testo 108

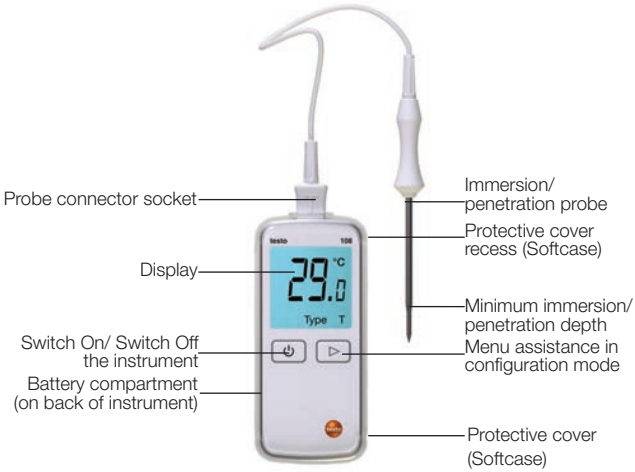
Watertight temperature measuring instrument

Instruction manual

1. General information

Please read this document through carefully and familiarise yourself with the operation of the product before using it. Keep this documentation to hand so that you can refer to it when necessary.

2. Product description



3. Safety information

Avoid electrical hazards:

- Do not conduct measurements on or near live parts!

Adhere to the product safety/guarantee requirements:

- Operate the instrument properly and according to its intended purpose and within the parameters specified. Do not use force.
- Do not store with solvents (e.g. acetone).
- Only open the instrument if this is expressly described in the documentation for maintenance purposes.

Ensure correct disposal:

- Dispose of defective rechargeable batteries and spent battery at the collection points provided.
- Send the instrument directly to us at the end of its life cycle. We will ensure that it is disposed of in an environmentally friendly manner.

4. Intended Use

The testo 108 is a watertight food thermometer.
The product is designed for the following tasks/areas:

- Food sector: production, food service, spot check measurement
- Measuring liquids, pastes and semi-solid materials

The following product components are designed for continuous contact with foodstuffs in accordance with Regulation (EC) 1935/2004:
The immersion/penetration probe from the tip up to 1 cm before the probe's handgrip or the plastic housing. If provided, the information about penetration depths under point 7.2 in the instruction manual or the mark(s) on the immersion/penetration probes should be noted.

The product may not be used in the following areas:

- Potentially explosive areas
- For diagnostic measurements in the medical sector

5. Technical data

Feature	Values
Sensor type	Thermocouple Type T (included), Thermocouple Type K connectable
Measurement range	-50...+300 °C/-58...+572 °F (only applies to metallic probe points)
Measurement Parameter	Temperature in °C/°F
Resolution	0.1°C/°F
Instrument accuracy (Ambient temperature +23°C ±3°C)	±0.5 °C (-30...+70 °C) ±0.5 °C ±0.5% of the measurement value (-50...-30 °C/+70...+300 °C)
Probe accuracy	±0.5 °C (-40...-20 °C) ±0.2 °C (-20...+70 °C) ±0.5 °C (+70...+125 °C) ±0.4% of the measurement value (+125...+300 °C)
Adjustment time t99	10 s (measured in moving liquid)
Measurement rate	2 measurements per second
Operating temperature	-20...+60 °C/-4...+140 °F
Transport/storage temperature	-30...+70 °C/-22...+158 °F
Power supply	3 x AAA batteries
Battery life	2500 h (typically at 23 °C)
Housing	TPE/PC +ABS/PC+ABS+10%GF
Protection class	IP67 (the probe included in the set is connected)
Instrument dimensions	140 x 60 x 24,5 mm
Weight	150 g (instrument incl. battery, without soft case), 33 g (probe)
Display	LCD, one-line, with status line
Standards	EN 13485
EC Directive	2004/108/EC
Warranty	2 years

Information on standards

This product complies with the guidelines as per EN 13485 standard, performance: S, T (storage, transportation), environment: E (transportable thermometer)

Accuracy class: 1

Measuring range: -50...+300 °C

According to EN 13485, the measuring instrument should be checked and calibrated regularly under the terms of EN 13486 (recommended frequency: yearly).

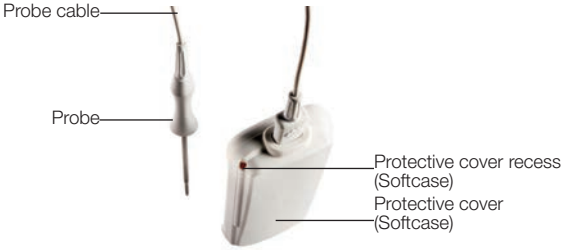
Contact us for more information.

6. Initial operation

6.1 Remove the protective casing (Softcase)

The protective casing (Softcase) supplied with the testo 108 protects it from impact and contamination.

In addition, the probe can be safely stowed in the recess of the supplied protective casing (Softcase) on the side of the appliance.



6.2 Inserting batteries

1 Loosen the screw to the battery compartment.
2 Open the battery compartment.
3 Insert batteries (3 x AAA).
Observe the polarity!
4 Close the battery compartment.
5 Tighten the screw.

7. Operation

7.1 On / Off.

- ▶ Switch the instrument on: ⏻ Press quickly.
- Display test appears. The instrument is ready for measurement.
- ▶ Switch off the instrument: ⏻ Hold down for at least 3 seconds

Factory settings

The instrument is set up for the delivery as follows:

- ▶ Unit: °C
- ▶ Probe type: T
- ▶ Auto off-Time: 10 min (instrument automatically switches off 10 mins after switching on).

To edit the settings see how to adjust the instrument.

7.2 Measuring

! Observe the required immersion/penetration for correct measuring result: at least 22 mm.

! The housing must be exposed to a maximum operating temperature of -20 to +60 °C. The measurement range from -50 to +300 °C is only applicable to metallic probe points.

✓ Instrument is switched on.

- ▶ Immerse/place the probe into the object being measured.
- The current measurement value is shown. Wait until the measurement value does not change any more.

7.3 Changing the probe

Standard Type T and K probes with miniature TE-connectors, as well as the supplied Type T probe can be connected to the testo 108.

1 Disconnect the connected probes.

2 Put the required Type T/K-probe in the probe connector socket.

3 With Type K probes: In the settings change the probe type, see instrument set-up.

8. Setting up the instrument

In the set-up menu the unit, type of probe, and Auto-off -Time can be changed.

! The set-up menu must always be completely run through, also if the only one parameter has been changed.

✓ Instrument is switched off.

1 Switching the instrument on: ⏻ Press quickly.

- Display test appears.

2 ⏻ hold pressed down for about 3 sec during Displaytest.

- Configuration mode is opened, after presetting **°C** or **°F** is displayed.

3 Choose **°C** or **°F** unit: ▷ press and confirm with ⏻.

- After presetting **Type K** or **Type T** is shown.

4 Choose probe type **Type K** or **Type T**: ▷ press and confirm with ⏻.

- After presetting **10, 30, 60** or **off** are displayed.

5 Auto-off Time **10, 30, 60** or **off** choose: ▷ press and confirm with ⏻.

- The configuration is finished. With the new settings, the instrument changes in measurement mode.

9. Service and Maintenance

9.1 Changing the batteries

1 Loosen the screw on the battery compartment.
2 Open the battery compartment.
3 Insert batteries (3 x AAA).
Observe the polarity!
4 Close the battery compartment.
5 Tighten the screw.

9.2 Cleaning the instrument

Only use weak, commercially available neutral/household cleaning agents (e.g. washing-up liquid) to clean the instrument. Do not use aggressive cleaning agents or solvent!

Protective cover (Softcase) can be cleaned with washing up liquid.

The housing and probe can be disinfected using an alcohol-based spray. In doing so, always follow the manufacturer's instructions.

✓ The probe included in the set is connected.

▶ Clean the housing and probe under running water and rub dry with a towel.

10. Questions and Answers

Question	Possible causes	Possible solution
lights on.	Batteries dead.	▶ Change batteries.
- - - lights on.	Measurement range exceeded or fallen below.	▶ Measurements can only be carried out in the range specified.
Instrument cannot be switched on.	Batteries dead.	▶ Change batteries.
Instrument switches itself off.	The instrument switches itself off automatically as per the configured Auto-off-Time.	▶ Switch the instrument on. - If required: To change the Auto-Off-Time see how to set up the instrument.

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