



SILVION LIMITED  
 The Brambles, Grantham Road,  
 Old Somerby, Grantham, Lincs  
 NG33 4AB UK  
 Tel: 01476 590932  
 Mob: 07872 857310  
 Email: [sales@silvion.co.uk](mailto:sales@silvion.co.uk)  
 Web: [www.silvion.co.uk](http://www.silvion.co.uk)

## TYPE WE50 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 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 disc



### OUTER CASING

MATERIAL .....	ACETAL
LENGTH .....	80mm
DIAMETER .....	20mm
SINTERED DISC DIAMETER .....	15mm

### SILVER CHLORIDE ELEMENT

LENGTH .....	20mm (+/- 2mm)
DIAMETER .....	6mm
GEOMETRIC SURFACE AREA .....	4cm <sup>2</sup>
REAL SURFACE AREA .....	200cm <sup>2</sup>
MATERIALS .....	SILVER COMPOUNDS ARE 99.90% PURE

ELECTROLYTE .....	INERT SOLID ELECTROLYTE WITH 0.5MOLAR KCl
-------------------	---

### PERFORMANCE DATA

SHORT CIRCUIT CURRENT (<1 MIN) .....	10mA
STABILITY (POTENTIAL DRIFT AT CONSTANT TEMP AND ENVIRONMENT) .....	+/- 3mV (24Hrs) @ 5 micro Amp load
ACCURACY ( Vs SCE IN 3% NaCl @ 20°C).....	-5mV +/- 5mV
TEMPERATURE COEFFICIENT .....	-0.65 mV/Deg C
LIFE IN CONCRETE .....	25 YEARS (THEORETICAL)
TEMP RANGE .....	-5 to 80°C
SHELF LIFE .....	Infinite if stored correctly

### 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

VAT No 975 9426 61