

## Air velocity & IAQ measuring instruments

- testo 440 air velocity & IAQ measuring instrument
- testo 440 dP air velocity & IAQ measuring instrument incl. differential pressure

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Intuitive: clearly structured measurement menus for the most important applications stored on the instrument

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Wireless: Bluetooth probes for greater measuring convenience and a reduced tangle of cables in the case

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Space-saving: a universal handle for all probes

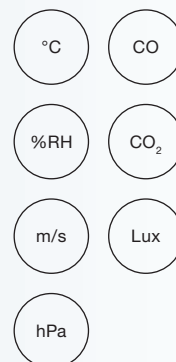
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Clear overview: parallel display of 3 measuring values; configuration and results at a glance

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Reliable: internal memory for up to 7500 measurement protocols, USB interface for data export and optional printout of measuring values

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Compatible with a wide selection of Bluetooth™ and wired probes.

The testo 440 combines the benefits of a compact handheld device with intuitive measurement menus and a comprehensive selection of air velocity & IAQ probes. This means you have all measuring tasks on air conditioning and ventilation systems reliably under control.

You can connect the testo 440 air velocity & IAQ measuring instrument either to a large selection of digital probes, the Testo Smart Probes or numerous Testo temperature probes. Clearly structured menus for measuring volume flow in ducts/at outlets, K-factor, degree of turbulence, cooling/heating load, mould indication and logging mode


are stored on the instrument. These menus enable you to accomplish the relevant measuring task more quickly, more efficiently and more reliably. Reports can be exported as Excel files via the USB interface or printed out on site.

The testo 440 air velocity & IAQ measuring instrument is available in two versions. The testo 440 dP model version also has an integrated differential pressure sensor. This makes measurements at filters as well as Pitot tube and K-factor measurements possible.

# Ordering data for testo 440

**testo 440**


Air velocity & IAQ measuring instrument, 3 x AA batteries, USB cable and calibration protocol.



Order no. 0560 4401

**testo 440 dP**

Air velocity & IAQ measuring instrument with integrated differential pressure sensor, connection hose, 3 x AA batteries, USB cable and calibration protocol.



Order no. 0560 4402

# Technical data testo 440

	testo 440	testo 440 dP
<b>Temperature (NTC)</b>		
Measuring range	-40 to +150 °C	
Accuracy (±1 digit)	±0.4 °C (-40 to -25.1 °C) ±0.3 °C (-25 to +74.9 °C) ±0.4 °C (+75 to +99.9 °C) ±0.5% of m.v. (remaining meas. range)	
Resolution	0.1 °C	
<b>Temperature (TC)</b>		
Measuring range	-200 to +1370 °C	
Accuracy (±1 digit)	±(0.3 °C + 0.3% of m.v.)	
Resolution	0.1 °C	
<b>Differential pressure</b>		
Measuring range		-150 to +150 hPa
Accuracy (±1 digit)	-	±0.05 hPa (0 to +1.00 hPa) ±0.2 hPa + 1.5% of m.v. (+1.01 ... +150 hPa)
Resolution		0.01 hPa
<b>Probe connections</b>		
TC type K		1x
NTC TUC / digital probe with cable		1x
Bluetooth probe	1x digital Bluetooth probe or testo Smart Probe	
Differential pressure	-	+
<b>Technical data</b>		
Operating temperature	-20 to +50 °C	
Storage temperature	-20 to +50 °C	
Battery type	3 x AA batteries	
Battery life	12 h (typically vane measurement)	
Weight	250 g	
Dimensions	154 x 65 x 32 mm	



The wired digital probes and the NTC probes of the testo 440 all have the practical TUC connection (Testo **U**niversal **C**onnector).

## Ordering data for kits

### Kits for measurement in ducts, at outlets and at filters

#### testo 440 delta P Air Flow ComboKit 1 with BT

- testo 440 dP air velocity & IAQ measuring instrument incl. differential pressure with internal memory and data export function
- Universal probe handle with Bluetooth
- Hot wire probe head incl. temperature and humidity sensor
- 100 mm vane probe head incl. temperature sensor
- Telescope (1 m) and 90° angle to fit both probes
- Combi case for testo 440 dP and multiple probes



Order no. 0563 4409

#### testo 440 delta P Air Flow ComboKit 2 with BT

- testo 440 dP air velocity & IAQ measuring instrument incl. differential pressure with internal memory and data export function
- Universal probe handle with Bluetooth
- 16 mm vane probe head incl. temperature sensor
- 100 mm vane probe head incl. temperature sensor
- Humidity probe head incl. temperature sensor
- Telescope (1 m) and 90° angle to fit both probes
- Combi case for testo 440 dP and multiple probes



Order no. 0563 4410

### Kits for measurements in ducts and at outlets

#### testo 440 Air Flow ComboKit 1 with BT

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- 100 mm vane probe with Bluetooth, incl. temperature sensor
- Hot wire probe with telescope (0.85 m) incl. temperature sensor, fixed cable (1.8 m)
- Measurement menu, e.g. for determining the volume flow
- Combi case for testo 440 and multiple probes



Order no. 0563 4406

#### testo 440 Air Flow ComboKit 2 with BT

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- 100 mm vane probe with Bluetooth, incl. temperature sensor
- 16 mm vane probe with telescope (0.85 m), fixed cable (1.8 m)
- Measurement menu, e.g. for determining the volume flow
- Combi case for testo 440 and multiple probes



Order no. 0563 4407

# Ordering data for kits

## Additional kits

### testo 440 Hot Wire Kit

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- Hot wire probe incl. temperature sensor, fixed cable (1.8 m) with telescope (0.85 m)
- Measurement menu, e.g. for determining the volume flow and timed and multi-point mean calculation
- Basic case for testo 440 and 1 probe



### testo 440 16 mm Vane Kit

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- Vane probe, fixed cable (1.8 m) with telescope (0.85 m)
- Measurement menu, e.g. for determining the volume flow and timed and multi-point mean calculation
- Basic case for testo 440 and 1 probe



### testo 440 100 mm Vane Kit with BT

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- 100 mm vane probe with Bluetooth, incl. temperature sensor
- Measurement menu, e.g. for determining the volume flow
- Basic case for testo 440 and 1 probe



Order no. 0563 4403

### testo 440 Indoor Comfort ComboKit with BT

- testo 440 air velocity & IAQ measuring instrument with internal memory and data export function
- Turbulence probe (400 mm)
- CO<sub>2</sub> probe with Bluetooth, incl. temperature and humidity sensor
- Combi case for testo 440 and multiple probes



Order no. 0563 4408

### testo 440 CO<sub>2</sub> Kit with BT

- testo 440 air velocity & IAQ measuring instrument
- CO<sub>2</sub> probe with Bluetooth, incl. temperature and humidity sensor
- Basic case for testo 440 and 1 probe



Order no. 0563 4405

### testo 440 Humidity Kit with BT

- testo 440 air velocity & IAQ measuring instrument
- Humidity and temperature probe with Bluetooth
- Basic case for testo 440 and 1 probe



Order no. 0563 4404

### testo 440 Lux Kit

- testo 440 air velocity & IAQ measuring instrument
- Lux probe
- Basic case for testo 440 and 1 probe



Order no. 0563 4402

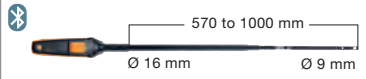
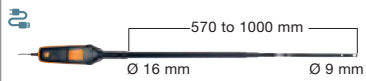
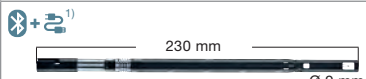
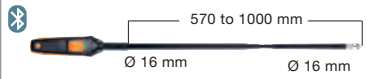


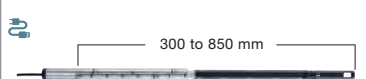
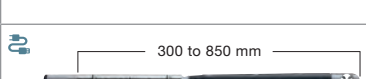







### testo 440 Laboratory kit

- testo 440 air velocity & IAQ measuring instrument
- Glass-coated digital Pt100 laboratory probe
- Basic case for testo 440 and 1 probe



Order no. 0563 4412

# Digital air velocity probes

Probe type		Measuring range	Accuracy	Resolution	Order no.
<b>Digital flow probes</b>					
Hot wire probe with Bluetooth, incl. temperature and humidity sensor		0 to 50 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) <sup>3)</sup> ±2.0 %RH (35 to 65 %RH) <sup>3)</sup> ±3.0 %RH (65 to 90 %RH) <sup>3)</sup> ±5 %RH (remaining meas. range) <sup>3)</sup> ±3 hPa	0.01 m/s 0.1 °C 0.1 %RH 0.1 hPa	0635 1571
Hot wire probe, fixed cable, incl. temperature and humidity sensor					0635 1572
Hot wire probe head, incl. temperature and humidity sensor					0635 1570
Vane probe (Ø 16 mm) with Bluetooth, incl. 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, incl. temperature sensor					0635 9572
Vane probe head (Ø 16 mm), incl. temperature sensor					0635 9570
Hot wire probe, fixed cable, incl. 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
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 hood probe, fixed cable		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
<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 2 m for all flow probes with an interchangeable handle.</b>					
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, incl. temperature sensor					0635 9372
High-precision vane probe head (Ø 100 mm), incl. temperature sensor					0635 9370
Vane probe (Ø 100 mm) with Bluetooth, incl. temperature sensor		0.3 to 35 m/s -20 to +70 °C	±(0.1 m/s + 1.5% of m.v.) (0.3 to 20 m/s) ±(0.2 m/s + 1.5% of m.v.) (20.01 to 35 m/s) ±0.5 °C	0.01 m/s 0.1 °C	0635 9431
Vane probe (Ø 100 mm), fixed cable, incl. temperature sensor					0635 9432
Vane probe head (Ø 100 mm), incl. temperature sensor					0635 9430




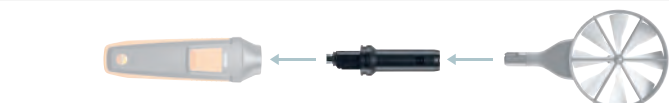
**For convenient ceiling measurements, the telescope with 90° angle (0550 0960) has been developed. It can simply be fitted to the 100 mm vane probes.**

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

<sup>3)</sup> Please see the additional accuracy information for humidity in the instruction manual.



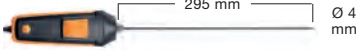
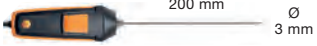



# Other digital probes and probe accessories

Probe type		Measuring range	Accuracy	Resolution	Order no.
<b>Digital humidity probes</b>					
Humidity/temperature probe with Bluetooth		0 to 100 %RH -20 to +70 °C	±2 %RH (5 to 90 %RH) <sup>3)</sup> ±0.5 °C	0.1 %RH 0.1 °C	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 -20 to +70 °C	±(0.6 %RH + 0.7% of m.v.) (0 to 90 %RH) <sup>3)</sup> ±(1.0 %RH + 0.7% of m.v.) (90 to 100 %RH) <sup>3)</sup> ±0.3 °C (15 to 30 °C) ±0.5 °C (remaining meas. range)	0.01 %RH 0.1 °C	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 +180 °C, fixed cable		0 to 100 %RH -20 to +180 °C	±3 %RH (0 to 2 %RH) <sup>3)</sup> ±2 %RH (2.1 to 98 %RH) <sup>3)</sup> ±3 %RH (98.1 to 100 %RH) <sup>3)</sup> ±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
<b>Digital comfort probes</b>					
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 <sub>2</sub> probe with Bluetooth, incl. temperature and humidity sensor		0 to 10,000 ppm CO <sub>2</sub> 5 to +95 %RH 0 to +50 °C 700 to 1100 hPa	±(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) <sup>3)</sup> ±2 %RH (35 to 65 %RH) <sup>3)</sup> ±3 %RH (65 to 90 %RH) <sup>3)</sup> ±5 %RH (remaining meas. range) <sup>3)</sup> ±0.5 °C ±3 hPa	1 ppm 0.1 %RH 0.1 °C 0.1 hPa	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 100 ppm 100.1 to 500 ppm	±3 ppm (0 to 30 ppm) ±5 ppm (30.1 to 100 ppm) ±10 % of m.v. (100.1 ... 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 flow probes					0554 2160

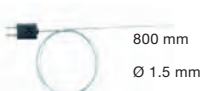
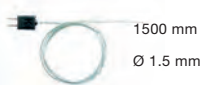
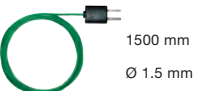

<sup>2)</sup> For use with cable handle (order no. 0554 2222) or Bluetooth handle (order no. 0554 1111).

<sup>3)</sup> Please see the additional accuracy information for humidity in the instruction manual.

## Digital temperature probes

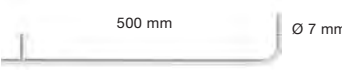
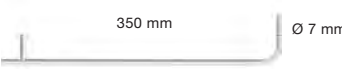
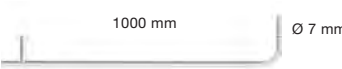

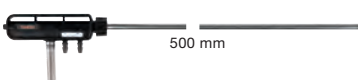

Probe type		Measuring range	Accuracy	Resolution	Order no.
<b>Digital temperature probes</b>					
<b>High-precision digital Pt100 penetration probe</b> for measurements in liquids and pastes with an accuracy of up to $\pm 0.05$ °C		-80 to +300 °C	$\pm 0.3$ °C (-80 to -40.001 °C) $\pm (0.1$ °C + 0.05% of m.v.) (-40 to -0.001 °C) $\pm 0.05$ °C (0 to +100 °C) $\pm (0.05$ °C + 0.05% of m.v.) (+100.001 to +300 °C)	0.001 °C	0618 0275
<b>Digital Pt100 penetration probe</b> for measurements in liquids and pastes		-100 to +400 °C	$\pm (0.15$ °C + 0.2% of m.v.) (-100 to -0.01 °C) $\pm (0.15$ °C + 0.05% of m.v.) (0 to +100 °C) $\pm (0.15$ °C + 0.2% of m.v.) (+100.01 to +350 °C) $\pm (0.5$ °C + 0.5% of m.v.) (+350.01 to +400 °C)	0.01 °C	0618 0073
<b>Glass-coated digital Pt100 laboratory probe</b> for measurements in corrosive media		-50 to +400 °C	$\pm (0.3$ °C + 0.3% of m.v.) (-50 to +300 °C) $\pm (0.4$ °C + 0.6% of m.v.) (+300.01 to +400 °C)	0.01 °C	0618 7072
<b>Robust, fast-reaction, digital Pt100 air probe</b>		-100 to +400 °C	$\pm (0.15$ °C + 0.2% of m.v.) (-100 to -0.01 °C) $\pm (0.15$ °C + 0.05% of m.v.) (0 to +100 °C) $\pm (0.15$ °C + 0.2% of m.v.) (+100.01 to +350 °C) $\pm (0.5$ °C + 0.5% of m.v.) (+350.01 to +400 °C)	0.01 °C	0618 0072
<b>Flexible digital Pt100 temperature probe</b> for measurements in locations that are difficult to access and in liquids		-100 to +260 °C	$\pm (0.3$ °C + 0.3% of m.v.)	0.01 °C	0618 0071

## Analogue 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 800 mm, fibreglass, TC type K	 800 mm Ø 1.5 mm	-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0644
Thermoelectric couple with TC plug, flexible, length 1500 mm, fibreglass, TC type K	 1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2 <sup>1)</sup>	5 s	0602 0645
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 <sup>1)</sup>	5 s	0602 0646
<b>Comfort probe</b>					
Globe thermometer Ø 150 mm, TC type K, for measuring radiant heat		0 to +120 °C	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 +1000 °C (type K), Class 2 to -40 to +1200 °C (type K), Class 3 to -200 to +40 °C (type K). A probe only ever complies with one accuracy class.


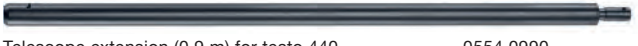






## Pitot tubes



Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Order no.
Pitot tube, length 500 mm, Ø 7 mm, stainless steel, for measuring flow velocity*	 500 mm Ø 7 mm	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*	 350 mm Ø 7 mm	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*	 1000 mm Ø 7 mm	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, incl. connection hose, length 360 mm	 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, incl. connection hose, length 500 mm	 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, incl. connection hose, length 1000 mm	 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)



## Accessories

Accessories for digital air velocity probes	Order no.
	
Extendible telescope for testo 440 air flow probes (37.5 to 100 cm incl. 90° angle)	0554 0960
	
Telescope extension (0.9 m) for testo 440 flow probes	0554 0990
Other accessories	Order no.
	
Measuring stand for comfort level measurements with standard-compliant positioning of probes (incl. case)	0554 1590
	
Combi case for testo 440 and multiple probes	0516 4401
	
Service case for volume flow measurement	0516 4900
	
testovent 417 funnel set comprising funnel for plate outlets (Ø 200 mm) and funnel for fans (330 x 330 mm) for incoming/outgoing air	0563 4170
	
Flow straightener testovent 417	0554 4172
	
USB mains unit incl. cable	0554 1105

Other accessories	Order no.
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 set for Testo humidity probes, saline solution with 11.3 %RH and 75.3 %RH, incl. adapter for Testo humidity probes	0554 0660
Printer	Order no.
 BLUETOOTH®/IRDA printer incl. battery and mains unit	0554 0621
 Spare thermal paper for printer (6 rolls), measurement data documentation can be read for up to 10 years	0554 0568
Calibration certificates	Order no.
ISO calibration certificate (temperature), for air/immersion probe, calibration points -18 °C; 0 °C; +60 °C	0520 0001
DAkkS calibration certificate (temperature); measuring instruments with air/immersion probe; calibration points -20 °C; 0 °C; +60 °C	0520 0211
ISO calibration certificate humidity, calibration points 11.3 %RH and 75.3 %RH at +25 °C	0520 0006
DAkkS calibration certificate (humidity); electronic hygrometer; calibration points 11.3 %RH and 75.3 %RH at +25 °C	0520 0206
ISO calibration certificate (pressure); accuracy > 0.6 (% of f.v.)	0520 0005
ISO calibration certificate flow, hot wire, vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s	0520 0004
ISO calibration certificate flow, hot wire, vane anemometer, Pitot tube; calibration points 5; 10; 15; 20 m/s	0520 0034
ISO calibration certificate (luminance) calibration points 0; 500; 1000; 2000; 4000 lux	0520 0010
ISO calibration certificate (CO <sub>2</sub> ; CO <sub>2</sub> probes); calibration points 0; 1000; 5000 ppm	0520 0033

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