



SCT100

- temperature range $-40 \div 1200^{\circ}\text{C}$ depending on thermocouple
- operating temperature of connection heads max. 150°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 **SCT100** consists of an optional exchangeable measuring insert, outer protective tube (thermowell), and aluminum connection. 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.

Application areas:

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

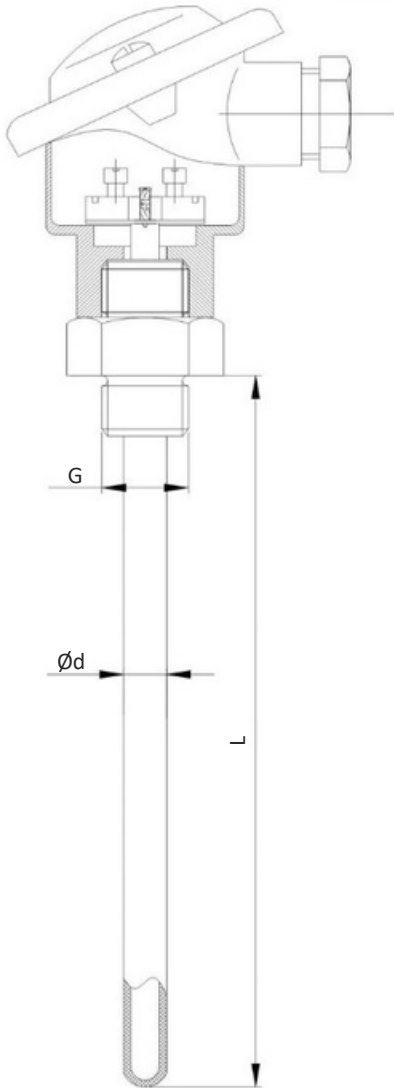
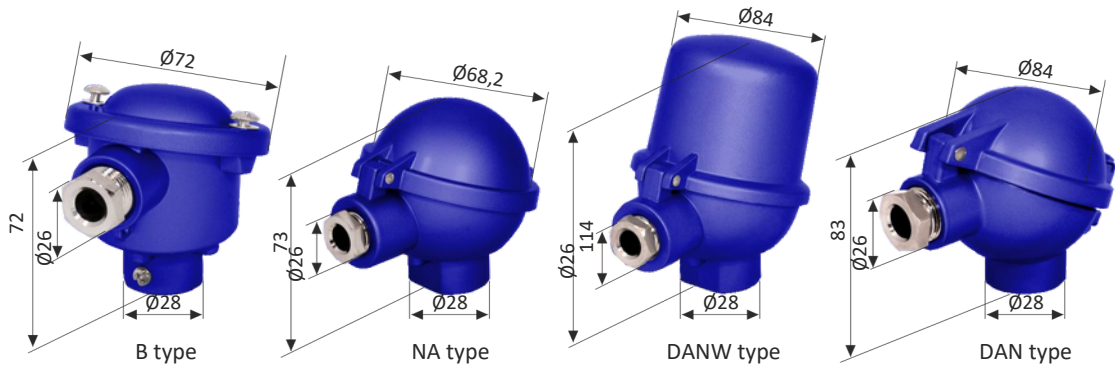
TECHNICAL DATA

Sensing element	J, K, N, R, S, B thermocouple or other (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
Process connection	G1/2", M20x1,5 or other

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)	$-40 \div 1000^{\circ}\text{C}$		$-40 \div 1200^{\circ}\text{C}$	

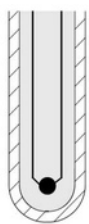
CONNECTION HEAD TYPES



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ventas@welko.cl - www.welko.cl

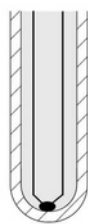


TYPES OF MEASURING HOT JUNCTION



SO

junction isolated
from the sheath

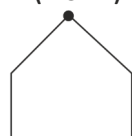


SU

junction
grounded

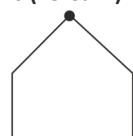
ELECTRICAL CONNECTION

K (NiCr-Ni)



(+) green (-) white

J (Fe-CuNi)



(+) black (-) white

ORDERING

SCT100-X-X-X-X-X-X-X-X-X

temperature sensor:

1 : single
2 : double
PP1 : without ceramic block
PP2 : with RTD/TC transmitter, 4...20mA
PP3 : with other transmitter (on request)

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]

measuring insert:

BW : non-replaceable
W : replaceable

sensor measuring range, output type or temperature transmitter settings:

please specify

accuracy class:

class 1
class 2

junction type:

SO : junction isolated from the sheath
SU : junction grounded

process connection:

G1/2"
M20x1,5
other, please specify

sheath diameter (Ød):

4 mm 6 mm 9 mm
other, please specify

Ordering example:

SCT100-1-J-B-100-W-9-M20x1,5-SO-1-250

Single TC temperature sensor, J thermocouple, 1 tolerance class, measuring insert replaceable, B head type, process connection M20x1,5, sheath diameter 9 mm and length 100 mm, hot junction isolated from the sheath, sensor measuring range 250°C.

