

testo – Smart Probes

testo 115i (0560 1115/ 0560 2115), testo 405i (0560 1405), testo 410i (0560 1410), testo 510i (560 1510), testo 549i (0560 1549/ 0560 2549), testo 552i (0560 1552/ 0560 2552) testo 605i (0560 1605/ 0560 2605), testo 805i (0560 1805), testo 905i (0560 1905), testo 915i (0560 1915)

Instruction manual



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2 Safety and the environment

2.1. About this document

Use

- Please read this documentation through carefully and familiarize yourself with the product before putting it to use. Pay particular attention to the safety instructions and warning advice in order to prevent injuries and damage to the products.
- Keep this document to hand so that you can refer to it when necessary.
- Hand this documentation on to any subsequent users of the product.

Symbols and writing standards

Representation	Explanation
\triangle	Warning advice, risk level according to the signal word:
	Warning! Serious physical injury may occur.
	Caution! Slight physical injury or damage to the equipment may occur.
	 Implement the specified precautionary measures.
1	Note: Basic or further information.
1 2	Action: more steps, the sequence must be followed.
>	Action: a step or an optional step.
	Result of an action.
Menu	Elements of the instrument, the instrument display or the program interface.
[OK]	Control keys of the instrument or buttons of the program interface.
	Functions/paths within a menu.
" "	Example entries

2.2. Ensure safety

- Do not operate the instrument if there are signs of damage at the housing, mains unit or feed lines.
- Do not perform contact measurements on non-insulated, live parts.
- Do not store the product together with solvents. Do not use any desiccants.
- Carry out only the maintenance and repair work on this instrument that is described in the documentation. Follow the prescribed steps exactly. Use only original spare parts from Testo.
- Dangers may also arise from the systems being measured or the measuring environment: Note the safety regulations valid in your area when performing the measurements.

2.2.1. Safety and the testo 510i/605i/915i

Magnetic field!

May be harmful to those with pacemakers.

- Keep a minimum distance of 10 cm between pacemaker and instrument.

2.2.2. Safety and the testo 605i

Not for condensing atmospheres. For continuous application in
high humidity (> 80 %RH at \leq 30 °C for > 12 h, > 60 %RH at >
30 °C for > 12 h), contact us via www.testo.com.

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The sensor must not be exposed to volatile chemicals such as solvents (e.g. ketene, ethanol, isopropyl alcohol, toluene) or organic compounds, especially in high concentrations and corresponding gases, over a prolonged period of time.

2.2.3. Safety and the testo 549i/552i

Risk of injury due to pressurized, hot, cold or toxic refrigerants/media!

- Only to be used by qualified staff.
- Wear protective goggles and safety gloves.
- Before applying pressure to the measuring instrument: always fix the instrument tightly onto the pressure connection
- Comply with the permissible measuring range (0 to 60 bar). Pay particular attention to this in systems with R744 refrigerant, since these are frequently operated at higher pressures!
- Use with A2L refrigerants

Testo measuring instruments (as of July 2020) can be used in compliance with the prescribed laws, standards, directives and safety regulations for refrigeration systems and refrigerants as well as regulations of the manufacturers of refrigerants of safety group A2L as per ISO 817.

Regional standardization and interpretation must always be observed.

For example, DIN EN 378-Part 1-4 applies to the scope of the EN standards.

During maintenance work, the employer must ensure that a hazardous explosive atmosphere is prevented (see also TRBS1112, TRBS2152 VDMA 24020-3).

A hazardous and potentially explosive atmosphere must be anticipated during maintenance and repair work on refrigeration systems with flammable refrigerants (e.g. those of category A2L and A3).

Maintenance, repairs, removal of refrigerants and commissioning of systems may only be carried out by qualified personnel.

2.2.4. Safety and the testo 805i



Laser radiation! Class 2 laser.

- Do not look into the laser beam!

2.2.5. Safety and the testo 552i



The testo 552i Smart Probe must not be connected if the pressure is higher than 5 bar. Otherwise, damage may occur.

2.3. Protecting the environment

- Dispose of faulty rechargeable batteries/spent batteries in accordance with the valid legal specifications.
- At the end of its useful life, send the product to the separate collection for electric and electronic devices (observe local regulations) or return the product to Testo for disposal.

WEEE Reg. Nr. DE 75334352

3 Specifications

Testo Smart Probes are different hand-held measuring instruments for various applications that communicate with your mobile terminal devices by means of an app. The respective Smart Probe performs the measurement and is operated by your mobile terminal device. The various Smart Probes allow you to measure the temperature, humidity, flow, and volume flow at the outlet, or perform pressure, differential pressure, and non-contact temperature measurements in the duct.

4 **Product description**

4.1. Overview of Smart Probes



- 1 Measuring unit
- 2 LED
- 3 Button
- 4 Battery compartment (at the back)
- 5 Direction of flow testo 405i / testo 410i (not shown) (An arrow on the top of the housing displays the direction of flow in which the measuring instrument has been calibrated and which achieves the best measurement results. Please note the direction of flow during usage.)

4.2. LED status

LED status	Meaning
Flashing red	Low battery status
Flashing yellow	Smart Probe is switched on.Smart Probe is searching for a BT connection, but is not connected.
Flashing green	Smart Probe is switched on.Bluetooth is connected.

5 First steps

5.1. Switching on/off



testo 549i/552i



5.1.1. Switching on

- 1 Pull the film out of the battery compartment.
- 2 Press the button on your Smart Probe.
- ▶ The Smart Probes switch on.

5.1.2. Switching off

- 1 Press and hold the button on your Smart Probe.
- The Smart Probes switch off.

5.1.3. Establishing Bluetooth[®] connection

To establish a connection via ${\sf Bluetooth}^{\circledast},$ you need a tablet or smartphone with the Testo Smart App installed on it.

You can get the App for iOS instruments in the App Store or for Android instruments in the Play Store.

Compatibility:

• Requires iOS 13.0 or later/Android 8.0 or later,



- requires Bluetooth[®] 4.0.
- ✓ The Testo Smart App is installed on your terminal device and ready for use.

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- 1. Press the button on the Smart Probe.
- The Smart Probe switches on.
- The LED flashes yellow while connecting via Bluetooth and then flashes green once the connection is established.
- The connection between the Smart Probe and your mobile terminal device is established.

5.2. Transmitting readings

- ✓ The Smart Probe is switched on and connected to your mobile terminal device via Bluetooth.
- The current readings are automatically displayed in the App.

6 Using the App

6.1. Overview of operating controls

12:30		*▼⊿∎	
Basic	view	\$.	—5
Live Gra	ohic	Table	
1 + 0	0:00:09		
testo 605i • 244		:	6
Air Temperature	23.8	c	Ŭ
Relative humidity	48.7	6RH	
Dew point temperature	12.4	с	
Wet bulb temperature	16.6	с	
Absolute humidity	10.49 g	ı/m³	
testo 410i • 378		:	
Temperature	24.9	С	
Flow velocity	3.58	n/s	

- 1 Choice of applications.
- 2 Switch between the views (list, graphic diagram, table)
- 3 Display of connected Smart Probes including readings
- 4 Start/stop
- 5 Measurement configuration (the menu changes depending on the Smart Probe connected and the application selected)
- 6 Smart Probe configuration

6.2. App options

6.2.1. Set "Language"

- 1. Tap -> Settings -> Language.
- A selection list is displayed.
- 2. Tap the required language.
- The language has been changed.

Display Tutorial 6.2.2.

The Tutorial guides you through the first steps when operating the Testo Smart App.

- 1. Tap -> Help & Information -> Tutorial
- The Tutorial is displayed. In Tutorial, swipe to display the next page.
- 2. Tap X to close the Tutorial.

Display App Info 6.2.3.

In App Info you can find the version number of the installed App.

- 1. Tap -> Help & Information -> Instrument information
- The App's version number is displayed, as well as the ID.

6.3. **Application menus**

6.3.1. Selecting the application menu

- 1. Press
- A selection of menus for various applications is displayed.
- Select the required application.
- The selection disappears and your selected application is displayed.

6.3.2. Setting favourites

- 1. Press
- A selection of applications is displayed.
- 2. Press $\stackrel{\text{ress}}{\simeq}$ next to the application that you would like to designate as a favourite.
- The asterisk is displayed in orange 🔼

6.3.3. Displaying information about an application

- 1. Press 🔚
- A selection of applications is displayed.
- 2 Press
- The information about an application is displayed.

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6.4. Smart Probe settings

If the readings fluctuate wildly, it is advisable to damp the readings.

~	The probe is connected to the SMART App.
1	Click on .
	Main menu opens.
2	Click on Sensors.
	The Sensors menu opens.
3	Click on the required sensor.
•	Information is displayed about the model, order number, serial number and firmware version.
4	Click on the Settings tab.
	The settings window opens.
5	Enable Activate damping using the slider.
6	Click on Average of the measured values.
	Window for Average of the measured values opens.
7	Enter a value between 2 and 20 seconds.

6.5. testo 115i/915i - Surface increment

Surface probes withdraw heat from the measured surface immediately after the initial contact. This makes the measurement result lower than the true surface temperature without the probe (or the reverse if the surface is colder than the environment). This effect can be corrected by an increment in % of the reading.

- / The probe is connected to the SMART App.
- ¹ Click on 🔳.

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- Main menu opens.
- ² Olick on Sensors.
- The Sensors menu opens.
- 3 Click on the required sensor.
- Information is displayed about the model, order number, serial number and firmware version.
- 4 Click on the Settings tab.
- The settings window opens.
- 5 Click on Use surface increment.
- 6 Enable Activate surface increment using the slider.

6.6. List, graphic diagram and table view

The available readings can be displayed in different ways in the various views.

List view

Displays the readings transmitted by the Smart Probe in the form of a list. Readings from all connected Smart Probes are displayed here.

Graphic diagram view

The graphical progression of up to four different readings can be displayed. Tap on a reading above the diagram to select the readings to be displayed.

· Table view

In the Table view, all readings are displayed in sequence according to date and time. The different readings from the individual Smart Probes can be selected by pressing $\triangleleft \triangleright$.

6.7. Settings view

- 1. Press and select Edit View.
- An overview of parameters is displayed.
- 2. Deselect the check mark to hide a Smart Probe reading.
- 3. Press ▼ to select the unit for a reading.
- 4. Press OK to confirm your settings

6.8. Exporting readings

1. Press -> Memory -> Select measurement.

$\boldsymbol{<}$	Export	12:30 * 🕶 🛋 🗎
	Report	← Volume flow outlet
Î	Delete	Date: 26.03.2024 12.30
		Lustomer: Testo Office Building
		Attach images
		Write a comment
		Measurement data
		Volume flow Ø 1,032.5 m ^a /h
		Air velocity Ø 2.39 m/s
		Temperature Ø 25.0 °C
		Recorded by sensor 378
		Actual measuring time period
		Start 26.03.2024, 12:15:15
		End 26.03.2024, 12:30:16
		≪ Export PDF Report

6.8.1. Excel (CSV) Export

- 1. Press <
- A selection of export options appears.
- 2. Press Start export.
- A selection of sending/export options appears.
- 3. Select your required sending/export options.

6.8.2. PDF Export

1 Click on Report.

- A selection window is displayed.
- 2 If required, activate the Create PDF with all readings button.
- 3 Click on Create.



For measurements, please be aware that the option **Create PDF with all readings** is only possible up to 30 pages, due to the resulting file size and number of pages. In the testo DataControl software, however, PDF reports can be created for all measurements without any restrictions.

A report containing all the information is created.

- A selection window is displayed. The report can be sent via e-mail or Bluetooth[®].
- 4 Click on e-mail or Bluetooth[®].
- The report will be sent.

7 Maintaining the product

7.1. Cleaning the instrument

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Do not use any aggressive cleaning agents or solvents! Mild household cleaning agents or soap suds may be used.

> If the housing of the instrument is dirty, clean it with a damp cloth.

7.2. Keeping connections clean

 Keep connections clean and free of grease and other deposits, clean with a damp cloth as required.

7.3. Ensuring measuring accuracy

> Testo Customer Service will be happy to help you if you require it.

> Keep within the permissible measuring range!

> Calibrate instrument regularly (recommendation: once a year).

7.4. testo 552i – Cleaning vacuum probe

CAUTION

Possible damage to the sensor!

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Do not use any sharp-edged objects.

Remove the vacuum probe from the device.

2 Use a plier to unscrew and remove the middle part.



7 Maintaining the product

3 Turn a suitable screw left-handed slightly into the white seal and pull out the white seal to expose the sensor opening.

3.1 Alternatively you can use the plier to pull it out.

4 Put a few drops of rubbing alcohol (95%) into the sensor opening.







- 5 Seal the opening by placing your finger on it and shake the vacuum probe briefly.
- 6 Remove all the alcohol from the probe.
- 7 Repeat the process at least twice.

8 Leave the probe to dry at least 4 hours.

To dry the sensor faster, you can connect the probe directly to a vacuum pump and create a vacuum.

9 Reinstall the white sealing ring and screw the middle back in with the pliers.

7.5. Smart Probes App

The Testo Smart App is kept updated via the Play Store for Android devices and the App Store for iOS devices. Please update the App as soon as a new update is available. We therefore recommend that you do not disable automatic notifications when new updates are available.

8 Tips and assistance

8.1. Questions and answers

Question	Answer
LED flashes red	Batteries are almost spent.
	Change batteries.
The instrument	Remaining battery capacity insufficient
switches itself off	 Change the batteries.
lights up instead of	Outside the permissible measuring range.
the measurement	 Keep within the permissible measuring range.
parameter display	or
	Sensor is defective
	 Contact your testo Service department.
The App cannot be	 No correct search terms were entered.
found in the store	> Enter an unambiguous search term, e.g.: "testo Smart Probes" or use the link on the testo website.
	or
	 Your mobile terminal device does not meet the technical requirements (iOS 12.0 or later, Android 6.0 or later / Bluetooth 4.2 (Low Energy))
	 Please check the technical data for your mobile terminal device

8.2. Accessories and spare parts

Designation	Item number
testo Smart Case (Refrigeration) for storing and transporting 2 x testo 115i and 2 x testo 549i, dimensions $250 \times 180 \times 70$ mm	0516 0240
testo Smart Case (Heating) for storing and transporting testo 115i, testo 410i, testo 510i, testo 549i and testo 805i, dimensions 250 × 180 × 70 mm	0516 0270
testo Smart Case (VAC) for storing and transporting testo 405i, testo 410i, testo 510i, testo 605i testo 805i and testo 905i, dimensions 270 × 190 × 60 mm	0516 0250
testo Smart Case (temperature) for the storage and transportation of testo 915i and plug-in probes, dimensions 250 x 180 x 70 mm	0516 0032

9 Technical data

9.1. Bluetooth module

The use of the wireless module is subject to the regulations and stipulations of the respective country of use, and the module may only be used in each case in countries for which a country certification has been granted.

The user and every owner undertake to adhere to these regulations and prerequisites for use, and acknowledge that the re-sale, export, import, etc. in particular in, to or from countries without wireless permits, is their responsibility.

9.2. General technical data

All accuracy specifications apply at a nominal temperature of 22 °C.

5.2. 1. lesto 5051		
Feature	Values	
Measuring range	-50 …150 °C / -58 … 302 °F	
Accuracy ± 1 digit	± 1 °C / ± 1.8 °F	
Resolution	0.1 °C / 0.1 °F	
Measurement rate	1/sec	
Available units of measurement	°C, °F	
Storage temperature	-20 60 °C / -4 140 °F	
Operating temperature	-20 50 °C / -4 122 °F	
Battery type	3 micro batteries AAA	
Battery life	150 h	
Dimensions	222 mm × 30 mm × 24 mm Probe shaft length 100 mm Probe shaft diameter 4 mm	
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863	

9.2.1. testo 905i

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9.2.2. testo 410i

Feature	Values
Measuring range	0.4 30 m/s / 80 5,900 fpm -20 60 °C / -4 140 °F
Accuracy ± 1 digit	±(0.2 m/s + 2 % of m.v.) (0.4 20 m/s) ±(40 fpm + 2 % of m.v.) (80 4,000 fpm) ±0.5 °C / ±0.9 °F
Resolution	0.1 °C / 0.1 °F 0.1 m/s / 1 fpm
Measurement rate	1/sec
Available units of measurement	°C, °F, m/s, fpm, m³/h, cfm, l/s
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 micro batteries AAA
Battery life	130 h
Dimensions	154 mm × 43 mm × 21 mm 30 mm vane diameter
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863

9.2.3. testo 405i

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Depending on the point of use, the ambient pressure (default value 1.013 hPa) must be entered in the SMART App so that the air pressure can be compensated. Otherwise, errors of measurement may occur.

Feature	Values
Measuring range ¹	0 … 30 m/s / 0 … 5,900 fpm -20 … 60 °C / -4 … 140 °F

¹ Please switch on the Smart Probe in the following ambient conditions: > 10 $^{\circ}$ C, air velocity 0 m/s = protective cap closed to enable the sensor to heat up.

Feature	Values
Accuracy ± 1 digit	$\begin{array}{l} \pm (0.1 \text{ m/s} + 5 \% \text{ v. Mw}) (0 \dots 2 \text{ m/s}) \\ \pm (0.3 \text{ m/s} + 5 \% \text{ v. Mw}) (2 \dots 15 \text{ m/s}) \\ \pm (0.5 \text{ m/s} + 5 \% \text{ v. Mw}) (15 \dots 30 \text{ m/s}) \\ \pm (20 \text{ fpm} + 5 \% \text{ v. Mw}) (0 \dots 394 \text{ fpm}) \\ \pm (59 \text{ fpm} + 5 \% \text{ v. Mw}) (394 \dots 3,000 \text{ fpm}) \\ \pm (100 \text{ fpm} + 5 \% \text{ v. Mw}) (3.000 \dots 4,900 \text{ fpm}) \\ \pm 0.5 \text{ °C} / \pm 0.9 \text{ °F} \end{array}$
Resolution	0.01 m/s / 1 fpm 0.1 °C / 0.1 °F
Measurement rate	1/sec
Available units of measurement	°C, °F, m/s, fpm, m³/h, cfm, l/s
Storage temperature	-20 60 °C / -4140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 micro batteries AAA
Battery life	15 hrs
Dimensions	200 mm × 30 mm × 41 mm Extendible telescope 400 mm Probe shaft diameter 12 mm Probe tip diameter 9 mm
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863

9.2.4. testo 549i

Feature	Values
Measuring range	0 to 60 bar (rel) / 0 to 870 psi (rel)
Accuracy ± 1 digit	0.5 % of full scale value
Resolution	0.01 bar / 0.1 psi
Measurement rate	2/sec
Available units of measurement	bar, psi, MPa, kPa
Connection	1x 7/16" UNF / 1/4" SAE connection
Overload	65 bar (rel)

Feature	Values
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 micro batteries AAA
Battery life	130 hrs
Measurable media	CFC, HFC, HCFC, N, H20, CO2
Dimensions	152 mm x 35 mm x 35 mm
Directives, standards	EU guideline: 2014/30/EU
and tests	RED: 2014/53/EU
	RoHS: 2011/65/EU + (EU) 2015/863

9.2.5. testo 805i

Feature	Values
Measuring range	-30 °C to 250 °C / -22 to 482 °F
Accuracy ± 1 digit	±1.5 °C or ± 1.5 % of m.v. (0 250 °C)
	±2.0 °C (-20.00.1 °C)
	±2.5 °C (-30.020.1 °C)
	±2.7 °F or ± 1.5 % of m.v. (32 … 482 °F)
	±3.6 °F (-4 32 °F)
	±4.5 °F (-224 °F)
Resolution	0.1 °C / 0.1 °F
Measurement rate	2/sec
Available units of	°C, °F
Connection	7/46" LINE
Connection	7/16 – UNF
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-10 50 °C / 14 122 °F
Battery type	3 micro batteries AAA
Battery life	30 hrs
Optics	10:1
Laser marking	Diffraction lens as laser marking (laser circle)
Dimensions	140 mm × 36 mm × 25 mm
Emission level	Adjustable from 0.1 to 1.0

Feature	Values
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU
	RoHS: 2011/65/EU + (EU) 2015/863

9.2.6. testo 605i

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The humidity sensor attains the highest degree of accuracy in temperatures between + 5 °C and + 60 °C and 20 % to 80 % RH. If the instrument is exposed to higher humidity for a long period of time, this can falsify the readings by up to 3 % RH. After 48 hours at 50 % RH \pm 10 % and + 20 °C \pm 5 °C, the sensor regenerates by itself.

CAUTION

Damage to the humidity probe

- The probe must never be exposed to a humidity level of 100 % RH for longer than 3 days.

Feature	Values
Measuring range	-20 to 60 °C, -4 to 140 °F, 0 to 100% RH
Accuracy ± 1 digit	±0.8 °C (-20 0 °C) / ±1.44 °F (-4 32 °F) ±0.5 °C (0 60 °C) / ±0.9 °F (32 140 °F) ±3.0 % RH (10 % RH 35 % RH) ±2.0 % RH (35 % RH 65 % RH) ±3.0 % RH (65 % RH 90 % RH) ±5.0 % RH (< 10 % RH or > 90 % RH) @ 25 °C ±1 °C Hysteresis: ± 1.0 % RH Long term stability/year: ± 1.0 % RH/year
Resolution	0.1 °F / 0.1 °C 0.1 % RH
Measurement rate	1/sec
Available units of measurement	°C, °F, % RH, °Ctd, °Ftd, wetbulb °C, wetbulb °F
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 micro batteries AAA
Battery life	150 h

Feature	Values
Dimensions	218 mm × 30 mm × 27 mm Probe shaft length 90 mm
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863

9.2.7. testo 510i

Feature	Values	
Measuring range	-150 … 150 hPa / 60 in wc	
Accuracy ± 1 digit	±0.05 hPa (0 … 1.00 hPa) /	
	±0.02 in wc (0 … 0.4 in wc)	
	±0.2 hPa + 1.5 % of m.v. (1.01 … 150 hPa) ±0.08 in wc + 1.5 % of m.v. (0.41 … 60 in wc)	
Overload	500 hPa	
Resolution	0.01 hPa / 0.01 inch wc	
Measurement rate	2/sec	
Available units of measurement	mbar, hPa, Pa, mmHg, inHg, in WC, psi, mmWC In conjunction with Pitot tube (optional): m/s, fpm, m³/h, cfm, l/s	
Storage temperature	-20 60 °C / -4 140 °F	
Operating temperature	-20 50 °C / -4 122 °F	
Battery type	3 micro batteries AAA	
Battery life	150 hrs	
Dimensions	148 × 36 × 23 mm	
Directives, standards	EU guideline: 2014/30/EU	
and tests	RED: 2014/53/EU	
	RoHS: 2011/65/EU + (EU) 2015/863	

9.2.8. testo 115i

Feature	Values
Measuring range	-40 150 °C / -58 302 °F
Accuracy ± 1 digit	±1.3 °C (-20 85 °C) ±2.34 °F (-4 185 °F)
Resolution	0.1 °C / 0.1 °F
Measurement rate	1/sec
Available units of measurement	°C, °F
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 micro batteries AAA
Battery life	150 h
Dimensions	183 mm × 90 mm × 30 mm max. 35 mm pipe diameter
Directives, standards and tests	EU guideline: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863

9.2.9. testo 915i

Feature	Values
Measuring range: handle	-60 1,000 °C
(0560 1915)	-76 1,832 °F
Measuring range with TC	-50 400 °C
immersion probe (0602 1093)	-58 752 °F
Measuring range with TC surface probe (0602 2093)	-50 350 °C -58 662 °F
Measuring range with TC air probe (0602 3093)	-50 400 °C -58 752 °F
Measuring range with flexible	-50 400 °C
TC probe (0602 4093)	-58 752 °F
Accuracy ± 1 digit: handle	±(0.5 °C + 0.3 % of m.v.)
(0560 1915)	±(0.9 °F + 0.3 % of m.v.)

Feature	Values
Accuracy ± 1 digit: handle with with TC immersion probe (0602 1093)	±1.0 °C (-50 100 °C) ±1 % of m.v. (remaining meas. range) ±1.8 °F (-58 212 °F) ±1 % of m.v. (remaining meas. range)
Accuracy \pm 1 digit: handle with TC surface probe (0602 2093)	±(1.0 + 1 % of m.v.) °C ±(1.8 + 1 % of m.v.) °F
Accuracy ± 1 digit: handle with TC air probe (0602 3093)	±1.0 °C (-50 100 °C) ±1 % of m.v. (remaining meas. range) ±1.8 °F (-58 °C 212 °F) ±1 % of m.v. (remaining meas. range)
Accuracy ± 1 digit: handle with flexible TC probe (0602 4093)	±1.0 °C (-30 80 °C) ±(0.7 + 1 % of m.v.)(-5030 °C) ±(0.2 + 1 % of m.v.) (80 400 °C) ±1.8 °F (-22 °F 186 °F) ±(1.3 + 1 % of m.v.)(-58 °F22 °F) ±(0.4 + 1 % of m.v.)(186 °F 752 °F)
Resolution	0.1 °C / 0.1 °F
Available units of measurement	°C, °F
Storage temperature	-20 60 °C / -4 140 °F
Operating temperature	-20 50 °C / -4 122 °F
Battery type	3 AAA batteries
Battery life	150 h
Dimensions of handle	129 x 31 x 31 mm
Directives, standards and tests	EU Directive: 2014/30/EU RED: 2014/53/EU RoHS: 2011/65/EU + (EU) 2015/863
Cable length of plug-in sensor	max. 3 m

9.2.10. testo 552i

Feature	Values
Measuring range	0 26.66 mbar 0 20,000 microns
Accuracy ± 1 digit	±10 microns + 10 % of m.v. (100 1,000 microns)

Feature	Values
Resolution	1 micron (0 1,000 microns) /
	10 microns (1,000 2,000 microns) /
	100 microns (2,000 5,000 microns)
Measurement rate	1/sec
Available units of measurement	bar, psi, MPa, kPa
Storage temperature	-20 50 °C / -4 122 °F
Operating temperature	-1050 °C / -14 122 °F
	PA66 +30 % GF TPE, P
Protection class	IP 54
Battery type	3 AAA batteries
Battery life	39 h
Connection	7/16" UNF
Dimensions	155 x 35 x 35 mm
	6.10 x 1.38 x 1.38 inch
Directives, standards	EU Directive: 2014/30/EU
and tests	RED: 2014/53/EU
	RoHS: 2011/65/EU + (EU) 2015/863



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