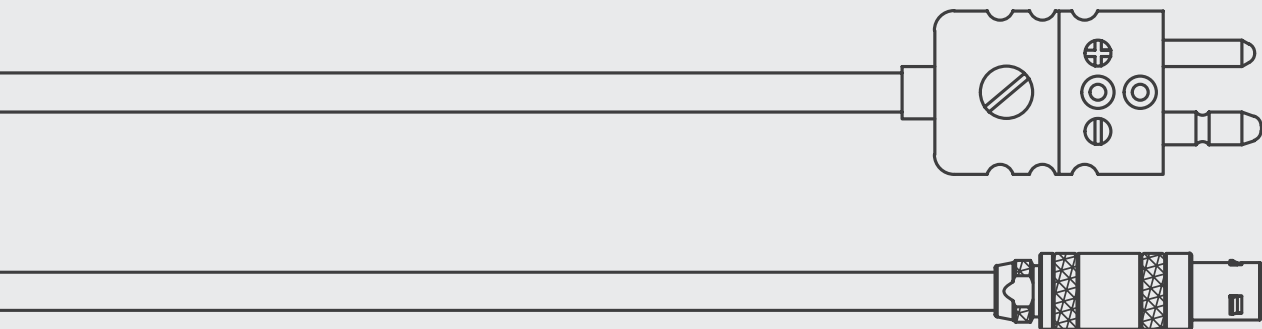


# Industrial thermocouple

CONNECTOR

**TCMA-TCNA-TCPA-TCPB**  
**CONFIGURATIONS**

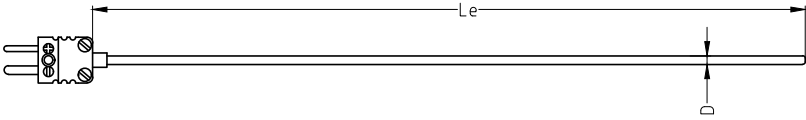
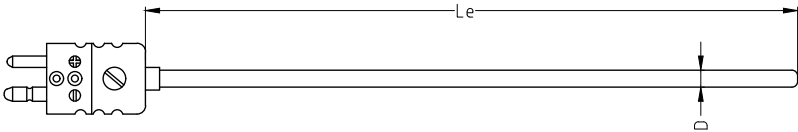
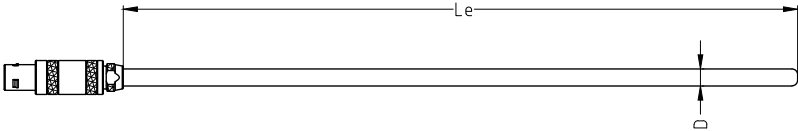
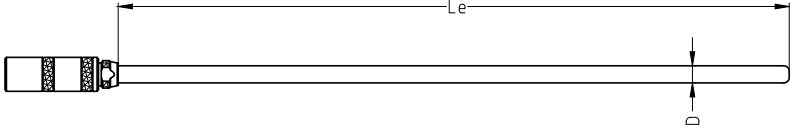
**General use TC**



**RODAX**<sup>o</sup>  
new temperature solutions

Product series TCWT

**Table 1: Measuring inserts main models**

	<b>Terminal</b>	
<b>TCMA</b>	Miniature flat pin connector	
<b>TCNA</b>	Round pin connector	
<b>TCPA0, TCPA1, TCPA2, TCPA3</b>	Male push-pull self-latching connector  (Lemo® mod S with Cu pins and size 0, 1, 2 or 3)	
<b>TCPB0, TCPB1, TCPB2, TCPB3</b>	Female push-pull self-latching connector  (Lemo® mod S with Cu pins and size 0, 1, 2 or 3)	

## Features assembly

High quality thermocouple element with MgO mineral insulated metal sheathed cable, providing excellent stability and reproducibility.

The unique properties make this basic element ideally suited for a wide variety of applications up to 1200 °C depending on thermocouple type and metal sheath.

The thermocouple element is fully bendable.

**Table 2: Measuring inserts details**

## Details

- Thermocouple types: J/K/T/E/N/S/R/B
- Thermocouple standards: EN/IEC 60584 and/or ANSI MC96-1
- Minimum insulation resistance: 1000 MOhm at 500VDC,  $T_{amb}=20\text{ }^{\circ}\text{C}$
- Conductors: thermocouple material
- Metal sheath: see table

## TC Type

<b>J</b>	<b>K</b>	<b>T</b>	<b>E</b>	<b>N</b>
Fe – CuNi	NiCr – NiAl	Cu – CuNi	NiCr – CuNi	NiCrSi – NiSi
±1.5 between -40 °C and 375 °C or ±0.004xT °C	±1.5 between -40 °C and 375 °C or ±0.004xT °C	±0.5 between -40 °C and 125 °C or ±0.004xT °C	±1.5 between -40 °C and 375 °C or ±0.004xT °C	±1.5 between -40 °C and 375 °C or ±0.004xT °C

## Colour code

<b>ANSI</b>	<b>IEC</b>	<b>Other</b>
ANSI – MC96-1	EN/IEC 60584-1	

## TC element

<b>S</b>	<b>D</b>	<b>T</b>
Single thermocouple	Dual thermocouple	Triple thermocouple

## Diameter ØD

<b>D3</b>	<b>D3,2</b>	<b>D4,5</b>	<b>D4,8</b>	<b>D6</b>	<b>D6,35</b>	<b>Other diameters on request</b>
3,0 mm	3,2 mm	4,5 mm	4,8 mm	6,0 mm	6,35 mm	

## Sheath material

<b>M2102</b>	<b>M2107</b>	<b>M2110</b>	<b>M0601</b>	<b>M0701</b>	<b>M0704</b>	<b>M0809</b>
SS304	SS316 Standard for TC J/T	SS310	Inconel 600 Standard for TC K	Alloy 800H	Alloy 825	Hastelloy X

## Hot junction

<b>I</b>	Individually isolated	Hot junction electrically isolated from and shielded by the sheath.
<b>CI</b>	Commonly isolated	Multiple hot junctions joined to one hot junction electrically isolated from and shielded by the sheath.
<b>DI</b>	Dually isolated	Hot junction electrically isolated from and shielded by the sheath. For dual and triple: all circuits isolated from each other and from the sheath.
<b>G</b>	Grounded	Hot junction welded to the sheath.

## Temperature rating connector

Sensor main model	ST	HT	UT	KE
TCMA/TCNA	200 °C	350 °C	425 °C	650 °C
TCPA/TCPB	250 °C	NA	NA	NA

**Table 3: Additional accessories**

## Accessories

Sensor main model	24MCF	24MCW	24SCF	24SCW	24SOM	24SOF
TCMA/TCNA	Counter plug female miniature connector	Wire bracket in SS for miniature connector	Counter plug female standard connector	Wire bracket in SS for miniature connector	NA	NA
TCPA/TCPB	NA	NA	NA	NA	Lemo® S series male connector	Lemo® S series female connector

**Table 4: Certification possibilities**

## Certificates

Following tests and certificates are possible and are either done in-house or done by an external party.

Code	Certificates
<b>Q04210</b>	Functional test report sensor
<b>Q04230</b>	Calibration report (measuring points to be indicated) E.g. 100/200 °C
<b>Q05220</b>	Calibration report by accredited calibration lab retraceable (measuring points to be indicated)
<b>Q05230</b>	Calibration report by accredited calibration lab ISO/IEC 17025 (BELAC) (measuring points to be indicated)
<b>Q02040</b>	Test report EN10204-2.2

## HOW TO ORDER (example)

Code		Example	Your code
<b>Main model</b>	See table 1	KPA1	
<b>TC type</b>	See table 2	K	
<b>Colour code</b>	See table 2	ANSI	
<b>TC element</b>	See table 2	S	
<b>Diameter ØD</b>	See table 2	D6	
<b>Sheath material</b>	See table 2	M0601	
<b>Hot junction</b>	See table 2	I	
<b>Temperature rating connector</b>	See table 2	ST	
<b>Additional accessories</b>	See table 3		
<b>Insertion length Le</b>	In mm	Le400	

Ordering code example:

KPA1 K ANSI S D6 M0601 I ST Le400

**For all options: please contact Rodax**

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Santvoortbeeklaan 33, 2100 Antwerp - Belgium

T +32 (0)3 360 90 00

E [quotationdesk@rodax-europe.com](mailto:quotationdesk@rodax-europe.com)

[www.rodax-europe.com](http://www.rodax-europe.com)

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**TCM-Gen-TC GB 201901**