

## COMBINATION pH ELECTRODE IJ44A, IJ44At

Electrodes **IJ-44A**, and **IJ44At** have a unique specific construction which enables measurements in various samples of both pure and contaminated liquids, soil and semi-solids without the threat of clogging the junction.

This electrode enables measurements in very wide range of samples.

**WATER, WASTEWATER, CONTAMINATED SAMPLES, COSMETICS, DETERGENTS, ORGANIC MATERIALS, PROTEINS, LUBRICANTS, OILS, WINE, MEAT, CHEESE..... ALL THIS MAY BE MEASURED WITH ONE ELECTRODE!**

This electrodes shouldn't be used for measurements of distilled or deionised water.

The **IJ44A** model is characterised by a fast reaction in clean water and low temperature samples. Has a very good mechanical resistance.

The **IJ44At** it is identical as **IJ44A** except it has a built in temperature probe Pt-1000B

The construction of the electrode is unusual, precisely fitted sleeve put on the end of electrode creates an "intermediate junction" what protects the real junction (diaphragm) of the electrode against clogging, ensures stable measurements in these types of liquids or semi-liquid mass, in which other electrodes quickly stop working. Such construction is highly resistant to clogging by fats, proteins or other sediments.

Elements of glass electrodes are protected by a plastic body.

Plastic sleeve which protects the junction is an integral part of the electrode. It is impossible to use the electrode without the sleeve. The sleeve may be exchanged and it's kind depends on the type of the measured sample.



Sleeve for measurements  
in liquid samples



Sleeve for measurements  
in semi solid samples

Machine processing of the glass ensures high precision of matching elements in glass and plastic electrode, which is a must for a proper operation.

When properly handled, the electrode's lifetime is longer than the standard electrodes.

The average lifetime 2 to 4 years.





### *Refilling the gel electrolyte*

Periodically, on average every 1 month, the sleeve should be removed, the exposed collar flushed to remove the old gel and new gel should be poured in.

The conical membrane is hardened, what allows it to be used for direct penetration measurements, e.g. in meat or cheese.

The electrode does not contain mercury and fits directly into Eppendorf tubes.

**We pay your attention to the favourable price, much lower than the price of electrodes for similar purposes offered by their companies.**

### **TECHNICAL DATA**

Range	0 ÷ 14 pH
Zero point	7.0 ± 0.4 pH
Membrane	Glass, conical
Working temperature range	0 ÷ 60 °C
Membrane	Glass, conical
Junction type	"intermediate" junction
Electrolyte	Concentrated – 3 M KCl
Impedance	< 120 MΩ (25 °C)
Diameter	12.0 mm ±0.5 mm
Length	140 mm
Minimal immersion level	20 mm
Maximal immersion level	100 mm
Body material	polypropylene
Cable length	about 1 m
Connector	BNC-50 +RCA in IJ44At