

SCT210



- temperature range $-10 \div 300^{\circ}\text{C}$ (depending on the cable used)
- mounting using a magnet and a pressure spring
- various magnetic surfaces
- thermowell spring protection against excessive cable bending

The thermocouples SCT210 are designed to measure the temperature of flat magnetic surfaces. The sensor consists of a neodymium magnet of a specific shape and a connection cable. Thanks to the special structure and the use of a pressure spring, the measuring element adheres tightly to the measured surface, which ensures measurement accuracy and dynamics.

Application areas

- temperature measurement of ferrous material,
- general industrial services.

TECHNICAL DATA

Sensing element	J, K, N, R, S, B thermocouple or other (single, double)
Measuring range	$-10 \div 300^{\circ}\text{C}$ (depending on the cable used)
Class	1 or 2
Cable	type: single cond teflon or single cond fibreglass, standard length 1500 mm or other according to order

MAGNETIC SURFACE

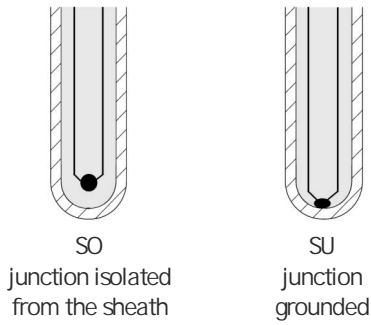
Magnetic surface	Diameter D	Diameter D1	Length L	Adhesion force
M1	$\varnothing 13 \text{ mm}$	$\varnothing 4,2 \text{ mm}$	10 mm	7 [N]
M2	$\varnothing 19 \text{ mm}$	$\varnothing 5,4 \text{ mm}$	13 mm	19 [N]
M3	$\varnothing 25 \text{ mm}$	$\varnothing 5,4 \text{ mm}$	16 mm	29 [N]
M4	$\varnothing 32 \text{ mm}$	$\varnothing 7 \text{ mm}$	25 mm	66 [N]

THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

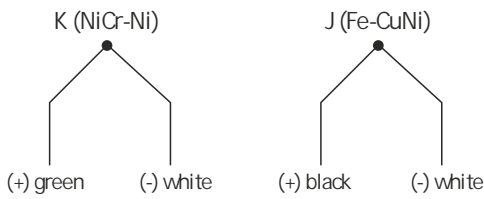
Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi)	$-40 \div 750^{\circ}\text{C}$	$\pm 1,5^{\circ}\text{C}$	$-40 \div 750^{\circ}\text{C}$	$\pm 2,5^{\circ}\text{C}$
K (NiCr-Ni)	$-40 \div 1000^{\circ}\text{C}$	$\pm 0,0040^{\circ}\text{C} \times t $	$-40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



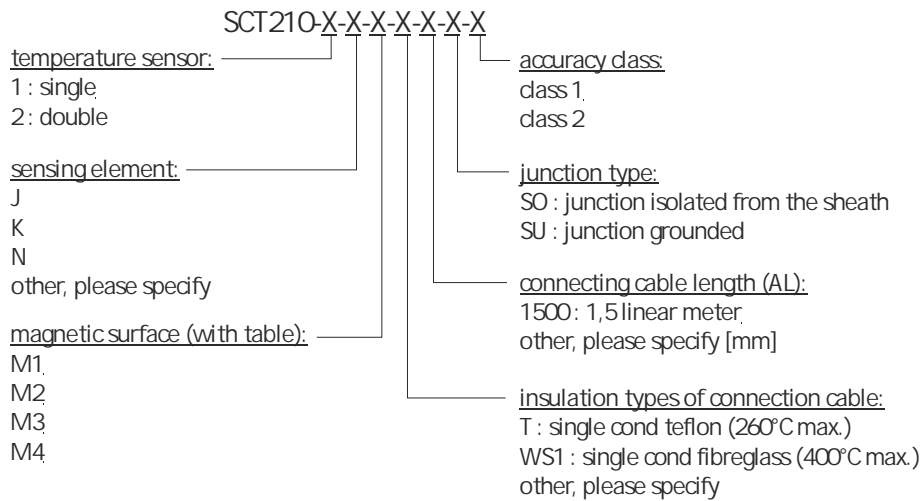
TYPES OF MEASURING HOT JUNCTION



ELECTRICAL CONNECTION



ORDERING



Ordering example:

SCT210-1-K-M1-T-1500-SO-2

Single TC temperature sensor, K thermocouple, 2 tolerance class, magnet type M1, single conductors in teflon insulation, connection cable length 1500mm, hot junction isolated from the sheath.

