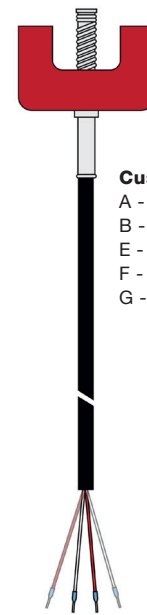
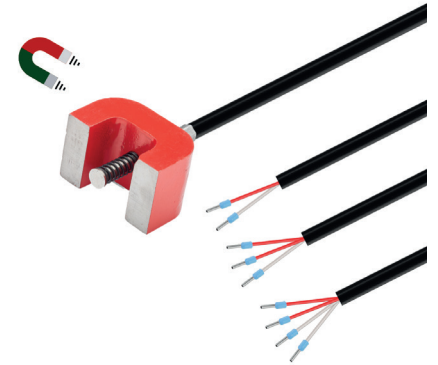


Contact probe horseshoe magnet with PVC cable

Order nr.: 802051 1011

Surface probes are used for temperature measurements on smooth surfaces. The probe sits securely at the measuring point due to the particularly strong holding magnet without having to be permanently installed. PVC cables are the most cost-efficient solution for many applications up to +105 °C. For other temperatures or higher flexibility, cables made of silicone, glass fiber or PFA are used. To order your probe, select your configuration and send us the order code.



Customizable options

- A - Measuring element
- B - Connection type
- E - Material connection cable
- F - Length connection cable
- G - Connector

General Information	
Measuring range	-30 °C to +105 °C depending on sensor type and connection cable
Perm. °C range cable	-30 °C to +105 °C
Accuracy	depending on sensor type
Response time	t63 / t99: information is available on request
Supply and output	
Max. measurement 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
Certificates	Certificate of suitability (on request)

A - Measuring element				
Code	Sensor	Accuracy / Tolerance resistance	min ²⁾	max ²⁾
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
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

¹⁾according to IEC 751 / EN 60751 | ²⁾ Perm. range °C | Please note that 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	✓	✓	✓

probe head					
Bild	Contact body		Dimensioning		Zeichnung
	Contact geometry	U-Shape		Length (mm)	40
	Material	Stainless steel 1.4541 SUS321		Width (mm)	25
	Magnet	AlNiCo 500		Height (mm)	25
	Holding magnet strength	Counter material adhesion ≥90 N			
	Perm. °C-Range (mm)	-50 °C bis +400 °C			

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Ω

E - Cable material and configuration connection cable

Picture	Code	IP	Connection type	Color	From (°C) ¹⁾	To (°C) ¹⁾	Outside material	Material strand	Color strand	Ø (mm) ²⁾	Q (mm ²) ³⁾	Ω / m ⁴⁾
	E0006	IP67	2-Wire	black	-30	+105	PVC	PVC	rd, wt	4,0	0,22	0,07
	E0007	IP67	3-Wire	black	-30	+105	PVC	PVC	rd, wt, rd	3,8	0,14	0,13
	E0008	IP67	4-Wire	black	-30	+105	PVC	PVC	rd, wt, rd, wt	3,8	0,14	0,13

Insulation resistance: ≥ 100 MOhm at 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

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 ¹⁾
			H1	Metal bend protection

¹⁾on request

Your order code

Order nr.	Measuring element	Connection type	Material connection cable	Length connection cable	Connector
802051 1011	A_____	B_____	E_____	F_____	G_____

Matching accessories: 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

Delivery and Assembly

Assembly instructions	via magnet
Delivery and Packaging	Probe, separately packaged in PE bag

Important assembly advices

The contact probe is fixed directly to the measuring point with the strong horseshoe magnet. The tension spring fixes the measuring point even in case of vibrations. The surface should be clean, even and free of residues. If necessary, you can use thermal paste for better thermal coupling.

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Technical drawing

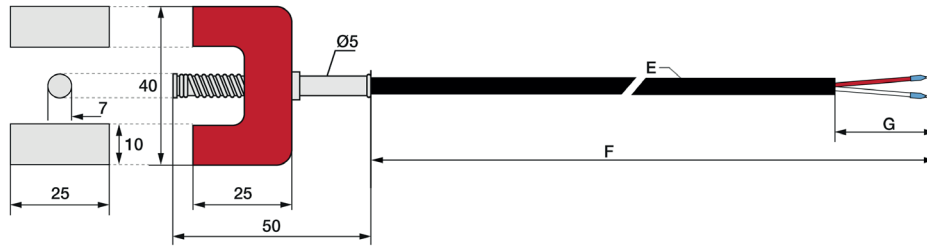
Customizable options

- A - Measuring element
- B - Connection type

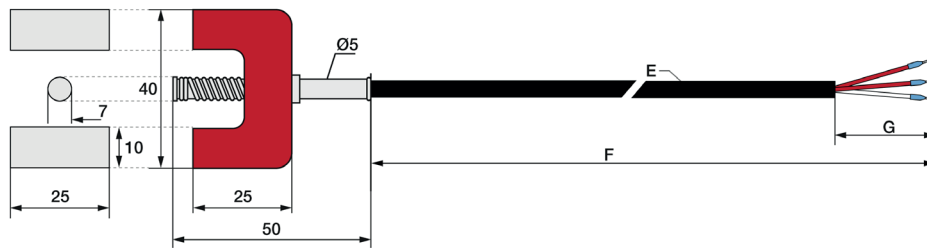
- E - Material connection cable
- F - Length connection cable
- G - Connector

All dimensions in mm

Ausführung 2-Leiter / 2-Wire version



Ausführung 3-Leiter / 3-Wire version



Ausführung 4-Leiter / 4-Wire version

