

COMBINATION REDOX ELECTRODE ERPt-111

Combination ORP (redox, mV) electrode type ERPt-111 is designed for measurements in water solutions. The electrode consists of measuring and reference half-cells. The measuring part is a platinum ring placed at the end of the electrode, which potential depends on the oxidation - reduction balance in the measured solution. The reference part is Ag/AgCl in KCl solution saturated with silver chloride. A contact with the sample is ensured by fiber diaphragm (junction). The electrode is prepared for cooperation with pH meters with an option of mV measurement and with BNC connector.

It may be used both during laboratory and field measurements. The electrolyte used in the electrode is gel what slows down its outflow. The electrode is not refillable what makes its using and conservation easier. On the other hand lack of possibility of replacing the electrolyte limits electrode's lifetime. That's why it is not advised to use the electrode during continuous measurements especially in higher temperatures or higher pressure (ex. in pipes). For such conditions a ERPt-13 electrode is suggested.

The ERPt-111 electrode is equipped with mechanically and chemically resistant epoxy body, it successfully protects the measuring part of the electrode.

The typical fields in which the electrode is used are: controlling of the Redox potential in chemical or biological treatment of the municipal sewage and industrial waste, measurements of the surface water quality, controlling of the fermentation processes etc. The ERPt-111 may also be used in laboratories as an end point indicator in the titration process.

TECHNICAL DATA

Measuring Range	±2000 mV
Temperature range	0...60°C
Measuring half cell	platinum
Reference half cell	Ag/AgCl
Reference solution	saturated KCl + AgCl
Diaphragm material	fiber
Body diameter	12,0 ± 0,5 mm
Body length (without cable socket)	120 ± 5 mm
Diameter of the electrolyte inlet	6...7 mm
Minimal depth of immersing	10 mm
Maximal depth of immersing	115 mm
Body material	epoxy
Cable length	1 m
Connector	BNC-50



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