

# Temperature measuring instrument (1-channel)

testo 925 – For fast and reliable measurements in the HVAC field

Ideally suited to applications in the HVAC field

1-channel temperature measuring instrument with optional wireless probes

TopSafe, the indestructible protective case, protects from dirt and impact

Continuous display of min/max values

Audible alarm (adjustable limit values)

Hold-button for freezing measurement values

Large, backlit display



The testo 925 is a 1-channel temperature measuring instrument which is particularly suitable for applications in the HVAC field. The instrument is optimum for the connection of fast and reliable thermocouple probes. Using measurement data transfer by radio, the measurement value of a further temperature probe can be additionally displayed wirelessly. The protective cover TopSafe ensures water- and dirt-proofness when a probe is connected. The instrument reliably and continuously displays the minimum and maximum measurement values. The measurement values shown in the display (current measurement value, frozen measurement value, or the minimum/maximum values) can be printed out via the Testo report printer (optional). The user can store limit values in the instrument himself; as soon as these upper and lower values are violated, an audible signal sounds.

°C

## **Technical data**

### testo 925

testo 925, 1 channel temperature measuring instrument T/C Type K, audible alarm, connection of an optional radio probe, with battery and calibration protocol

Part no. 0560 9250



Sensor type	Туре К (NiCr-Ni)
Meas. range	-50 to +1000 °C
Accuracy ±1 digit	±(0.5 °C +0.3% of mv) (-40 to +900 °C) ±(0.7 °C +0.5% of mv) (remaining range)
Resolution	0.1 °C (-50 to +199.9 °C) 1 °C (remaining range)

#### General technical data

Operating temperature	-20 to +50 °C
Storage temperature	-40 to +70 °C
Housing material	ABS
Battery type	9V block battery, 6F22
Battery life	200 h (connected probe, backlight off) 45 h (radio mode, backlight off) 68 h (connected probe, backlight always on) 33 h (radio mode, backlight always on)
Dimensions	182 x 64 x 40 mm
Weight	171 g
Warranty	2 years



Optional protective case TopSafe



Wireless measurement with radio probes



1 probe connection

## Accessories

Accessories for measuring instrument		
9V rech. battery for instrument, instead of battery	0515 0025	
Recharger for 9V rechargeable battery for external recharging of 0515 0025 battery	0554 0025	

#### Radio module for upgrading measuring instrument with radio option

Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	0554 0188	
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	0554 0190	

#### **Printer and Accessories**

Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549	
Spare thermal paper for printer (6 rolls), permanent ink measurement data documentation legible for up to 10 years	0554 0568	

#### **Transport and Protection**

TopSafe, protects from impact and dirt	0516 0221
Transport case for measuring instrument, 3 probes and accessories (430 x 310 x 85 mm)	0516 0200
Transport case for meas. instr. and probes (405 x 170 x 85 mm)	0516 0201
Case for measuring instrument and probes	0516 0210

#### Other features

Handle for attachable measurement tips, applicable for all Testo probes with miniature thermocouple plugs	0409 1092	
Extension cable, 5m, for thermocouple probe Type K	0554 0592	
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004	

#### **Calibration Certificates**

ISO calibration certificate/temperature for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/temperature (Applies only to immersion/penetration probe 0602 2693) 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
ISO calibration certificate/temperature meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071
DAkkS calibration certificate/temperature meas. instr. with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C	0520 0211
DAkkS calibration certificate/temperature contact surface temperature probes; calibration points +100°C; +200°C; +300°C	0520 0271

Part no.

Part no.

## **Radio probes**

#### Radio probes for immersion/penetration measurements

Radio immersion/penetration probe, NTC, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; Radio freq. 869.85 MHz FSK				0613 1001		
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>		
	-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (+80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t <sub>99</sub> (in water) 12 s	_	

#### Radio handles with probe head for air-/ immersion-penetration-meas.

Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, 0554 0189 DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; Radio freq. 869.85 MHz FSK T/C probe head for air/immersion/penetration measurement (T/C Type K) 0602 0293 Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK 0554 0191 T/C probe head for air/immersion/penetration measurement (T/C Type K) 0602 0293 Dimensions Resolution Measuring Accuracy t,99 Probe shaft/probe shaft tip range -50 to +350 °C Short-term to +500 °C 0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining t<sub>99</sub> (in water) 10 s

 $\pm (0.5 \degree C + 0.3\% \text{ of m.v.}) (-40 \text{ to } +500 \degree C) \pm (0.7 \degree C + 0.5\% \text{ of m.v.}) (remaining range) T/C probe head: Class 2$ 

range)

Radio handle

#### Radio handles with probe head for surface measurement

30 mm

Ø 3.4 mm

Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, 0554 0189 DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO; Radio freq. 869.85 MHz FSK T/C probe head for surface measurement (T/C Type K) 0602 0394 Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK 0554 0191 0602 0394 T/C probe head for surface measurement (T/C Type K) Measuring Accuracy Dimensions Resolution t<sub>99</sub> Probe shaft/probe shaft tip range -50 to +350 °C Short-term to +500 °C 0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining Radio handle:  $\pm$ (0.5 °C +0.3% of m.v.) (-40 to +500 °C)  $\pm$ (0.7 °C +0.5% of m.v.) (remaining range) T/C probe head: Class 2 120 mm 40 mm 5 s Ø5mm Ø 12 mm range)

#### Radio handles for attachable T/C probes

100 mm

Ø 5 mm

#### Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO ; Radio freq. 869.85 MHz FSK 0554 0189 Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK 0554 0191 Illustration Measuring Accuracy Resolution range ±(0.7 °C +0.3% of m.v.) (-40 to +900 °C) ±(0.9 °C +0.5% of m.v.) (remaining range) 0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range) -50 to +1000 °C

#### **Technical data Radio probes**

#### Radio immersion/penetration probe, NTC

Battery type	2 x 3V button cell (CR 2032)
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)
Radio handle	
Battery type	2 AAA micro batteries

#### **Common Technical Data**

Measuring rate	0.5 s or 10 s, adjustable on handle
Radio coverage	Up to 20 m (without obstructions)
Radio transmission	Unidirectional
Operating temperature	-20 to +50 °C
Storage temperature	-40 to +70 °C

#### Part no.

#### Part no.

## **Probes**

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
Air probes					
<ul> <li>Robust air probe, T/C Type K, Fixed cable 1.2 m</li> </ul>	115 mm Ø 4 mm	-60 to +400 °C	Class 2 <sup>1)</sup>	25 s	0602 1793
Immers./penetr. probes					
<ul> <li>Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable 1.2 m</li> </ul>	Ø 1.5 mm 300 mm	-60 to +1000 °C	Class 1 <sup>1)</sup>	2 s	0602 0593
<ul> <li>Fast-action, waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m</li> </ul>	60 mm 14 mm Ø 5 mm Ø 1.5 mm	-60 to +800 °C	Class 1 <sup>1)</sup>	3 s	0602 2693
Immersion tip, flexible, TC Type K	0 1.5 mm	-200 to +1000 °C	Class 1 <sup>1)</sup>	5 s	0602 5792
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K	Ø 3 mm 1000 mm	-200 to +1300 °C	Class 1 <sup>1)</sup>	4 s	0602 5693
Waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m	114 mm 50 mm 0 5 mm 0 3.7 mm	-60 to +400 °C	Class 2 <sup>1)</sup>	7 s	0602 1293
Surface probes					
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K, Fixed cable	145 mm Ø 8 mm	0 to +300 °C	Class 2 <sup>1)</sup>	5 s	0602 0193
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable 1.2 m	115 mm Ø 5 mm Ø 12 mm	-60 to +300 °C	Class 2 <sup>1)</sup>	3 s	0602 0393
					<u> </u>

<ul> <li>Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K, Fixed cable 1.2 m</li> </ul>	115 mm 0 5 mm 0 6 mm	-60 to +400 °C	Class 2 <sup>1)</sup>	30 s	0602 1993

The measuring instrument inside TopSafe is waterproof with this probe.
The measuring 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).
A probe always corresponds to only **one** accuracy class.

## Probes

Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.				
Surface probes								
80 mm 50 mm Ø 5 mm Ø 12 mm	-60 to +300 °C	Class 2 1)	3 s	0602 0993				
150 mm Ø 2.5 mm Ø 4 mm	-60 to +1000 °C	Class 1 <sup>1)</sup>	20 s	0602 0693				
680 mm 12 mm	-50 to +250 °C	Class 2 <sup>1)</sup>	3 s	0602 2394				
35 mm	-50 to +170 °C	Class 2 1)	150 s	0602 4792				
75 mm Ø 21 mm	-50 to +400 °C	Class 2 1)		0602 4892				
395 mm	-50 to +120 °C	Class 1 1)	90 s	0628 0020				
	-60 to +130 °C	Class 2 1)	5 s	0602 4592				
35 mm	-60 to +130 °C	Class 2 <sup>1)</sup>	5 s	0602 0092				
	-50 to +100 °C	Class 2 1)	5 s	0602 4692				
	Probe shaft/probe shaft tip         80 mm       50 mm         0 5 mm       20 mm         150 mm       0 4 mm         0 2.5 mm       0 4 mm         680 mm       12 mm         0 2.5 mm       0 20 mm         35 mm       0 20 mm         75 mm       0 21 mm         395 mm       20 mm	Probe shaft/probe shaft tip       range         80 mm       50 mm       -60 to +300 °C         0 5 mm       0 12 mm       -60 to +1000 °C         150 mm       0 4 mm       -60 to +1000 °C         680 mm       0 4 mm       -50 to +250 °C         680 mm       0 25 mm       -50 to +100 °C         35 mm       0 20 mm       -50 to +100 °C         35 mm       0 20 mm       -50 to +100 °C         35 mm       0 21 mm       -50 to +100 °C         395 mm       20 mm       -50 to +120 °C         395 mm       20 mm       -60 to +130 °C         395 mm       20 mm       -60 to +130 °C         35 mm       15 mm       -60 to +130 °C	Probe shaft/probe shaft tip       range       construction         80 mm       50 mm       -80 to +300 °C       Class 2 °         1       150 mm       12 mm       -80 to +1000 °C       Class 1 °         1       150 mm       0 4 mm       -80 to +1000 °C       Class 2 °         1       0 2.5 mm       0 4 mm       -50 to +250 °C       Class 2 °         1       0 2.5 mm       0 2.5 mm       -50 to +100 °C       Class 2 °         1       0 2.5 mm       0 2.5 mm       -50 to +100 °C       Class 2 °         1       0 2.5 mm       0 2.0 mm       -50 to +100 °C       Class 2 °         1       0 2.0 mm       -50 to +100 °C       Class 2 °       -60 to +130 °C       Class 2 °         35 mm       0 2.1 mm       -50 to +120 °C       Class 2 °       -60 to +130 °C       Class 2 °         395 mm       20 mm       -60 to +130 °C       Class 2 °       -60 to +130 °C       Class 2 °         35 mm       15 mm       -60 to +130 °C       Class 2 °       -60 to +130 °C       Class 2 °	Probe shaft/probe shaft tip       range       No. X       19         80 mm       50 mm       -60 to +300 °C       Class 2 °1       3 °         150 mm       0.12 mm       -60 to +1000 °C       Class 2 °1       3 °         150 mm       0.12 mm       -60 to +1000 °C       Class 2 °1       20 °         150 mm       0.2 mm       -60 to +1000 °C       Class 2 °1       3 °         680 mm       12 mm       -50 to +100 °C       Class 2 °1       3 °         35 mm       0.2 mm       -50 to +100 °C       Class 2 °1       3 °         35 mm       0.2 mm       -50 to +100 °C       Class 2 °1       150 °         75 mm       0.2 mm       -50 to +100 °C       Class 2 °1       150 °         75 mm       0.2 mm       -50 to +100 °C       Class 2 °1       150 °         385 mm       0.2 mm       -50 to +100 °C       Class 2 °1       90 °         395 mm       20 mm       -50 to +100 °C       Class 2 °1       5 °         395 mm       20 mm       -50 to +100 °C       Class 2 °1       5 °         395 mm       20 mm       -50 to +100 °C       Class 2 °1       5 °         35 mm       5 °       -60 to +130 °C       Class 2 °1				

The measuring instrument inside TopSafe is waterproof with this probe. 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). A probe always corresponds to only **one** accuracy class.

## **Probes**

Probe type	Dimensions Probe shaft/probe shaft tip		Measuring range	Accuracy	t <sub>99</sub>	Part no.
Food probes						
<ul> <li>Waterproof food probe made of stainless steel (IP65), TC Type K, Fixed cable</li> </ul>	125 mm	30 mm	-60 to +400 °C	Class 2 1)	7 s	0602 2292
	Ø 4 mm	Ø 3.2 mm				
Waterproof robust immersion/penetration probe with metal protection hose Tmax	240 mm		-50 to +230 °C	Class 1 <sup>1)</sup>	15 s	0628 1292
+230°C. e.g. for monitoring temp.	Ø 4 mm					

#### Thermocouples

cable

in cooking oil, T/C Type K, Fixed

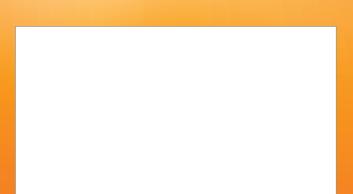
Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0644
Thermocouple with TC adapter, flexible, length 1500 mm , fibreglass, TC Type K	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2 1)	5 s	0602 0646

The measuring instrument inside TopSafe is waterproof with this probe.
 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). A probe always corresponds to only **one** accuracy class.

#### Information on surface measurement:

- $\bullet$  The response times  $t_{_{99}}\,$  stated are measured on ground steel or aluminium plates at +60 °C.
- The stated accuracies are sensor accuracies.
- The accuracy in your application is dependent on the surface structure (roughness), material of the measurement object (heat capacity and heat transfer), as wel as sensor accuracy. Testo creates a corresponding calibration certificate for the deviations of your measurement system in your application. For this purpose, Testo uses a surface test bench developed in cooperation with the PTB (Physikalisch Technische Bundesanstalt).





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