

We measure it.



# Humidity/temperature measuring instrument

testo 605-H1

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Precise measurement of air humidity, air temperature and dewpoint

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Ideally suited for measurements in ducts

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Easy read-out of measurement values thanks to bendable joint

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%RH

°C

°C td

The thermal hygrometer testo 605-H1 is particularly versatile and convenient to use thanks to its joint. The display can be rotated into different positions, allowing optimum read-out of the measurement values. The long-term stable sensor guarantees correct measurement results even after years. The small, compact testo 605-H1 measures air humidity and air temperature and additionally calculates the dewpoint temperature.

testo 605-H1 is suitable for monitoring air humidity in ducts. The probe shaft has a length of 125 mm and can be ideally positioned in the duct using the holder included in delivery. The rotatable protective cap protects the sensor from dirt and impact.

## Technical data / Accessories

### testo 605-H1

testo 605-H1 thermohygrometer with duct holder and dewpoint calculation incl. attachment clip and battery

Part no. 0560 6053



### General technical data

Oper. temp.	0 to +50 °C
Storage temp.	-20 to +70 °C
Battery type	3 batteries Type AAA
Battery life	Approx. 1000 h
Weight	75 g (with batteries, without packaging)

### Sensor types

	NTC	Testo humid. sensor, cap.
Meas. range	0 to +50 °C -20 to +50 °C td	+5 to +95 %RH
Accuracy ±1 digit	±0.5 °C	±3 %RH
Resolution	0.1 °C	0.1 %RH

### Accessories

### Part no.

#### Accessories for measuring instrument

ISO calibration certificate humidity Calibration points 11.3 %RH and 75.3 %RH at +25°C	0520 0006	
ISO calibration certificate humidity Calibration point 75.3%RH at +25°C	0520 0096	

# Thermal hygrometer

## testo 608 – Continuous indoor climate monitoring

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Continuous display of temperature, humidity and dewpoint

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Max. and min. value display

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Battery monitor

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Additional advantages testo 608-H2:

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LED alarm reports limit value violations

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High accuracy  $\pm 2$  %RH

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The low-budget hygrometer testo 608-H1 continuously measures humidity, temperature and dewpoint. The large display is easily legible even at a distance, the suspension and standing fixtures allow flexible positioning on a table or the wall.

testo 608 has a max./min. value display and a battery monitor. Thanks to the long-term stable sensor, you can rely on correct measurement results even after years.

testo 608-H2, the precise alarm hygrometer, reliably reports humidity and temperature limit value violations, e.g. in garden centres, storerooms, cleanrooms, museums, laboratories etc.

## Technical data / Accessories

### testo 608-H1

testo 608-H1 thermohygrometer  
humidity/dewpoint/temperature incl.  
battery

Part no. 0560 6081



### General technical data

Measuring rate	18 s
Storage temp.	-40 to +70 °C
Battery type	9V block battery
Battery life	approx. 1 year
Weight	168 g
Dimensions	111 x 90 x 40 mm
Material/Housing	ABS
Display	LCD, 2 lines
Warranty	1 year

### testo 608-H2

testo 608-H2 hygrometer,  
humidity/dewpoint/temperature, with LED  
alarm, battery and calibration protocol

Part no. 0560 6082



Technical data	testo 608-H1		testo 608-H2	
Sensor types	NTC	Testo humid. sensor, cap.	NTC	Testo humid. sensor, cap.
Meas. range	0 to +50 °C -20 to +50 °C td	+10 to +95 %RH	-10 to +70 °C -40 to +70 °C td	+2 to +98 %RH
Accuracy ±1 digit	±0.5 °C (at +25 °C)	±3 %RH (+10 to +95 %RH)	±0.5 °C (at +25 °C)	±2 %RH (+2 to +98 %RH)
Resolution	0.1 °C	0.1 %RH	0.1 °C	0.1 %RH
Oper. temp.	0 to +50 °C		-10 to +70 °C	

### Accessories

### Part no.

#### Accessories for measuring instrument

ISO calibration certificate humidity, calibration points 11.3 %RH and 75.3 %RH  
at +25 °C/+77 °F; per channel/instrument

0520 0076

We measure it.



# Humidity/temperature measuring instrument

**testo 610 – Pocket-sized air humidity measurements**

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Measurement of air humidity and temperature

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Incl. dewpoint calculation and Wet Bulb

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Long-term stable Testo humidity sensor

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Hold-function and max./min. values

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Display illumination

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%RH

°C

Illustration 1:1

The testo 610 simultaneously measures relative air humidity and temperature. It is thus ideally suitable for fast checks on ambient conditions, e.g. in offices, production rooms or in warehouses.

The patented humidity sensor developed by Testo guarantees reliable measurement result. The accuracy of  $\pm 2.5$  %RH is confirmed by a calibration protocol which is included in delivery. Dewpoint calculation and the

calculation of Wet Bulb as well as a hold-function and the display of max. and min. values are possible with the testo 610.

The clip-on protective cap, wrist strap and belt holder ensure safekeeping of the instrument. testo 610 is very handy, small and easy to operate.

## Technical data / Accessories

### testo 610

testo 610 handy humidity/temperature meter incl. protection cap, batteries and calibration protocol

Part no. 0560 0610



### General technical data

Measuring rate	1 s
Weight	90 g (batteries and protective cap included)
Oper. temp.	-10 to +50 °C
Storage temp.	-40 to +70 °C
Battery type	2 batteries Type AAA
Battery life	200 h (average, without display illumination)
Dimensions	119 x 46 x 25 mm (incl. protective cap)
Protection class	IP20

### Sensor types

	NTC	Testo humid. sensor, cap.
Meas. range	-10 to +50 °C	0 to 100 %RH
Accuracy ±1 digit	±0.5 °C	±2.5 %RH (5 to 95 %RH)
Resolution	0.1 °C	0.1 %RH

### Accessories

### Part no.

#### Accessories for measuring instrument

ISO calibration certificate humidity calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076	
ISO calibration certificate/temperature temp. data logger; calibration points -8°C; 0°C; +40°C per channel/instrument	0520 0171	

We measure it.



# Humidity/temperature/pressure measuring instrument

**testo 622 – Fast and precise ambient climate monitoring**

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Precise measurement of temperature, humidity and pressure

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All important values directly at a glance

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Large, easily legible display

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Adjustable calibration reminder function (optional)

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In addition to temperature and humidity, the testo 622 also measures pressure, making it ideal for indoor climate monitoring. It shows the current measurement values as well as date and time in a large, clear display. It thus provides all important values at a glance. Especially in laboratories, the testo 622 is suitable for monitoring ambient conditions during calibrations or when setting up experiments.

Thanks to the long-term stable sensor, the measuring instrument provides reliable and correct measurement results even after years. The hanging and standing bracket allows flexible positioning of the instrument on a table or wall.

Particularly time-saving and user friendly: The calibration and adjustment of the measuring instrument is possible directly on site with the help of the optional calibration and adjustment software.

## Technical data / Accessories

### testo 622

testo 622 hygrometer with pressure indication, calibration protocol, batteries and attachment material included

Part no. 0560 6220



### General technical data

Measuring rate	10 s
Storage temp.	-20 to +60 °C
Oper. temp.	-10 to +60 °C
Battery life	12 months
Weight	240 g (without batteries)
Dimensions	185 x 105 x 36 mm

### Sensor types

	NTC	Testo humid. sensor, cap.	Piezoresistive pressure sensor
Meas. range	-10 to +60 °C	0 to 100 %RH	300 to 1200 hPa
Accuracy ±1 digit	±0.4 °C	±2 %RH at +25 °C (10 to 90 %RH) ±3 %RH (remaining range)	±3 hPa
Resolution	0.1 °C	0.1 %RH	0.1 hPa

### Accessories

### Part no.

#### Accessories for measuring instrument

Calibration and adjustment software with USB cable for testo 622/623	0554 6230	
ISO calibration certificate humidity, calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076	
DAkkS calibration certificate/humidity	0520 0206	



We measure it.



# Temperature/humidity measuring instrument

## testo 623 – Ambient climate measurement with history function

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Analysis of past temperature and humidity measurement values directly on site

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Histogram shows measurement values of last 90 days

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All important values at a glance

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Large, easily legible display

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%RH

°C

The temperature and humidity measuring instrument testo 623 shows current and past temperature and humidity values as well as date and time, simultaneously in a large, clear display. This way, you have all important values constantly in view.

The displayed curve analysis offers optimum evaluation of the measurement results of the past 90 days. The testo 623 is thus ideal for fast on-site checks of ambient conditions without complicated analysis on a PC.

Thanks to the long-term stable sensor, the measuring instrument provides reliable and correct measurement results even after years. The hanging and standing bracket allows flexible positioning of the instrument on a table or wall.

Particularly user friendly: The calibration and adjustment of the measuring instrument is possible directly on site with the help of the optional calibration and adjustment software.

## Technical data / Accessories

### testo 623

testo 623 hygrometer with history function of measurement values, calibration protocol, batteries and attachment material included

Part no. 0560 6230



### General technical data

Measuring rate	20 s
Storage temp.	-20 to +60 °C
Oper. temp.	-10 to +60 °C
Battery life	12 months
Weight	240 g
Dimensions	185 x 105 x 36 mm

### Sensor types

	NTC	Testo humid. sensor, cap.
Meas. range	-10 to +60 °C	0 to 100 %RH
Accuracy $\pm 1$ digit	$\pm 0.4$ °C	$\pm 2$ %RH at +25 °C (10 to 90 %RH) $\pm 3$ %RH (remaining range)
Resolution	0.1 °C	0.1 %RH

### Accessories

### Part no.

#### Accessories for measuring instrument

Calibration and adjustment software with USB cable for testo 622/623	0554 6230	
ISO calibration certificate humidity, calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076	
DAkkS calibration certificate/humidity	0520 0206	

We measure it.



# Humidity/temperature measuring instrument

**testo 625 – Long-term stable and compact**

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Display of temperature and relative humidity / Wet Bulb temperature / dewpoint

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Min./max. values

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Hold-button for fixing measurement value

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Display illumination

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Auto-off function

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TopSafe, protection of instrument against dirt and impact

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%RH

°C

The testo 625 is a compact instrument with an integrated humidity probe head for the measurement of air humidity and temperature. The large two-line display quickly and reliably shows humidity, Wet Bulb temperature or dewpoint, as well as temperature.

For measurements in difficult-to-access places, the humidity probe head can simply be removed and plugged onto the handle with a probe cable (accessory); alternatively, the measurement values can be transferred wirelessly from the probe to the measuring instrument over large distances. For this purpose, the humidity probe head is plugged onto the wireless handle (accessory), and the testo 625 is equipped with the radio module (accessory).

# Humidity/temperature measuring instrument

## testo 625

testo 625 humidity/temperature measuring instrument incl. plug-in humidity probe head, battery and calibration protocol

Part no. 0563 6251



### General technical data

Storage temp.	-40 to +85 °C
Oper. temp.	-20 to +50 °C
Battery type	9V block battery, 6F22
Battery life	70 h (without radio operation)
Weight	195 g
Dimensions	182 x 64 x 40 mm
Material/Housing	ABS
Warranty	1 year

### Sensor types

	Testo humid. sensor, cap.	NTC	Type K (NiCr-Ni) (Radio probes)
Meas. range	0 to +100 %RH	-10 to +60 °C	-200 to +1370 °C
Accuracy ±1 digit	±2.5 %RH (+5 to +95 %RH)	±0.5 °C	See probe data
Resolution	0.1 %RH	0.1 °C	0.1 °C



Moisture probe head via handle with probe wire



testo 625 with radio handle and radio module



testo 625 with attached probe head

# Accessories

Accessories for measuring instrument	Part no.	
Handle for plug-in humidity probe head for connection to testo 625, probe cable included (length 120 cm)	0430 9725	
Case for measuring instrument and probes	0516 0210	
TopSafe, protects from impact and dirt	0516 0221	
Control and adjustment set for Testo humidity probes, salt solution with 11.3% RH and 75.3% RH, incl. adapter for Testo humidity probes	0554 0660	
Lithium battery button cell	0515 0028	
9V rech. battery for instrument, instead of battery	0515 0025	
Recharger for 9V rechargeable battery, for external recharging of 0515 0025 battery	0554 0025	

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ISO calibration certificate humidity, Calibration points 11.3 %RH and 75.3 %RH at +25°C	0520 0006	
ISO calibration certificate/humidity, saturated saline solutions: calibration point 11.3%RH	0520 0013	
ISO calibration certificate/humidity, saturated saline solutions, calibration point 75.3%RH	0520 0083	
DAkkS calibration certificate/humidity, electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0206	
DAkkS calibration certificate/humidity, saturated saline solutions; calibration point 11.3%RH	0520 0213	
DAkkS calibration certificate/humidity, saturated saline solutions; calibration point 75.3%RH	0520 0283	

## 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	

## Radio handle for attachable humidity probe head (humidity probe head included in delivery of testo 625)



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	

## Technical data Radio handle

Battery type	2 AAA micro batteries
Battery life	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)
Measuring rate	0.5 s or 10 s, adjustable on handle
Radio coverage	Up to 20 m (without obstructions)
Radio transmission	Unidirectional
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C

We measure it.



# Humidity/temperature measuring instrument

## testo 635 – Measurement technology for humidity measurement

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Connection of 2 plug-in probes and 3 wireless probes

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Measurement of temperature, air humidity, material equilibrium moisture, pressure dewpoint, absolute pressure and U-value

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Display of dewpoint distance, min., max. and mean values

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Illuminated display

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Protection class IP 54

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Instrument store for 10,000 measurement values (testo 635-2 only)

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PC software for archiving and documenting measurement data (testo 635-2)

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°C

%RH

hPa

The testo 635 offers the possibility of testing and analyzing air humidity, material moisture (based on equilibrium moisture), U-value and the dewpoint in compressed air systems.

In addition to measurement with classical probes, a wireless measurement over up to 20 m distance is also possible with the testo 635. This eliminates damage to the cable or difficulties in handling. The wireless probes are available for the measurement parameters temperature and humidity, up to three wireless probes can be recorded and displayed by the testo 635. The optional plug-in radio module can be retrofitted at any time.

The testo 635 stands out thanks to its intuitive operation and clear menu structure. For example, for measurements

at different measurement sites, the testo 635-2 provides the advantage that the measurement values can be allocated to the respective measurement site. For long-term measurements and material moisture measurements, the instrument can be switched between different user profiles.

The testo 635 is available in two versions. The version testo 635-2 has extended instrument functions such as an instrument store, PC software, direct display of material humidity and the possibility of connecting a U-value probe

## Technical data

### testo 635-1

testo 635-1 thermohygrometer incl. battery and calibration protocol

Part no. 0560 6351



### testo 635-2

testo 635-2 humidity/temperature measuring instrument with measurement value store, PC software and USB-cable incl. battery and calibration protocol

Part no. 0563 6352

#### General technical data

Oper. temp.	-20 to +50 °C
Storage temp.	-30 to +70 °C
Battery type	Alkali manganese, mignon, Type AA
Battery life	200 h
Dimensions	220 x 74 x 46 mm
Weight	428 g
Material/Housing	ABS/TPE/Metal
Warranty	1 year

#### Sensor types

	Type K (NiCr-Ni)	NTC (humidity probe)	Testo humid. sensor, cap.	Absolute pressure probe
Meas. range	-200 to +1370 °C	-40 to +150 °C	0 to +100 %RH	0 to 2000 hPa
Accuracy ±1 digit	±0.3 °C (-60 to +60 °C) ±(0.2 °C + 0.3% of mv) (remaining range)	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (-40 to -25.1 °C) ±0.4 °C (+75 to +99.9 °C) ±0.5% of mv (remaining range)	See probe data	See probe data
Resolution	0.1 °C	0.1 °C	0.1 %RH	0.1 hPa

## Common advantages

- Connection of 3 radio probes
- Measurement of air humidity, material equilibrium moisture and pressure dew point in compressed air systems
- Display of dew point difference, min, max and mean values
- Print data on Testo printer (optional)
- Backlit display
- Protection type IP 54

## Advantage testo 635-1

- Cyclic printing of readings on testo printer, e.g. once per minute

## Advantages testo 635-2

- Instrument store for 10,000 readings
- PC software for filing and documenting measurement data
- Direct display of material moisture due to storable characteristics curves (Basis: material equilibrium moisture)
- U-value probe connection possible
- Storage of single measurements or measurement series by measurement site
- Quick access to the most important functions via user profiles





# Accessories

Transport and Protection	Part no.	
Service case for basic equipment of measuring instrument and probes, dimensions: 400 x 310 x 96 mm	0516 0035	
Service case for measuring instrument, probe and accessories, dimensions 520 x 380 x 120 mm	0516 0435	
Service case for measuring instrument, probes and accessories, dimensions 520 x 380 x 120 mm	0516 0735	

## Additional accessories and spare parts

Handle for attachable humidity probe head for connection to testo 635, incl. probe wire, for measurement / calibration of humidity probe head	0430 9735	
Control and adjustment set for Testo humidity probes, salt solution with 11.3% RH and 75.3% RH, incl. adapter for Testo humidity probes	0554 0660	
Sintered PTFE filter, Ø 12 mm, for corrosive media High humidity range (long-term measurements), high flow velocities.	0554 0756	
Stainless steel sintered filter, pore size 100 µm, probe protection in dusty atmospheres or higher flow velocities for measurements at higher flow velocities or in contaminated air	0554 0647	
Adapter for surface humidity measurement, for humidity probes Ø 12 mm locates damp spots on walls, for example	0628 0012	
Cap for bore holes, for humidity probe Ø 12 mm Measures equilibrium moisture in bore holes	0554 2140	
Plug-in mains adapter, 5 VDC 500 mA with European adapter, 100-250 VAC, 50-60 Hz	0554 0447	
Lithium battery button cell, CR2032 AA batteries for radio handle	0515 0028	
Adhesive material for fixing and sealing	0554 0761	

## 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	0554 0568	
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610	

## Calibration Certificates

ISO calibration certificate humidity, Calibration points 11.3 %RH and 75.3 %RH at +25°C	0520 0006	
ISO calibration certificate/temperature, meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071	
ISO calibration certificate dewpoint, two adjustment points -10/-40 °Ctd at 6 bar	0520 0136	
ISO calibration certificate/absolute pressure, 3 meas. points distributed over meas. range Absolute pressure; accuracy 0.1 to 0.6; 3 points distributed over meas. range (0 to 70 bar)	0520 0185	
ISO calibration certificate/humidity cal. points freely selectable from 5 to 95%RH at +15 to +35°C or at -18 to +80°C	0520 0106	
ISO calibration certificate/humidity, saturated saline solutions: calibration point 11.3%RH	0520 0013	
ISO calibration certificate/humidity, saturated saline solutions, calibration point 75.3%RH	0520 0083	
DAkkS calibration certificate/humidity, electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0206	
DAkkS calibration certificate/humidity, saturated saline solutions; calibration point 11.3%RH	0520 0213	
DAkkS calibration certificate/humidity, saturated saline solutions; calibration point 75.3%RH	0520 0283	
ISO calibration certificate/U-value probe	0520 0481	
DAkkS calibration certificate/U-value probe	0520 0981	

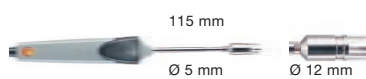

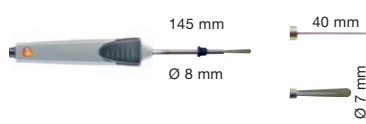

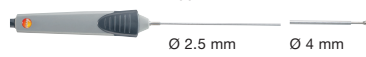
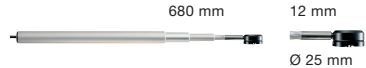





# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
<b>Humidity probes</b>					
Humidity/temperature probe	 Ø 12 mm	0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.3 °C		0636 9735
Robust humidity probe for meas. up to +125 °C, short-term up to +140 °C, Ø 12 mm, e.g. exhaust ducts, and for meas. of material equilibrium moisture, e.g. bulk goods	 300 mm Ø 12 mm	0 to +100 %RH -20 to +125 °C	±2 %RH (+2 to +98 %RH) ±0.2 °C		0636 2161
Thin humidity probe with built-in electronics, incl. 4 attachable PTFE protection caps for material moisture equilibrium measurement	 60 mm Ø 4 mm	0 to +100 %RH 0 to +40 °C	±2 %RH (+2 to +98 %RH) ±0.2 °C		0636 2135
Scatter field probe for fast and damage-free material moisture measurement, with probe cable 1.2 m.		Woods: <50 % Building materials: <20 %			0636 6160
<b>Pressure dewpoint probes</b>					
Pressure dewpoint probe for measurements in compressed air systems, Fixed cable	 300 mm	0 to +100 %RH -30 ... +50 °C tpd	±0.9 °C tpd (+0.1 to +50 °C tpd) ±1 °C tpd (-4.9 to 0 °C tpd) ±2 °C tpd (-9.9 to -5 °C tpd) ±3 °C tpd (-19.9 to -10 °C tpd) ±4 °C tpd (-30 to -20 °C tpd)	300 s	0636 9835
Precision pressure dewpoint probe for measurements in compressed air systems, including certificate with test point -40 °C tpd, Fixed cable	 300 mm	0 to +100 %RH -60 to +50 °C tpd	±0.8 °C tpd (-4.9 to +50 °C tpd) ±1 °C tpd (-9.9 to -5 °C tpd) ±2 °C tpd (-19.9 to -10 °C tpd) ±3 °C tpd (-29.9 to -20 °C tpd) ±4 °C tpd (-40 to -30 °C tpd)	300 s	0636 9836
<b>Absolute pressure probes</b>					
Absolute pressure probe 2000 hPa		0 to +2000 hPa	±5 hPa		0638 1835
<b>Air probes</b>					
Robust air probe, T/C Type K, Fixed cable	 115 mm Ø 4 mm	-60 to +400 °C	Class 2 <sup>1)</sup>	25 s	0602 1793

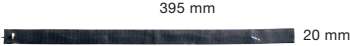







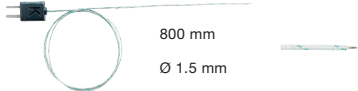
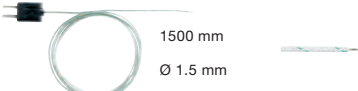
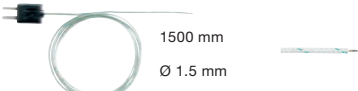
1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
Surface probes					
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable		-60 to +300 °C	Class 2 <sup>1)</sup>	3 s	0602 0393
Temperature probe to determine U-value, triple sensor system for measuring wall temperature, modelling clay included		-20 to +70 °C	Class 1 <sup>1)</sup> U-value: ±0.1 ±2% of fsv*		0614 1635
		Information: This probe connects to testo 635-2 only An additional probe for measuring outer temperatures is required when determining the U-value e.g. 0602 1793 or 0613 1001 or 0613 1002. *when used with an NTC or wireless humidity probe for measuring outside temperature and 20 K difference between the air inside and outside			
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K, Fixed cable		0 to +300 °C	Class 2 <sup>1)</sup>	5 s	0602 0193
Fast-action surface probe with sprung thermocouple strip, bent, also for uneven surfaces, measurement range short-term to +500°C, TC Type K, Fixed cable 1.2 m		-60 to +300 °C	Class 2 <sup>1)</sup>	3 s	0602 0993
Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K, Fixed cable 1.2 m		-60 to +1000 °C	Class 1 <sup>1)</sup>	20 s	0602 0693
Flat head surface probe with telescopic handle max. 680 mm for measurements at hard-to-access points, TC Type K, Fixed cable 1.6 m (correspondingly shorter when telescope extended)		-50 to +250 °C	Class 2 <sup>1)</sup>	3 s	0602 2394
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K, Fixed cable 1.6 m		-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
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K, Fixed cable 1.2 m		-60 to +400 °C	Class 2 <sup>1)</sup>	30 s	0602 1993

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).

# Probes

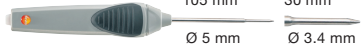
Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
<b>Surface probes</b>					
Pipe wrap probe with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K, Fixed cable		-50 to +120 °C	Class 1 <sup>1)</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		-60 to +130 °C	Class 2 <sup>1)</sup>	5 s	0602 4592
Spare meas. head for pipe wrap probe, TC Type K		-60 to +130 °C	Class 2 <sup>1)</sup>	5 s	0602 0092
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
<b>Immers./penetr. probes</b>					
Efficient and fast-action immersion probe, waterproof, TC Type K, Fixed cable 1.2 m		-60 to +1000 °C	Class 1 <sup>1)</sup>	2 s	0602 0593
Fast-action, waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m		-60 to +800 °C	Class 1 <sup>1)</sup>	3 s	0602 2693
Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1 <sup>1)</sup>	5 s	0602 5792
Waterproof immersion/penetration probe, TC Type K, Fixed cable 1.2 m		-60 to +400 °C	Class 2 <sup>1)</sup>	7 s	0602 1293
<b>Thermocouples</b>					
Thermocouple with TC adapter, flexible, 800mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0644
Thermocouple with TC adapter, flexible, 1500mm long, fibre glass, TC Type K		-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500mm long, PTFE, TC Type K		-50 to +250 °C	Class 2 <sup>1)</sup>	5 s	0602 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).

# Radio probes

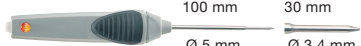
## Radio probes for immersion/penetration measurements

### Part no.

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	
Radio immersion/penetration probe, NTC, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0613 1002	
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>		
 105 mm 30 mm Ø 5 mm Ø 3.4 mm	-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.

### Part no.

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	
T/C probe head for air/immersion/penetration measurement, attachable to radio handle, T/C Type K (0554 0189)					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, attachable to radio handle, T/C Type K (0554 0189)					0602 0293	
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>		
 100 mm 30 mm Ø 5 mm Ø 3,4 mm	-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C +0.3% of mv) (-40 to +500 °C) ±(0.7 °C +0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t <sub>99</sub> (in water) 10 s		


## Radio handles with probe head for surface measurement

### Part no.

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	
T/C probe head for surface measurement, attachable to radio handle, 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	
T/C probe head for surface measurement, attachable to radio handle, T/C Type K					0602 0394	
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution	t <sub>99</sub>		
 120 mm 40 mm Ø 5 mm Ø 12 mm	-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C +0.3% of mv) (-40 to +500 °C) ±(0.7 °C +0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s		


## Radio probes incl. humidity probe head

### Part no.

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	
Humidity probe head, attachable to radio handle					0636 9736	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL; Radio freq. 915.00 MHz FSK					0554 0191	
Humidity probe head, attachable to radio handle					0636 9736	
Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Resolution			
	0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.3 °C	0.1 %RH 0.1 °C			

## Radio handles for attachable T/C probes

### Part no.

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 range	Accuracy	Resolution			
	-50 to +1000 °C	±(0.7 °C +0.3% of mv) (-40 to +900 °C) ±(0.9 °C +0.5% of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)			

# Radio probes

## Accessories Radio probes

## Part no.

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	

## 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
Battery life	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)

### 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
Oper. temp.	-20 to +50 °C
Storage temp.	-40 to +70 °C
Protection class	IP54

# Humidity/temperature measuring instrument

**testo 645 – Highly precise measurements for industry**

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Highly accurate humidity measurement up to  $\pm 1$  %RH

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Connection of 2 plug-in probes

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Measurement of temperature, relative humidity and pressure dewpoint

---

Internal measurement store (3000 measurement values)

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PC software for the analysis, archiving and documentation of the measurement values (option)

---

Button for Hold, min./max. values, mean value calculation

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Convenient data analysis

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%RH

°C

The highly accurate thermal hygrometer testo 645 has two probe inputs for the connection of an extensive range of probes:

- Channel 1: temperature Type K/J/S, NTC
- Channel 2: combi probe humidity/temperature or temperature probe Pt 100

The measuring instrument automatically displays the measurement parameters temperature, relative humidity, dewpoint, pressure dewpoint, absolute humidity, degree of humidity and enthalpy, and additionally presents the current values, the last measured values, min., max. and mean values at the press of a button.

Measurement data can be stored by measurement site in the testo 645, and analyzed on a PC, or documented using the Testo fast printer (option). The TopSafe (option) is available for tough applications. The measuring instrument, probes and accessories can be stored safely and tidily in the transport case (option).

# Technical data

## testo 645

testo 645, humidity/temperature measuring instrument, with battery and calibration protocol

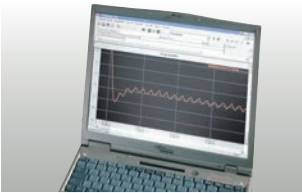
Part no. 0560 6450



### General technical data

Oper. temp.	0 to +50 °C
Storage temp.	-20 to +70 °C
Display	LCD, 4 lines
Battery type	Alkali manganese
Battery life	45 h
Dimensions	215 x 68 x 47 mm
Weight	255 g
Material/Housing	ABS
Warranty	1 year

Accuracy of temperature:  $\pm 1$  digit at +22°C  
Ni 10000 sensor: meas. range: ...+180°C  
Typical battery lives: 9V block (Al-Mn) 20-45h.  
The hour times are reduced by a factor of 5 if a 9V rech. battery is used  
Calculated humidity parameters: td, g/m<sup>3</sup>, g/kg, J/g (pressure compensated)  
Mains connection and battery recharging in instrument



Save data by measurement site and analyze on a notebook



Connections for temperature probes Type K/J/S, NTC and combi probe humidity/temperature or temperature probe Pt100

## Technical data / Accessories

Sensor type	Meas. range	Accuracy $\pm 1$ digit	Resolution
Testo humid. sensor, cap.	0 to +100 %RH	See probe data	0.1 %RH (0 to +100 %RH)
Pt100	-200 to +800 °C	$\pm 0.1\%$ of mv (+200.1 to +800 °C) $\pm 0.2$ °C (-200 to +200 °C)	0.1 °C (-200 to +800 °C)
Type K (NiCr-Ni)	-200 to +1370 °C	$\pm 0.5\%$ of mv (+60 to +1370 °C) $\pm 0.3$ °C (-200 to +59.9 °C)	0.1 °C (-200 to +1370 °C)
Type S (Pt10Rh-Pt)	-50 to +1700 °C		
Type J (Fe-CuNi)	-40 to +750 °C		
NTC	-50 to +150 °C		0.1 °C (-50 to +150 °C)

### Accessories

### Part no.

#### Transport and Protection

Transport case (plastic) for measuring instrument, probes and accessories for safe and orderly storage	0516 0445	
TopSafe (indestructible protection case), with bench stand and belt clip	0516 0440	

#### Printer and Accessories

Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549	
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610	
Spare thermal paper for printer (6 rolls), permanent ink measurement data documentation legible for up to 10 years	0554 0568	

#### Software and Accessories

ComSoft Professional Pro software incl. data archiving	0554 1704	
RS232 cable connects instrument to PC (1.8 m) for data transfer	0409 0178	

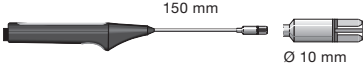


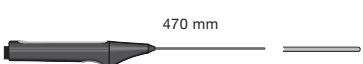

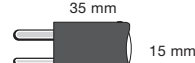

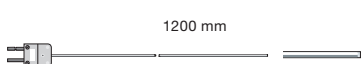
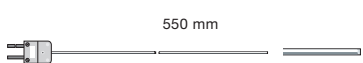
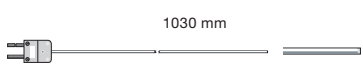




# Accessories

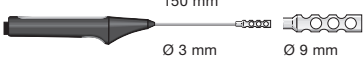

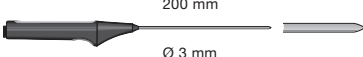
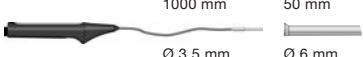


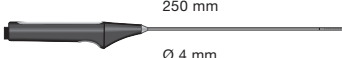


Additional accessories and spare parts		Part no.
Desk-top power supply with international connection options	0554 1143	
9V rech. battery for instrument, instead of battery	0515 0025	
Cable, 1.5 m long, connects probe with plug-in head to meas. instrument, PUR coating material	0430 0143	
Extension cable, 5 m long, between plug-in head cable and instrument, PUR coating material	0409 0063	
Adapter for surface humidity measurement, for humidity probes Ø 12 mm locates damp spots on walls, for example	0628 0012	
Cap for bore holes, for humidity probe Ø 12 mm Measures equilibrium moisture in bore holes	0554 2140	
Control and adjustment set for Testo humidity probes, salt solution with 11.3% RH and 75.3% RH, incl. adapter for Testo humidity probes	0554 0660	
Cable, 5 m long, connects probe with plug-in head to measuring instrument, PUR coating material	0430 0145	
Adapter to connect NiCr-Ni thermocouples and probes with open wire ends	0600 1693	
Handle for plug-in measuring tip	0600 5593	
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004	
Spare measuring tip for smelting probe	0363 1712	
Control/adjustment containers (75.3%RH) for 1 point control and adjustment of instrument	0554 0638	
testo saline solution pot for checking humidity probes, 33 %RH	0554 0636	
<b>Calibration Certificates</b>		
ISO calibration certificate humidity Calibration points 11.3 %RH and 75.3 %RH at +25°C	0520 0006	
ISO calibration certificate/humidity saturated saline solutions: calibration point 11.3%RH	0520 0013	
ISO calibration certificate/humidity saturated saline solutions, calibration point 75.3%RH	0520 0083	
DAkkS calibration certificate/humidity electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +25°C	0520 0206	
DAkkS calibration certificate/humidity saturated saline solutions; calibration point 11.3%RH	0520 0213	
DAkkS calibration certificate/humidity saturated saline solutions; calibration point 75.3%RH	0520 0283	

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
<b>Type K (NiCr-Ni)</b>					
Quick-action surface probe, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +300 °C	Class 2 <sup>1)</sup>	3 s	0604 0194
Fast response immersion/penetration probe, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +400 °C	Class 1 <sup>1)</sup>	3 s	0604 0293
Super quick-action immersion/penetration probe for measurements in liquids, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +600 °C	Class 1 <sup>1)</sup>	1 s	0604 0493
Super quick-action immersion/penetration probe for high temperatures, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +1100 °C	Class 1 <sup>1)</sup>	1 s	0604 0593
Super quick-action immersion/penetration probe for measurements in gases and liquids with a low-mass tip, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +600 °C	Class 1 <sup>1)</sup>	1 s	0604 9794
Spare meas. head for pipe wrap probe, TC Type K		-60 to +130 °C	Class 2 <sup>1)</sup>	5 s	0602 0092
Plug-in measuring tip, 750mm long, flexible, for high temperatures, outer casing: stainless steel 1.4541. Please order handle with Part no. 0600 5593		-200 to +900 °C	Class 1 <sup>1)</sup>	4 s	0600 5393
Plug-in measuring tip, 1200 mm long, flexible, for high temperatures, outer casing: stainless steel 1.4541. Please order handle with Part no. 0600 5593		-200 to +900 °C	Class 1 <sup>1)</sup>	4 s	0600 5493
Plug-in measuring tip, 550mm long, flexible, for high temperatures, outer casing: Inconel 2.4816. Please order handle with Part no. 0600 5593		-200 to +1100 °C	Class 1 <sup>1)</sup>	4 s	0600 5793
Plug-in measuring tip, 1030mm long, flexible, for high temperatures, outer casing: Inconel 2.4816. Please order handle with Part no. 0600 5593		-200 to +1100 °C	Class 1 <sup>1)</sup>	4 s	0600 5893

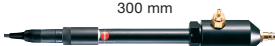
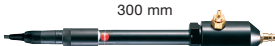

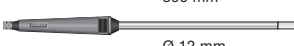


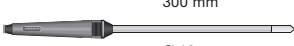

1) According to norm EN 60751, the accuracy of Classes 1 / 2 refers to -40 to +1000/+1200 °C.

# Probes





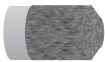

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
<b>Pt100</b>					
Precision air probe , Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +400 °C	±(0.03 °C +0.05% of mv) (0 to +100 °C) ±(0.06 °C +0.1% of mv) (remaining range)	75 s	0628 0017
Standard immersion/penetration probe, Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +400 °C	Class A (-100 to +400 °C) Class B (remaining range)	20 s	0604 0273
Highly accurate immersion/penetration probe , Plug-in head. connection cable 0430 0143 or 0430 0145 required		-200 to +400 °C	±(0.03 °C +0.05% of mv) (0 to +100 °C) ±(0.06 °C +0.1% of mv) (remaining range)	30 s	0628 0015
Flexible precision immersion probe, cable heat-proof up to +300°C , Plug-in head. connection cable 0430 0143 or 0430 0145 required		-100 to +265 °C	1/10 Class B (0 to 100°C) 1/5 Class B (rem. range) to EN 60751 <sup>2)</sup>	80 s	0628 0016
<b>Humidity probes</b>					
Standard ambient air probe up to +70°C, Plug-in head. connection cable 0430 0143 or 0430 0145 required		0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	12 s	0636 9740
Duct humidity/temperature probe, Fixed cable 3 m		0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	12 s	0636 9715
Thin humidity probe incl. 4 attachable protection caps for ambient air measurements, measurements in exhaust air ducts and equilibrium moisture measurements , Plug-in head. connection cable 0430 0143 or 0430 0145 required		0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (-20 to -10.1 °C) ±0.5 °C (+50.1 to +70 °C)	15 s	0636 2130
Highly accurate reference humidity/temp. probe, Plug-in head. connection cable 0430 0143 or 0430 0145 required		0 to +100 %RH -20 to +70 °C	±1 %RH (+10 to +90 %RH)* ±2 %RH (remaining range) * in the temperature range from +15°C to +30°C ±0.2 °C (+10 to +40 °C) ±0.4 °C (remaining range)	12 s	0636 9741
Humidity/temperature probe , Plug- in head. connection cable 0430 0143 or 0430 0145 required		0... +100 %RH -20 to +70 °C	±2 %RH (+2... +98 %RH) ±0.4 °C (+0.1 to +50 °C) ±0.5 °C (-20 to 0 °C) ±0.5 °C (+50.1 to +70 °C)	12 s	0636 9742

2) According to standard EN 60751, the accuracy of Class A and B refer to -200 to +600 °C.

# Probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
<b>Probes Process humidity</b>					
Standard pressure dewpoint probe for measurements in compressed air systems, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 300 mm	0 to +100 %RH -30 to +50 °C tpd	±0.9 °C tpd (+0.1 to +50 °C tpd) ±1 °C tpd (-4.9 to 0 °C tpd) ±2 °C tpd (-9.9 to -5 °C tpd) ±3 °C tpd (-19.9 to -10 °C tpd) ±4 °C tpd (-30 to -20 °C tpd)		0636 9840
Precision pressure dewpoint probe for measurements in compressed air systems incl. cert. with test point -40°C tpd, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 300 mm	0 to +100 %RH -60 to +50 °C tpd	±0.8 °C tpd (-4.9 to +50 °C tpd) ±1 °C tpd (-9.9 to -5 °C tpd) ±2 °C tpd (-19.9 to -10 °C tpd) ±3 °C tpd (-29.9 to -20 °C tpd) ±4 °C tpd (-40 to -30 °C tpd)		0636 9841
High humidity level probe w/ heated sensor element, no humidity on sensor, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 300 mm Ø 12 mm	0 to +100 %RH -20 to +85 °C	±2.5 %RH (0 to +100 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (-20 to -10.1 °C) ±0.5 °C (+50.1 to +100 °C) * in the temperature range from +10°C to +30°C	30 s	0636 2142
Robust high temperature/humidity probe up to +180°C, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 300 mm Ø 12 mm	0 to +100 %RH -20 to +180 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (+0.1 to +50 °C) ±0.5 °C (remaining range)	30 s	0628 0021
Flexible humidity probe (does not retain shape) for measurements in inaccessible places, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 1500 mm 100 mm Ø 12 mm	0 to +100 %RH -20 to +180 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (+0.1 to +50 °C) ±0.5 °C (-20 to 0 °C) ±0.5 °C (+50.1 to +180 °C)	30 s	0628 0022
<b>Probes Material and equilibrium moisture</b>					
Sword probe for measuring humidity and temperature in stacked material, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 320 mm 18 mm x 5 mm	0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (-20 to -10.1 °C) ±0.5 °C (+50.1 to +70 °C)	12 s	0636 0340
Robust humidity probe e.g. for measuring equilibrium moisture or for measurements in exhaust ducts to +120°C, Plug-in head. connection cable 0430 0143 or 0430 0145 required	 300 mm Ø 12 mm	0 to +100 %RH -20 to +120 °C	±2 %RH (+2 to +98 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)	30 s	0636 2140
<b>Probes aw value</b>					
aw value set: pressure-tight precision humidity probe with certificate, measurement chamber and 5 sample bowls (plastic)	 Reproducibility of aw value ±0.003	0 to +1 aW 0 to +100 %RH -20 to +70 °C	±0.01 aW (+0.1 to +0.9 aW) ±0.02 aW (+0.9 to +1 aW) ±1 %RH (+10 to +90 %RH) ±2 %RH (0 to +10 %RH) ±2 %RH (+90 to +100 %RH) ±0.4 °C (-10 to +50 °C) ±0.5 °C (remaining range)		0628 0024
Measuring chamber completely					0554 9860

## Covering caps

Caps for humidity probes Ø 12m and 21mm	Illustration	For humidity probes	Part no.
Metal protection cage, Ø 12 mm for humidity probes, for measurement in flow velocities of less than 10 m/s	 Ø 12 mm	0636 9740, 0636 9715	0554 0755
Cap with wire mesh filter, Ø 12 mm		All humidity probes with Ø 12 mm	0554 0757
PTFE sintered filter, Ø 21 mm, for corrosive substances, high humidity range (long-term measurements), high velocities	 Ø 21 mm	All humidity probes with Ø 21 mm	0554 0666
Sintered PTFE filter, Ø 12 mm, for corrosive media, High humidity range (long-term measurements), high flow velocities.	 Ø 12 mm	0636 9769, 0636 9740, 0636 9715	0554 0756
PTFE sintered filter, Ø 12 mm, for corrosive substances, high humidity range (non-stop measurements), high flow speeds	 Ø 12 mm	0628 0021, 0628 0022, 0636 2140, 0636 2142	0554 0758
Stainless steel sintered cap, Ø 21 mm, can be screwed onto humidity probe, protection in case of high mechanical load and high velocities	 Ø 21 mm	All humidity probes Ø 21 mm	0554 0640
Stainless steel sintered filter, pore size 100 µm, probe protection in dusty atmospheres or higher flow velocities, for measurements at higher flow velocities or in contaminated air	 Ø 12 mm	0636 9740, 0636 9715	0554 0647