

## Ag/AgCl 0.5M KCl REFERENCE ELECTRODE FOR USE IN CONCRETE

The silver/silver chloride (Ag/AgCl) elements are manufactured using a "unique" and advanced technique that results in a porous silver matrix. The matrix is then coated with precise quantities of silver/chloride to ensure high reliability and stability, greater accuracy and increased life performance. The predetermined chloride ion concentration around the element is maintained by using an inert electrolyte compatible with the Ag/AgCl chloride element. Ionic continuity to the environment is via a micro-porous sintered disc.

All electrodes are fully tested, calibrated and supplied complete with a calibration certificate. They are individually identified with a unique number to ensure full traceability.



### Telemagnetica S.r.l.

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## Technical details

### OUTER CASING

Material	Acetal body with porous ceramic sintered disc and nylon cable gland
Dimensions	Length: 82mm (104mm w/ gland); Ø 20mm
Ceramic Disc Diameter	15mm
Weight (W/O Cable)	33g

### SILVER CHLORIDE ELEMENT

Materials	Silver compounds are 99.90% pure
Dimensions	Length: 20mm (+/- 2mm); Section: 6mm
Surface Area	Geometric: 4cm; real: 200cm

<i>ELECTROLYTE</i>	Inert electrolyte with 0.5 Molar KCl
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### PERFORMANCE DATA

Stability	+/- 5mV (24 Hrs) @ 5µA load
Accuracy	-5mV +/-5mV (Vs SCE IN 3% NaCl @20 C)
Temp Coefficient	-0.65V/°C
Temp Range	-5 to 70 °C
Internal Resistance	Less than 500 Ohms
Theoretical Design Life	25 years @ 0.1 µA load

### CABLE

Standard	1x2.5mm <sup>2</sup> XLPE/PVC – Blue <i>Other cable type available upon request</i>
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**PLEASE NOTE:** Under no circumstances should the reference electrode be connected directly to the structure or the electrode will self-discharge and cease to operate. Minimum input impedance for the voltmeter when measuring the structure to electrolyte potential is 10 MOhm.

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