testo Be sure.

Data sheet
testo 400

Universal IAQ instrument

testo 400 – the multitasker for IAQ professionals

Smart Touch

Compatible with a comprehensive selection of Bluetooth® and cable probes.

°C | CO | %RH | CO | m/s | Lux | hPa | m^3/h

— Measures all IAQ-related parameters:
Flow, temperature, humidity, pressure, illuminance, radiant heat, turbulence, CO_2 and CO

— High-precision,
location-independent and integrated differential pressure sensor

— High-quality digital probes
and an intelligent calibration concept

— Document measuring values directly on the customer's site
and send them by bluetooth, or further analyze them using the testo DataControl PC software

— Smart and intuitive measurement programs:
- HVAC grid measurement in accordance with EN 12599 and ASHRAE 111
- PMV/PPD in accordance with EN ISO 7730 and ASHRAE 55
- Draught and degree of turbulence in accordance with EN ISO 7730 and ASHRAE 55
- WBGT measurement in line with DIN 33403 and EN ISO 7243, NET measurement in accordance with DIN 33403

testo 400 is the universal measuring instrument for all IAQ professionals, enabling them to measure, document and analyze all IAQ parameters with just one instrument. Your benefits:
- Smart support through stored measurement menus and evaluation of measuring values according to the traffic light principle – for error-free measurements
- Manage all the relevant customer data, including measuring points, directly in the instrument - work directly and efficiently on site
- Complete and send measuring values with full documentation, including photos, comments and your own logo directly on site – get to the next job faster
- Probe heads can be changed without restarting the instrument – easy handling with no lost time
- Calibration of probes which is independent of the measuring instrument and adjustment function at up to six measuring points for zero-error display – fewer downtimes and high-precision measurements

As consultants, experts, technical service providers or service technicians in the air conditioning and ventilation sector, the testo 400 therefore supports you in the truly smart performance of your measuring tasks. Relevant quality parameters in industrial production and manufacturing processes can also be reliably and accurately checked using the testo 400.

Technical data

Differential pressure (integrated)	
Measuring range	0 to +200 hPa
Accuracy (±1 digit)	±(0.3 Pa ± 1% of m.v.) (0 to 25 hPa) ±(0.1 hPa + 1.5% of m.v.) (25.001 to 200 hPa)
Resolution	0.001 hPa
Absolute pressure (integrated)	
Measuring range	700 to +1100 hPa
Accuracy (±1 digit)	±3 hPa
Resolution	0.1 hPa
Temperature NTC (with appropriate probe)	
Measuring range	-40 to +150 °C
Accuracy (±1 digit)	±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 m.v. (remaining meas. range)
Resolution	0.1 °C
Temperature TC type K (with appropriate probe)	
Measuring range	-200 to +1370 °C
Accuracy (±1 digit)	±(0.3 °C + 0.1% of m.v.)
Resolution	0.1 °C

Temperature Pt100 (with appropriate probe)	
Measuring range	See probe data
Accuracy (±1 digit)	
Resolution	
General technical data	
Probe connections	4x Bluetooth®, 2x TUC*, 2x TC type K
Interfaces	Bluetooth®, USB
Operating temperature	-5 to +45 °C
Storage temperature	-20 to +60 °C
Power supply	Rechargeable li-ion battery (5550 mAh)
Battery life	approx. 10 hrs continuous operation
Display	5.0 inch HD touch display 1280 x 720 px resolution
Camera	Main camera: 8.0 MP Front camera: 5.0 MP
Memory	2 GB (corresponds to approx. 1,000,000 readings)
Protection class	IP40
Dimensions	210 x 95 x 39 mm
Weight	510 g
Data transmission	Bluetooth®, e.g. for connection to Bluetooth probes, testo Smart Probes and testo 420

*TUC connection (Testo Universal Connector): For the connection of fixed cable digital probes and NTC probes.

Ordering data

testo 400

— testo 400 universal IAQ instrument, including transport case for volume flow measurement, connection hose, mains unit with USB cable and calibration protocol.

Order no.
0560 0400 01

IAQ data logger

— IAQ data logger for long-term measurements with the testo 400, including mains unit with USB cable and calibration protocol.

Order no.
0577 0400

Ordering data for kits

testo 400 air flow kit with hot wire probe

Order no.
0563 0400 73

- testo 400 universal IAQ instrument, including transport case for volume flow measurement, silicone hoses, mains unit with USB cable and calibration protocol
- Hot wire probe with Bluetooth®, including temperature and humidity sensor (comprising hot wire probe head, telescope (extendable to
  1.0 m) handle adapter and Bluetooth® handle), 4 x AA batteries and calibration protocol
- Vane probe head (Ø 100 mm), including temperature sensor and calibration protocol
- High-precision humidity/temperature probe head, including calibration protocol
- 90° angle for connecting vane probes (Ø 100 mm)

testo 400 air flow kit with 16 mm vane probe

Order no.
0563 0400 74

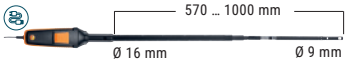
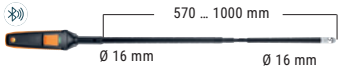
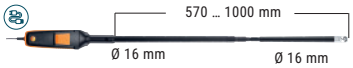
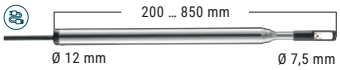
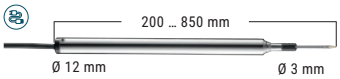
- testo 400 universal IAQ instrument, including transport case for volume flow measurement, silicone hoses, mains unit with USB cable and calibration protocol
- Vane probe (Ø 16 mm) with Bluetooth®, including temperature sensor (comprising 16 mm vane probe head, telescope (extendable to 1.0 m), handle adapter and Bluetooth® handle), 4 x AA batteries and
  calibration protocol
- Vane probe head (Ø 100 mm), including temperature sensor and calibration protocol
- High-precision humidity/temperature probe head, including calibration protocol
- 90° angle for connecting vane probes (Ø 100 mm)

testo 400 IAQ and comfort kit with tripod

Order no.
0563 0401 01

- testo 400 universal IAQ instrument, including transport case for comfort level measurement, silicone hoses, mains unit with USB cable and calibration protocol
- CO_2 probe with Bluetooth®, including temperature and humidity sensor, (comprising CO_2 probe head and Bluetooth® handle), 4 x AA batteries, table stand and calibration protocol
- Turbulence probe with fixed cable, including calibration protocol
- Globe thermometer Ø 150 mm with fixed cable, TC type K, for measuring radiant heat
- Measuring tripod for comfort level measurement, consisting of folding stand, mounting rod, 4 x probe mounts, including bag

Digital flow probes

Probe type		Measuring range	Accuracy	Resolu-tion	Order no.
Digital flow probes					
Hot wire probe with Bluetooth®, including temperature and humidity sensor		0 to 30 m/s -20 to +70 °C 5 to 95 %RH 700 to 1100 hPa	±(0.03 m/s + 4% of m.v.) (0 to 20 m/s) ±(0.5 m/s + 5% of m.v.) (20.01 to 30 m/s) ±0.5 °C (0 to +70 °C) ±0.8°C (-20 to 0 °C) ±3.0 %RH (10 to 35 %RH)[3] ±2.0 %RH (35 to 65 %RH)[3] ±3.0 %RH (65 to 90 %RH)[3] ±5 %RH (remaining meas. range)[3] ±3 hPa	0.01 m/s 0.1 °C 0.1 %RH 0.1 hPa	0635 1571
Hot wire probe, fixed cable, including temperature and humidity sensor					0635 1572
Hot wire probe head, including temperature and humidity sensor					0635 1570
Vane probe (Ø 16 mm) with Bluetooth®, including temperature sensor		0.6 to 50 m/s -10 to +70 °C	±(0.2 m/s + 1% of m.v.) (0.6 to 40 m/s) ±(0.2 m/s + 2% of m.v.) (40.1 to 50 m/s) ±1.8°C	0.1 m/s 0.1 °C	0635 9571
Vane probe (Ø 16 mm), fixed cable, including temperature sensor					0635 9572
Vane probe head (Ø 16 mm), including temperature sensor					0635 9570
Hot wire probe, fixed cable, including temperature sensor		0 to 30 m/s -20 to +70 °C 700 to 1100 hPa	±(0.03 m/s + 4% of m.v.) (0 to 20 m/s) ±(0.5 m/s + 5% of m.v.) (20.01 to 30 m/s) ±0.5 °C ±3 hPa	0.01 m/s 0.1 °C 0.1 hPa	0635 1032
Hot wire probe (Ø 7.5 mm), fixed cable, including temperature sensor		0 to 20 m/s -20 to +70 °C 700 to 1100 hPa	±(0.03 m/s + 5% of m.v.) (0 to 20 m/s) ±0.5 °C ±3 hPa	0.01 m/s 0.1 °C 0.1 hPa	0635 1026
Hot ball probe (Ø 3 mm), fixed cable, including temperature sensor		0 to 10 m/s -20 to +70 °C 700 to 1100 hPa	±(0.03 m/s + 5% of m.v.) (0 to 10 m/s) ±0.5 °C ±3 hPa	0.01 m/s 0.1 °C 0.1 hPa	0635 1051
Vane probe (Ø 16 mm), fixed cable		0.6 to 50 m/s	±(0.2 m/s + 1% of m.v.) (0.6 to 40 m/s) ±(0.2 m/s + 2% of m.v.) (40.1 to 50 m/s)	0.1 m/s	0635 9532
Fume cupboard probe, fixed cable (Measurement of flow velocity and volume flow at laboratory extractors based on DIN EN 14175-3/-4.)		0 to 5 m/s 0 to +50 °C 700 to 1100 hPa	±(0.02 m/s + 5% of m.v.) (0 to 5 m/s) ±0.5 °C ±3 hPa	0.01 m/s 0.1 °C 0.1 hPa	0635 1052
High-precision vane probe (Ø 100 mm) with Bluetooth®, including temperature sensor		0.1 to 15 m/s -20 to +70 °C	±(0.1 m/s + 1.5% of m.v.) (0.1 to 15 m/s) ±0.5 °C	0.01 m/s 0.1 °C	0635 9371
High-precision vane probe (Ø 100 mm), fixed cable, including temperature sensor					0635 9372
High-precision vane probe head (Ø 100 mm), including temperature sensor					0635 9370

[1] For use with cable handle (order no. 0554 2222) or Bluetooth® handle (order no. 0554 1111) in conjunction with handle adapter (order no. 0554 2160).
[3] Please note the additional accuracy specifications on the hysteresis and long-term stability of humidity in the instruction manual.

Digital flow probes

Probe type		Measuring range	Accuracy	Resolu-tion	Order no.
Digital flow probes					
High-precision vane probe (Ø 100 mm) with Bluetooth®, including temperature sensor		0.1 to 15 m/s -20 to +70 °C	±(0.1 m/s + 1.5% of m.v.) (0.1 to 15 m/s) ±0.5 °C	0.01 m/s 0.1 °C	0635 9371
High-precision vane probe (Ø 100 mm), fixed cable, including temperature sensor					0635 9372
High-precision vane probe head (Ø 100 mm), including temperature sensor	1)				0635 9370

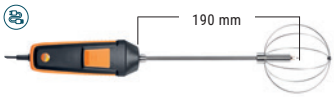
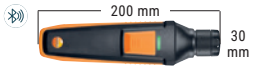
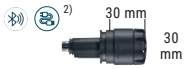
1) For use with cable handle (order no. 0554 2222) or Bluetooth® handle (order no. 0554 1111) in conjunction with handle adapter (order no. 0554 2160).

Other digital probes

Probe type		Measuring range	Accuracy	Resolu-tion	Order no.
Digital humidity probes					
Humidity/temperature probe with Bluetooth®		0 to 100 %RH -20 to +70 °C	±2 %RH (5 to 90 %RH)3) ±0.5 °C	0.1 %RH 0.1 °C	0636 9731
Humidity/temperature probe, fixed cable					0636 9732
Humidity/temperature probe head	2)				0636 9730
High-precision humidity/ temperature probe with Bluetooth®		0 to 100 %RH -20 to +70 °C	±(0.6 %RH + 0.7% of m.v.) (0 to 90 %RH)3) ±(1.0 %RH + 0.7% of m.v.) (90 to 100 %RH)3) ±0.3 °C (15 to 30 °C) ±0.5 °C (remaining meas. range)	0.01 %RH 0.01 °C	0636 9771
High-precision humidity/ temperature probe, fixed cable					0636 9772
High-precision humidity/ temperature probe head	2)				0636 9770
Robust humidity/temperature probe for temperatures up to +180 °C, fixed cable		0 to 100 %RH -20 to +180 °C	±3 %RH (0 to 2 %RH)3) ±2 %RH (2.1 to 98 %RH)3) ±3 %RH (98.1 to 100 %RH)3) ±0.5 °C (-20 to 0 °C) ±0.4 °C (0.1 to +50 °C) ±0.5 °C (+50.1 to +180 °C)	0.1 %RH 0.1 °C	0636 9775

2) For use with cable handle (order no. 0554 2222) or Bluetooth® handle (order no. 0554 1111).
3) Please note the additional accuracy specifications on the hysteresis and long-term stability of humidity in the instruction manual.

Other digital probes

Probe type		Measuring range	Accuracy	Resolu-tion	Order no.
Digital comfort probes					
Turbulence probe, fixed cable		0 to +5 m/s 0 to +50 °C 700 to 1100 hPa	±(0.03 m/s + 4% of m.v.) (0 to 5 m/s) ±0.5 °C ±3 hPa	0.01 m/s 0.1 °C 0.1 hPa	0628 0152
Lux probe, fixed cable		0 to 100,000 lux	DIN 13032-1 Appendix B F1 = 6 % = V(Lambda) adjustment F2 = 5 % = cos-true evaluation Class C according to DIN 5032-7	0.1 lux (< 10,000 lux) 1 lux (≥ 10,000 lux)	0635 0551
CO_2 probe with Bluetooth®, including temperature and humidity sensor		0 to 10,000 ppm CO_2 5 to 95 %RH 0 to +50 °C 700 to 1100 hPa	±(50 ppm + 3% of m.v.) (0 to 5,000 ppm) ±(100 ppm + 5% of m.v.) (5,001 to 10,000 ppm) ±3 %RH (10 to 35 %RH)[3] ±2 %RH (35 to 65 %RH)[3] ±3 %RH (65 to 90 %RH)[3] ±5 %RH (remaining meas. range)[3] ±0.5 °C ±3 hPa	1 ppm 0.1 %RH 0.1 °C 0.1 hPa	0632 1551
CO_2 probe, fixed cable, including temperature and humidity sensor					0632 1552
CO_2 probe head, including temperature and humidity sensor					0632 1550
CO probe with Bluetooth®		0 to 100 ppm	±3 ppm (0 to 30 ppm) ±5 ppm (30.1 to 100 ppm)	0.1 ppm	0632 1271
CO probe, fixed cable		100.1 to 500 ppm	±10 % of m.v. (100.1 … 500 ppm)		0632 1272
CO probe head					0632 1270
Probe handles and adapters					
Bluetooth® handle for connecting testo 400 testo 440 probe heads					0554 1111
Cable handle for connecting testo 400 / testo 440 probe heads					0554 2222
Handle adapter for connecting testo 400 / testo 440 flow probes					0554 2160

2) For use with cable handle (order no. 0554 2222) or Bluetooth® handle (order no. 0554 1111).
3) Please note the additional accuracy specifications on the hysteresis and long-term stability of humidity in the instruction manual.

Testo Smart Probes

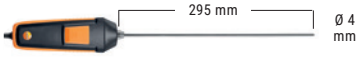
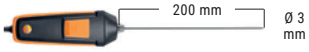
Testo Smart Probes		Measuring range	Accuracy ±1 digit	Resolu-tion	Order no.
Temperature					
testo 115i Clamp thermometer with smartphone operation, for measurements on pipelines with diameters of 6 to max. 35 mm, including batteries and calibration protocol		-40 to +150 °C	±1.3 °C (-20 to +85 °C)	0.1 °C	0560 2115 02
testo 915i – with flexible probe Wireless Smart Probe testo 915i with flexible probe (TC Type K), incl. batteries and calibration protocol		-50 to +400 °C	±1.0 °C (-30 to +80 °C) ±(0.7 °C + 1 % of m.v.) (-50 to -30 °C) ±(0.2 °C + 1 % of m.v.) (+80 to +400°C)	0.1 °C	0563 4915
testo 915i – with air probe Wireless Smart Probe testo 915i with air probe (TC Type K), incl. batteries and calibration protocol		-50 to +400 °C	±1.0 °C (-50 to +100 °C) ±1 % of m.v. (remaining meas. range)	0.1 °C	0563 3915
testo 915i – with immersion/ penetration probe Wireless Smart Probe testo 915i with immersion/ penetration probe (TC Type K), incl. batteries and calibration protocol		-50 to +400 °C	±1.0 °C (-50 to +100 °C) ±1 % of m.v. (remaining meas. range)	0.1 °C	0563 1915
testo 915i – with surface probe Wireless Smart Probe testo 915i with surface probe (TC Type K), incl. batteries and calibration protocol		-50 to +350 °C	±(1.0 °C +1 % of m.v.)	0.1 °C	0563 2915
testo 915i kit Universal temperature kit consisting of Smart Probe testo 915i with plug-in immersion/penetration probe, air probe and surface probe in Smart Case, incl. batteries and calibration protocol		see above, testo 915i - Air probe - Immersion/penetration probe - Surface probe		0.1 °C	0563 5915
testo 805i Infrared thermometer with smartphone operation, including batteries and calibration protocol		-30 to +250 °C	±1.5 °C or ±1.5% of m.v. (0 to +250 °C) ±2.0 °C (-20 to -0.1 °C) ±2.5 °C (-30 to -20.1 °C)	0.1 °C	0560 1805
Humidity					
testo 605i Thermohygrometer with smartphone operation, including batteries and calibration protocol		0 to 100 %RH -20 to +60 °C	±3.0 %RH (10 to 35 %RH)[3)] ±2.0 %RH (35 to 65 %RH)[3)] ±3.0 %RH (65 to 90 %RH)[3)] ±5 %RH (< 10 %RH or > 90 %RH)[3)] ±0.8 °C (-20 to 0 °C) ±0.5 °C (0 to +60 °C)	0.1 %RH 0.1 °C	0560 2605 02

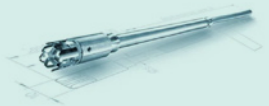
[3)] Please note the additional accuracy specifications on the hysteresis and long-term stability of humidity in the instruction manual.

Testo Smart Probes

Testo Smart Probes		Measuring range	Accuracy ±1 digit	Resolu-tion	Order no.
Flow					
testo 405i Thermal anemometer with smartphone operation, telescopic tube extendable to up to 400 mm, including batteries and calibration protocol		0 to 30 m/s -20 to +60 °C	±(0.1 m/s + 5% of m.v.) (0 to 2 m/s) ±(0.3 m/s + 5% of m.v.) (2 to 15 m/s) ±0.5 °C	0.01 m/s 0.1 °C	0560 1405
testo 410i Vane anemometer with smartphone operation, including batteries and calibration protocol		0.4 to 30 m/s -20 to +60 °C	±(0.2 m/s + 2% of m.v.) (0.4 to 20 m/s) ±0.5 °C	0.1 m/s 0.1 °C	0560 1410
Flow					
testo 510i Differential pressure measuring instrument with smartphone operation, including hose kit (Ø 4 mm and 5 mm) with adapter, batteries and calibration protocol		-150 to 150 hPa	±0.05 hPa (0 to 1 hPa) ±(0.2 hPa + 1.5% of m.v.) (1 to 150 hPa)	0.01 hPa	0560 1510
testo 549i High-pressure measuring instrument with smartphone operation, including batteries and calibration protocol		-1 to 60 bar	0.5% of final value	0.01 bar	0560 2549 02

Digital temperature and humidity probes

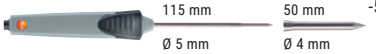
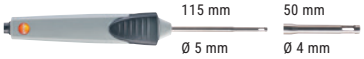
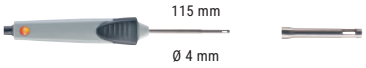
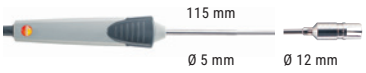
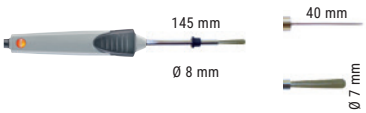
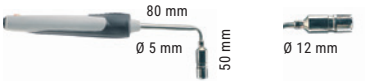
Probe type		Measuring range	Accuracy	Resolu-tion	Order no.
Digital temperature probes					
High-precision digital Pt100 penetration probe for measurements in liquids and pastes with an accuracy of up to ±0.05 °C		-80 to +300 °C	±0.3 °C (-80 to -40.001 °C) ±(0.1 °C + 0.05% of m.v.) (-40 to -0.001 °C) ±0.05 °C (0 to +100 °C) ±(0.05 °C + 0.05% of m.v.) (+100.001 to +300 °C)	0.001 °C	0618 0275
Digital Pt100 penetration probe for measurements in liquids and pastes		-100 to +400 °C	±(0.15 °C + 0.2% of m.v.) (-100 to -0.01 °C) ±(0.15 °C + 0.05% of m.v.) (0 to +100 °C) ±(0.15 °C + 0.2% of m.v.) (+100.01 to +350 °C) ±(0.5 °C + 0.5% of m.v.) (+350.01 to +400 °C)	0.01 °C	0618 0073
Glass-coated digital Pt100 laboratory probe for measurements in corrosive media		-50 to +400 °C	±(0.3 °C + 0.3% of m.v.) (-50 to +300 °C) ±(0.4 °C + 0.6% of m.v.) (+300.01 to +400 °C)	0.01 °C	0618 7072
Robust, fast-reaction, digital Pt100 air probe		-100 to +400 °C	±(0.15 °C + 0.2% of m.v.) (-100 to -0.01 °C) ±(0.15 °C + 0.05% of m.v.) (0 to +100 °C) ±(0.15 °C + 0.2% of m.v.) (+100.01 to +350 °C) ±(0.5 °C + 0.5% of m.v.) (+350.01 to +400 °C)	0.01 °C	0618 0072
Flexible digital Pt100 temperature probe for measurements in locations that are difficult to access and in liquids		-100 to +260 °C	±(0.3 °C + 0.3% of m.v.)	0.01 °C	0618 0071
Digital NTC stump temperature probe		-30 to +50 °C	±0.4 °C	0.1 °C	0572 2162
Digital Pt100 cable temperature probe Cable length 1.3 m		-85 to +150 °C (only probes and cable)	±(0.25 °C + 0.3 % of m.v.) at -49.9 to +99.9°C ±0.55 °C remaining measuring range	0.01 °C	0572 2163
Digital humidity probe					
Digital stump humidity/ temperature probe		-30 to +50 °C/ 0 to 100 %RH (non-condensing)	±0.4 °C at +25 °C ± 2.0 %RH at 0 to 90 %RH at +25 °C ± 0.03 %RH/K (k=1)	0.1 °C 0.1 %RH	0572 2164
Digital cable humidity/ temperature probe Cable length 1.3 m		-30 to +50 °C/ 0 to 100 %RH (non-condensing)	±0.4 °C at +25 °C ± 2.0 %RH at 0 to 90 %RH at +25 °C ± 0.03 %RH/K (k=1)	0.1 °C 0.1 %RH	0572 2165



Customised probes on request.

Further information at www.testo-sensor.de

Analog temperature probe

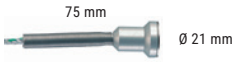
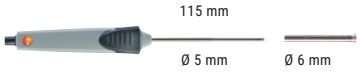
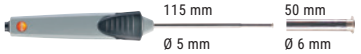
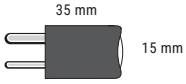
Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	Response time	Order no.
Pipe wrap probe (NTC) for pipe diameters of 5 to 65 mm, fixed cable 1.2 m		-50 to +120 °C	±0.2 °C (-25 to +80 °C)		0615 5605
Temperature probe with Velcro (NTC), fixed cable 1.4 m		-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)	60 s	0615 4611
Watertight immersion/ penetration probe NTC, fixed cable 1.2 m		-50 to +150 °C	±0.5% of m.v. (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining meas. range)	10 s	0615 1212
Robust air probe NTC, fixed cable 1.2 m		-50 to +125 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining meas. range)	60 s	0615 1712
Clamp probe for measurements on pipes from 6 to 35 mm diameter, NTC, fixed cable 1.5 m		-40 to +125 °C	±1 °C (-20 to +85 °C)	60 s	0615 5505
Robust air probe, TC type K, fixed cable		-60 to +400 °C	Class 2 [1]	200 sec	0602 1793
Very fast-reaction surface probe with sprung thermocouple strip, also suitable for uneven surfaces, measuring range briefly up to +500 °C, TC type K, fixed cable		-60 to +300 °C	Class 2 [1]	3 sec	0602 0393
Fast-reaction paddle surface probe, for measurements in places that are difficult to access (e.g. narrow openings and cracks), thanks to flat, flexible tip, TC Type K, fixed cable		0 to +300 °C	Class 2 [1]	5 sec	0602 0193
Precise, watertight surface probe with small measuring head for even surfaces, TC type K, fixed cable		-60 to +1000 °C	Class 1 [1]	20 sec	0602 0693
Very fast-reaction surface probe with sprung thermocouple strip, angled for uneven surfaces as well, measuring range briefly up to +500 °C, TC type K, fixed cable		-60 to +300 °C	Class 2 [1]	3 sec	0602 0993

1) According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (type K), of Class 2 to -40 to +1200 °C (type K) and of Class 3 to -200 to +40 °C (type K). A probe only ever complies with one accuracy class.

Information about surface measurement:

- The specified response times t99 are measured on polished steel or aluminium plates at +60 °C.
- The specified accuracies are sensor accuracies.
- The accuracy in your application depends on the surface properties (roughness), the material of the measurement object (thermal capacity and heat transfer) and the sensor accuracy. Testo will produce a corresponding calibration certificate for the deviations of your measurement system in your application. For this, Testo uses a surface test bed developed in cooperation with the PTB (Physikalisch Technische Bundesanstalt - National Metrology Institute of Germany).

Analog temperature probe

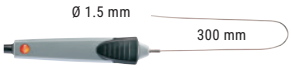
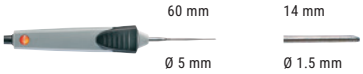
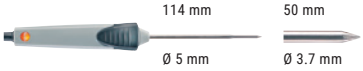
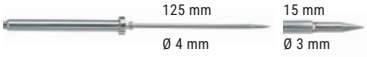
Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	Response time	Order no.
Surface temperature probe TC type K, with telescope max. 985 mm, for measurements in locations that are difficult to access, fixed cable 1.6 m (correspondingly shorter when telescope is extended)		-50 to +250 °C	Class 2 [1]	3 sec	0602 2394
Magnetic probe, adhesive power approx. 20 N, with adhesive magnets, for measurements on metal surfaces, TC type K, fixed cable		-50 to +170 °C	Class 2 [1]	150 sec	0602 4792
Magnetic probe, adhesive power approx. 10 N, with adhesive magnets, for higher temperatures, for measurements on metal surfaces, TC type K, fixed cable		-50 to +400 °C	Class 2 [1]		0602 4892
Watertight surface probe with wider measuring tip for even surfaces, TC type K, fixed cable		-60 to +400 °C	Class 2 [1]	30 sec	0602 1993
Watertight NTC surface probe for flat surfaces, fixed cable 1.2 m		-50 to +150 °C [2]	±0.5% of m.v. (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining meas. range)	35 s	0615 1912
Pipe wrap probe with Velcro strip, for measuring temperatures on pipes with diameters up to max. 120 mm, Tmax +120 °C, TC type K, fixed cable		-50 to +120 °C	Class 1 [1]	90 sec	0628 0020
Pipe wrap probe for pipe diameters 5 to 65 mm, with interchangeable measuring head, measuring range briefly up to +280 °C, TC type K, fixed cable		-60 to +130 °C	Class 2 [1]	5 sec	0602 4592
Replacement measuring head for pipe wrap probe, TC type K		-60 to +130 °C	Class 2 [1]	5 sec	0602 0092

[1] According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (type K), of Class 2 to -40 to +1200 °C (type K) and of Class 3 to -200 to +40 °C (type K). A probe only ever complies with one accuracy class.

Information about surface measurement:

- The specified response times t99 are measured on polished steel or aluminium plates at +60 °C.
- The specified accuracies are sensor accuracies.
- The accuracy in your application depends on the surface properties (roughness), the material of the measurement object (thermal capacity and heat transfer) and the sensor accuracy. Testo will produce a corresponding calibration certificate for the deviations of your measurement system in your application. For this, Testo uses a surface test bed developed in cooperation with the PTB (Physikalisch Technische Bundesanstalt - National Metrology Institute of Germany).

Analog temperature probe

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	Response time	Order no.
Precise and fast immersion probe, flexible, watertight, TC type K, fixed cable		-60 to +1000 °C	Class 1 [1]	2 sec	0602 0593
Ultra-fast, watertight immersion/penetration probe, TC type K, fixed cable		-60 to +800 °C	Class 1 [1]	3 sec	0602 2693
Immersion measuring tip, flexible, TC type K		-40 to +1000 °C	Class 1 [1]	5 sec	0602 5792
Immersion measuring tip, flexible, for measurements in air/flue gases (not suitable for measurements in smelters), TC type K		-40 to +1000 °C	Class 1 [1]	4 sec	0602 5693
Watertight immersion/ penetration probe, TC type K, fixed cable		-60 to +400 °C	Class 2 [1]	7 sec	0602 1293
Flexible, low-mass immersion measuring tip, ideal for measurements in small volumes, such as Petri dishes, or for surface measurements (e.g. fixed with adhesive tape)	TC type K, 2 m, FEP-insulated thermal wire, temperature-resistant up to 200 °C, oval cable with dimensions: 2.2 mm x 1.4 mm	-40 to +1000 °C	Class 1 [1]	1 sec	0602 0493
Watertight food probe made of stainless steel (IP65), TC type K, fixed cable		-60 to +400 °C	Class 2 [1]	7 sec	0602 2292
Stainless steel NTC food probe (IP67) with PTFE cable up to +250 °C, fixed cable 1.5 m		-50 to +150 °C [2]	±0.5% of m.v. (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining meas. range)	8 s	0615 3311

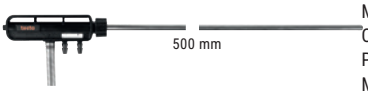
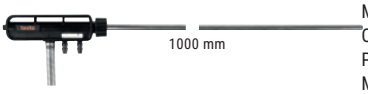
[1] According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (type K), of Class 2 to -40 to +1200 °C (type K) and of Class 3 to -200 to +40 °C (type K). A probe only ever complies with one accuracy class.

Analog probes

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	t99	Order no.
Thermoelectric couples					
Thermoelectric couple with TC plug, flexible, length 800 mm, glass fibre, TC type K	800 mm Ø 1.5 mm	-50 to +400 °C	Class 2 [1]	5 sec	0602 0644
Thermoelectric couple with TC plug, flexible, length 1500 mm, glass fibre, TC type K	1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2 [1]	5 sec	0602 0645
Thermoelectric couple with TC plug, flexible, length 1500 mm, PTFE, TC type K	1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2 [1]	5 sec	0602 0646
Comfort probe					
Globe thermometer Ø 150 mm, TC type K, for measuring radiant heat		0 to +120 °C	Class 1 [1]		0602 0743
WBGT kit for testo 400					
WBGT kit (Wet Bulb Globe Temperature) for evaluating workplaces with heat immission based on ISO 7243 and DIN 33403-3, incl. transport case and tripod	Globe thermometer 150 mm (TC Type K)	0 to +120 °C	Class 1 [1]		0618 7220
	Ambient temperature probe (Pt100)	+10 to +60 °C	±(0.3 °C + 0.3 % of m.v.)		
	Wet bulb temperature probe (Pt100)	+5 to +40 °C	±(0.3 °C + 0.3 % of m.v.)		

[1] According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (type K), of Class 2 to -40 to +1200 °C (type K) and of Class 3 to -200 to +40 °C (type K). A probe only ever complies with one accuracy class.

Pitot tubes

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Order no.
Pitot tube, length 500 mm, Ø 7 mm, stainless steel, for measuring flow velocity*		Measuring range 1 to 100 m/s Operating temperature 0 to +600 °C Pitot tube factor 1.0	0635 2045
Pitot tube, length 350 mm, Ø 7 mm, stainless steel, for measuring flow velocity*		Measuring range: 1 to 100 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 1.0	0635 2145
Pitot tube, length 1000 mm, stainless steel, for measuring flow velocity*		Measuring range: 1 to 100 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 1.0	0635 2345
Straight Pitot tube with integrated temperature measurement, including connection hose, length 360 mm		Measuring range: 1 to 30 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 0.67 Minimum immersion depth: 150 mm	0635 2043
Straight Pitot tube with integrated temperature measurement, including connection hose, length 500 mm		Measuring range: 1 to 30 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 0.67 Minimum immersion depth: 150 mm	0635 2143
Straight Pitot tube with integrated temperature measurement, including connection hose, length 1000 mm		Measuring range: 1 to 30 m/s Operating temperature: 0 to +600 °C Pitot tube factor: 0.67 Minimum immersion depth: 150 mm	0635 2243

*Connection hose required (order no. 0554 0440) or (order no. 0554 0453)

testo 420 volume flow hood

testo 420 set

— testo 420 volume flow hood, with measuring instrument, body, 610 x 610 mm flow hood, 5 x tension rods, USB cable, batteries and trolley, incl. calibration protocol

Order no.
0563 4200

Compatability	Connection to testo 400 via Bluetooth® interface
Weight	2.9 kg
Standard hood	610 x 610 mm
Battery life	40 h (Zeroing interval 10 seconds, display illumination off, Bluetooth off)

Display	Dot matrix with illumination 3.5 inch
Memory	2 GB internal (approx. 18,000 measurements)
Data transmission	Bluetooth®, e.g. for connection to testo 400

		Order no.
Air flow velocity matrix, telescope with ball head, length 1.8 m, with 2 x 2 m connection hose, silicon-free, with Velcro attachment on the telescope, for connection to differential pressure measuring instrument		8721 0025

Accessories

Accessories for comfort level measurement	Order no.
IAQ data logger for long-term measurements with the testo 400	0577 0400
Measuring tripod for comfort level measurements with standard-compliant positioning of probes (including bag)	0554 1591

Accessories for digital flow probes	Order no.
Extendable telescope for testo 400 / 440 flow probes (37.5 to 100 cm including 90° angle)	0554 0960
Telescope extension (0.9 m) for testo 400 / 440 flow probes	
90° angle for connecting vane probes (Ø 100 mm)	0554 0991
Handle adapter for connection to flow probes	0554 2160
Telescopic rod with universal joint for testo 400 / testo 440 / testo 480 flow velocity probes (0.6 to 1.8 m)	0430 0946
Measuring tripod for flow measurements for standard-compliant positioning of probes, incl. tripod base and probe holder	0554 1592

Other accessories	Order no.
Transport case for air flow measurement (520 x 410 x 160 mm)	0516 1400
Transport case for IAQ and comfort level measurement (520 x 410 x 210 mm)	0516 2400
testovent 417 funnel kit comprising funnel for plate outlets (Ø 200 mm) and funnel for fans (330 x 330 mm) for incoming / outgoing air	0563 4170
testovent 417 volume flow straightener	0554 4172
USB power supply incl. cable	0554 1106
Connection hose, silicone, length 5 m, maximum load capacity 700 hPa (mbar)	0554 0440
Connection hose, silicone-free for differential pressure measurement, length 5 m, maximum load capacity 700 hPa (mbar)	0554 0453
Control and calibration kit for Testo humidity probes, saline solution with 11.3 %RH and 75.3 %RH, including adapter for Testo humidity probes	0554 0660

Printer	Order no.
Mobile BT®/ IRDA printer incl. 1 roll of thermal paper, rech. battery and mains unit	0554 0622
Spare thermal paper for printer (6 rolls), measurement data documentation can be read for up to 10 years	0554 0568

PC software testo DataControl for data analysis, download available free of charge after registration at www.testo.com

Accessories

Calibration certificates	Order no.
ISO flow calibration certificate; hot wire/vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s	0520 0004
ISO flow calibration certificate; hot wire/vane anemometer, Pitot tube; calibration points 0.3; 0.5; 0.8; 1.5 m/s	0520 0024
ISO flow calibration certificate; hot wire/vane anemometer, Pitot tube; calibration points 5; 10; 15; 20 m/s	0520 0034
ISO flow calibration certificate; hot wire/vane anemometer, Pitot tube; selective calibration points in the 0.5 to 27 m/s range	0520 0104
DAkkS flow calibration certificate; hot wire/vane anemometer, Pitot tube; selective calibration points in the 0.1 to 27 m/s range	0520 0214
DAkkS flow calibration certificate; hot wire/vane anemometer, Pitot tube; calibration points 0.5; 1; 2; 5; 10 m/s	0520 0244
ISO pressure calibration certificate; 5 calibration points; accuracy > 0.6% of f.v.	0520 0005
ISO pressure calibration certificate; 5 calibration points; accuracy 0.1 to 0.6% of f.v.	0520 0025
DAkkS pressure calibration certificate; 5 calibration points; accuracy > 0.6% of f.v.	0520 0225
ISO humidity calibration certificate, electronic hygrometer; calibration points 11.3 %RH and 75.3 %RH at +25 °C	0520 0006

Calibration certificates	Order no.
ISO humidity calibration certificate; electronic hygrometer; calibration points 11.3; 50; 75.3 %RH at +25 °C	0520 0166
DAkkS humidity calibration certificate; electronic hygrometer; calibration points 11.3 %RH and 75.3 %RH at +25 °C	0520 0206
DAkkS humidity calibration certificate; electronic hygrometer; selective calibration points 5 to 95 %RH at -18 to +70 °C	0520 0216
ISO temperature calibration certificate, for air/immersion probe, calibration points -18°C; 0 °C; +60 °C	0520 0001
ISO temperature calibration certificate for air/immersion probe, selective calibration points in the -196 to +1200 °C range	0520 0101
DAkkS temperature calibration certificate for air/immersion probe, selective calibration points in the -196 to +1000 °C range	0520 0201
DAkkS temperature calibration certificate; measuring instruments with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C	0520 0211
ISO luminous intensity calibration certificate; calibration points 0; 500; 1000; 2000; 4000 lux	0520 0010
ISO luminous intensity calibration certificate; selective calibration points in the 0; 50 to 10,000 lux range	0520 0123
ISO CO_2 calibration certificate; CO_2 probes; calibration points 0; 1000; 5000 ppm	0520 0033

Subject to change without notice. 1981 1314/NON EU/dk/10.2026