



## SCT101

- temperature range  $-40 \div 1200^{\circ}\text{C}$  depending on thermocouple
- operating temperature of connection heads max.  $150^{\circ}\text{C}$
- stainless steel sheath
- optional: sensor with a replaceable measuring insert
- possibility of mounting a 4...20 mA or 0...10 V temperature transmitter
- connection head DANW with local display

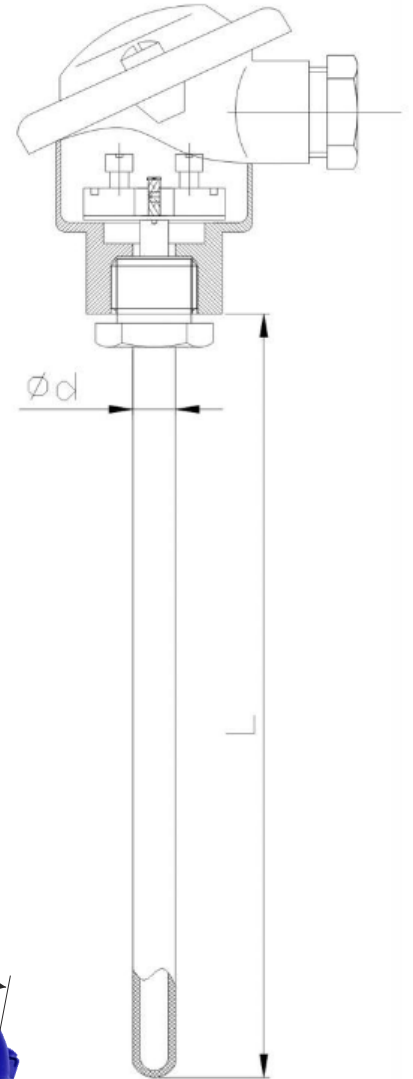
The thermocouple **SCT101** consists of an optional exchangeable measuring insert, outer protective tube (thermowell) and aluminum connection head. Mounting a temperature transmitter with 4...20 mA or 0...10V output signal is possible. The measuring insert represents the replaceable element of the complete sensor, which reduces the time and costs of maintenance of the measuring apparatus installed in the object. Compression fittings allow simple adaptation to the required insertion length at the installation point.

### Application areas:

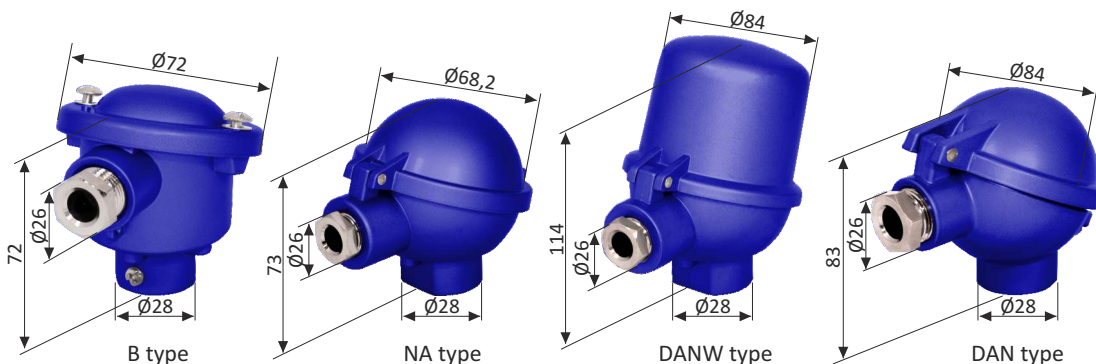
- machine construction, tanks or containers,
- fine chemical industry,
- light energy industry,
- food industry,
- general industrial services.

### TECHNICAL DATA

Sensing element	J, K, N thermocouple (single, double)
Measuring range	$-40 \div 1200^{\circ}\text{C}$ (depending on thermocouple and material)
Connection head	B, NA or other, operating temperature $-40 \div 150^{\circ}\text{C}$
Class	1 or 2
Sheath	material: stainless steel 1.4541 or other nominal length: 100 mm, 160 mm or other diameter: $4 \div 15$ mm



### CONNECTION HEAD TYPES



### THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi)	$-40 \div 750^{\circ}\text{C}$	$\pm 1,5^{\circ}\text{C}$	$-40 \div 750^{\circ}\text{C}$	$\pm 2,5^{\circ}\text{C}$
K (NiCr-Ni)	$-40 \div 1000^{\circ}\text{C}$	$\pm 0,0040^{\circ}\text{C} \times  t $	$-40 \div 1200^{\circ}\text{C}$	$\pm 0,0075^{\circ}\text{C} \times  t $
N (NiCrSi-NiSi)	$-40 \div 1000^{\circ}\text{C}$		$-40 \div 1200^{\circ}\text{C}$	



**OPTIONAL ACCESORIES**



S type flange  
(stainless steel)

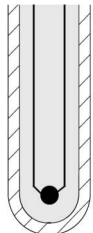


T type flange  
(PTFE)

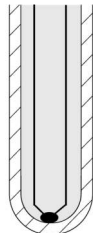


Threaded holder (fitting)  
with a compression ferrule  
(brass or stainless steel)

**TYPES OF MEASURING HOT JUNCTION**



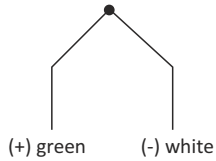
SO  
junction isolated  
from the sheath



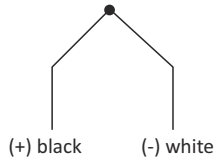
SP  
grounded  
junction

**ELECTRICAL CONNECTION**

**K (NiCr-Ni)**



**J (Fe-CuNi)**



**ORDERING**

**SCT101-X-X-X-X-X-X-X-X**

**temperature sensor:**

- 1 : single
- 2 : double
- PP : with transmitter

**sensing element:**

- J
- K
- N
- other, please specify

**connection head:**

- B
- NA
- other, please specify

**sheath length (L):**

- 100 mm
- 160 mm
- other, please specify [mm]

**sensor measuring range or temperature transmitter settings:**

please specify

**accuracy class:**

- class 1
- class 2

**junction type:**

- SO : junction isolated from the sheath
- SU : junction grounded

**sheath diameter (Ød):**

- 4 mm
- 6 mm
- 9 mm
- other, please specify

**measuring insert:**

- BW : non-replaceable
- W : replaceable

Ordering example:

**SCT101-1-K-B-100-BW-6-SO-2-150°C**

Single TC temperature sensor, K thermocouple, 2 tolerance class, non-replaceable measuring insert, B head type, sheath diameter Ø9 mm and length L=100 mm, hot junction isolated from the sheath, sensor measuring range 250°C.

