

# Temperature sensor

Series **KTY**

## Features

- **Large Measuring Range**
- **Mounting in windings** of electrical motors, generators, transformers and industrial electronic for the monitoring of limiting temperatures
- **Customer-specified types** will be realized at low costs
- **Quick and safe response action**
- **Connecting cable soldered**
- **Insulation:** heat shrink tubing/metal case
- **Temperature range**  
-40 °C to +190°C
- **100% -controlled production**



## Description

KTY84-130 is a silicon semi-conductor, similar to a diode, which has a large measuring range and consequently covers most of the industrial requirements.

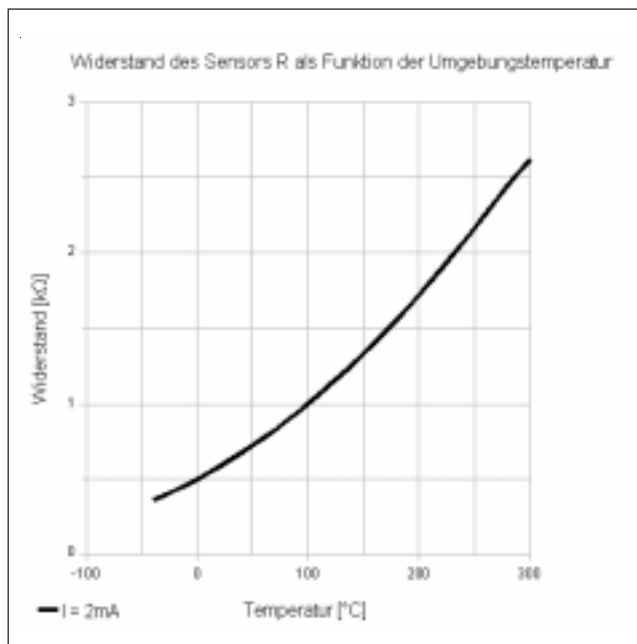
The KTYs have a positive temperature coefficient. The resistance temperature characteristic curve runs thereby linear. It follows that the main range of application results in measuring of temperature and monitoring of limit values.

## Technical data

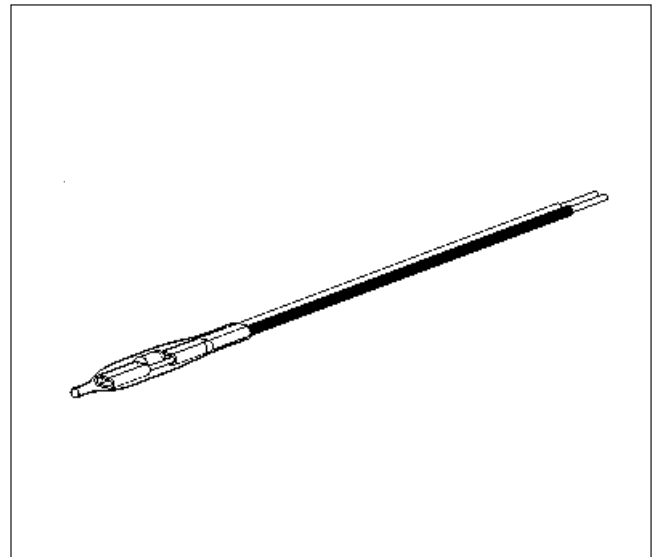
Measurement temp. range $\vartheta_M$	-40°C...+180°C <sup>1) 2)</sup>
Reference temperature $\vartheta_N$	+ 100°C
Sensor resistance $R_N$ bei $\vartheta_N$	1000Ω ± 3%
Temperature coefficient	typ. 0,61% /K
Resistance Conditions $R_{250}/R_{100}$	2,166 ± 0,055
$R_{25}/R_{100}$	0,603 ± 0,008
Measuring current	2,0 mA
Permanent current $I_{Dmax}$	$\vartheta_U = 25^\circ\text{C}$ 10,0 mA $\vartheta_U = 300^\circ\text{C}$ 2,0 mA
Insulation material	Kynarflex/Mylar-Nomex
Operating temperature	-40°C....+190°C
Connecting cables	Teflon AWG 26 = 0,14mm <sup>2</sup>
Dielectric strength	2,5 kV

- 1) KTY84-130 without insulation and connecting leads  
2) others on request

## Resistance - Temperature - Characteristic curve

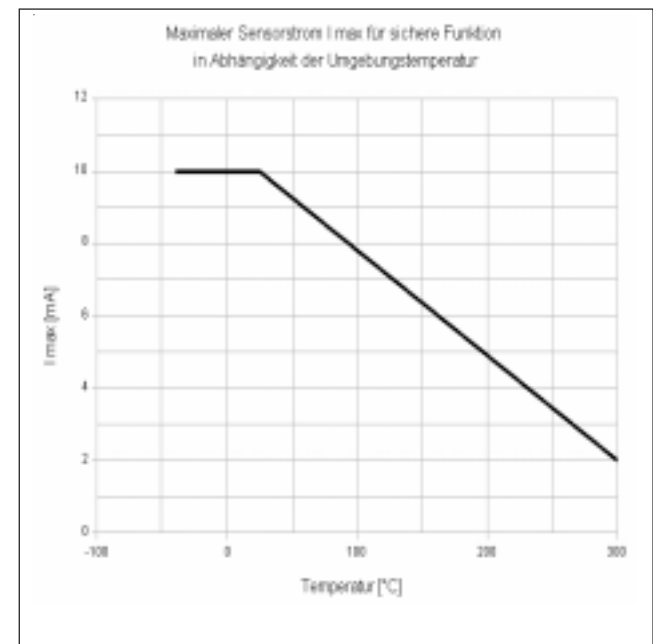


## Dimensions (data in mm)



Standard lead: Teflon stranded wire, AWG 26 = 0,14 mm<sup>2</sup>,  
Standard length 500 mm  
Cathode green, Anode yellow

## max. allowable sensor current depending on temperature



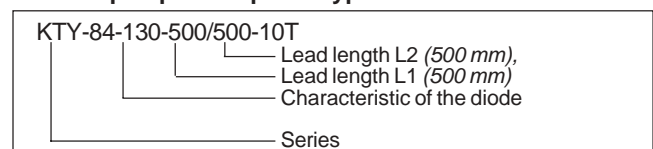
## Model

Sensors with teflon-stranded wires soldered, insulated with temperature-resistance shrinking tube of Kynarflex or additional Mylar-Nomex tube or Kynar tube. Because of the dependence of the polarity the cathode has to be connected with the negative potential of the measuring apparatus.

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Because TMC has no access to the details of the application, respectively, TMC is not able to take any liability for perhaps improper use of the PTC or for the violation of the claims of others, patent violation for example.

## Order example for special types



We reserve the right to modify specification and dimensions. Regarding the information of this brochure there can't lay claim of liability or to acceptance guarantee.

This new data sheet obsoletes all previous issues.

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