

Temperature probes for universal use (DS / PS)

Order number: 8999 1111

The temperature probes from Testo Sensor GmbH for heat and cold meters offer the highest measurement accuracy, the fastest response behaviour and conformity to MID and MessEV. In addition, our approvals cover a wide range of configuration options for your probe. This allows you to configure it exactly to suit your heat or cold meter.



General informationen	
Measuring range (depending on sensor and connection cable)	±0 °C to +105 °C (PUR / PVC cable)
	±0 °C to +130 °C (TPE cable)
	±0 °C to +150 °C (Silicone cable)
Limit value temperature difference	3 K to 150 K
Response time	< 4s (depending on the design e.g. Ø 5.0 / 5.2 mm significantly faster)
Measurement stability	10 years (Please note recalibration cycles according to MID / MessEV)

Measuring elements and connection type	
Measuring elements	Please config (Pt100, Pt500 or Pt1000)
Tolerance	Class B according to EN60751
Connection type	Two-wire technology
Measuring principle	resistiv (resistance value)
Maximum measurement current (calculated from the maximum permissible power loss of 0.5 mW)	Pt100: 1178 µA at 2,5 m and 0,0095 Ohm/m
	Pt500: 795 µA at 12,5 m and 0,0095 Ohm/m
	Pt1000: 562 µA at 255 m and 0,0095 Ohm/m

Installation	
Installation	Direct installation according to DIN EN 1434 or installation in immersion sleeves according to tolerance list
Minimum immersion depth	≥ 20 mm
Maximum pressure	P S 25 at flow velocity water 2 m/s
Cable lengths acc. to DIN EN 1434	Pt100 max 2,5 m Pt500 max 12,5 m Pt1000 max 25 m

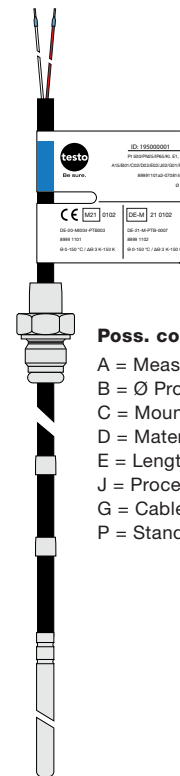
Environmental conditions	
Protection class: IP 65 (according to DIN 40050) Electrical: E1 Mechanical: M3 Climatic: -25 °C to +70 °C	

Please configure your temperature probe for heat and cold meters

A - Measuring element			B - Ø Probe shaft		C - Mounting length	
Code	Meas.element	Genauigkeit	Code	Ø Probe shaft	Code	Mount. length
A13	Pt100	Cl. B ¹⁾	B01	5,0 mm	C01	26,0 mm
A15	Pt500	Cl. B ¹⁾	B02	5,2 mm	C02	27,5 mm
A23	Pt1000	Cl. B ¹⁾	B03	6,0 mm	C03	38,0 mm
					C04	60,0 mm

¹⁾ dT = ±(0,30 °C + 0,005 · T) acc. to IEC 751|EN 60751 |conn. type: 2-Wire
 Other probe shaft Ø between 5.0 and 6.0 mm as well as other mounting lengths and customised screw connections are available on request.

J - Process connection		D - Material connection cable							
Code	Standard	Code	Conn.	Color	from °C	to °C	Out	Color	Q mm ²
J00	without screw connection	D01	2-Wire	black	±0	+105	PVC	rd, wh	0,22
		D02	2-Wire	black	±0	+150	Silicone	rd, wh	0,22
J02	M10 x 1 incl. locking screw & sealing device	D03	2-Wire	black	±0	+130	TPE	rd, wh	0,22
		D04	2-Wire	black	±0	+105	PUR	rd, wh	0,22
Further or customised screw fittings are available on request									



Poss. configuration

- A = Measuring elements
- B = Ø Probe shaft
- C = Mounting length
- D = Material cable
- E = Length cable
- J = Process connection
- G = Cable end
- P = Standard

Certificates and approvals

EU type examination certificate according to module B of the guideline 2014/32/EU (MID) for heat meters

Type examination certificate according to module B of the Measuring and Calibration Ordinance (MessEV) of 11.12.2014 for cold meters

Recognised production quality assurance systems according to Module D of Directive 2014/32/EU (MID)

Recognised quality assurance systems for production in accordance with Module D of the Ordinance on Measurement and Verification (MessEV) of 1.12.2014

Suitability test according to the list of pronounced toleration of stockpile crushes

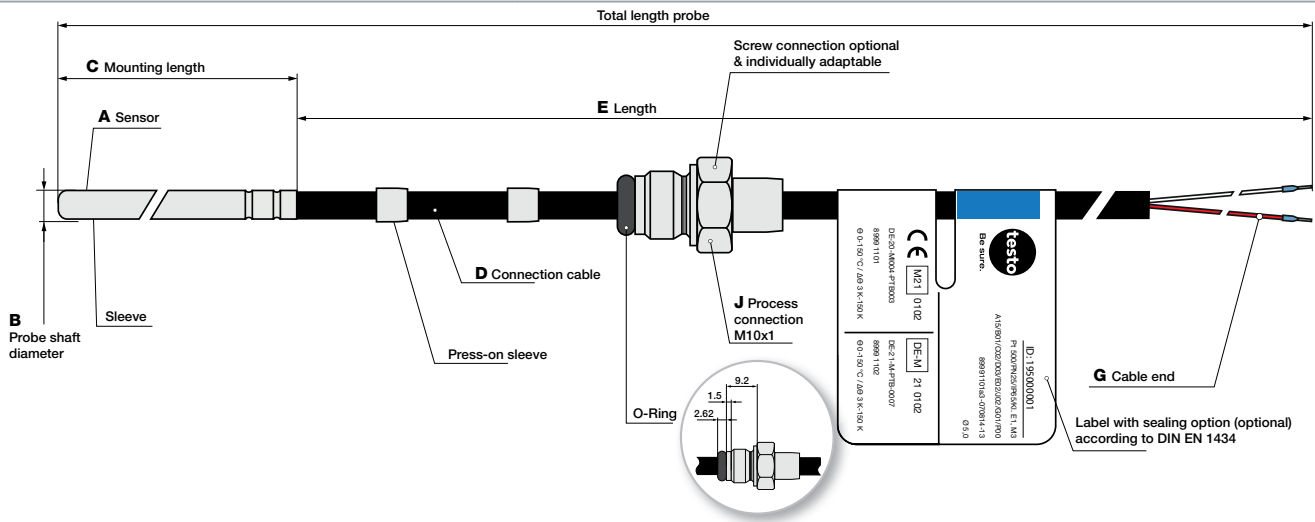
DIN EN 61326-1:2013 | DIN EN IEC 63000:2019-05

KS / 17.08.2022

E - Length		G - End sleeves		P - Norm	
Code	Length	Code	Standard	Code	Standard
E01	1,5 m	G01	Wire end ferrules (standard)	P00	not paired
E02	2,5 m	G02	Tin-plated connection leads (only for probes permanently connected to the calculator)	P01	paired according to DIN EN 1434
				P02	paired according to DIN EN 1434 with conformity assessment / marking according to MID (heat)
				P04	paired according to DIN EN 1434 with conformity assessment / marking according to MessEG (cold Austria)

We offer other cable lengths between 0.3 m and 25 m in increments of 0.5 m. Please note the maximum lengths (depending on the sensor): Pt100 max 2.5 m | Pt500 max 12.5 m | Pt1000 max 25 m

Technical drawing



Mounting temperature probes for universal use (DS / PS)

- The following drawing shows the sensor installation according to DIN EN 1434.
- Proceed as follows for probe mounting: In case of replacement, the old temperature probe and the old O-ring must first be removed from the installation location without leaving any residue.
- Seals and sealing surfaces must be clean and free of damage.
- Strip the new O-ring from the probe and insert it into the installation location.
- Push the process thread of the temperature probe with open locking screw onto the temperature probe sleeve as far as it will go.
- Screw in the process connection as far as it will go (tightening torque: 4 Nm) and tighten the locking screw (tightening torque: 4 cNm).
- At the end of each installation, a leak test must be carried out.
- Seal the probe in accordance with DIN EN 1434, using the existing sealing points.

