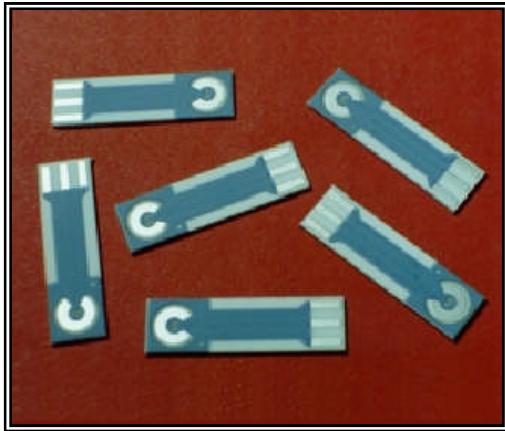


SUBSTRATES FOR AMPEROMETRIC BIOSENSORS

Type : AC1.W*.R* (*)



Description

The sensor is formed on a corundum ceramic base. On to this surface the working, the reference and the auxiliary electrodes are applied. The working and the auxiliary electrodes are made of Gold and the reference one is made of Silver in standard product AC1.WS.RS. 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 is put on the working electrode of the sensor.

Physical Parameters

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

A = 4,00 ± 0,05 mm

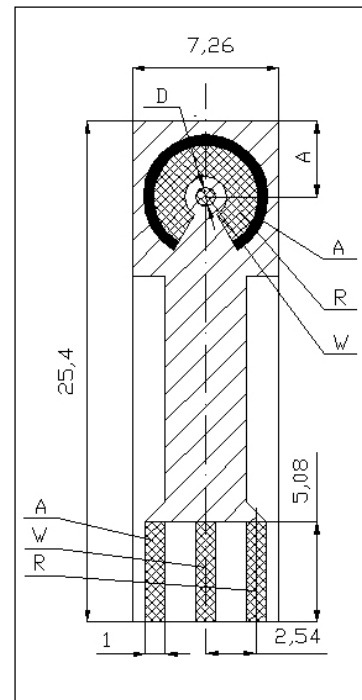
D = 1,00 ± 0,05 mm

Electrode Materials

Electrode materials are defined by:

AC1.W*.R* (*)

The asterisk is replaced by the appropriate number or letter.



A - Amperometric sensor or electrode

C - Corundum ceramic base

1 - Sensor group reference number

W - Working electrode material

S - Alloy of Gold and Platinum

1 - Pure Gold

2 - Pure Platinum

3 - Pure Silver

4 - Graphite (7105)

R - Reference electrode material

S - Silver

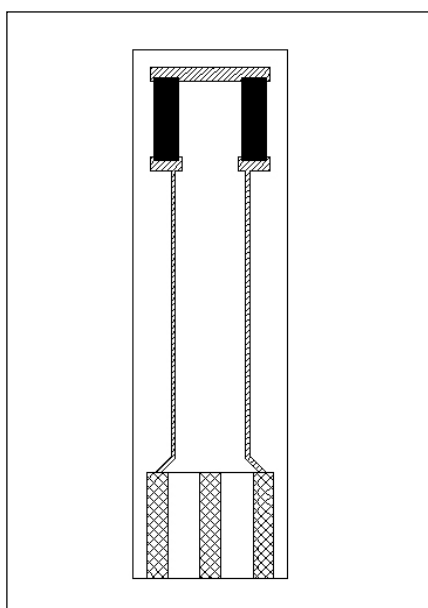
1 - Silver / Silver Chloride

2 - Silver covered by AgCl

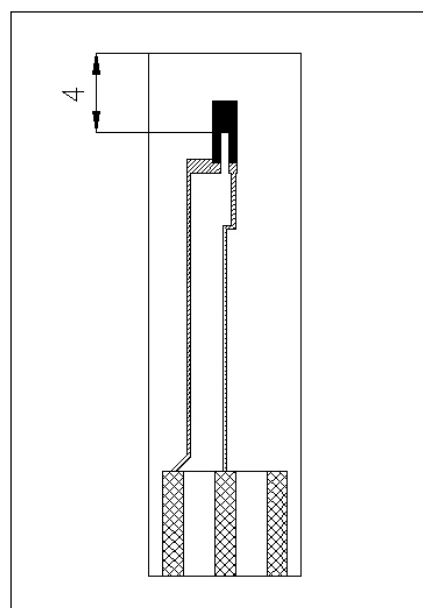
(*) - Additional technical specification

H - Heating of the sensor

T - Temperature sensing element



AC1.W*.R* (H)



AC1.W*.R* (T)

Connector Types for AC1 Sensor Range

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

Optional Equipment

Evaluating Units:

- BA1.*
- BA2.*

Experimental Accessories:

- Flow Through Adapter
- MFS (Micro Flow System)
- Peristaltic Pump
- Stand
- Thermostated Vessel

Sensor Usage

This specific range of AC1 sensors enables the measurement of:

- Basic electrochemical and bio-electrochemical techniques
- H₂O₂ concentration

- Glucose
- Ferricyanide
- Toxicity caused by pesticides
- Enzyme activity
- Enzyme activity and Michaelis Menten constant

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 – 25 sensors
- All order quantities are to be in multiples of 25 e.g. 25, 50, 75, etc.
- Delivery time for standard AC1 sensors is 4 weeks from receipt of order
- Delivery time for non-standard AC1 sensors depends on final technical specification of order

Examples of Order:

- 100 pieces – AC1.W2.R1
- 250 pieces – AC1.W3.RS (H, T)

Standard stock program is black; products available on special order are on shadowed background.

The explicit list of materials used for electrode preparation

Type of Sensor	Electrode Material			Conducting Paths
	Working	Reference	Auxiliary	
AC1.WS.RS	PtAu (15 / 85%)	AgPd (98 / 2%)	PtAu (15 / 85%)	Ag
AC1.WS.R1	PtAu (15 / 85%)	Ag / AgCl (60 / 40%)	PtAu (15 / 85%)	Ag
AC1.WS.R2	PtAu (15 / 85%)	Chlorinated Silver	PtAu (15 / 85%)	Ag
AC1.W1.RS	AuPd (98 / 2%)	AgPd (98 / 2%)	AuPd (98 / 2%)	Ag
AC1.W1.R1	AuPd (98 / 2%)	Ag / AgCl (60 / 40%)	AuPd (98 / 2%)	Ag
AC1.W1.R2	AuPd (98 / 2%)	Chlorinated Silver	AuPd (98 / 2%)	Ag
AC1.W2.RS	Pt (100%)	AgPd (98 / 2%)	Pt (100%)	Ag
AC1.W2.R1	Pt (100%)	Ag / AgCl (60 / 40%)	Pt (100%)	Ag
AC1.W2.R2	Pt (100%)	Chlorinated Silver	Pt (100%)	Ag
AC1.W3.RS	AgPd (98 / 2%)	AgPd (98 / 2%)	AuPd (98 / 2%)	Ag
AC1.W3.R1	AgPd (98 / 2%)	Ag / AgCl (60 / 40%)	AuPd (98 / 2%)	Ag
AC1.W3.R2	AgPd (98 / 2%)	Chlorinated Silver	AuPd (98 / 2%)	Ag
AC1.W4.RS	C (7105)	AgPd (98 / 2%)	PtAu (15 / 85%)	Ag
AC1.W4.R1	C (7105)	Ag / AgCl (60 / 40%)	PtAu (15 / 85%)	Ag
AC1.W4.R2	C (7105)	Chlorinated Silver	PtAu (15 / 85%)	Ag