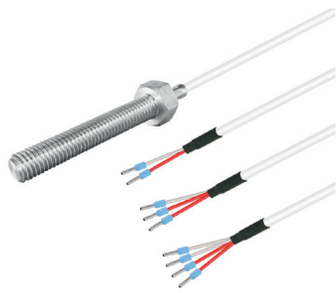
Be sure. testo

Screw-in probe M8x50 with PFA cable

Article no.: 803172 4011

Screw-in probe M8x50 measure the temperature in pipes or containers. PFA cables can be used up to +260 °C. They are robust, acid-resistant, flexible and a good alternative to silicone cables. To configure your screw-in probe for your measuring task, simply select the required configuration features and send us the order code.



General Information	
Measuring range	-50 °C to +260 °C depending on sensor Type and connection cable
Perm. °C range cable	-50 °C to +260 °C
Accuracy	a seconda dell´elemento sensibile
Pull-out force	≥ 30 N
Pressure proof up to	10 bar
Supply and output	
Max. meas. current	max. 1 mA
Supply voltage	approx. 5 V depending on measurement current
Measurement signal	passive (resistance value)
Ambient conditions	
Protection class	IP54 according DIN 60529 (depending on cable)
Humidity and moisture condensation resistance	according to application-specific qualification
Certificates and Standards	
Standards	DIN EN 61326-1:2013 | DIN EN IEC 63000:2019-05
Directive	RoHS 2011/65/EU | 2014/30/EU

Customizable options
A - Measuring element
B - Connection Type
E - Material connection cable
F - Length connection cable
G - Connector
H - Bend protection

A - Measuring element				
Code	**Sensor**	**Accuracy / Tolerance resistance**	**From (°C)[1)]**	**To (°C)[1)]**
A012	Pt100	Cl. B dT = ±(0,30 °C + 0,005|t|)[1)]	-50 °C	+400 °C
A011	Pt100	Cl. A dT = ±(0,15 °C + 0,002|t|)[1)]	-50 °C	+300 °C
A013	Pt100	1/3 Cl. B dT = ±(1/3 · (0,30 °C + 0,005|t|))[1)]	-50 °C	+200 °C
A022	Pt500	Cl. B dT = ±(0,30 °C + 0,005|t|)[1)]	-70 °C	+500 °C
A032	Pt1000	Cl. B dT = ±(0,30 °C + 0,005|t|)[1)]	-50 °C	+400 °C
A031	Pt1000	Cl. A dT = ±(0,15 °C + 0,002|t|)[1)]	-50 °C	+300 °C
A105	NTC 5 kOhm	R25 = 5 KOhm ±1 %	-40 °C	+125 °C
A110	NTC 10 kOhm	R25 = 10 KOhm ±1 %	-40 °C	+125 °C

[1)]according to IEC 751 / EN 60751 | [2)] Perm. range °C | A105, A110, A210 only on request | The measuring range depends on the measuring element and the connecting cable. | Detailed information and the characteristics can be found in our download area.

B - Connection Type	
Code	Conn. Type
B2	2-Wire (2W)
B3	3-Wire (3W)
B4	4-Wire (4W)

Possible connections			
Sensor	**2W**	**3W**	**4W**
Pt	✓	✓	✓
NTC	✓		

MW / KC / 01.08.2024

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Please find our whole temperature probe and transmitter portfolio in our webshop at: www.testo-sensor.shop

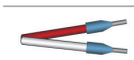
Screw-in thread			
Picture	**Screw-in thread**		**Technical drawing**
	Material	Stainless steel 1.4301 | SUS 304	
	Length (mm)	50	
	Process connection	M8x50	
	Wrench size	13	

E - Cable material and configuration connection cable												
Picture	**Code**	**Connection Type**	**Color**	**IP**	**From (°C)[1]**	**To (°C)[1]**	**Outside material**	**Material strand**	**Color strand**	**Ø (mm)[2]**	**Q (mm²)[3]**	**Ω / m[4]**
	E5500	2-Wire	white	IP67	-50	+260	PFA	PFA	rd, wt	2,4	0,22	0,09
	E5501	3-Wire	white	IP67	-50	+260	PFA	PFA	rd, wt, rd	2,4	0,22	0,09
	E5503	4-Wire	white	IP67	-50	+260	PFA	PFA	rd, wt, rd, wt	2,7	0,22	0,09

Insulation resistance: ≥ 100 MOhm a min. 100 VDC | [1]Perm. range °C | [2]Tolerance ± 0,2 mm | [3] Tolerance ± 0,03 mm² | [4] per single strand

F - Length								
Code	F010	F020	F030	F040	F050	F100	F150	F200
m	1	2	3	4	5	10	15	20

Other lengths on request

G - Connector		
Picture	**Code**	**Feature**
	G01	Insulated end ferrules (50 mm)

H - Bend protection				
Picture	**Length (mm)**	**Material**	**Code**	**Feature**
	50	Stainless steel spring 1.4310 | SUS 302	H0	Without (Standard)
			H1	Metal bend protection[1]

[1]on request

Delivery and Assembly	
Assembly instructions	via process connection
Delivery and Packaging	Probe, seperatly packaged in PE bag

Your order code						
Article no.	Measuring element	Connection Type	Material connection cable	Length connection cable	Connector	Bend protection
803172 4011	A_____	B_____	E_____	F_____	G_____	H_____

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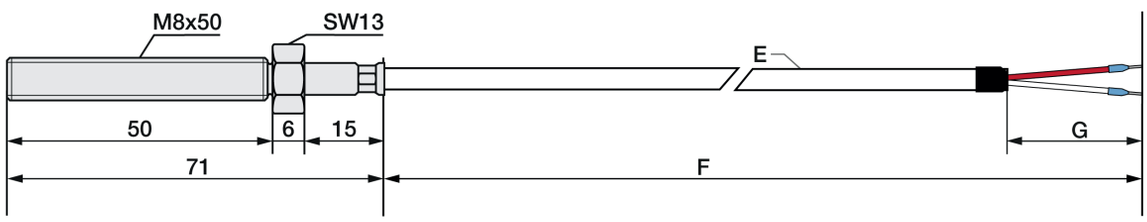
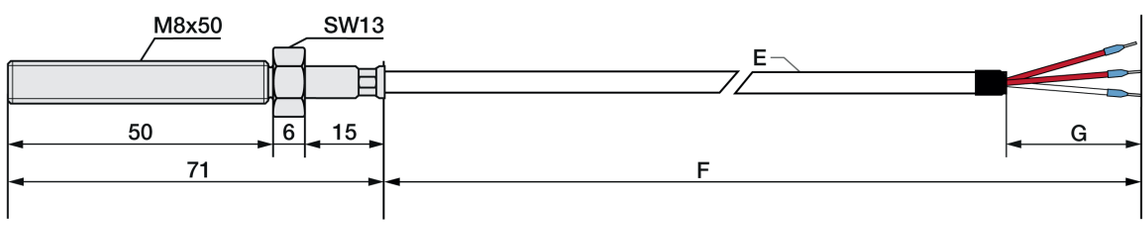
Technical drawing

Customizable options		
A - Measuring element B - Connection Type E - Material connection cable	F - Length connection cable G - Connector H - Bend protection	All dimensions in mm

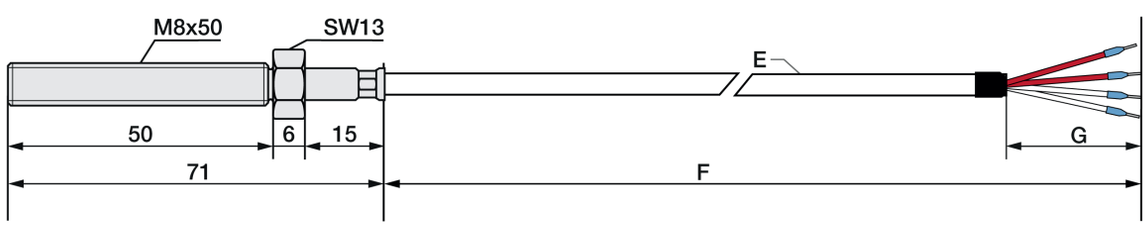
2-Wire version



3-Wire version



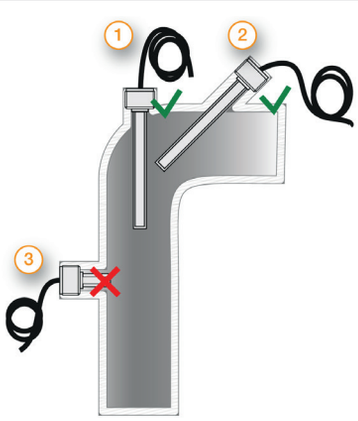
4-Wire version



Delivery and Assembly

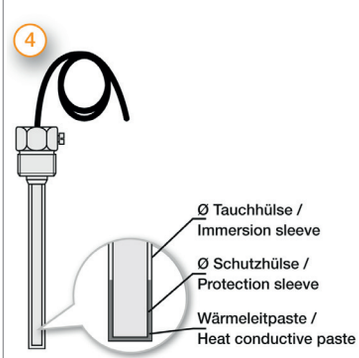
Delivery and Packaging	Probe, seperatly packaged in PE bag

Important assembly advices



Measurement errors can occur due to heat dissipation to the environment. To keep these as small as possible, we recommend immersing the protection sleeve of your temperature probe as deeply as possible in the medium to be measured during installation. The optimum installation depth should be 10-15 times the Ø of the protection sleeve or, when using an immersion sleeve, the Ø of the immersion sleeve. When installing in pipelines whose Ø does not have a sufficiently deep installation depth, you should install the probe either at an angle or in a pipe elbow. Make sure that you have sufficient space so that the probe can be removed again. 1) Installation with sufficient installation depth 2) Installation at an angle with small pipe Ø 3) Not like this: Minimum installation depth not reached

Please lay the cable in such a way that no water can penetrate the probe and with reserve loop (4). This allows you to extend the probe without disconnecting the electrical connection.



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Matching accessories: Heat-conducting paste

Details of accessories can be found on our website.

Heat-conducting paste		
	Article no.	**809540 1000**
	Content	10 ml
	Thermal conductivity	>2.5 W/mK
	Min / Max °C	-30 °C to +280 °C
	Thermal resistance	< 0.126

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