

# Data Logger Temperature

## testo 176 T3 / testo 176 T4

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High data security

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Works with Type T, Type K, Type J Thermocouples

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Four probe connection ports

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Internal storage for 2 million measurement values

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Up to 8 years' battery life

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Data retrieval using USB or SD Card

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Impact protective steel housing without display (testo 176 T3),  
or standard housing with display (testo 176 T4)



The efficient testo 176 T3 and T4 loggers do the work of four single channel loggers in just one device. Each logger has four ports that accept a wide range of Type J, Type K, and Type T thermocouples to fit any specialized application. The internal memory allows to store 2 million readings, just the right size to satisfy any long term monitoring needs.

The testo 176 T3 logger is designed to survive in rough industrial environments and is protected by a massive steel housing. Testo 176 T4 comes in the same standard housing and with an easy-to-read large screen display.

The testo 176 loggers can be programmed, analyzed, and have data retrieved with the ComSoft Basic 5 software (free download), as well as the more sophisticated ComSoft Pro and ComSoft CFR programs.

Testo Inc. also offers NIST calibration services for testo 176 T3, T4, and other testo loggers.

# Technical data / Accessories

## testo 176 T3

testo 176 T3, 4-channel temperature data logger in metal housing with external sensor connection (TC Type T, Type K and Type J) incl. wall holder, lock, batteries and factory calibration document.

Part no. 0572 1763



### General technical data

Channels	4 x external
Battery type	1 x Lithium (TL-5903) (3.6 Volt)
Battery life	8 years at 15 min. meas. rate
Operating temperature	-20 to +70 °C
Storage temperature	-40 to +85 °C
Dimensions	103 x 63 x 33 mm
Protection class	IP65
Measuring rate	1 s - 24 h
Memory	2 million measurement values

## testo 176 T4

testo 176 T4, 4-channel temperature data logger with external sensor connections (TC Type T, Type K and Type J) incl. wall holder, lock, batteries and factory calibration document.

Part no. 0572 1764



Lateral connection of Mini USB cable and SD card



Probe connection at lower end of housing for four thermocouple probes (Type T, K and J)

### Sensor types







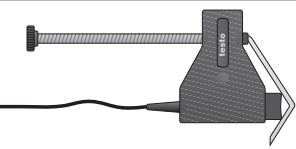

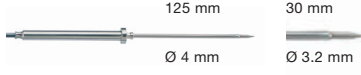
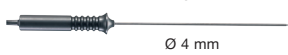

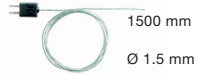
	Type T (Cu-CuNi)	Type K (NiCr-Ni)	Type J (Fe-CuNi)
Measuring range	-200 to +400 °C	-195 to +1000 °C	-100 to +750 °C
Accuracy ±1 digit	±1 % of m.v. (-200 to -100.1 °C) ±0.3 °C (-100 to +70 °C) ±0.5 % of m.v. (+70.1 to +400 °C)	±1 % of m.v. (-195 to -100.1 °C) ±0.3 °C (-100 to +70 °C) ±0.5 % of m.v. (+70.1 to +1000 °C)	±0.3 °C (-100 to +70 °C) ±0.5 % of m.v. (+70.1 to +750 °C)
Resolution	0.1 °C	0.1 °C	0.1 °C

### Accessories

### Part no.


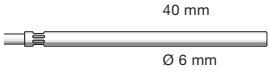

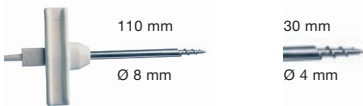
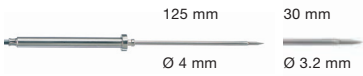
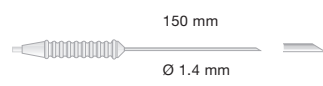
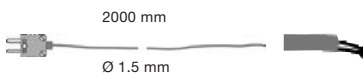
Mobile thermal printer for data loggers testo 175/176/184	0572 0576	
Wall holder (black) for testo 176	0554 1703	
Cable for connecting the data loggers testo 175 and testo 176 to the PC, Mini-USB to USB	0449 0047	
SD card - for collecting the measurement data from the data loggers testo 175 and testo 176; 2 GB; application range to -20 °C	0554 8803	
Battery for testo 176 -1 x TL-5903 AA cell (3.6 Volt)	0515 1760	
ComSoft Basic 5 Software used to program and readout loggers. Includes graphs, tables, and export function. Order as a CD, or go to <a href="http://testo.com">testo.com</a> for a free download	0572 0580	
ComSoft Professional, Pro software incl. data archiving	0554 1704	
ComSoft CFR 21 Part 11, Software for requirements according to CFR 21 Part 11 for Testo data loggers	0554 1705	
Heat protection container, protects from temperatures up to +200 °C	0572 9999	Ident. no. 0699 6995/1
ISO calibration certificate temperature temperature probe; calibration points 10 °C, 25 °C, 40 °C or -20 °C, 25 °C, 40 °C per channel/instrument	0520 0153	

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
Probes Type K					
Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1 <sup>1)</sup>	5 s	0602 5792
Immersion tip, flexible, TC Type K		-200 to +40 °C	Class 3 <sup>1)</sup>	5 s	0602 5793
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K		-200 to +1300 °C	Class 1 <sup>1)</sup>	4 s	0602 5693
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K, Fixed cable		-50 to +170 °C	Class 2 <sup>1)</sup>	150 s	0602 4792
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K, Fixed cable		-50 to +400 °C	Class 2 <sup>1)</sup>		0602 4892
Pipe wrap probe with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K, Fixed cable 1.5 m		-50 to +120 °C	Class 1 <sup>1)</sup>	90 s	0628 0020
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term up to +280 °C, TC Type K, Fixed cable 1.2 m		-60 to +130 °C	Class 2 <sup>1)</sup>	5 s	0602 4592
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), meas. range short-term up to +130 °C, TC Type K, Fixed cable		-50 to +100 °C	Class 2 <sup>1)</sup>	5 s	0602 4692
Waterproof food probe made of stainless steel (IP65), TC Type K, Fixed cable		-60 to +400 °C	Class 2 <sup>1)</sup>	7 s	0602 2292
Waterproof robust immersion/penetration probe with metal protection hose Tmax +230 °C, e.g. for monitoring temp. in cooking oil, T/C Type K, Fixed cable		-50 to +230 °C	Class 1 <sup>1)</sup>	15 s	0628 1292
Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0644
Thermocouple with TC adapter, flexible, length 1500 mm, fibreglass, TC Type K		-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0645

<sup>1)</sup> According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
Probes Type K					
Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K	 1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2 <sup>1)</sup>	5 s	0602 0646
Stationary probe with stainless steel sleeve, TC Type K, Fixed cable 1.9 m	 40 mm Ø 6 mm	-50 to +205 °C	Class 2 <sup>1)</sup>	20 s	0628 7533
Flexible, low-mass immersion measurement tip, ideal for measurements in small volumes such as petri dishes, or for surface measurements (e.g. attached with adhesive tape), TC Type K, 2 m, FEP insulated thermal wire, temperature proof up to 200 °C, oval wire with dimensions: 2.2 mm x 1.4 mm	 Ø 0.25 mm 500 mm	-200 to +1000 °C	Class 1 <sup>1)</sup>	1 s	0602 0493
Probes Type T					
Frozen food probe, corkscrew design, T/C Type T, Plug-in cable	 110 mm 30 mm Ø 8 mm Ø 4 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) <sup>2)</sup>	8 s	0603 3292
Stainless steel food probe (IP67), with FEP cable to +200 °C, TC Type T, Fixed cable	 125 mm 30 mm Ø 4 mm Ø 3.2 mm	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) <sup>2)</sup>	7 s	0603 3392
Waterproof, super-quick needle probe for measurements without visible penetration hole, T/C Type T, Fixed cable	 150 mm Ø 1.4 mm	-50 to +250 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining range) <sup>2)</sup>	2 s	0628 0027
Flexible oven probe, Tmax +250 °C, PTFE cable	 2000 mm Ø 1.5 mm	-50 to +250 °C	Class 1 <sup>2)</sup>		0603 0646

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).  
 2) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +350 °C (Type T).

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Subject to change without notice.

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