

SCT105



- temperature range $-40 \div 1200^{\circ}\text{C}$ depending on thermocouple
- MA type connection head
- operating temperature of connection heads max. 100°C
- stainless steel sheath
- outer thermowell with process connection

The thermocouple SCT105 consists of a non-exchangeable measuring insert, outer protective tube with threaded process connection (thermowell), and aluminum connection head. Miniature connection head MA type reduces the size of complete sensor construction to make possible installation in confined areas.

Application areas

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

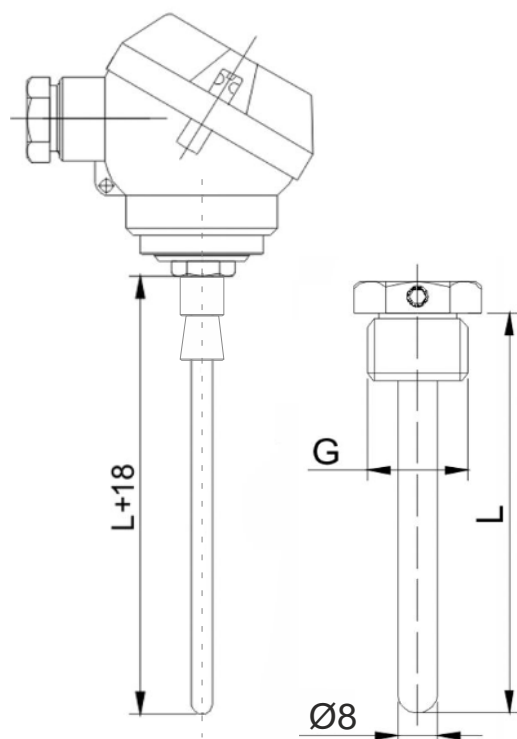
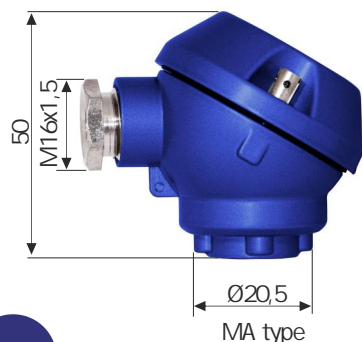
TECHNICAL DATA

| | |
|--------------------|--|
| Sensing element | J, K, N, R, S, B thermocouple or other (single, double) |
| Measuring range | $-40 \div 1200^{\circ}\text{C}$ (depending on thermocouple and material) |
| Connection head | MA type, aluminum, operating temperature $-40 \div 100^{\circ}\text{C}$ |
| Class | 1 or 2 |
| Sheath | material: stainless steel 1.4541 or other nominal length: 100 mm (standard) diameter: 8 mm |
| Process connection | G1/2", M20x1,5 or other |

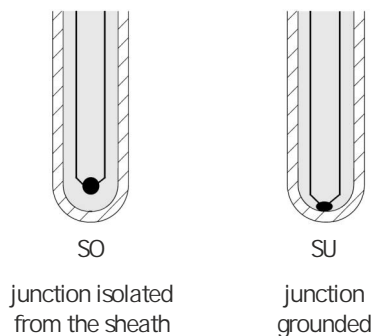
THERMOCOUPLES TOLERANCE ACC. TO PN-EN 60584

| Thermocouple | Class 1 | | Class 2 | |
|------------------|----------------------------------|---|---------------------------------|---|
| | Temperature range | Tolerance | Temperature range | Tolerance |
| J (Fe-CuNi) | $-40 \div 750^{\circ}\text{C}$ | $\pm 1,5^{\circ}\text{C}$ | $-40 \div 750^{\circ}\text{C}$ | $\pm 2,5^{\circ}\text{C}$ |
| 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 $ |

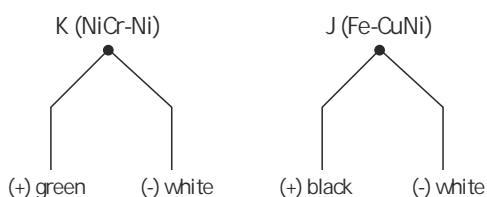
CONNECTION HEAD



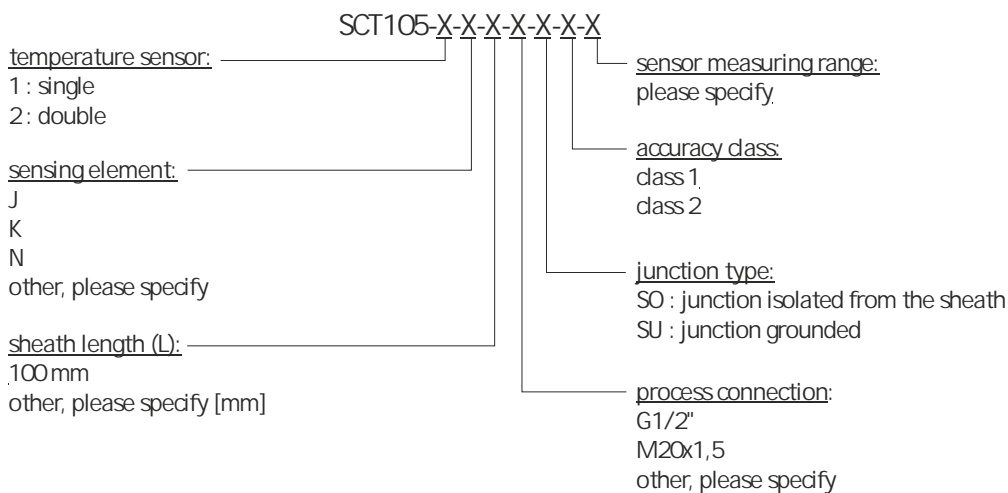
TYPES OF MEASURING HOT JUNCTION



ELECTRICAL CONNECTION



ORDERING



Ordering example:

SCT105-1-K-100-G1/2"-SO-2-100

Single TC temperature sensor, K thermocouple, 2 tolerance class, process connection G1/2", sheath length 100 mm, hot junction isolated from the sheath, sensor measuring range 100°C.

