



SCT103

- temperature range $-40 \div 1200^{\circ}\text{C}$ 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

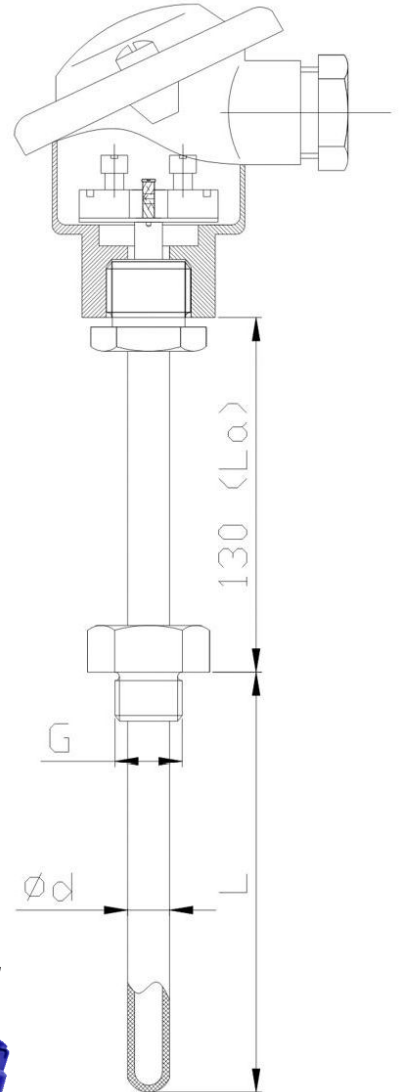
The thermocouple **SCT103** consists of an exchangeable measuring insert, outer protective tube (thermowell) with neck and aluminum connection head. Mounting a temperature transmitter with 4...20 mA or 0...10V the output signal is possible. The measuring insert represents the replaceable element of the 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:

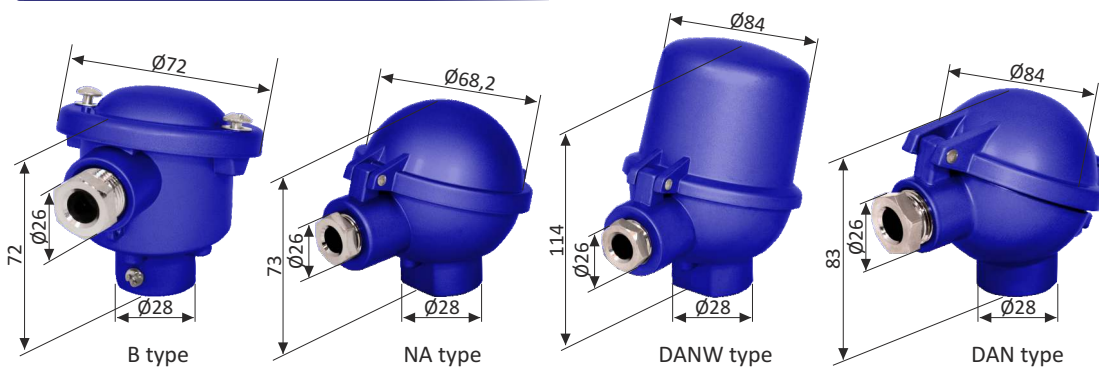
- fine chemical industry,
- light energy industry,
- general industrial services.

TECHNICAL DATA

Sensing element	J, K, N 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: 130 mm (standard) diameter: $4 \div 15$ mm
Process connection	G1/2", M20x1,5 or other



CONNECTION HEAD TYPES

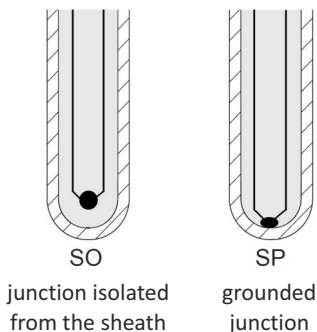


THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

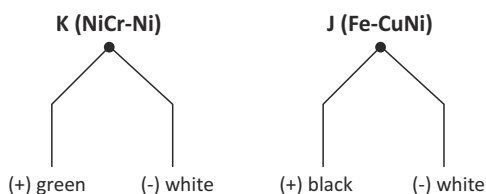
Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi)	$-40 \div 750^{\circ}\text{C}$	$\pm 1,5^{\circ}\text{C}$	$-40 \div 750^{\circ}\text{C}$	$\pm 2,5^{\circ}\text{C}$
K (NiCr-Ni)	$-40 \div 1000^{\circ}\text{C}$	$\pm 0,0040^{\circ}\text{C} \times t $	$-40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



TYPES OF MEASURING HOT JUNCTION



ELECTRICAL CONNECTION



ORDERING

SCT103-X-X-X-X-X-X-X-X-X-X

temperature sensor:	1 : single 2 : double PP : with transmitter	sensor measuring range or temperature transmitter settings:	please specify
sensing element:	J K N other, please specify	accuracy class:	class 1 class 2
connection head:	B NA other, please specify	junction type:	SO : junction isolated from the sheath SU : junction grounded
sheath length (L):	100 mm 160 mm other, please specify [mm]	process connection:	G1/2" M20x1,5 other, please specify
length La [mm]:	S : 130 mm (standard) 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°C

Single TC temperature sensor, K thermocouple, 2 tolerance class, measuring insert replaceable, B head type, process connection: G1/2", sheath diameter Ø9 mm and length L=100 mm, hot junction isolated from the sheath, sensor measuring range 250°C.

