

Pipe contact thermocouple Type J with glass fibre cable

Article no.: 802180 1111

Type J pipe contact thermocouples with aluminum prism and glass-fibre cable precisely measure the surface temperature of bent objects such as pipes. The contact body with a special radius is ideal for pipes with a diameter of 30 mm to 110 mm. The measuring range extends from -30 to 400 °C. We offer various cable lengths and connection plugs so that you can adapt the thermocouple optimally to your installation situation. You will find suitable plugs and connection cables in our accessories.



General Information	
Measuring range	-40 °C to +400 °C depending on chosen connection cable
Perm. °C range cable	-50 °C to +400 °C
Accuracy	-40 °C to +375 °C: ±1,5 °C 375 °C to 750 °C: ±0,004 t according to DIN IEC 60584 Class 1

Supply and output	
Measuring element	Thermocouple Type J
Measuring point	Measuring point isolated
Measurement signal	Thermovoltage

Ambient conditions	
Protection class	IP20 according to 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

- E - Material connection cable
- F - Length connection cable
- G - Connector
- H - Bend protection

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

E - Cable material and configuration connection cable											
Picture	Code	Type	Color	IP	From (°C) ¹⁾	To (°C) ¹⁾	Outside material	Material strand	Ø (mm) ²⁾	Q (mm ²)	Color strand
	E8310	Thermocouple cable	Type J ³⁾	IP20	-50	+400	Varnish	Glass fibre	3,0	0,22	bk, wt
Insulation resistance: ≥ 100 MOhm a min. 100 VDC ¹⁾ Perm. range °C ²⁾ Tolerance ± 0,2 mm ³⁾ Color according to IEC 584 ⁴⁾ per thermocouple											

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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	Technical drawing - Stecker
	G01	Insulated end ferrules (50 mm)	
	G11	Mini-TC connector Type J bk	
	G31	TC connector Type J bk	

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

Your order code				
Article no.	Material connection cable	Length connection cable	Connector	Bend protection
802180 1111	E_____	F_____	G_____	H_____

Delivery and Assembly	
Assembly instructions	Using quick-release strap, clamping range Ø 30 mm to 110 mm
Delivery and Packaging	Probe, Quick-release strap, separately packaged in PE bag

Important assembly advices	
<p>The surface must be polished and free of residues. Please attach the probe securely. Use the quick-release strap provided. Ensure good thermal contact and use the thermal conduction paste provided. Depending on requirements, it may be advisable to insulate the probe to minimize the influence of the ambient temperature.</p>	

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Technical drawing

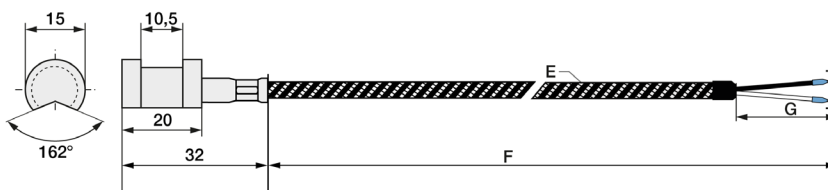
Customizable options

E - Material connection cable
 F - Length connection cable

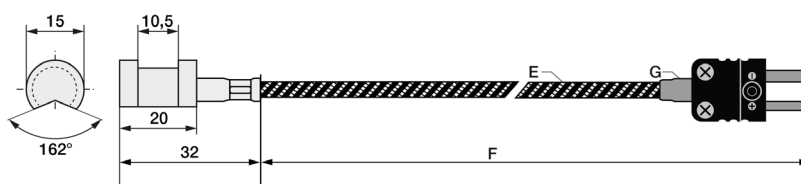
G - Connector
 H - Bend protection

All dimensions in mm

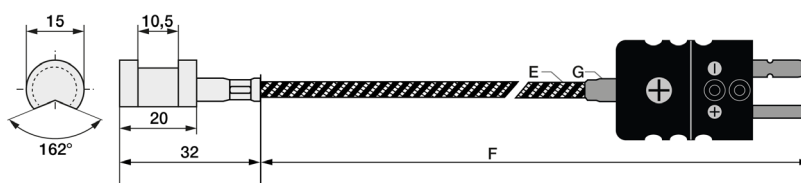
Version with insulated end ferrules



Version with Mini TE connector



Version with TE connector



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

Managing Director: Prof. Burkart Knospe, Timo Löffler
 Amtsgericht Freiburg HRB 706025 | Umsatzsteuer-ID.: DE274417683

Matching accessories: Thermocouple cables

Thermocouple cables - Please select your desired cable first.

	Order code	Type	Color	IP	From (°C) ¹⁾	To (°C) ¹⁾	Outside material	Material strand	Ø (mm) ²⁾	Q (mm ²)	Color strand	Ω / m ⁴⁾
	809340 1	Thermocouple cable	Type J ³⁾	IP20	-50	+400	Varnish	Glass fibre	3,0	0,22	bk, wt	2,50

Insulation resistance: ≥ 100 MOhm at min. 100 VDC | ¹⁾per. °C range | ²⁾Tolerance ± 0.2 mm | ³⁾ Color according to IEC 584 | ⁴⁾per thermocouple

Now please select the length and add the code to the article no. of the cable.

Length (m)	1	2	5	10	20
Code	010	020	050	100	200

Please append these digits to the part number of your desired cable.

Matching accessories: Connector

G - Connector

Picture	Code	Feature	Picture	Code	Feature
	809140 1000	Mini-TC connector Type J bk		809100 1000	Mini-TC coupling Type J bk
	809150 1000	TC connector Type J bk		809110 1000	TC coupling Type J bk

Technical drawing - Connector

	Mini-TC connector		Mini-TC coupling
	TC connector		TC coupling

Other connectors available on request

Matching accessories: Heat-conducting paste

Heat-conducting paste

Picture	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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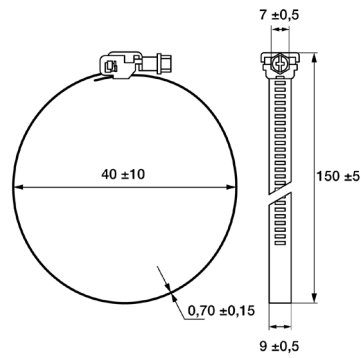
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Matching accessories: Quick-release strap

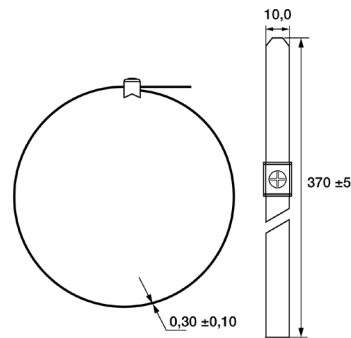
Quick-release strap



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

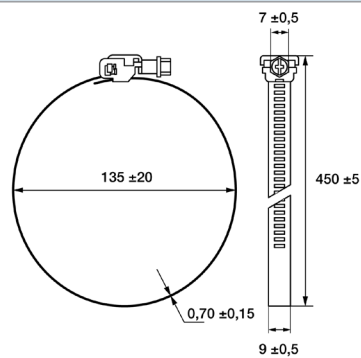
Quick-release strap



ArtikelnrArticle 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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