

Measuring gauge PH 100

Temperature, pH and conductivity measurements

Liquids for the electroplating process require precise observation of their parameters. To ensure the quality of the electroplating the pH measurement is therefore one of the most important criteria.

For measuring the pH value, the pH electrode is also an essential component of the complete measuring gauge. Standard is an electrode with plastic shaft. As a single measuring rod, the combination of working electrode and reference electrode are incorporated into one design.

To guarantee the functionality of the electrode, the electrode tip is sealed with a fluid-filled cap. This should be regularly controlled.

The pH electrode should be calibrated at regular intervals. The calibration is swiftly and easily carried out with the help of the built-in calibration tools and the provided buffer solutions. For quality control purposes, the zero point and gradient can be simply read off the display.

The pH measurement transmitted should always be recorded together with the displayed temperature measurement.

With the new portable measuring set PH 100, for transmitting the pH value, many important process parameters can be swiftly and simply determined. The practical range of functions available via waterproof buttons, and the automatic temperature compensation via a separate stainless steel temperature sensor, facilitate their quick and reliable handling. In addition to the pH measurement, this multifunctional device also includes the possibility for measuring temperature and the determination of electrical conductivity of aqueous solutions.

The measuring gauge will be delivered in a compact and robust plastic case along with the corresponding buffer solutions and measuring electrodes.



Glass electrodes are also available in the range of accessories, alongside other plastic pH electrodes. When designing the gauge, most emphasis is placed upon the ease of use and robustness.

This portable, battery-powered analysis gauge is suitable for all uses. This may be in the laboratory, in production, in waste water treatment, in routine on-the-spot measurements, or anywhere where precise measurements are required.



Technical information

Ambient temperature	5 - 50°C
Display	8 digits x 14 Segments LCD - 7 mm background lighting with connectible background lighting
pH – input resistance	>10 ¹² Ohm
pH – input current	<1 pA
Batteries	3 x 1,5V, approx. 90hrs. life, battery control display, auto timer switches off after 15 min
Weight	550 g including measuring sensor
Casing	Aluminium (anodised with silver)
Dimensions	L=128 mm, W=82 mm, H=31 mm

pH measurement

Working range	0,00 to 14,00 pH
Automatic temperature compensation	0 to 100°C
Display accuracy	±0,01 pH
Automatic calibration with the buffers	pH 7,00 and pH 4,00 or pH 7,00 and pH 9,00 (Buffer value is prescribed and will be automatically identified)

pH single measuring rods (electrodes)

Dimensions	∅12 mm x L=125 mm
All round standard pH electrode with plastic shaft	pH single measuring rod pH62 1 - 12 pH, 0 - 60°C
Precision of pH electrode with glass shaft	pH single measuring rod InLab412 0 - 14 pH, 0 - 98°C

Temperature measurement

Measuring range	-25,0°C to +150,0°C
Resolution	0,1°C
Accuracy	±1 K
Sensor	Pt 1000 IEC60751, Class B

Conductivity measurement

Display Range	0 - 99,99 µS / 999,9 µS / 9999 µS / 99,99 mS / 999,9 mS
Measuring error	up to 200,0 mS: 2 % or 8 digit up to 500,0 mS: 4 % or 5 digit The measuring frequency adjusts automatically to the conductivity (approx. 20 Hz to 110 kHz)
Temperature coefficient – adjustable	from 0 - 3,9 % (Standard setting: 2,2 % N, natural water)
Reference temperature	20°C / 25°C adjustable
Dimensions of conductivity measuring cells	W=32 mm, D=18 mm, L=165 mm