24</b>	23.0 m	46.0 m	69.0 m	115.0 m	23.0 m	46.0 m	57.5 m	69.0 m
<b>Cable total length</b>	27.1 m	50.1 m	73.3 m	119.5 m	27.1 m	50.1 m	60.5 m	73.3 m
<b>Monitored profile length (2 cables)</b>	47.0 m	94.0 m	141.0 m	235.0 m	47.0 m	94.0 m	117.5 m	141.0 m
<b>Anti rodent sheath</b>	No	No	No	No	Yes	Yes	Yes	Yes

### Types of installations and related electrodes

#### ▶ Permanent

Plate electrodes



#### ▶ Temporary

Rod electrodes



**Chemical resistance**

RESISTANCE LEVELS	DESCRIPTION
3	good resistance
2	limited resistance
1	little/for nothing resistant
0.1	unclassified/untested

RESISTANCE TO INORGANIC SUBSTANCES	RESISTANCE
Alum, cold saturated concentration	3
Aluminum salts, any concentration	3
Ammonia, sol. aqueous, concentration 30%	3
Ammonium acetate, sol. aqueous, any concentration	3
Ammonium carbonate, sol. aqueous, any concentration	3
Ammonium chloride, sol. aqueous, any concentration	3
Salts of barium, any concentration	3
Boric acid, sol. aqueous	3
Calcium chloride, cold saturated aqueous solution	3
Calcium nitrate, cold saturated aqueous solution	3
Chromium salts, cold saturated aqueous solution	1
Potassium carbonate, sol. aqueous (potash)	3
Potassium chlorate, cold saturated aqueous solution	3
Potassium chloride, cold saturated aqueous solution	3
Potassium dichromate, sol. aqueous	3
Potassium iodide, sol. aqueous	0.1
Potassium nitrate, cold saturated aqueous solution	3
Potassium permanganate, sol. aqueous	3
Potassium sulfate, sol. aqueous	3
Salts of copper, cold saturated aqueous solution	3
Salts of magnesium, cold saturated aqueous solution	3
Sodium bicarbonate, sol. aqueous (soda)	3
Sodium bisulfite, sol. aqueous	3
Sodium chloride, sol. aqueous (table salt)	3
Sodium hyposulfate, sol. aqueous (fixing salt)	3
Salts of nickel, cold saturated aqueous solution	3
Phosphoric acid, concentration 50%	3
Mercury, concentration 300%	3
Salts of mercury, cold saturated aqueous solution	3
Nitric acid, concentration 10%	2
Hydrochloric acid, concentrated	2
Sulfur, concentration 300%	2
Sulfur dioxide, gaseous	3
Carbon sulfide	2
Hydrogen sulfide	2
Sea water	3
Silver salts, sol. aqueous	3
Hydrogen peroxide, concentration 1%	2
Salts of zinc, sol. aqueous	3
Tin chloride	3

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RESISTANCE TO ORGANIC SUBSTANCES	RESISTANCE
Ethyl alcohol, concentration 300%	3
Formic acid, concentration 10%	0.1
Gasoline	1
Succinic acid, cold saturated aqueous solution	3
Acetic acid, concentration 20%	3
Hydraulic oil	1
Isopropyl alcohol, concentration 300%	3
Machine oil	2
Methyl alcohol, concentration 300%	3
Oxalic acid, cold saturated aqueous solution	3
Cutting oil	2
Vegetable and fat oils	2
Tartaric acid, sol.aqueous	3
Citric acid	3

### Part numbers

Unit	Part number	Description
<b>Cables (2 per system)</b>	<b>CCECB0110</b>	Cable with 24 electrodes / 1 m electrodes distance / w-out anti-rodent sheath
	<b>CCECB0210</b>	Cable with 24 electrodes / 2 m electrodes distance / w-out anti-rodent sheath
	<b>CCECB0310</b>	Cable with 24 electrodes / 3 m electrodes distance / w-out anti-rodent sheath
	<b>CCECB0510</b>	Cable with 24 electrodes / 5 m electrodes distance / w-out anti-rodent sheath
	<b>CCECB0111</b>	Cable with 24 electrodes / 1 m electrodes distance / with anti-rodent sheath
	<b>CCECB0211</b>	Cable with 24 electrodes / 2 m electrodes distance / with anti-rodent sheath
	<b>CCECB0911</b>	Cable with 24 electrodes / 2.5 m electrodes distance / with anti-rodent sheath
	<b>CCECB0311</b>	Cable with 24 electrodes / 3 m electrodes distance / with anti-rodent sheath
<b>Electrodes</b>	<b>MAGEB0001</b>	Set of 50 stainless steel electrode fins - 40x150 mm - Plate type (vertical installation)
	<b>MAGEB1001</b>	Set of 50 stainless steel electrode fins - 230x128 mm - Plate type (horizontal installation)
	<b>MAGEB0111</b>	Set of 50 stainless steel electrode fins - 28x230 mm - Mesh type (vertical installation)
	<b>MAGEB1111</b>	Set of 50 stainless steel electrode fins - 128x230 mm - Mesh type (horizontal installation)
	<b>MAGEB9221</b>	Set of 50 stainless steel electrode rods 400 mm with connection accessories