

COMBINATION pH ELECTRODES EPX-4B, EPX-4UB

The combination glass electrodes **EPX-4B** and **EPX-4UB** are used for continuous pH measurements in liquid containers with use of immersion heads: **GXZ-1t**, **GXZ-2t** and **GXZ3t** which cooperate with controllers for continuous measurements and **GXZ-3tk** multifunction head for portable meters. Special connector and M16 thread placed in the upper part of the electrode enables to screw it in into the measuring head.

Teflon junction limits penetration of the measured solution into the electrode and enables good contact with the measured sample what results in accurate and stable measurements and limits the penetration of the measured solution inside the electrode. The measuring membrane is a round glass bulb made of glass chosen depending on the intended use.

The **EPX-4B** model is designed for measurements in liquids containing strong acids or alkalis (apart from hydrofluoric acid or NaOH and KOH).

The **EPX-4UB** model may be used for measurements in deionised, pure and ultra pure water.

The reference half cell is separated by an internal electrolytical diaphragm, what 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 diaphragm and interference of the sulphide and cyanide ions from the measured solution. It also limits the interference of the reducing agents such as amines, buffers containing TRIS, sulfites, etc. To keep the electrode permanently activated, it is equipped with a bottle filled with saturated KCl put on its end.

In case of using the electrode with controllers of **801** or **804** series it is necessary to use a preamplifier. In case of using CP-**421** pH meter the preamplifier is necessary only if a distance between the head and the meter is greater than 10 meters.

The electrodes may work in liquids with temperature up to 90°C. The gel electrolyte is not refillable.

TECHNICAL DATA

Measuring range	0 ÷ 14 pH
Working temperature range	0 ÷ 90°C
0 point	7 ± 0.3 pH
Membrane	Glass, spherical
Type of junction	Teflon
Electrolyte	Gel – 3,3 M KCl Ag / AgCl
Impedance	< 120 MΩ (25 °C)
Body diameter	12.0 mm ± 0,5 mm
Length	155 mm ± 5 mm
Body material	glass
Connector	Chinch with M16 thread
Maximal pressure of liquid	3 bar

