Corrosion Solutions

DurAmmo

Impressed Current Cathodic Protection

Product Datasheet

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Description

ElectroTechCP™ *durAmmo* is a long-life reference electrode which can be embedded in concrete and used to control the cathodic protection of the reinforcing steel. The potential of the ElectroTechCP™ *durAmmo* is relatively independent of changes in the chemical properties of concrete, so it can be used in wet or dry environments with or without chloride. The *durAmmo* is designed so that it can withstand substantial current drainage. This makes it particularly suitable for uses with automated monitoring systems where the potential is being assessed on a frequent basis. The ElectroTechCP™ *durAmmo* is not a true half cell, but in common with platinum electrodes, displays a stability of potential due its ongoing nobility in various environments. Potential is + 110mV relative to a copper sulfate electrode.

Temperature Range

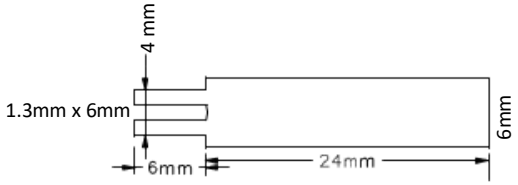
0 to 40°C. Below this temperature the concrete electrolyte starts to freeze which significantly affects recorded potentials.

Service Life

The *durAmmo* is extremely durable and with both a current discharge capacity and a coated titanium wire which can sustain damage and still work reliably. Over 100 years of service can be anticipated.

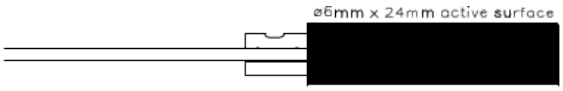
SPECIFICATION FOR ROD

Nominal rod diameter	6 mm
Nominal length	30mm
Composition	ASTM 265 grade 1
Analysis	Fe max 0.20% O max 0.18% N max 0.03% C max 0.10% H max 0.015% Balance of titanium
Coating composition	MMO (mixed metal oxide). This is an iridium oxide/tantalum oxide-based coating.



SPECIFICATION FOR TITANIUM COATED WIRE

Nominal diameter	1.2 mm
Composition	ASTM B348 grade 2
Analysis	Fe max 0.30% O max 0.25% N max 0.03% C max 0.10% H max 0.015% Balance of titanium
Resistance	0.47 ohm per linear meter



Insulation

Coating type	PolyPropylene
Nominal coating thickness	0.5mm
Color	blue
Nominal wire diameter	2.2-2.3 mm