

CORROSION RATE MONITORING PROBES



Ag/AgCl Reference Electrode



CORROSION RATE MONITORING PROBES - Concrete Cathodic Protection

Corrosion rate monitoring probes are designed for installation during the construction of structures to provide information on the corrosion of the reinforcement and the condition of the concrete. This is done in the form of the following measurements:

- Corrosion potential (E_{corr}) of the probe working electrode and the main reinforcement with respect to the probe reference element.
- Corrosion rate (I_{corr}) of the probe working electrode and the main reinforcement using the linear polarization resistance (LPR) method
- Concrete Resistivity
- Concrete temperature



Major Applications – Concrete Cathodic Protection

We can provide this product to suit your specification and requirements

Silver / Silver Chloride Permanent Embeddable Reference Electrode

Information

Silver / Silver Chloride reference electrode is specially designed for concrete application having stable potential and long life. The components are Silver metal, Silver chloride, silver ions and chloride ions.

Stability - Less than $\pm 3\text{mV}$ in 24 hours. Less than $\pm 10\text{mV}$ expected in 20 years.

Life in Concrete - more than 30 years at a leakage current of 1mA

Housing - ACETAL Plastic / Nylon tube.

Contact surface - Micro porous plug

Temperature range: -5°C to 70°C

Approx. overall dimension - 4" long x 1" dia.

Potential:

$-15\text{mV} \pm 10\text{mV}$ versus the Saturated Calomel Electrode (SCE)

$230\text{mV} \pm 10\text{mV}$ versus the Standard Hydrogen Electrode (SHE)

Cable:

Supplied to order as required

QA/QC:

All reference electrode are factory calibrated and supplied with calibration certificates.