

CONDUCTOMETRIC SENSOR SUBSTRATES

Type: CC1.W* (*)

Description

The sensor is formed on a corundum ceramic base. Onto this surface two interdigitated structures of electrodes are applied. The electrodes are made of Platinum-Gold alloy in standard product CC1.WS. At the end of the sensor there is a contact which is connected with the active part by the silver conducting path which is covered by a dielectric protection layer. A bio-chemically active substance can be immobilised on the working electrode of the sensor.

Physical parameters

Dimensions:

Weight: 0.4 gms
 Length: 25.40 mm
 Width: 7.26 mm
 Thickness of sensor: 0.63 mm
 Thickness of lines: 150 μ m
 Gap between lines: 200 μ m

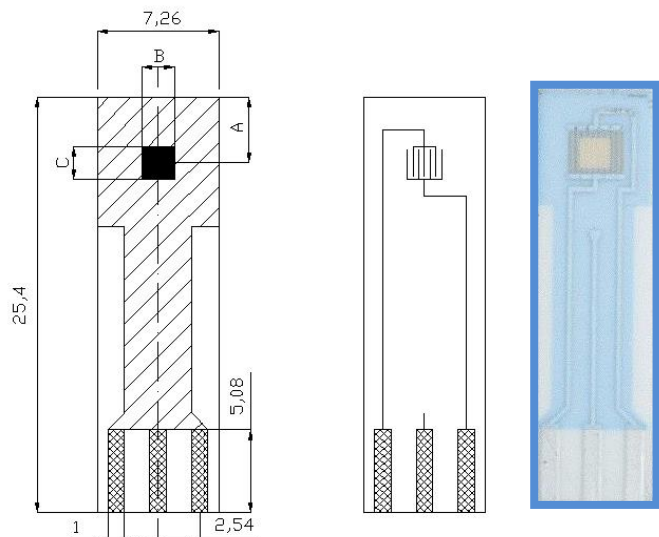
A = 4.00 \pm 0.05 mm

B = 2.00 \pm 0.05 mm

C = 2.00 \pm 0.05 mm

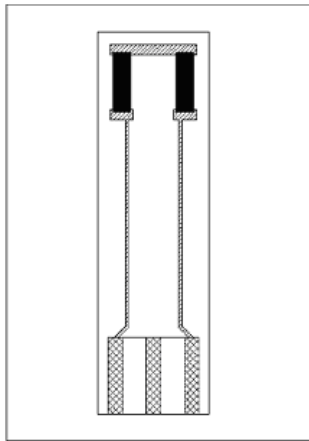
Electrode Materials are defined by:

CC1.W* (*)

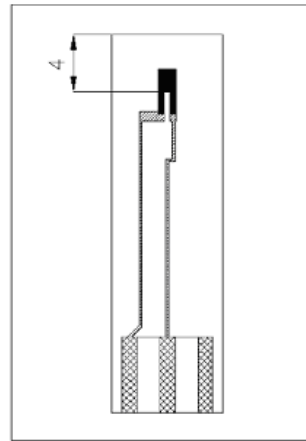


The asterisk is replaced by the appropriate number or letter.

C - Conductometric sensor	2 - Pure Platinum
C - Corundum ceramic base	3 - Pure Silver
1 - Sensor group reference number	4 - Graphite
W - Working electrode material	(*) - Additional Technical specification
S - Alloy of Gold and Platinum	H - Heating of the sensor
1 - Pure Gold	T - Temperature sensing element



CC1.W* (H)



CC1.W* (T)

Heating parametry:

Maximum voltage is 35 V and temperature approximately 500°C, resistance: 80 +/- 10 Ohm.

Thermistor:

- 1) Resistance paste - resistance 160Ohm, coefficient K= 6100 ppm/K
- 2) Pt1000

Connector types for CC1 sensors range

	KA1	KA1.S	KA1.C	KA4
CC1.W*	✓	✓	✓	✓
CC1.W* (H)				✓
CC1.W* (T)				✓

Sensor Usage

This specific range of CC1 sensors enables the measurement of:

- Basic electrochemical and bio-electrochemical techniques
- Conductivity analysis

Software Packs

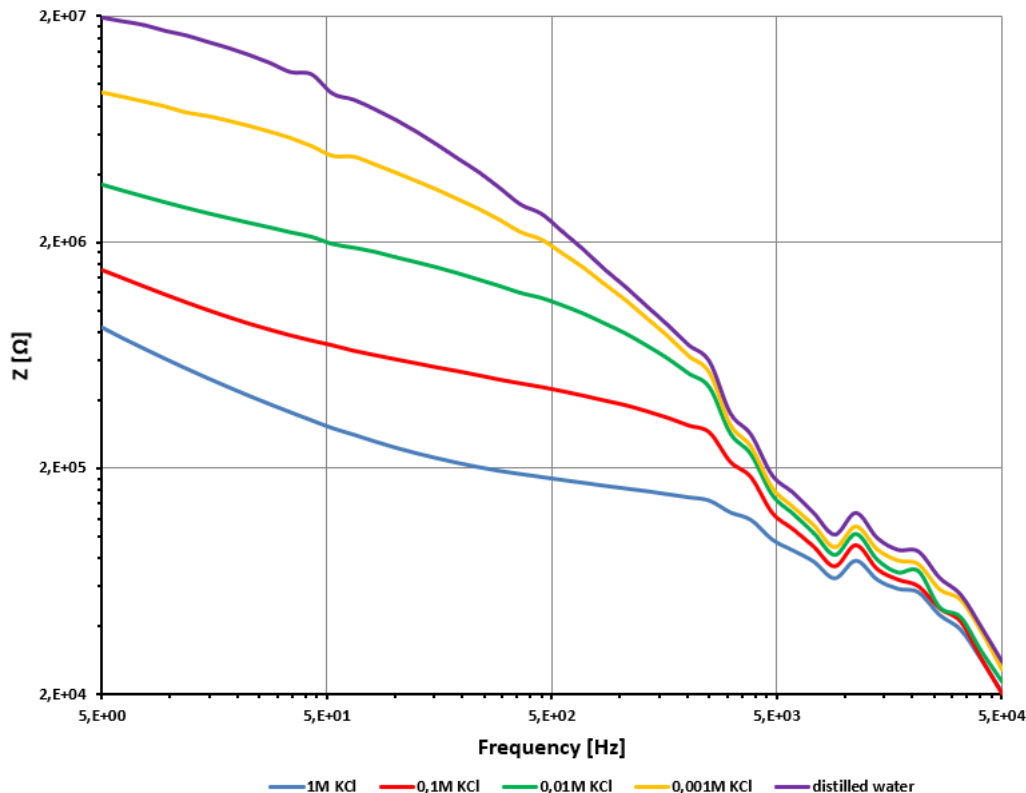
These are available for:

- Bipolar current pulse measurement

Related patents

- CZ-PV 2001-3227

Typical Sensor Response



Method:

- Impedance spectroscopy

Sensor:

- CC1.W2

Chemicals:

- KCl solutions (1M, 0.1M, 0.01M, 0.001M)

Activation

Sensors CC1.W4 must be activated before usage. We offer unactivated version of CC1.W4 sensors. Activated version is produced on your demand also.

Ordering Information

- The order is specified by whole sensor description formula
- Minimum order quantity - 20 sensors
- All order quantities are to be in multiples of 20 e.g. 20, 40, 60, etc.
- Delivery time for standard CC1 sensors is 4 weeks from receipt of order
- Delivery time for non-standard CC1 sensors depends on final technical specification of order

Example of Order

- 100 pieces - CC1.W2