

SCT203



- temperature range $-40 \div 400^{\circ}\text{C}$ (depending on the cable used)
- mounting by an assembly screw hole in thermowell
- stainless steel sheath
- thermowell spring protection against excessive cable bending

The thermocouples SCT203 are designed for fitting directly into a drilled hole or process. Consist of a thermocouple element, a protection tube made out of stainless steel, and a connection cable. Sensor insertion length, thermowell diameter, process connection thread, number of sensors, accuracy, cable length, and insulation can be selected individually for the respective application.

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	$-40 \div 400^{\circ}\text{C}$ (depending on the cable used)
Class	1 or 2
Sheath	material: stainless steel nominal length (min. 15 mm): 50 mm (standard), 100 mm or other diameter (min. 3 mm): 4 mm, 6 mm, 8 mm or other
Cable	type according to the table, standard length 1500 mm or other according to order
Process connection	G1/2, M10x1; M14x1,5 or other according to order

CONNECTION CABLES

Diagram	Insulation design	Temperature range	Code
	Double fiberglass - stainless steel	$-40 \div 400^{\circ}\text{C}$	WS
	PVC	$-10^{\circ}\text{C} \div 105^{\circ}\text{C}$	PVC
	Teflon - stainless steel - teflon	260°C max.	TOT
	Teflon - stainless steel	260°C max.	TO
	Silicon - stainless steel - silicon	180°C max.	SOS
	Silicon - silicon	$-30^{\circ}\text{C} \div 250^{\circ}\text{C}$	SS
	Teflon - teflon	$-40^{\circ}\text{C} \div 260^{\circ}\text{C}$	TT



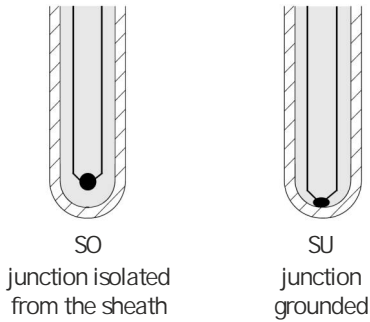
Sheath diameter	Mounting hole diameter (d1)	Width (d)
Ø 4 mm	Ø 3,2 mm	6 mm
Ø 6 mm	Ø 4,2 mm	8 mm
Ø 8 mm	Ø 5,2 mm	10 mm



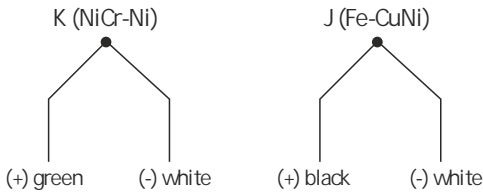
THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

Thermocouple	Class 1		Class 2	
	Temperature range	Tolerance	Temperature range	Tolerance
J (Fe-CuNi) K (NiCr-Ni) N (NiCr-Si-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
B (PtRh30-PtRh6)	-	-	600 ÷ 1700°C	± 0.0025°C x t
R (PtRh13-Pt) S (PtRh10-Pt)	0 ÷ 1100°C 1100 ÷ 1600°C	± 1.0°C ± [1+0.003(t-1100)]°C	0 ÷ 600°C 600 ÷ 1600°C	± 1.5°C ± 0.0025°C x t

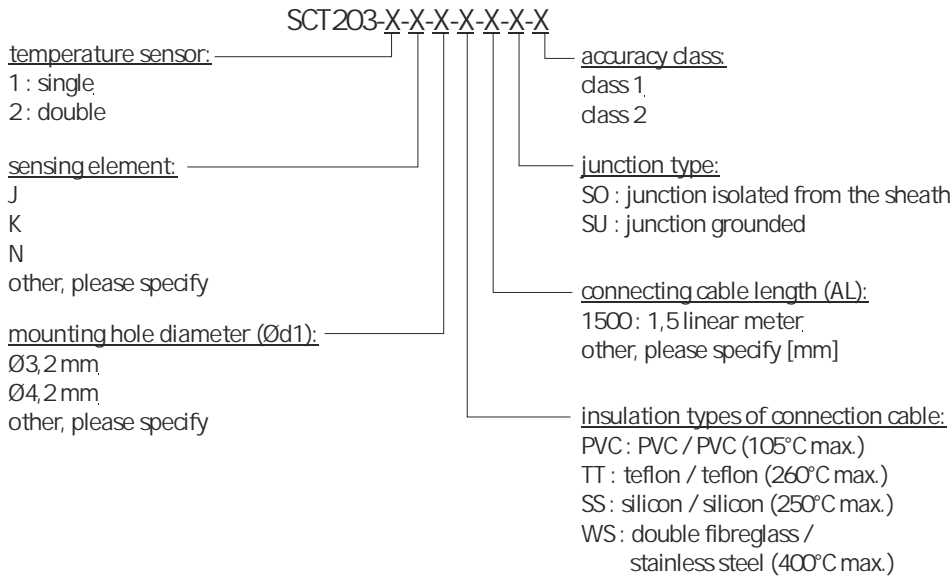
TYPES OF MEASURING HOT JUNCTION



ELECTRICAL CONNECTION



ORDERING



Ordering example:
SCT203-1-K-3,2-WS-1500-SO-2
Single TC temperature sensor, K thermocouple, 2 tolerance class, mounting hole diameter 3,2 mm, double fibreglass insulation, cable length 1500 mm, hot junction isolated from the sheath.

