

PERMANENT SILVER / SILVER CHLORIDE REFERENCE ELECTRODE FOR CONCRETE – WE10

DATASHEET 3.18

AG/AGCL REFERENCE ELECTRODE



The silver/silver chloride (Ag/AgCl) elements in all electrodes 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:

- 1). High Reliability;
- 2). High Stability;
- 3). Greater Accuracy;
- 4). Increased Life Performance.

NOTE:

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 Ag/AgCl chloride element. Ionic continuity to the environment is via a micro-porous sintered disc.

OUTER CASING	
MATERIAL :	Acetal body with porous ceramic sintered disc and nylon cable gland
DIMENSIONS:	Length: 62mm (84mm w/ gland); Diameter: 18mm
CERAMIC CYLINDER DIAMETER:	15mm
WEIGHT (W/O CABLE):	22g
SILVER CHLORIDE ELEMENT	
MATERIALS:	Silver compounds are 99.90% pure
DIMENSIONS: Length:	Length: 15mm (+/- 2mm); Section: 6mm
SURFACE AREA: :	Geometric: 3cm ² ; Real: 100cm ²
ELECTROLYTE:	Inert electrolyte with 0.5 Molar KCl
PERFORMANCE DATA	
STABILITY (POTENTIAL DRIFT AT CONSTANT TEMP AND ENVIRONMENT) :	+/- 5mV (24 Hrs) @ 5µA load
ACCURACY (Vs SCE IN 3% NaCl @20oC):	-5mV +/- 5mV
TEMP COEFFICIENT:	-0.65V/ oC
TEMP RANGE:	-5 to 70oC
INTERNAL RESISTANCE:	Less than 500 Ohms
THEORETICAL DESIGN LIFE :	20 years @ 0.1 µA load



BAC[®]

CORROSION CONTROL

BAC Corrosion Control Ltd
Stafford Park 11 • Telford • TF3 3AY
United Kingdom

T: +44 (0) 1952 290 321
E: sales@bacgroup.com
W: www.bacgroup.com

PERMANENT SILVER / SILVER CHLORIDE REFERENCE ELECTRODE FOR CONCRETE – WE50

DATASHEET 3.18

AG/AGCL REFERENCE ELECTRODE



The silver/silver chloride (Ag/AgCl) elements in all electrodes 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:

- 1). High Reliability;
- 2). High Stability;
- 3). Greater Accuracy;
- 4). Increased Life Performance.

NOTE:

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 Ag/AgCl chloride element. Ionic continuity to the environment is via a micro-porous sintered disc.

OUTER MODEL CASING	
MATERIAL :	Acetal body with porous ceramic sintered disc and nylon cable gland
DIMENSIONS:	Length: 82mm (104mm w/ gland); Diameter: 20mm
CERAMIC CYLINDER DIAMETER:	15mm
WEIGHT (W/O CABLE):	33g
SILVER CHLORIDE ELEMENT	
MATERIALS:	Silver compounds are 99.90% pure
DIMENSIONS: Length:	Length: 20mm (+/- 2mm); Section: 6mm
SURFACE AREA: :	Geometric: 4cm ² ; Real: 100cm ²
ELECTROLYTE:	Inert electrolyte with 0.5 Molar KCl
PERFORMANCE DATA	
STABILITY (POTENTIAL DRIFT AT CONSTANT TEMP AND ENVIRONMENT) :	+/- 5mV (24 Hrs) @ 5µA load
ACCURACY (Vs SCE IN 3% NaCl @20oC):	-5mV +/-5mV
TEMP COEFFICIENT:	-0.65V/ oC
TEMP RANGE:	-5 to 70oC
INTERNAL RESISTANCE:	Less than 500 Ohms
THEORETICAL DESIGN LIFE :	25 years @ 0.1 µA load



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PERMANENT SILVER / SILVER CHLORIDE REFERENCE ELECTRODE FOR CONCRETE – WE100

DATASHEET 3.18

AG/AGCL REFERENCE ELECTRODE



The silver/silver chloride (Ag/AgCl) elements in all electrodes 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:

- 1). High Reliability;
- 2). High Stability;
- 3). Greater Accuracy;
- 4). Increased Life Performance.

NOTE:

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 Ag/AgCl chloride element. Ionic continuity to the environment is via a micro-porous sintered disc.

OUTER MODEL CASING	
MATERIAL :	Acetal body with porous ceramic sintered disc and nylon cable gland
DIMENSIONS:	Length: 110mm (133mm w/ gland); Diameter: 22mm
CERAMIC CYLINDER DIAMETER:	20mm
WEIGHT (W/O CABLE):	70g
SILVER CHLORIDE ELEMENT	
MATERIALS:	Silver compounds are 99.90% pure
DIMENSIONS: Length:	Length: 50mm (+/- 2mm); Section: 5mm x 5mm
SURFACE AREA: :	Geometric: 10cm ² ; Real: 500cm ²
ELECTROLYTE:	Inert electrolyte with 0.5 Molar KCl
PERFORMANCE DATA	
STABILITY (POTENTIAL DRIFT AT CONSTANT TEMP AND ENVIRONMENT) :	+/- 1mV (24 Hrs) @ 5µA load
ACCURACY (Vs SCE IN 3% NaCl @20oC):	-5mV +/- 5mV
TEMP COEFFICIENT:	-0.65V/ oC
TEMP RANGE:	-5 to 70oC
INTERNAL RESISTANCE:	Less than 500 Ohms
THEORETICAL DESIGN LIFE :	30 years @ 0.1 µA load



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