

Pipe contact probe with PFA cable

Article no.: 802170 1011

Pipe contact probes with aluminum prism measure the surface temperature on curved surfaces such as pipes. The radius of the contact body is particularly suitable for pipes with a diameter of 30 mm - 110 mm.



Customizable options

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

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	depending on sensor Type
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
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

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
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

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	✓	✓	✓

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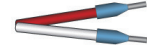
Contact body					
Picture	Contact body		Dimensioning		Drawing
	Contact geometry	Prism	Length (mm)	20	
			Total length (mm)	32	
	Material	Aluminium	Ø (mm)	15	
	Contact angle	162°			
We offer other contact bodies on request.					

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 (mm ²) 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 at min. 100 VDC | ¹⁾Perm. range °C | ²⁾Tolerance ± 0,2 mm | ³⁾ Tolerance ± 0,03 mm² | ⁴⁾ per single strand

F - Length									G - Connector	
Code	F010	F020	F030	F040	F050	F100	F150	F200	Code	G01
m	1	2	3	4	5	10	15	20	Feature	Insulated end ferrules (50 mm)



Other lengths on request

Your order code

Article no.	Measuring element	Connection Type	Material connection cable	Length connection cable	Connector
802170 1011	A_____	B_____	E_____	F_____	G_____

Delivery and Assembly

Assembly instructions	by means of quick-release strap, clamping range Ø 30 mm to 110 mm.
Delivery and Packaging	Probe, Quick-release strap, Heat-conducting paste, seperatly packaged in PE bag

Important assembly advices

Bei Bedarf isolieren /
Insulate if required

Oberfläche sauber und rückstandsfrei /
Surface clean and residue-free
Passendes Spannband liegt bei /
Matching tension strap enclosed

Wärmeleitpaste verwenden! /
Use heat-conducting paste!

The surface must be brightly polished and free of residues. Please attach the probe firmly. Use the quick-release strap supplied. Ensure good thermal contact, use the enclosed thermal paste. Depending on the requirements, it may be useful to insulate the probe to minimize the influence of the ambient temperature.

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 D-79853 Lenzkirch Unser gesamtes Temperaturfühler- und Transmitter- Portfolio finden Sie in unserem Webshop unter: www.testo-sensor.shop

Technical drawing

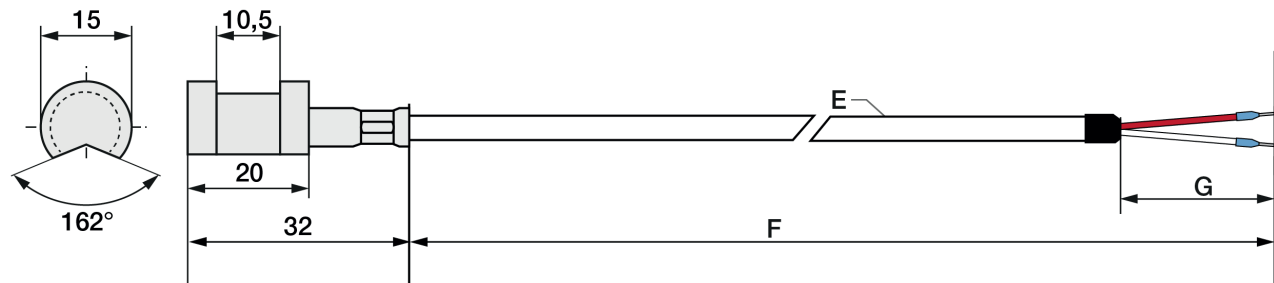
Customizable options

A-Measuring element
 B-Connection Type
 -

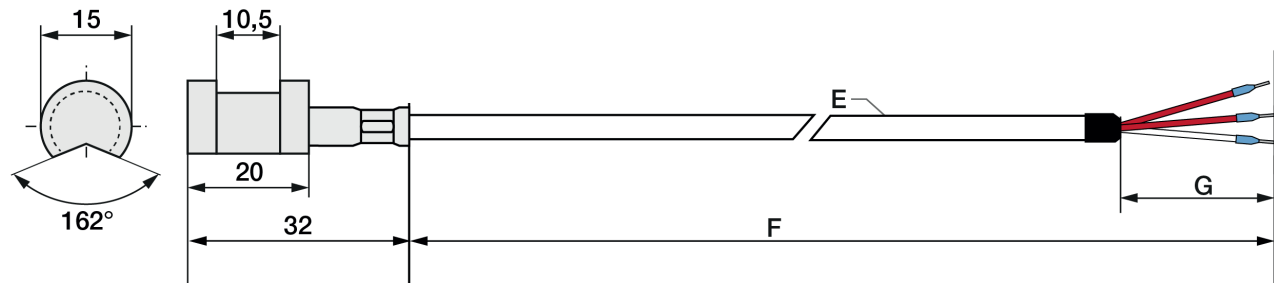
E-Material connection cable
 F-Length connection cable
 G-Connector

All dimensions in mm

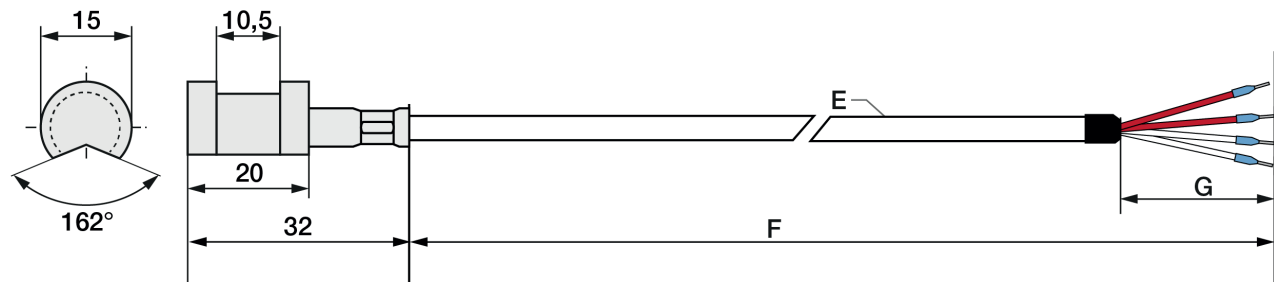
2-Wire version



3-Wire version



4-Wire version



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Matching accessories: Heat-conducting paste


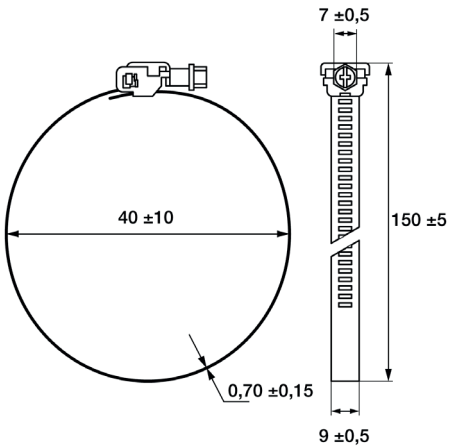
Heat-conducting paste		
	Article no.	809540 1000
	Content	10 ml
	Thermal conductivity	>2.5 W/mK
	Min / Max °C	-30 °C to +280 °C
	Thermal resistance	< 0.126

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Matching accessories: Quick-release strap


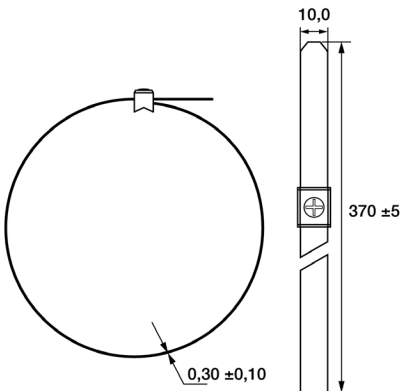
Quick-release strap

Article no.	809550 1000
Clamping range (mm)	Ø 25 to 40
Material	Stainless Steel
Dimensions (L/W) (mm)	150 ¹⁾ / 9 ²⁾
Closure	Screw closure

1) ± 5 mm | 2) ± 0,5 mm


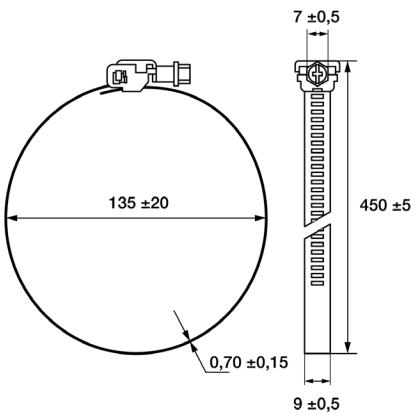
Quick-release strap

Article no.	809550 2000
Clamping range (mm)	Ø 30 to 110
Material	Stainless Steel
Dimensions (L/W) (mm)	370 ¹⁾ / 10
Closure	Screw closure

1) ± 5 mm | 2) ± 0,5 mm

Quick-release strap

Article no.	809550 3000
Clamping range (mm)	Ø 25 to 135
Material	Stainless Steel
Dimensions (L/W) (mm)	450 ¹⁾ / 9 ²⁾
Closure	Screw closure

1) ± 5 mm | 2) ± 0,5 mm

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