ul. Skrudlak 1, 34-600 Limanowa www.limathermsensor.pl

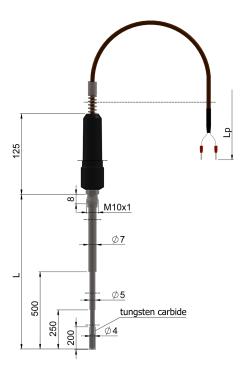
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# Mineral insulated thermocouple sensors PTTJ-147, PTTK-147

## **Technical description**

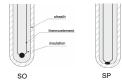
Measuring range / sensing element					
(-40 ÷ 700) °C	J	class 2			
(-40 ÷ 800) °C	K	class 2			
Thermowell					
<ul> <li>- three-stepped ø4/ø5/ø7 mm</li> <li>- material: steel 1.4541</li> <li>- length L [mm]: 600÷1000</li> <li>- at length 200 mm covered with tungsten carbide to enhance abrasion resitance</li> </ul>					
Construction version					
<ul> <li>plastic handle, max. working temperature 80 °C</li> <li>M10x1 thread allows the sensor to be screwed into the housing of e.g. a container</li> </ul>					
Wire					
– wire: $2x0,22 \text{ mm}^2$ in double silicone insulation – measuring junction: isolated SO – length $L_{\rm p}$ =1m (standard)					
Options					
<ul> <li>measuring junction: grounded SP</li> <li>thermocouple J, K: class 1</li> <li>other lead wire insulation types: teflon, armour, fiberglass</li> </ul>					
Additional accessor	ies				
<ul><li>mini plug SMPW – p. 198÷199</li><li>compensation cables – p. 197</li></ul>					



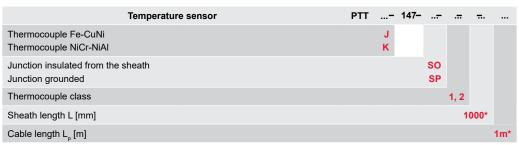
#### Tolerance for thermocouples class acc to. PN-EN 60584

Thermocouple	Class 1		Class 2	
	Range [°C]	Tolerance [°C]	Range [°C]	Tolerance [°C]
<b>J</b> Fe-CuNi	(-40÷375) (375÷750)	±1,5 ±0,004  t	(-40÷333) (333÷750)	±2,5 ±0,0075  t
<b>K</b> NiCr-NiAl	(-40÷375) (375÷1000)	±1,5 ±0,004  t	from (-40÷333) (333÷1200)	±2,5 ±0,0075  t

## Types of measuring hot junction



## Ordering code



<sup>\*</sup> or others acc. to requirements

Ordering example

PTTK-147-SO-1-1000-1m sensor with mineralinsulated thermocouple NiCr-NiAl, kl.1, insulated junction, sheath length L = 1000 mm, lead wire length  $L_p = 1$ m