

SCT120



- temperature range $-40 \div 800^{\circ}\text{C}$ depending on thermocouple
- operating temperature of connection heads max. 150°C
- for mounting in additional protection tube
- stainless steel AISI316 (1.4401) insert cover
- spring-loaded insert ensures an excellent connection with the thermowell
- possibility of mounting a 4...20mA or 0...10V temperature transmitter
- connection head DANW with local display

The thermocouple SCT120 is used for temperature measurement of liquid and gaseous media. The temperature sensor design (replaceable measuring insert) is suitable for various industrial applications. Replacement of the measuring insert does not cause the technological installation damage. Spring-loaded insert ensures an excellent connection with the bottom of the sensor thermowell.

Application areas:

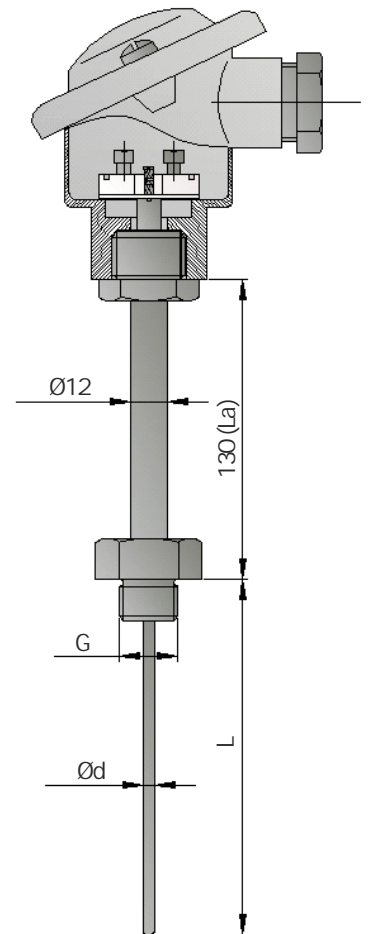
- installations of technological processes in all industries,
- mechanical engineering,
- heating, air conditioning and ventilation installations.

TECHNICAL DATA

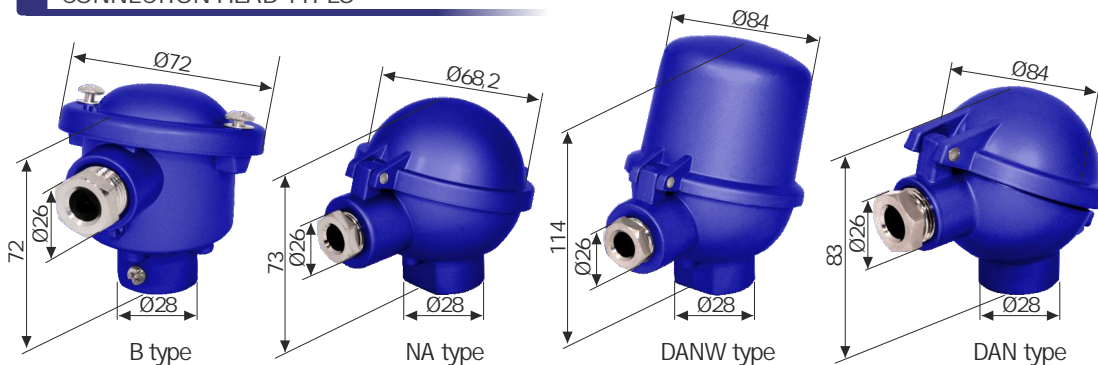
Sensing element	J, K, N, R, S, B thermocouple or other (single, double)
Measuring range	$-40 \div 800^{\circ}\text{C}$ (depending on thermocouple and material)
Connection head	B, NA, MA, DAN or other, operating temperature $-40 \div 150^{\circ}\text{C}$
Class	1 or 2
Insert	mineral insulated or tube sheath material: stainless steel AISI316 (1.4401) any nominal length (specified when ordering) diameter: from 3 to 8 mm or other
Process connection	G1/2", M20x1,5 or other

THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

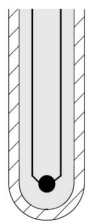
Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi)	$-40 \div 750^{\circ}\text{C}$	$\pm 1,5^{\circ}\text{C}$	$-40 \div 750^{\circ}\text{C}$	$\pm 2,5^{\circ}\text{C}$
K (NiCr-Ni)	$-40 \div 1000^{\circ}\text{C}$	$\pm 0,0040^{\circ}\text{C} \times t $	$-40 \div 1200^{\circ}\text{C}$	$\pm 0,0075^{\circ}\text{C} \times t $
N (NiCr-Si-NiSi)	$-40 \div 1000^{\circ}\text{C}$		$-40 \div 1200^{\circ}\text{C}$	
B (PtRh30-PtRh6)	-	-	$600 \div 1700^{\circ}\text{C}$	$\pm 0,0025^{\circ}\text{C} \times t $
R (PtRh13-Pt)	$0 \div 1100^{\circ}\text{C}$	$\pm 1,0^{\circ}\text{C}$	$0 \div 600^{\circ}\text{C}$	$\pm 1,5^{\circ}\text{C}$
S (PtRh10-Pt)	$1100 \div 1600^{\circ}\text{C}$	$\pm [1+0,003(t-1100)]^{\circ}\text{C}$	$600 \div 1600^{\circ}\text{C}$	$\pm 0,0025^{\circ}\text{C} \times t $



CONNECTION HEAD TYPES

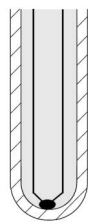


TYPES OF MEASURING HOT JUNCTION



SO

junction isolated from the sheath

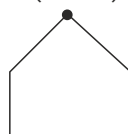


SU

junction grounded

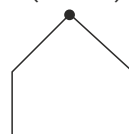
ELECTRICAL CONNECTION

K (NiCr-Ni)



(+) green (-) white

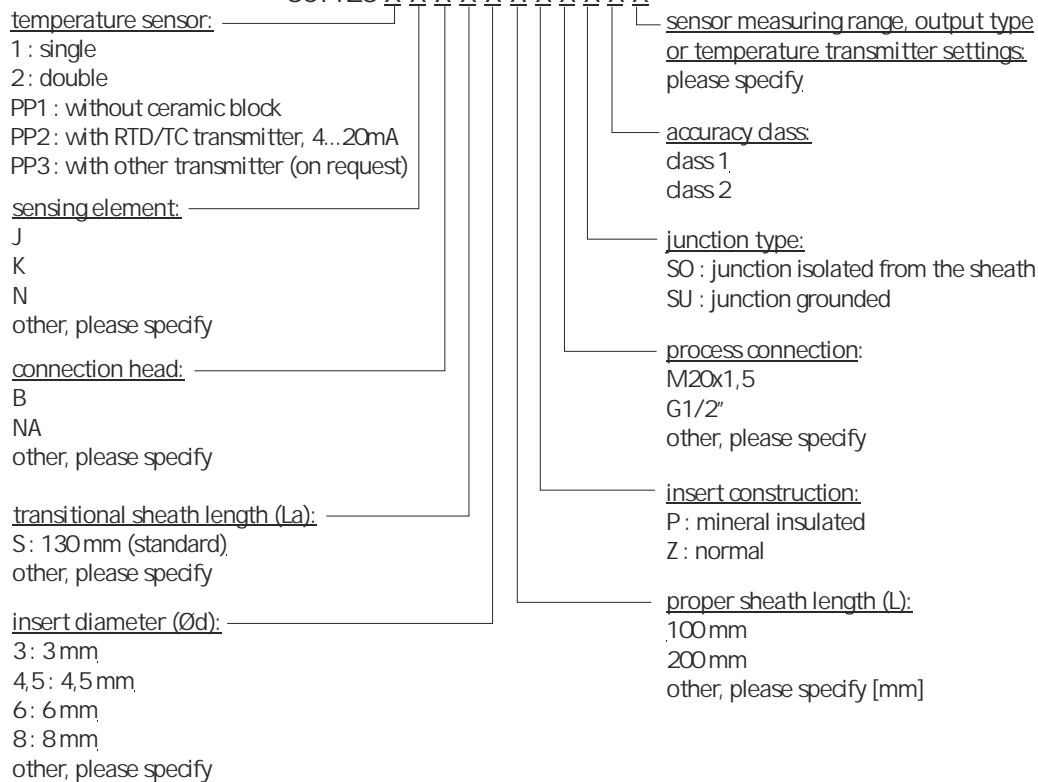
J (Fe-CuNi)



(+) black (-) white

ORDERING

SCT120-X-X-X-X-X-X-X-X-X-X



Ordering example:

SCT120-1-K-B-S-6-100-P-M20x1,5-SO-2-600

Single TC temperature sensor, K thermocouple, 2 tolerance class, with mineral insulated measuring insert diameter 6 mm, length 100 mm, B head type, hot junction isolated from the sheath. Sensor with process connection M20x1,5 and temperature range 600°C.

