

# The testo 440 probe system

Completely versatile: a universal handle for all air velocity & IAQ probes. This saves space and reduces weight, enabling you to perform accurate measurements in any application.

With the testo 440, you can handle any air conditioning and ventilation system measurements that come your way.

**testo 440 probe handle, adapter and telescope for testo 440 air velocity probes**

**testo 440 probe handle and adapter for testo 440 air velocity probes**

**testo 440 probe handle (Bluetooth or fixed cable)**

0.63 inch vane probe head incl. temperature sensor

Hot wire probe head incl. temperature and humidity sensor

High-precision 4 inch vane probe head incl. temperature sensor

4 inch vane probe head incl. temperature sensor

**testo 440 probe heads for air velocity incl. temperature and humidity sensor**

CO probe head

CO<sub>2</sub> probe head incl. temperature and humidity sensor

High-precision humidity probe head

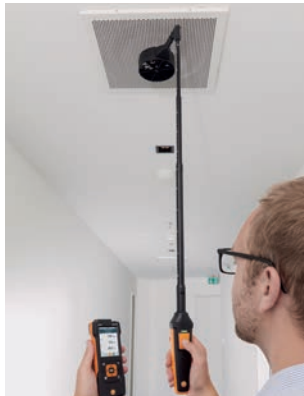
Humidity probe head

**Probe heads for humidity, CO, CO<sub>2</sub> and temperature**

## Advantages during measurement



All testo 440 air velocity probes for measurements in ducts have an optional scaled, extendible telescope (extends from 3 to 6.5 feet).



The 4 inch vane probe can be easily combined with the 90° angle and telescope, making measurements at ceiling outlets easier.



Do you need to carry out measurements in places where Bluetooth isn't possible? No problem: simply switch the probe head over from Bluetooth to the cable handle and you're ready to go.









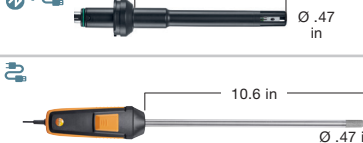
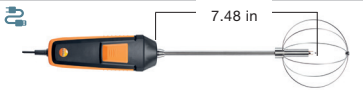
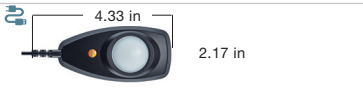









With the testo 440 dP model, which includes a differential pressure sensor, you can ensure that the filters in air conditioning systems are working properly and no contamination in the outdoor air gets indoors.

# Digital air velocity probes

Probe type		Measuring range	Accuracy	Resolution	Order no.
<b>Digital air velocity probes</b>					
Hot wire probe with Bluetooth, incl. temperature and humidity sensor					0635 1571
Hot wire probe, fixed cable, incl. temperature and humidity sensor		0 to 9842.5 fpm -4 to 158°F 5 to 95% RH	±(5.91 fpm + 4% of m.v.) (0 to 3937 fpm) ±(98.4 fpm + 5% of m.v.) (3939 to 5905.5 fpm) ±0.9 °F (32 to 158 °F) ±1.4 °F (-4 to 32 °F) ±3.0% RH (10 to 35% RH) ±2.0% RH (35 to 65% RH) ±3.0% RH (65 to 90% RH) ±5% RH (remaining meas. range)	1.97 fpm 0.1 °F 0.1% RH	0635 1572
Hot wire probe head, incl. temperature and humidity sensor					0635 1570
Vane probe (Ø 0.63 inch) with Bluetooth, incl. temperature sensor					0635 9571
Vane probe (Ø 0.63 inch), fixed cable, incl. temperature sensor		118 to 9842.5 fpm 14 to 158 °F	±(39.37 fpm + 1% of m.v.) (118 to 7874 fpm) ±(39.37 fpm + 2% of m.v.) (7874 to 9842.5 fpm) ±3.2 °F	1.97 fpm 0.1 °F	0635 9572
Vane probe head (Ø 0.63 inch), incl. temperature sensor					0635 9570
Hot wire probe, fixed cable, incl. temperature sensor		0 to 5905.5 fpm -4 to 158 °F	±(1.97 fpm + 4% of m.v.) (0 to 3937 fpm) ±(98.42 fpm + 5% of m.v.) ±0.9 °F	1.97 fpm 0.1 °F	0635 1032
Vane probe (Ø 0.63 inch) fixed cable		118 to 9842.5 fpm	±(39.37 fpm + 1% of m.v.) (118 to 7874 fpm) ±(39.37 fpm + 2% of m.v.) (7874 to 9842.5 fpm)	19.7 fpm	0635 9532
Fume hood probe, fixed cable		0 to 984.25 fpm 32 to +122 °F	±(39.37 fpm + 5% of m.v.) (0 to 984.25 fpm) ±0.9 °F	1.97 fpm 0.1 °F	0635 1052
<b>To measure flows in ducts with a large cross-section, we recommend an extension set (0554 0990). This enables the telescope to be extended to up to 6.5 feet for all air velocity probes with an interchangeable handle.</b>					
High-precision vane probe (Ø 4 inch) with Bluetooth, including temperature sensor					0635 9371
High-precision vane probe (Ø 4 inch), fixed cable, incl. temperature sensor		19.7 to 2952.8 fpm -4 to 158 °F	±(1.97 fpm + 1.5% of m.v.) (19.7 to 2952.8 fpm) ±0.9 °F	1.97 fpm 0.1 °F	0635 9372
High-precision vane probe head (Ø 4 inch), incl. temperature sensor					0635 9370
Vane probe (Ø 4 inch) with Bluetooth, incl. temperature sensor					0635 9431
Vane probe (Ø 4 inch), fixed cable, incl. temperature sensor		59 to 6889.8 fpm -4 to 158°F	±(0.1 m/s + 1.5% of m.v.) 59 to 3937 fpm) ±(39.37 fpm + 1.5% of m.v.) (3939 to 6889.76 fpm) ±0.9 °F	1.97 fpm 0.1 °F	0635 9432
Vane probe head (Ø 4 inch), incl. temperature sensor					0635 9430
<b>For convenient ceiling measurements, the telescope with 90° angle (0550 0960) has been developed. It can be easily attached to the 4 inch vane probes.</b>					

<sup>1)</sup> For use with cable handle (order no. 0554 2222) or Bluetooth handle (order no. 0554 1111) in conjunction with an adapter (order no. 0554 2160).

# Other digital probes and probe accessories

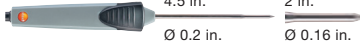


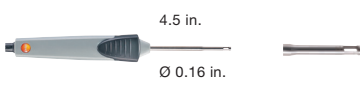

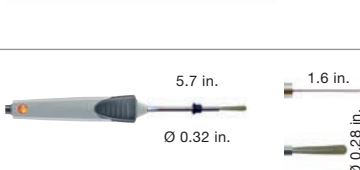
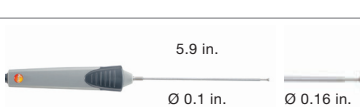
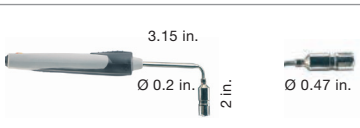
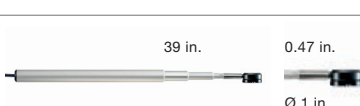
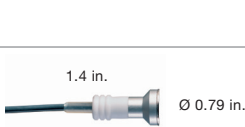
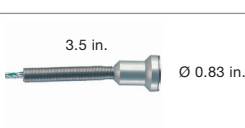
Probe type		Measuring range	Accuracy	Resolution	Order no.
<b>Digital humidity probes</b>					
Humidity/temperature probe with Bluetooth		0 to 100% RH -4 to 158°F	±2% RH (5 to 90% RH) ±0.9 °F	0.1% RH 0.1 °F	0636 9731
Humidity/temperature probe, fixed cable					0636 9732
Humidity/temperature probe head					0636 9730
High-precision humidity/temperature probe with Bluetooth		0 to 100% RH -4 to 158°F	±(0.6% RH + 0.7% of m.v.) (0 to 90% RH) ±(1.0% RH + 0.7% of m.v.) (90 to 100% RH) ±0.5 °F (59 to 86 °F) ±0.9 °F (remaining meas. range)	0.01% RH 0.1 °F	0636 9771
High-precision humidity/temperature probe, fixed cable					0636 9772
High-precision humidity/temperature probe head					0636 9770
Robust humidity/temperature probe for temperatures up to 356 °F, fixed cable		0 to 100% RH -4 to 356°F	±3% RH (0 to 2% RH) ±2% RH (2.1 to 98% RH) ±3% RH (98.1 to 100% RH) ±0.9 °F (-4 to 32 °F) ±0.7 °F (32 to 122°F) ±0.9 °F (122 to 356 °F)	0.1% RH 0.1 °F	0636 9775
<b>Digital comfort probes</b>					
Turbulence probe, fixed cable		0 to 984.25 fpm 32 to 122 °F	±(5.9 fpm + 4% of m.v.) (0 to 984.25 fpm) ±0.9 °F	1.97 fpm 0.1 °F	0628 0152
Lux probe, fixed cable		0 to 100,000 lux	DIN EN 13032-1 Appendix B Class C according to DIN 5032-7	0.1 lux (< 10,000 lux) 1 lux (≥ 10,000 lux)	0635 0551
CO <sub>2</sub> probe with Bluetooth, incl. temperature and humidity sensor		0 to 10,000 ppm CO <sub>2</sub> 5 to +95% RH 32 to 122 °F	±(50 ppm + 3% of m.v.) (0 to 5000 ppm) ±(100 ppm + 5% of m.v.) (5001 to 10,000 ppm) ±3% RH (10 to 35% RH) ±2% RH (35 to 65% RH) ±3% RH (65 to 90% RH) ±5% RH (remaining meas. range) ±0.9 °F	1 ppm 0.1% RH 0.1 °F	0632 1551
CO <sub>2</sub> probe, fixed cable, incl. temperature and humidity sensor					0632 1552
CO <sub>2</sub> probe head incl. temperature and humidity sensor					0632 1550
CO probe with Bluetooth		0 to 500 ppm	±3 ppm (0 to 30 ppm) ±10% of m.v. (30.1 to 500 ppm)	0.1 ppm	0632 1271
CO probe, fixed cable					0632 1272
CO probe head					0632 1270
<b>Probe handle and adapter</b>					
Cable handle for connecting testo 440 probe heads					0554 2222
Bluetooth handle for connecting testo 440 probe heads					0554 1111
Handle adapter for connecting testo 440 air velocity probes					0554 2160

<sup>2)</sup> For use with cable handle (order no. 0554 2222) or Bluetooth handle (order no. 0554 1111).

# testo Smart Probes

testo Smart Probes		Measuring range	Accuracy ±1 digit	Resolution	Order no.
<b>Temperature</b>					
<b>testo 115i</b> Clamp thermometer with smartphone operation, for measurements on pipelines with diameters of 0.25 to 1.5 inches, incl. batteries and calibration protocol		-40 to 302 °F	±2.3 °F (-4 to 185 °F)	0.1 °F	0560 1115
<b>testo 905i</b> Thermometer with smartphone operation, including batteries and calibration protocol		-58 to 302 °F	±2 °F	0.1 °F	0560 1905
<b>testo 805i</b> Infrared thermometer with smartphone operation, including batteries and calibration protocol		-22 to 482 °F	2.7 °F or ±1.5 % of mv (32 to 482 °F) ±4 °F (-4 to 32 °F) ±4.5 °F (-22 to -4.2 °F)	0.1 °F	0560 1805
<b>Humidity</b>					
<b>testo 605i</b> Thermohygrometer with smartphone operation, including batteries and calibration protocol		0 to 100% RH -4 to 140 °F	±(1.8% RH + 3% of m.v.) at 77 °F (5 to 80% RH) ±1.4 °F (-4 to 32 °F) ±0.9 °F (32 to 140 °F)	0.1% RH 0.1 °F	0560 1605
<b>Flow</b>					
<b>testo 405i</b> Thermal anemometer with smartphone operation, telescopic tube extendible to up to 15.75 inches, incl. batteries and calibration protocol		0 to 5906 fpm -4 to 140 °F	±(19.7 fpm + 5 % of mv) (0 to 394 fpm) ±(59.1 fpm + 5 % of mv) (394 to 2953 fpm) ±0.9 °F	1.97 fpm 0.1 °F	0560 1405
<b>testo 410i</b> Vane anemometer with smartphone operation, including batteries and calibration protocol		78.7 to 5906 fpm -4 to 140 °F	±(39.4 fpm + 2 % of mv) (78.7 to 3937 fpm) ±0.9 °F	19.7 fpm 0.1 °F	0560 1410
<b>Pressure</b>					
<b>testo 510i</b> Differential pressure measuring instrument with smartphone operation, including hose set (Ø 0.15 in. and 0.2 in.) with adapter, batteries and calibration protocol		-60 to +60 InH <sub>2</sub> O	±0.02 InH <sub>2</sub> O ±(0.1 InH <sub>2</sub> O +1.5 % of mv) (+0 to +60 InH <sub>2</sub> O)	0.004 InH <sub>2</sub> O	0560 1510
<b>testo 549i</b> High-pressure measuring instrument with smartphone operation, including batteries and calibration protocol		-14 to +870 psi	0.5% of final value	0.14 psi	0560 1549

# Analog temperature probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Watertight immersion/penetration probe NTC, fixed cable 4 feet		-58 to 302 °F	±0.5 % of mv (212 to 302 °F) ±0.4 °F (-13 to 166.8 °F) ±0.7 °F (Remaining Range)	10 s	0615 1212
Robust air probe, NTC, fixed cable 4 feet		-58 to 257 °F	±0.4 °F (-13° to 176 °F) ±0.7 °F (Remaining Range)	60 s	0615 1712
Clamp probe for measurements on pipes from 0.25 to 1.5 in. diameter, NTC, fixed cable 5 feet		-40 to 257 °F	±1.8 °F (-4 to 185 °F)	60 s	0615 5505
Robust air probe, TC type K, fixed cable		-76 to 752 °F	Class 2 <sup>1)</sup>	200 s	0602 1793
Fast-reaction surface probe with sprung thermocouple strip, also suitable for non-plane surfaces, measuring range briefly up to 932 °F, TC type K, fixed cable		-76 to 572 °F	Class 2 <sup>1)</sup>	3 s	0602 0393
Fast-reaction paddle surface probe, for measurements in places that are difficult to access, e.g. narrow openings and cracks, TC type K, fixed cable		32 to 572 °F	Class 2 <sup>1)</sup>	5 s	0602 0193
Precise, watertight surface probe with small measuring head for plane surfaces, TC type K, fixed cable		-76 to 1832 °F	Class 1 <sup>1)</sup>	20 s	0602 0693
Fast-reaction surface probe with sprung thermocouple strip, angled for non-plane surfaces as well, measuring range briefly up to 932 °F, TC type K, fixed cable		-76 to 572 °F	Class 2 <sup>1)</sup>	3 s	0602 0993
Surface temperature probe TC type K, with telescope max. 39 in., for measurements in places that are difficult to access, fixed cable 5.25 ft. (correspondingly shorter when telescope is extended)		-58 to 482 °F	Class 2 <sup>1)</sup>	3 s	0602 2394
Magnetic probe, adhesive power approx. 20 N, with magnets, for measurements on metal surfaces, TC type K, fixed cable		-58 to 338 °F	Class 2 <sup>1)</sup>	150 s	0602 4792
Magnetic probe, adhesive power approx. 10 N, with magnets, for higher temperatures, for measurements on metal surfaces, TC type K, fixed cable		-58 to 752 °F	Class 2 <sup>1)</sup>		0602 4892

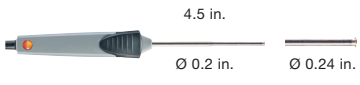

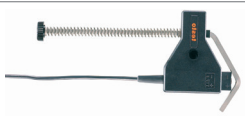
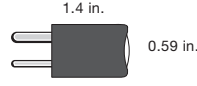


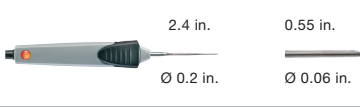
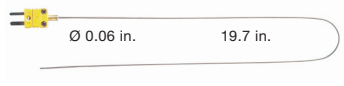


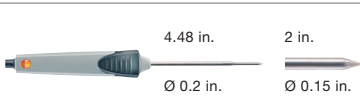
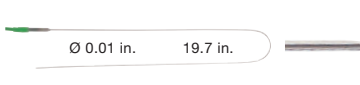
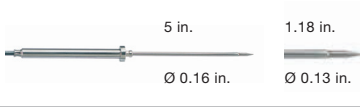
<sup>1)</sup> According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to 1832 °F (type K), Class 2 to -40 to 2192 °F (type K), Class 3 to -328 to 104 °F (type K). A probe only ever complies with one accuracy class.

## Information about surface measurement:

- The specified response times t<sub>99</sub> are measured on polished steel or aluminium plates at 140 °F.
- The specified accuracies are sensor accuracies.
- 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 probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
Watertight surface probe with wider measuring tip for plane surfaces, TC type K, fixed cable		-76 to 752 °F	Class 2 <sup>1)</sup>	30 s	0602 1993
Pipe wrap probe with Velcro strip, for measuring temperatures on pipes with diameters up to max. 4.7 in., Tmax 248 °F, TC type K, fixed cable		-58 to 248 °F	Class 1 <sup>1)</sup>	90 s	0628 0020
Pipe wrap probe for pipe diameters 0.2 in. to 2.5 in., with interchangeable measuring head, measuring range briefly up to 536 °F, TC type K, fixed cable		-76 to 266 °F	Class 2 <sup>1)</sup>	5 s	0602 4592
Replacement measuring head for pipe wrap probe, TC type K		-76 to 266 °F	Class 2 <sup>1)</sup>	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameters 0.5 to 1 in., measuring range briefly up to 266 °F, TC type K, fixed cable		-58 to 212 °F	Class 2 <sup>1)</sup>	5 s	0602 4692
Precise and fast immersion probe, flexible, watertight, TC type K, fixed cable		-76 to 1832 °F	Class 1 <sup>1)</sup>	2 s	0602 0593
Ultra-fast, watertight immersion/penetration probe, TC type K, fixed cable		-76 to 1472 °F	Class 1 <sup>1)</sup>	3 s	0602 2693
Immersion measuring tip, flexible, TC type K		-328 to 1832 °F	Class 1 <sup>1)</sup>	5 s	0602 5792
Immersion measuring tip, flexible, TC type K		-328 to 104 °F	Class 3 <sup>1)</sup>	5 s	0602 5793
Immersion measuring tip, flexible, for measurements in air/flue gases (not suitable for measurements in smelters), TC type K		-328 to 2372 °F	Class 1 <sup>1)</sup>	4 s	0602 5693
Watertight immersion/penetration probe, TC type K, fixed cable		-76 to 752 °F	Class 2 <sup>1)</sup>	7 s	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 392 °F, oval cable with dimensions: 0.09 x 0.06 in.	-328 to 1832 °F	Class 1 <sup>1)</sup>	1 s	0602 0493
Watertight food probe made of stainless steel (IP 65), TC type K, fixed cable		-76 to 752 °F	Class 2 <sup>1)</sup>	7 s	0602 2292

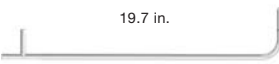
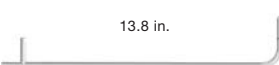

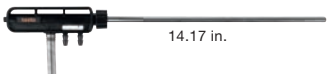

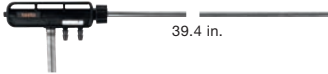
<sup>1)</sup> According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to 1832 °F (type K), Class 2 to -40 to 2192 °F (type K), Class 3 to -328 to +104 °F (type K). A probe only ever complies with one accuracy class.

## Analog probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Order no.
<b>Thermoelectric couples</b>					
Thermoelectric couple with TC plug, flexible, length 31.5 in., fibreglass, TC type K	 31.5 in. Ø 0.6 in.	-58 to 752 °F	Class 2 <sup>1)</sup>	5 s	0602 0644
Thermoelectric couple with TC plug, flexible, length 59 in., fibreglass, TC type K	 59 in. Ø 0.6 in.	-58 to 752 °F	Class 2 <sup>1)</sup>	5 s	0602 0645
Thermoelectric couple with TC plug, flexible, length 59 in., PTFE, TC type K	 59 in. Ø 0.6 in.	-58 to 482 °F	Class 2 <sup>1)</sup>	5 s	0602 0646
<b>Comfort probe</b>					
Globe thermometer Ø 5.9 in., TC type K, for measuring radiant heat		32 to 248 °F	Class 1 <sup>1)</sup>		0602 0743

<sup>1)</sup> According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to 1832 °F (type K), Class 2 to -40 to 2192 °F (type K), Class 3 to -328 to 104 °F (type K). A probe only ever complies with one accuracy class.

## Pitot tubes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Order no.
Pitot tube, length 19.7 in., Ø 0.3 in., stainless steel, for measuring flow velocity*	 19.7 in. Ø 0.3 in.	Measuring range 197 to 19685 fpm Operating temperature 32 to 1,112 °F Pitot tube factor 1.0	0635 2045
Pitot tube, length 13.8 in., Ø 0.3 in., stainless steel, for measuring flow velocity*	 13.8 in. Ø 0.3 in.	Measuring range 197 to 19685 fpm Operating temperature 32 to 1,112 °F Pitot tube factor: 1.0	0635 2145
Pitot tube, length 39.4 in., Ø 0.3 in., stainless steel, for measuring flow velocity*	 39.4 in. Ø 0.3 in.	Measuring range 197 to 19685 fpm Operating temperature 32 to 1,112 °F Pitot tube factor: 1.0	0635 2345
Straight Pitot tube with integrated temperature measurement, incl. connection hose, length 14.17 in.	 14.17 in.	Measuring range: 197 to 5906 fpm Operating temperature: 32 to 1,112 °F Pitot tube factor: 0.67 Minimum immersion depth: 5.9 in.	0635 2043
Straight Pitot tube with integrated temperature measurement, incl. connection hose, length 19.7 in.	 19.7 in.	Measuring range: 197 to 5906 fpm Operating temperature: 32 to 1,112 °F Pitot tube factor: 0.67 Minimum immersion depth: 5.9 in.	0635 2143
Straight Pitot tube with integrated temperature measurement, incl. connection hose, length 39.4 in.	 39.4 in.	Measuring range: 197 to 5906 fpm Operating temperature: 32 to 1,112 °F Pitot tube factor: 0.67 Minimum immersion depth: 5.9 in.	0635 2243

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