
The company

For the past 40 years testo AG has been developing, producing and distributing electronic measuring instruments and probes on a worldwide basis for

- temperature
- humidity
- velocity
- flue gas
- hydrology
- water analysis

The continuous research and further development of our products is always customer-orientated!



Worldwide distribution

Our accurate measuring instruments leave Lenzkirch for destinations throughout the world. With subsidiaries in Australia, Austria, Belgium, China/Hong Kong, France, Great Britain, Italy, Japan, The Netherlands, Spain, USA and sales representatives in the rest of the world, our measuring instruments have found successful markets throughout the five continents.

A high level of quality

The DIN EN ISO 9001 test certificate is a confirmation of Testo's high level of workmanship.

Fully-qualified service

We offer our customers qualified advice and assistance even after the sale of a product. Our worldwide sales network always guarantees quick support.



testo

Our objectives

A high level of quality, a favourable price/quality relationship and a customer-friendly service have made us one of the market leaders in portable, electronic measuring instruments.

All important industrial sectors use our highly-valued measuring instruments.

We offer practical instruments for water analysis for each application and price range.

Should you wish to effect measurements without printing the data, the following instruments from the low-cost Compact Class are ideal:

testo 230: measures pH value, temperature and redox

testo 240: measures conductivity and temperature

The compact alternative



The most important features:

- pH and temperature measuring instrument in one
- easy to use
- pH/°C electrodes are connected via one plug-in connection
- rugged and splash-proof (IP 54)
- large two line display
- latest probe technology for practically every application

Practical measurements

The **testo 230** is a complete pH measuring instrument as well as an accurate thermometer.

The pH value and temperature are not only measured with just one probe, but are also only connected to the measuring instrument via **one single** BNC compatible connection. This facilitates the use of the instrument considerably.

The second probe connection enables the NTC temperature probes from the **testo 110** measuring instrument to be connected to the **testo 230** instrument, i.e. the highly-resistant laboratory probe, the rugged, stainless steel food probe, the immersion/penetration probe, air probe and surface probe.

pH electrodes for every application

Accurate pH measurements in **aqueous solutions** such as acids and electrolyte are no problem with the type 01 pH, 02 pH and 04 pH electrodes.

The type 05 pH electrode has proved to be particularly suited to **critical environments**. The diaphragms usually used (very small pores) become blocked when used in suspensions, emulsions or solutions with proteins. The new obstruction-free single pore diaphragm (a large pore) guarantees:

- fewer problems with dirt/pollution
- high accuracy
- shorter response times

The type 03 pH electrode is ideal for penetration measurements in **solids** or **semi-solids**. The hole diaphragm (a very large pore) is of particular advantage in this type of application.



pH
°C
mV

Typ 02 pH

pH

Typ 05 pH

pH
°C

Typ 03 pH

pH

Technical data

testo 230 instrument

Measuring range	0 to 14 pH -50 to +150 °C ± 1999 mV
Resolution	0.01 pH 0.1 °C (°F) 1 mV
Accuracy ± 1 digit	± 0.01 pH ± 0.4 °C (-50 to -25.1 °C) ± 0.2 °C (-25 to +74.9 °C) ± 0.4 °C (+75 to +99.9 °C) ± 0.5 % of m.v. (+100 to +150 °C) ± 1 mV (0 to ±999 mV) ± 2 mV (±1000 to ±1999 mV)
Temperature compensation	man -10 to +150 °C auto -50 to +150 °C
Operating temperature	0 to +40 °C
Storage/transport temp.	-20 to +70 °C
Display	two lines
Connections	• BNC compatible socket for pH or pH/°C • mini DIN socket for temp. probe (testo 110)
Battery life	approx. 100 h
Weight	170 g (incl. battery)
Other	• IP 54 • °C/°F conversion • housing material ABS • Auto-off switch

Electrodes for aqueous solutions



Universal electrode type 01 pH: low-cost robust plastic electrode with gel electrolyte, thus practically maintenance-free.

Measuring range pH 0 to 14
Application range 0 to 60 °C (briefly: 80 °C)
Connection fixed cable with BNC plug
Diameter of shaft 12 mm



Laboratory electrode type 02 pH: highly-accurate glass electrode with excellent chemical resistance. Long life as liquid electrolyte can be refilled. Incl. standard ground sleeve adapter, immersion cap.

Measuring range pH 0 to 14
Application range 0 to 80 °C (briefly: 100 °C)
Connection standard plug-in head S7
Diameter of shaft 12 mm



Universal electrode type 04 pH: robust plastic electrode with temperature sensor. Gel electrolyte, thus practically maintenance-free. Incl. standard ground sleeve adapter and immersion cap.

Measuring range pH 0 to 14
0 to 60 °C
Application range 0 to 60 °C
(short-term to +80 °C)
Connection fixed cable (BNC compatible)
Diameter of shaft 12 mm

Electrode for critical environments



Special electrode type 05 pH: robust, plastic electrode (liquid electrolyte can be refilled) with temperature sensor. Few problems with dirt, high accuracy in critical environments and short response time due to single pore diaphragm. Incl. standard ground sleeve adapter and immersion cap.

Measuring range pH 0 to 14
0 to 60 °C
Application range 0 to 60 °C
Connection fixed cable (BNC compatible)
Diameter of shaft 12 mm

Warranty

Measuring instrument 24 months

*for manufacturing faults

pH electrode for soft substances and semi-solids



Penetration electrode type 03 pH: highly-accurate glass electrode with solidified electrolyte suitable for use in food, short response times, insensitive to dirt due to hole diaphragm. Incl. standard ground sleeve adapter and immersion cap.

Measuring range pH 2 to 14
Application range 0 to 40 °C (briefly: 60 °C)
Connection standard plug-in head S7
Length of measuring tip 35 mm
Ø Measuring tip 6 mm



Penetration electrode type 13ph: with break-proof plastic coating around the glass electrode and food-proof electrolyte. Not affected by dirt thanks to hole diaphragm. Incl. immersion cap

Measuring range pH 2 to 14
Application range 0 to 40 °C
Connection fixed cable with BNC

Redox electrode



Redox electrode type 06 mV: rugged glass electrode, insensitive to electrode poisoning due to two chamber system. Incl. standard ground sleeve adapter and immersion cap.

Measuring range ± 2000 mV
Application range 0 to 80 °C
Connection standard plug-in head S7
Diameter of shaft 12 mm

Temperature probes (NTC)



Immersion/penetration probe type 02 T: for all applications
Measuring range -50 to +150 °C
Response time t₉₉ 10 sec.
Length of probe shaft 110 mm
Ø Probe shaft 4 mm



Robust food penetration probe with special handle, IP65, reinforced cable (PUR) and reinforced protection against buckling

Measuring range -50 to +150 °C
Response time t₉₉ 7 sec.
Length of probe shaft 115 mm
Ø Probe shaft 5 mm (at the top 3,5 mm)

Food probe type 22 T: boilproof, water-resistant, completely out of V4A and robust

Measuring range -50 to +150 °C
Response time t₉₉ 10 sec.
Length of probe shaft 125 mm
Ø Probe shaft 4 mm (at the top 3 mm)

Typ 02 T

Typ 06 mV

°C

mV



