

Technical Data Sheet

Pressure / Temperature / Humidity / Air Velocity / Airflow / Sound level



Thermocouple temperature sensor with aluminium industrial connection head stainless steel angled or lined inconel with or without fitting

Type TBC K and TBCR K

TBC K – TBCD K – TBC KI – TBCD KI TBCR K – TBCRD K – TBCR KI – TBCRD KI

General features

- Thermocouple types T, J, K and N
- Measuring range from -40°C to +1000°C
- Mounting with stainless steel contact tip 316 L or inconel 600
- Smooth or screwing mounting

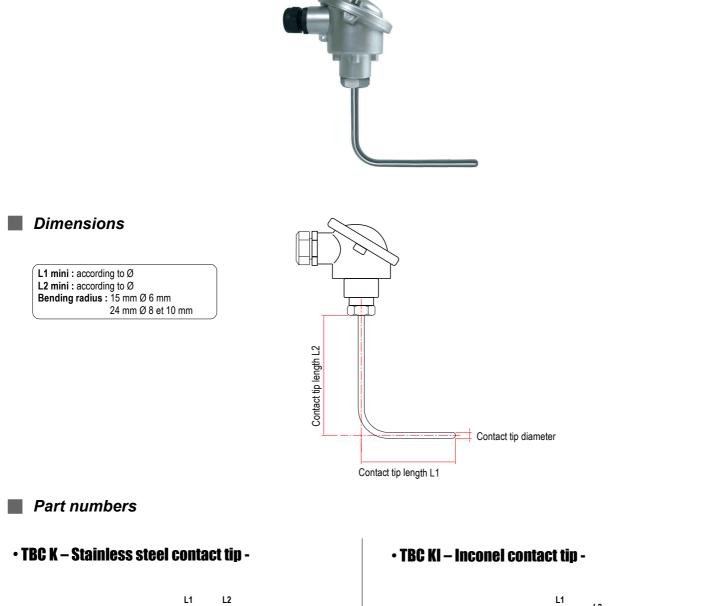
Technical features

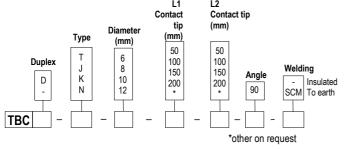
Working temperature. .For TBCK series from 40°C to +350°C for Tc T from 40°C to +400°C for J, K et N For TBCKI series from 40°C to +750°C for Tc J from 40°C to +750°C for Tc J from 0.°c to +750°C for Tc J Angled contact tip Image: Contact tip 0 in inconel 600 from 0.5 to 1 mm 0 : up to 300°C from 1.5 to 2 mm 0 : up to 500°C 3 mm 0 : up to 900°C from 4.5 to 8 mm 0 : up to 1000°C Image: Contact tip Accuracy* for class 1. .See "Tolerances" table Mounting of welding. .Insulated or to earth hot welding Single pair or 2x2 wires multipair mounting. Contact tip. .Stainless steel 316 L or ined inconel 600 for I series Compacted magnesia and stainless steel 316 L for TBC and TBCD series Angled at 90° (other on request) Compression fitting. .Stainless steel 316 L Smooth mounting without fitting : put anything Mounting with fitting on L2 (See schema) : 12 or 14 corresponding to fitting ½G and ½G. Mounting with fitting on L2 (See schema) : 12 L1 or 14L1 corresponding to fitting ½G and ½G. Thread .With or without fitting ½", ½" G or NPT plug. Electrical connection .Ceramic block junction 2 or 4 contacts. Transmitter as option. Connection head .Aluminium alloy(max 120°C) Cable gland : M20/150 [P65 protection Storage temperature. .for -20°C to +80°C	Warking townships	For TRCK pariag				
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Cable gland : M20/150 IP65 protection	Electrical connection	Ceramic block junction 2 or 4 contacts. Transmit	tter as option.			
Cable gland : M20/150 IP65 protection	Connection head	Aluminium alloy(max 120°C)				
IP65 protection						
Storage temperaturefrom -20°C to +80°C						
	Storage temperature	from -20°C to +80°C				

* Performed in laboratory conditions, the above accuracies mentioned in this document will be guaranteed, provided that you use the calibration compensation data or identical calibration conditions.

TBC K & TBC KI

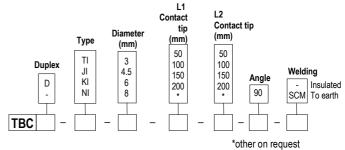
Stainless steel angled or lined inconel with or without multipair mounting probe





Example : TBCJ-8-100-100-90-SCM

Model : Thermocouple sensor type J welded to earth with stainless steel contact tip 8 mm \emptyset angled at 90° and L1 and L2 lengths 100 mm.



Example : TBCJI-8-100-100-90-SCM

Model : Thermocouple sensor type J welded to earth with inconel contact tip 8 mm Ø angled at 90° and L1 and L2 lengths 100 mm.

TBCR K & TBCR KI

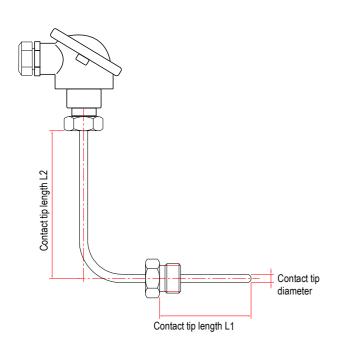
Stainless steel angled or lined inconel with fitting and with or without multipair mounting probe



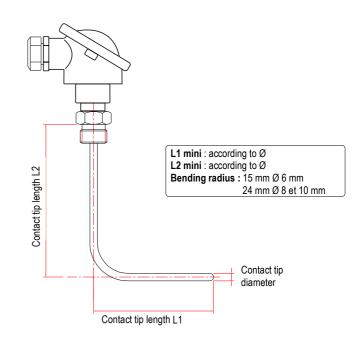


Dimensions

• With fitting on L1

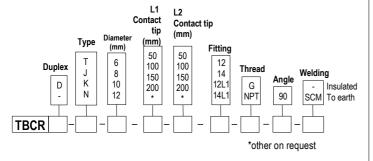


• With fitting on L2



Part numbers

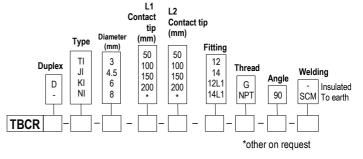
• TBCR K - Stainless steel contact tip -



Example : TBCRJ-8-100-100-12-G-90-SCM

Model : Thermocouple sensor type J welded to earth with stainless steel contact tip 8 mm Ø angled at 90° and L1 and L2 lengths 100 mm with fitting $\frac{1}{2}$ 'G on L2.

• TBCR KI - Inconel contact tip -



Example : TBCRJI-8-100-100-12-G-90-SCM

Model : Thermocouple sensor type J welded to earth with inconel contact tip 8 mm Ø angled at 90° and L1 and L2 lengths 100 mm, with fitting $\frac{1}{2}$ 'G on L2.

Tolerances* of the probe

As per IEC 584-3 norm

тс	MEASURING RANGE CLASS 1	TOLERANCE
Т	From -40°C to +350°C	From -40°C to +125°C ± 0.5°C From 125°C to +350°C ± 0.004 x T°abs
J	From -40°C to +750°C	From -40°C to +375°C ± 1.5°C From 375°C to 750°C ± 0.004 x T° abs
к	From -40°C to +1000°C	From -40°C to +375°C ± 1.5°C From 375°C to 1000°C ± 0.004 x T°abs
N	From -40°C to +1000°C	From -40°C to +375°C ± 1.5°C From 375°C to 1000°C ± 0.004 x T°abs

* Performed in laboratory conditions, the above accuracies mentioned in this document will be guaranteed, provided that you use the calibration compensation data or identical calibration conditions.

Most common thermocouple types

THERMOCOUPLE TYPE	+ CONDUCTOR	- CONDUCTOR	COLOR OF COMPENSATING CABLE
К	Nickel-Chrome 10%	Nickel-Aluminium 5% -Silicium	Ext. color + = GREEN, - = WHITE
Т	Copper	Copper-Nickel	Ext. color + = BROWN, - = WHITE
J	Iron	Copper-Nickel	Ext. color + = BLACK, - = WHITE
N	Nickel 84,4%	Nickel 95,6%	Ext. color + = PINK, - = WHITE
	Chromium 14,2%	Silicium 4,4%	
	Silicium 1,4%		
R	Platinum-Rhodium 13%	Platinum	Ext. color + = ORANGE, - = WHITE
S	Platinum-Rhodium 10%	Platinum	Ext. color + = ORANGE, - = WHITE
В	Platinum-Rhodium 30%	Platinum-Rhodium 6%	Ext. color + = GREY, - = WHITE

Accessories (See data sheet)

- Extension cable
- Compensating cable
- · Standard or miniature connector
- Cable seal for plug and socket connector
- Miniature or standard fixed connector
- · Miniature or standard connectors panel
- Extension lead
- Converters



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