

# pH/temperature measuring instrument

testo 230

Measurement of pH and temperature in one instrument

Display of calibration data and error reports

Robust and splashproof according to protection class IP54

Easily legible, 2-line display

1, 2, or 3-point calibration possible



The testo 230 combines a complete pH measuring instrument and a full-value temperature measuring instrument in one compact splashproof housing. It reliably records pH values, reduction voltages and temperature in watery solutions as well as in semi-solid to solid media.

The instrument has an automatic temperature compensation, and can be calibrated with standard as well as DIN buffers in the pH area.

Thanks to the possibility of connecting different pH probes, the testo 230 is universally applicable, not only for applications in the pharmaceutical industry, but also in the food sector and the field of HVAC.



## **Technical data / Accessories**

### testo 230

testo 230, analysis instrument, protection class IP54, automatic temperature compensation, incl. 2 electrode clips and battery

Part no. 0560 2304



#### Universal set testo 230

testo 230 set: analysis instrument with 2 electrode clips and battery, Testo buffer set pH 4 and 7, 50ml each, universal plastic electrode with temperature sensor plastic set case and batteries

Part no. 0563 2305

Sensor type	pН		
Meas. range	0 to +14 pH		
Accuracy ±1 digit	±0.01 pH (0 to +14 pH)		
Resolution	0.01 pH		

Sensor type	NTC
Meas. range	-50 to +150 °C
Accuracy ±1 digit	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (-50 to -25.1 °C) ±0.4 °C (+75 to +99.9 °C)
Resolution	0.1 °C

#### General technical data

Operating temperature	0 to +40 °C
Storage temperature	-20 to +70 °C
Display	LCD, 2 lines
Battery type	9V block battery
Battery life	100 h
Dimensions	168 x 72 x 27 mm
Weight	170 g
Housing material	ABS
Warranty	2 years
Temperature compensat	tion: man10 to +150°C; auto -50 to +150°C

## Accessories for measuring instrument

Part	no.
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Set case (plastic) for measuring instrument, probes and accessories user-friendly arrangement of measuring instrument and accessories	0516 0230
Storage solution for pH-electrode, 50 ml	0554 2318
ISO calibration certificate/water analysis for pH buffer solutions; calibration points 4 pH; 7 pH; 10 pH	0520 0007
ISO calibration certificate/water analysis at 3 pH values over the measuring range	0520 0037
pH buffer solution 4.01 in dosing bottle (250 ml), with DAkkS calibration certificate	0554 2061
pH buffer solution 7.00 in dosing bottle (250 ml), with DAkkS calibration certificate	0554 2063



## **Probes**

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Operating temperature	Part no.
pH / °C/ redox electrodes				
pH universal plastic electrode without temperature sensor Robust and dirt-insensitive pH electrode with single-pore diaphragm; unbreakable plastic, maintenance-free gel-electrolyte, incl. storage cap	P(50,2 (s).)	0 to +14 pH	0 to +60 °C Short-term to +80 °C	0650 2063
pH universal plastic electrode with temperature sensor Robust and dirt-insensitive pH electrode with single-pore diaphragm, unbreakable plastic, maintenance-free gel-electrolyte, incl. storage cap	360 0001	0 to +14 pH	0 to +60 °C Short-term to +60 °C	0650 2064
Glass pH electrode with temperature sensor Robust and dirt-insensitive pH electrode with single-pore diaphragm, Glass electrode with excellent chemical resistance, maintenance-free gel-electrolyte, incl. storage cap		0 to +14 pH	-10 to +80 °C	0650 1623
pH food electrode without temperature sensor Robust and dirt-insensitive pH penetration electrode with hole diaphragm, unbreakable plastic coating around glass electrode, maintenance-free food-safe gel- electrolyte, incl. watering cap	95 mm Ø 6.5 mm	+2 to +14 pH	0 to +40 °C	0650 0245

Probe type	Dimensions Probe shaft/probe shaft	tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
Temperature probes						
Stainless steel NTC food probe (IP65) with PUR cable, Fixed cable	125 mm Ø 4 mm	15 mm Ø 3 mm	-50 to +150 °C	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211
Robust NTC food penetration probe with special handle, reinforced PUR cable, Fixed cable	115 mm Ø 5 mm	30 mm Ø 3.5 mm	-25 to +150 °C <sup>1)</sup>	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	7 s	0613 2411

<sup>1)</sup> Long-term measurement range +125 °C, short-term +150 °C (2 minutes)