## pH ELECTRODE EPS-3Li

The **EPS-3Li combination** electrode is designed for pH measurements in liquids with water content below 5%. It may be used in petroleum products, extracts based on water and alcohol, vegetable oil and emultion paints provided that it is accurately rinsed immediately after measurement. The measurements in re-distilled water are also possible.

The BNC-50 connector enables cooperation with majority of available pH meters.

Glass body, round-shaped membrane.

The reference electrolyte is lithium chloride solution, refillable by the hole placed in the upper part of the glass body.

In non-water environment, the standard electrolyte - potasioum chloride solution – will not provide accurate measurements because of high diffusion potentials and high resistance between the non-water solution and the electrolyte.

The electrode is equipped with three external junctions.

The reference Ag/AgCI half cell is equipped with an internal electrolytical junction, which creates the ionic barrier. It prevents the silver ions from diffusion to the reference half cell, what in turn limits the chance of clogging of the ceramic junction and interference of the sulfide and cyanide ions from the measured solution. It also limits the interference of the reducing agents such as amines, buffers containing TRIS, sulfites, etc.

There are a few types of non-water solutions in which it is impossible to make stable measurement, however these are rarely occuring exceptions.

Range	0 ÷14 pH
Working temperature range	0 ÷ 90 °C
Membrane	round-shaped glass
Electrolyte	Lithium in ethanoll
Reference hallf- cell	Ag/AgCI
Electrolyte junction	3 x ceramic
Length without cap	120 mm ± 5 mm
Body diameter	12 mm ±0.5 mm
Minimal immersion level	30 mm
Maximal immersion level	90 mm
Body material	glass
Cable length	about 1 m
Connector	BNC-50

## **TECHNICAL DATA**

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