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## TYPE WE100 EMBEDDABLE REFERENCE ELECTRODE FOR USE IN CONCRETE



Silver/Silver Chloride elements in all SILVION electrodes are manufactured using an advanced technique which results in a porous silver matrix being formed around a silver wire skeleton. The matrix is then coated with precise quantities of Silver/Chloride to ensure:

- 1). HIGH STABILITY
- 2). GREATER ACCURACY
- 3). INCREASED LIFE PERFORMANCE.

For our embeddable electrodes we ensure that the pre determined chloride ion concentration around the element is maintained by using an inert electrolyte compatible with the silver/silver chloride element. Ionic continuity to the environment is via a micro-porous sintered ceramic disc.



### OUTER CASING

MATERIAL .....	ACETAL
LENGTH .....	110mm
DIAMETER .....	22mm
CERAMIC DISC DIAMETER .....	20mm

### SILVER CHLORIDE ELEMENT

LENGTH .....	50mm
DIAMETER .....	5 x 5mm
GEOMETRIC SURFACE AREA .....	10cm <sup>2</sup>
REAL SURFACE AREA .....	500cm <sup>2</sup>
MATERIALS .....	SILVER COMPOUNDS ARE 99.90% PURE

**ELECTROLYTE** ..... INERT SOLID ELECTROLYTE 0.5MOLAR KCl

### PERFORMANCE DATA

SHORT CIRCUIT CURRENT (<1 MIN) .....	20mA
STABILITY (POTENTIAL DRIFT AT CONSTANT TEMP AND ENVIRONMENT) .....	+/- 1mV (24Hrs) @ 5micro Amp load
ACCURACY ( Vs SCE in 3% NaCl @ 20DegC) .	-5mV +/- 5mV
TEMPERATURE COEFFICIENT.....	-0.65mV/Deg C
LIFE IN CONCRETE .....	30 YEARS (THEORETICAL)
TEMP RANGE .....	-5 to 70DegC

### QA/QC

All our electrodes are fully tested, calibrated and supplied complete with a calibration certificate. They are individually identified with a unique number to ensure full traceability.  
 All dimensions +/-1mm unless otherwise stated

*The information provided in this document was accurate at the time it was published, however, we reserve the right to revise this document without prior warning*

## SILVION REFERENCE ELECTRODES

*25 Years Service to the Corrosion Prevention Industry*

Registered in England No: 6860239

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