# Temperature measuring instrument (1-channel)

## testo 720

Ideally suitable for applications in laboratories and industry

Continuous display of min./max. values

Audible alarm (adjustable limit values)

Resistant to aggressive media with TopSafe

Hold-button for freezing measurement display

Large illuminated display

Measurement data printout on site with Testo fast printer

°C

The testo 720 is a robust temperature measuring instrument for precise air, surface and immersion measurements in the measuring range from -100 to +800 °C. It is possible to connect Pt100 probes as well as NTC probes to the one-channel measuring instrument.
In combination with the TopSafe, the testo 720 is resistant to aggressive media – as is the glass-coated probe, which has proven its worth in daily laboratory work.

You, as the user, can store limit values in the instrument yourself; as soon as these upper or lower limits are violated, an audible alarm sounds. The instrument also continuously shows all minimum and maximum values in its large backlit display. Using the optional Testo report printer, the measurement results can be directly printed out on site as required.

# Technical data / Accessories

## testo 720

testo 720, 1 channel temperature measuring instrument Pt100/NTC, with battery and calibration protocol

Part no. 0560 7207

### General technical data

| | |
|---|---|
| Oper. temp. | -20 to +50 °C |
| Storage temp. | -30 to +70 °C |
| Battery type | 9V block battery |
| Battery life | 70 h |
| Dimensions | 182 x 64 x 40 mm |
| Weight | 171 g |
| Material/Housing | ABS |
| Warranty | 2 years |

## Sensor types

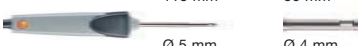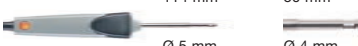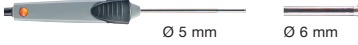| | Pt100 | NTC |
|---|---|---|
| Meas. range | -100 to +800 °C | -50 to +150 °C |
| Accuracy ±1 digit | ±0.2% of mv (+200 to +800 °C) ±0.2 °C (remaining range) | ±0.2 °C (-25 to +40 °C) ±0.3 °C (+40.1 to +80 °C) ±0.4 °C (+80.1 to +125 °C) ±0.5 °C (remaining range) |
| Resolution | 0.1 °C | 0.1 °C |
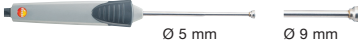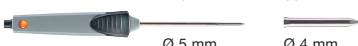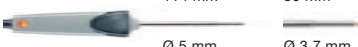
## Accessories                                                                                           Part no.

### Accessories for measuring instrument

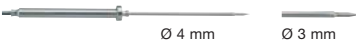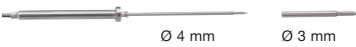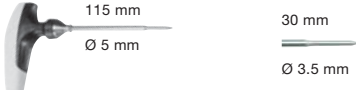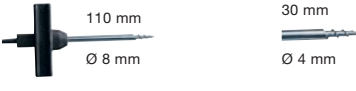| | Part no. | |
|---|---|---|
| 9V rech. battery for instrument, instead of battery | 0515 0025 | |
| Recharger for 9V rechargeable battery for external recharging of 0515 0025 battery | 0554 0025 | |
| Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries | 0554 0549 | |
| Spare thermal paper for printer (6 rolls), permanent ink | 0554 0568 | |
| TopSafe, protects from impact and dirt (incl. 2 attachment magnets) | 0516 0221 | |
| Case for measuring instrument and probes | 0516 0210 | |
| Transport case for meas. instr. and probes (405 x 170 x 85 mm) | 0516 0201 | |
| Transport case for measuring instrument, 3 probes and accessories (430 x 310 x 85 mm) | 0516 0200 | |
| Silicone heat paste (14g), Tmax = +260°C improves heat transfer in surface probes | 0554 0004 | |
| ISO calibration certificate/temperature for air/immersion probes, calibration points -18°C; 0°C; +60°C | 0520 0001 | |
| ISO calibration certificate/temperature Meas. instr. with air/immersion probe; cal. points 0°C; +150°C; +300°C | 0520 0021 | |
| ISO calibration certificate/temperature meas. instr. with air/immersion probe; calibration points 0°C; +300°C; +600°C | 0520 0031 | |
| DAkkS calibration certificate/temperature meas. instr. with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C | 0520 0211 | |
| ISO calibration certificate/temperature meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C | 0520 0071 | |
| DAkkS calibration certificate/temperature contact surface temperature probes; calibration points +100°C; +200°C; +300°C | 0520 0271 | |
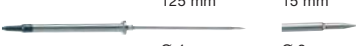
# Probes

| Probe type | Dimensions Probe shaft/probe shaft tip | | Measuring range | Accuracy | t99 | Part no. |
|---|---|---|---|---|---|---|
| **Laboratory probes** | | | | | | |
| Laboratory probe Pt100, glass-coated, exchangeable glass pipe (Duran 50), resistant to corrosive substances, Fixed cable | 200 mm<br>Ø 6 mm | 30 mm<br>Ø 5 mm | -50 to +400 °C | Class A (-50 to +300 °C), Class B (remaining range) [1] | 45 s<br>12 s[1] | 0609 7072 |
| **Air probes** | | | | | | |
| Efficient, robust NTC air probe, Fixed cable 1.2 m | 115 mm<br>Ø 5 mm | 50 mm<br>Ø 4 mm | -50 to +125 °C | ±0.2 °C (-25 to +80 °C)<br>±0.4 °C (remaining range) | 60 s | 0613 1712 |
| Efficient, robust air probe, Pt100, Fixed cable | 114 mm<br>Ø 5 mm | 50 mm<br>Ø 4 mm | -50 to +400 °C | Class A (-50 to +300 °C), Class B (remaining range) [1] | 70 s | 0609 1773 |
| **Surface probes** | | | | | | |
| Waterproof NTC surface probe for flat surfaces, Fixed cable 1.2 m | 115 mm<br>Ø 5 mm | 50 mm<br>Ø 6 mm | -50 to +150 °C | ±0.5% of mv (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 35 s | 0613 1912 |
| Pipe wrap probe with Velcro for pipe diameter to max. 75 mm, Tmax. +75°C, NTC | 300 mm | | -50 to +70 °C | ±0.2 °C (-25 to +70 °C)<br>±0.4 °C (-50 to -25.1 °C) | 60 s | 0613 4611 |
| Robust, waterproof surface temperature probe, Pt100, Fixed cable | 114 mm<br>Ø 5 mm | Ø 9 mm | -50 to +400 °C | Class B [1] | 40 s | 0609 1973 |
| **Immers./penetr. probes** | | | | | | |
| Waterproof NTC immersion/penetration probe, Fixed cable | 115 mm<br>Ø 5 mm | 50 mm<br>Ø 4 mm | -50 to +150 °C | ±0.5% of mv (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 10 s | 0613 1212 |
| Robust, waterproof Pt100 immersion/penetration probe, Fixed cable | 114 mm<br>Ø 5 mm | 50 mm<br>Ø 3.7 mm | -50 to +400 °C | Class A (-50 to +300 °C), Class B (remaining range) [1] | 12 s | 0609 1273 |

⬥ The measuring instrument inside TopSafe is waterproof with this probe.
1) According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)

# Probes

| Probe type | Dimensions<br>Probe shaft/probe shaft tip | | Measuring range | Accuracy | $t_{99}$ | Part no. |
|---|---|---|---|---|---|---|
| **Food probes** | | | | | | |
| ◆ Stainless steel NTC food probe (IP65) with PUR cable, Fixed cable | 125 mm<br>Ø 4 mm | 15 mm<br>Ø 3 mm | -50 to +150 °C [2] | ±0.5% of mv (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 8 s | 0613 2211 |
| ◆ Stainless steel NTC food probe (IP67) with PTFE cable to +250°C, Fixed cable | 125 mm<br>Ø 4 mm | 15 mm<br>Ø 3 mm | -50 to +150 °C | ±0.5% of mv (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 8 s | 0613 3311 |
| ◆ Robust NTC food penetration probe with special handle, reinforced PUR cable, Fixed cable | 115 mm<br>Ø 5 mm | 30 mm<br>Ø 3.5 mm | -25 to +150 °C [2] | ±0.5% of mv (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 7 s | 0613 2411 |
| ◆ Frozen food probe NTC, corkscrew design (incl. plug-in wire), Plug-in cable | 110 mm<br>Ø 8 mm | 30 mm<br>Ø 4 mm | -50 to +140 °C [2] | ±0.5% of mv (+100 to +140 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining range) | 20 s | 0613 3211 |
| ◆ Robust, Pt100 stainless steel food probe (IP65), Fixed cable | 125 mm<br>Ø 4 mm | 15 mm<br>Ø 3 mm | -50 to +400 °C | Class A (-50 to +300 °C), Class B (remaining range) [1] | 10 s | 0609 2272 |

◆ The measuring instrument inside TopSafe is waterproof with this probe.
1) According to standard 60751, the accuracies of Class A and B refer to -200 to +600 °C (Pt100)
2) Long-term measurement range +125°C, short-term +150°C or +140°C (2 minutes)

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