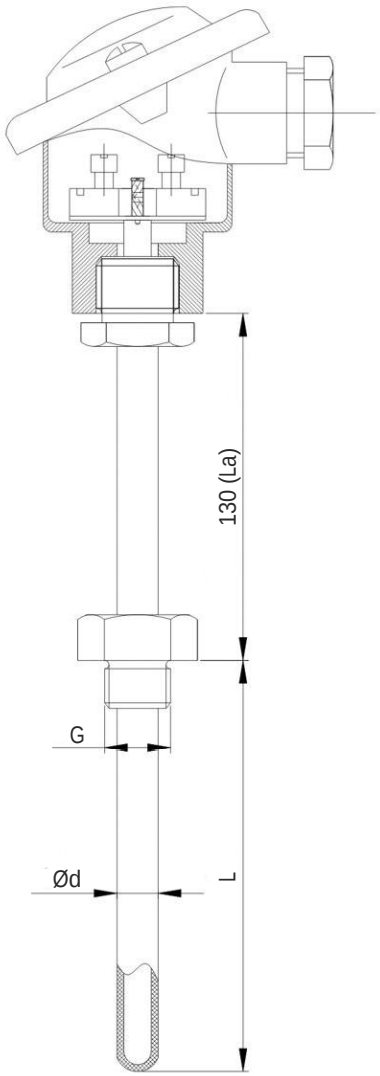
SCT103

- temperature range -40 ÷ 1200°C depending on thermocouple
- operating temperature of connection heads max. 150°C
- stainless steel sheath
- threaded process connection
- 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 SCT103 consists of an exchangeable measuring insert, outer protective tube (thermowell) with neck and aluminum connection head. Mounting a temperature transmitter with 4...20 mA or 0...10V the 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. Spring fixation of the measuring insert provides perfect pressure to the bottom of the protecting tube, reduces the time of reaction to changes of temperature and increases the accuracy of measurement as well as reduces natural vibration thus mechanical, and electrical defects can be avoided.
Application areas:
- fine chemical industry,
- light energy industry,
- general industrial services.



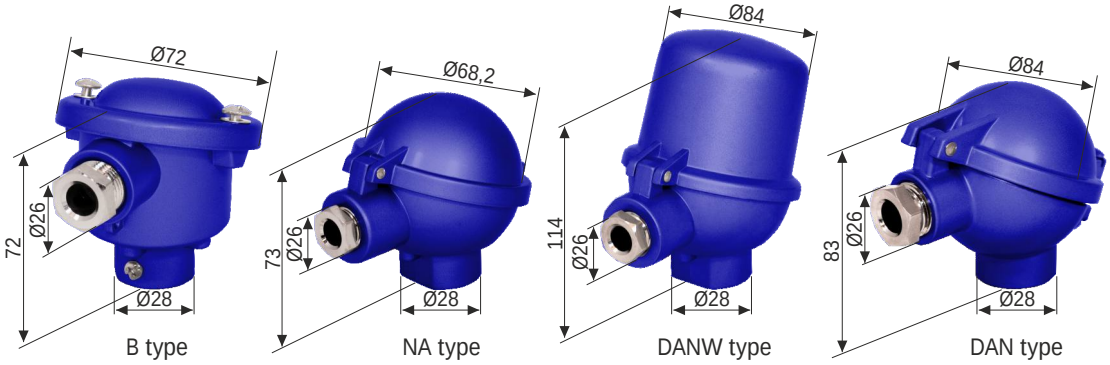
TECHNICAL DATA

Sensing element	J, K, N, R, S, B thermocouple or other (single, double)
Measuring range	-40 ÷ 1200°C (depending on thermocouple and material)
Connection head	B, NA or other, operating temperature -40 ÷ 150°C
Class	1 or 2
Sheath	material: stainless steel 1.4541 or other proper sheath length (L): 100 mm, 160 mm or other transitional sheath length (La): 130 mm (standard) diameter: 4 ÷ 15 mm
Process connection	G1/2", M20x1,5 or other

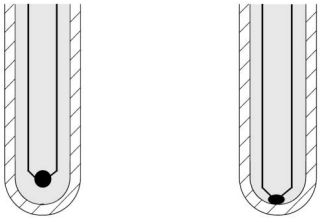
THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi) K (NiCr-Ni) N (NiCrSi-NiSi)	-40 ÷ 750°C -40 ÷ 1000°C -40 ÷ 1000°C	± 1,5°C ± 0,0040°C x |t|	-40 ÷ 750°C -40 ÷ 1200°C -40 ÷ 1200°C	± 2,5°C ± 0,0075°C x |t|

CONNECTION HEAD TYPES



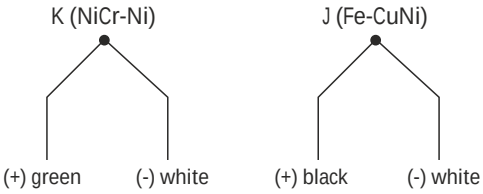
TYPES OF MEASURING HOT JUNCTION



SO
junction isolated from the sheath

SU
junction grounded

ELECTRICAL CONNECTION



ORDERING

SCT103-X-X-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

proper sheath length (L):
100 mm
160 mm
other, please specify [mm]

transitional sheath length (La):
S : 130 mm (standard)
other, please specify

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

measuring insert:
BW : non-replaceable
W : replaceable

Ordering example:
SCT103-1-K-B-100-S-W-9-G1/2"-SO-2-250
Single TC temperature sensor, K thermocouple, 2 tolerance class, measuring insert replaceable, B head type, process connection G1/2", sheath diameter 9 mm and length 100 mm, hot junction isolated from the sheath, sensor measuring range 250°C.