

SenTix[®] ML 70

pH combination electrode

General information

The pH combination electrode has a low maintenance gel electrolyte and a large-area ground glass ring junction. It is especially suitable for application in water treatment and drinking water.

Appropriate cable: AK-S7/1, coaxial cable 1 m long with twistable S7 plug-in connector, without instrument plug.

Storage

To store the combination electrode mount the protection cap, filled with 3 mol/L KCl solution. Short-term storage at 10 to 30 °C; never store at temperatures under -5 °C. During transport or storage, KCl solution can escape from the protection cap and form white, crystalline potassium chloride. This salt coating does not affect the ability to measure and can simply be rinsed off with water.

Calibration

Thoroughly rinse the combination electrode with water and immerse it in the buffer solution beyond the junction.

- Before using the next buffer solution, rinse the combination electrode with distilled water.
- Dispose of the buffer solution after use! Note the limited shelf life!
- Calibrate at the measurement temperature if possible and use the correct temperature value of the buffer solution.
- Calibrate the combination electrode according to the operating manual of the meter.

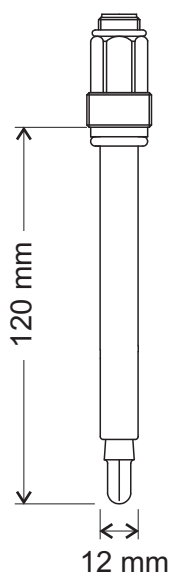
Aging

Either contamination or aging can cause longer response times, a reduction of the slope or a shift of the zero point of the pH measuring electrode. Every electrode ages as a consequence of the exchange processes at the glass membrane even if it is not used for measurement. Reference electrodes with gel electrolyte are low maintenance (no refilling of the electrolyte required).

Cleaning

- Carefully rinse the glass membrane of the pH measurement electrode and junction of the reference electrode with water and possibly dab them with a paper towel.
- After measuring in oily, organic or protein-containing test samples, rinse the pH glass electrode shortly with household washing-up liquid, ethyl alcohol or acetone. When using ethyl alcohol or acetone follow the safety instructions of the manufacturer.
- After cleaning, rinse the electrodes thoroughly with water and store them in KCl solution. Recalibrate them prior to the next measurement.
- Keep the plug contacts clean and dry!

Technical data on delivery



pH measuring range	pH 0 ... 14	
Temperature range	0 ... 80 °C	
Membrane resistance	approx. 250 MΩ (25 °C)	
Shunt conduction system	Ag/AgCl	
Electrolyte	Gel filling, approx. 3 mol/L KCl	
Junction	Ground glass ring junction	
Electrode zero point (25 °C)	pH = 7 ± 0.3	
Slope (25 °C)	> 95 % of the theoretical value	
Pressure	max. 6 bar	
Electrical connection	S7 industrial screw plug connection	
Process connection	Screw-in connection PG 13.5 on the plug head connector for installation	
Installation position	Vertical or tilted against the plumb line by max. 30 °	
Materials	Shaft	Glass
	Connection head:	Plastic (ABS)
	Sealing:	Silicone