

## HIGH QUALITY SURFACE ELECTROCHEMICAL SENSOR

Type: AC1P

### Description:

The sensor is formed on a corundum ceramic base. On to this surface the working, the reference and the auxiliary electrodes are applied. Working electrode has homogenous surface with roughness less than 1  $\mu\text{m}$ . The working and the auxiliary electrodes are made of variety of materials. At the end of the sensor there is a contacting field which is connected with the active part by the silver conducting paths which are covered by a dielectric protection layer. A bio-chemically active substance can be immobilised on the working electrode of the sensor to create a biosensor.

### Physical Parameters:

#### Dimensions:

Weight: 0.4 gms  
 Length: 25.40 mm  
 Width: 7.26 mm  
 Thickness: 0.63 mm

A =  $4.00 \pm 0.05$  mm

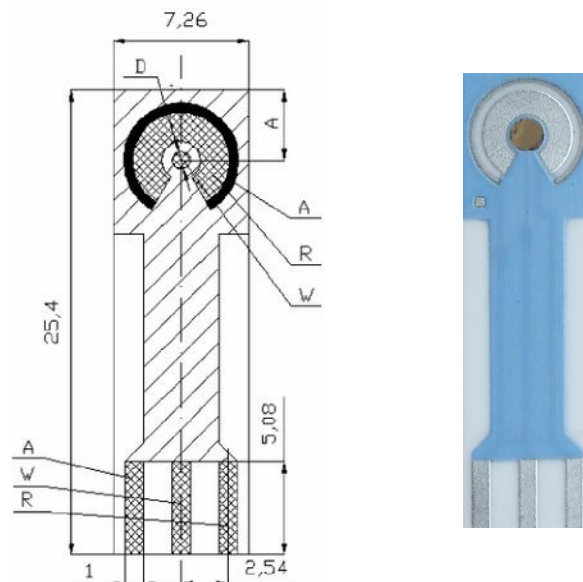
D =  $1.00 \pm 0.05$  mm

### Electrode Materials

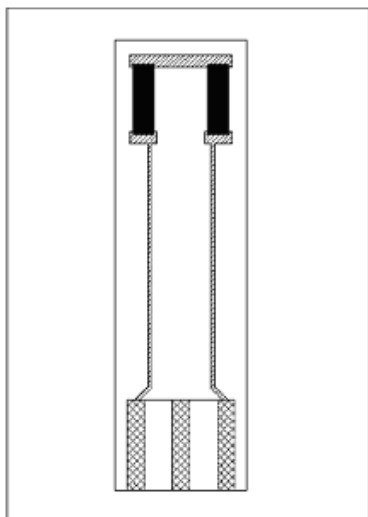
are defined by:

AC1P.W\*.R\* (\*)

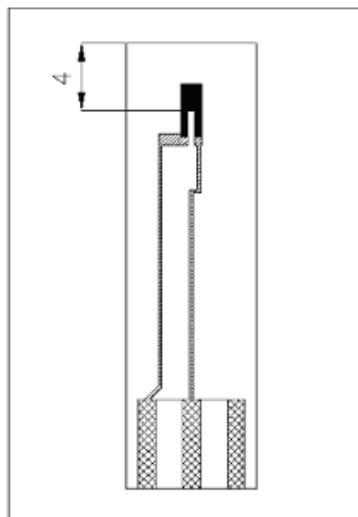
The asterisk is replaced by the appropriate number or letter.



A = Amperometric sensor or electrode	R - Reference electrode material
P = Polished working electrode	S - Silver
C = Corundum ceramic base	1 - Silver / Silver Chloride
1 = Sensor group reference number	2 - Silver covered by AgCl
W - Working electrode material	(*) - Additional Technical specification
1 - Pure Gold	H - Heating of the sensor
	T - Temperature sensing element



AC1.W\*.R\* (H)



AC1.W\*.R\* (T)

### Optional Equipment

#### Evaluating Units:

- BA1.\*
- BA2.\*

#### Experimental Accessories:

- Flow Through Adapter (FC2)
- MFS (Micro Flow System)
- Peristaltic Pump, Linear Pump
- Stand, TC1, TC2
- Thermostated Vessel

### Connector types for AC1 sensor range

	KA1	KA4
AC1.W*.R*	✓	✓
AC1.W*.R*(H)		✓
AC1.W*.R* (T)		✓
AC1.W*.R* (H, T)		✓

### Sensor Usage:

This specific range of AC1P sensors enable the measurement of:

- Basic electrochemical and bio-electrochemical techniques
- H<sub>2</sub>O<sub>2</sub> concentration, Glucose, Ferricyanide
- Toxicity caused by pesticides
- Enzyme activity
- Enzyme activity and Michaelis Menten constant
- Immobilization of antibodies
- Preparation of nanostructures

### Software Packs:

These are available for

- Basic evaluation
- Measurement of enzyme activity and Michaelis Menten constant X

### Related patents:

PV 1994-864 (13.04.1994) užitný vzor č. 6113/94

### Ordering information:

- The order is specified by whole sensor description formula
- Minimum order quantity - 5 sensors
- All order quantities are to be in multiples of 5 e.g. 5, 10, 15, etc.
- Delivery time for standard AC1P sensors is 4 weeks from receipt of order
- Delivery time for non-standard AC1P sensors depends on final technical specification of order

**Examples of Order:**

- 100 pieces - AC1P.W1.R1
- 250 pieces - AC1P.W1.RS (H,T)