

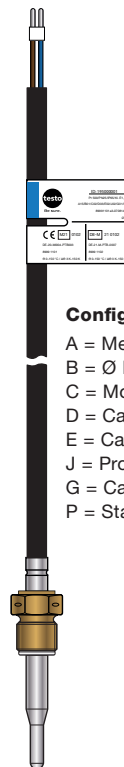
Fast-responding temperature probes (DS)

Order number: 8999 1101/02 (MID approval) or 8999 1102/02 (refrigeration approval)

The temperature probes from Testo Sensor GmbH for heat and cold meters offer the highest measuring accuracy, the fastest response behaviour and conformity to MID & MessEV. In addition, our approval covers a wide range of configuration options for your probe, ensuring that you can configure it exactly to suit your heat or cold meter.



General information	
Measuring range (depending on sensor and connection cable)	±0 °C up to +105 °C (PUR / PVC cable)
	±0 °C up to +130 °C (TPE / PTU cable)
	±0 °C up to +150 °C (Silicone cable)
Limit value temperature difference	3 K up to 150 K
Response time	B01 / B02 / B04 / B05 ≤2.5 seconds B03 ≤ 3 seconds
Measuring elements and connection type	
Measuring element	Please configure (Pt100, Pt500 or Pt1000)
Tolerance	Clacc B according to EN60751
Connection type	Two-wire technology
Measuring principle	resistive (resistance value)
Maximum measurement current(calculated from 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, type DS according to DIN EN 1434
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 (to DIN 40050) Electrical: E1 Mechanical: M3 Climatic: -25 °C to +70 °C	



Configuration

- A = Measuring element
- B = Ø Probe shaft
- C = Mounting length
- D = Cable material
- E = Cable length
- J = Process connection
- G = Cable end
- P = Standard

Please configure your temperature probe for heat and cold meters						
A - Measuring elements			B - Ø Probe shaft		C - Mounting length	
Code	Measuring element	Accuracy	Code	Ø Probe shaft	Code	Mounting length
A13	Pt100	Cl. B ¹⁾	B04	3,3 → 5,4 mm	C01	26,0 mm
A15	Pt500	Cl. B ¹⁾	B05	3,6 → 5,4 mm	C02	27,5 mm
A23	Pt1000	Cl. B ¹⁾			C03	38,0 mm
					C04	60,0 mm

¹⁾ dT = ±(0,30 °C + 0,005 · T) according to IEC 751 / EN 60751 | 2-wire

Other probe shaft Ø between 5.0 to 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	to	Outs.	Color	Q mm ²
J00	without screw connection	D01	2-Wire	black	±0 °C	+105 °C	PVC	rd, wh	0,22
		D02	2-Wire	black	±0 °C	+150 °C	Sil.	rd, wh	0,22
J02	M10 x 1 incl. locking screw & sealing device	D03	2-Wire	black	±0 °C	+130°C	PTE/ TPU	rd, wh	0,22
		D04	2-Wire	black	±0 °C	+105 °C	PUR	rd, wh	0,22

Further or customised screw fittings are available on request

Certificates and approvals
EU Type Examination Certificate according to Module B of the Directive 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 / 17.05.2024

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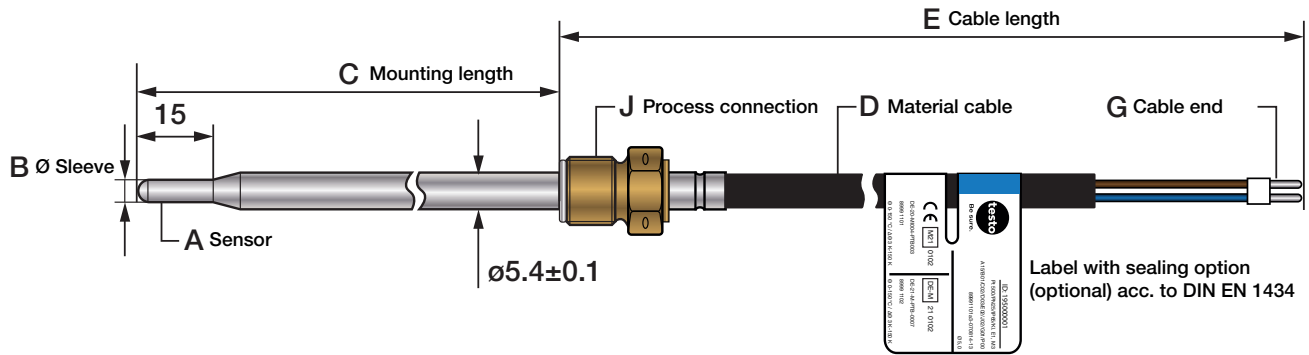
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You can find our standard portfolio in our
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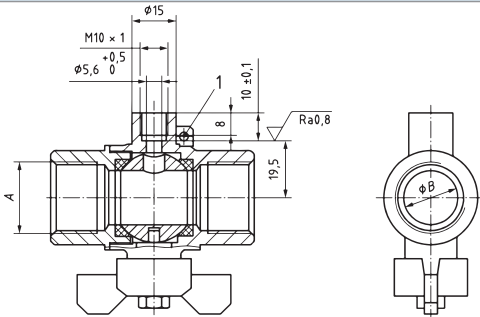
E - Length		G - Cable ends		P - Standard	
Code	Length	Code	Cable ends	Code	Standard
E01	1,5 m	G01	Wire end ferrules (standard)	P00	unpaired
E02	2,5 m	G02	Tin-plated connection leads (only for probes permanently connected to the calculator)	P01	paired according to DIN EN 1434
				P02	paired according to DIN EN 1434 with conformity assessment / marking according to MID (heat)
		G99	Customer specific contacts	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.
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



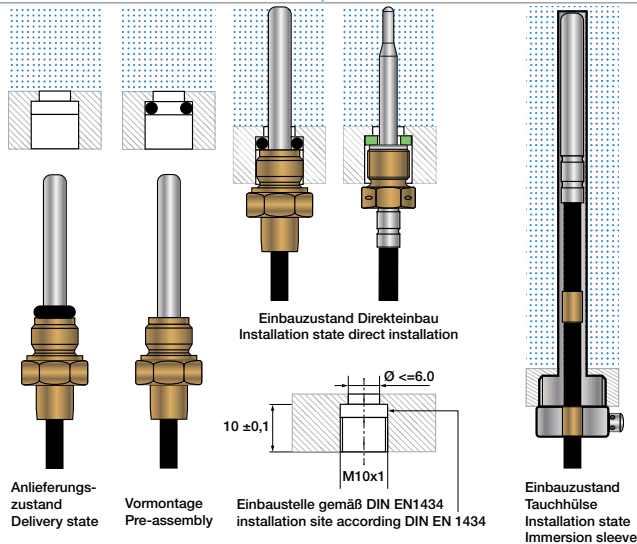
Mounting temperature probe for direct installation



The installation of temperature probes in pipelines ($q_p \leq 6$) must be carried out directly in new installations in Germany. The direct installation of temperature probes must be carried out in accordance with DIN EN 1434-2 and the technical guideline TR-K8 (see following figure).

Thread size A	Thread size B
G ½ B	18,5 mm
G ¾ B	24,0 mm
G 1 B	30,5 mm
G 1¼ B	39,0 mm
G 1½ B	45,0 mm

- The following drawing schematically shows the probe installation according to DIN EN. Proceed as follows when installing the probe:
- In case of replacement, the old temperature probe and the old seal 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 seal from the probe and insert it into the installation point.
- Push the process thread of the temperature probe with open locking screw (optional) onto the temperature probe sleeve as far as it will go.
- Screw in the process connection as far as it will go (tightening torque: Nm4) and tighten the locking screw (optional) (tightening torque: cNm4).
- At the end of each installation, a leak test must be carried out
- The probe must be sealed according to DIN EN 1434, use existing sealing points.



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