



SCR103-Exi

- temperature range $-40 \div 550^{\circ}\text{C}$
- 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 temperature transmitter

The resistance thermometer SCR103-Exi consists of an exchangeable measuring insert, outer protective tube (thermowell) with neck, and aluminum connection head. Mounting a temperature transmitter with 4...20 mA 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 of temperature changes, and increases the accuracy. It also reduces natural vibration. Thus, mechanical and electrical defects can be avoided.

Application areas

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

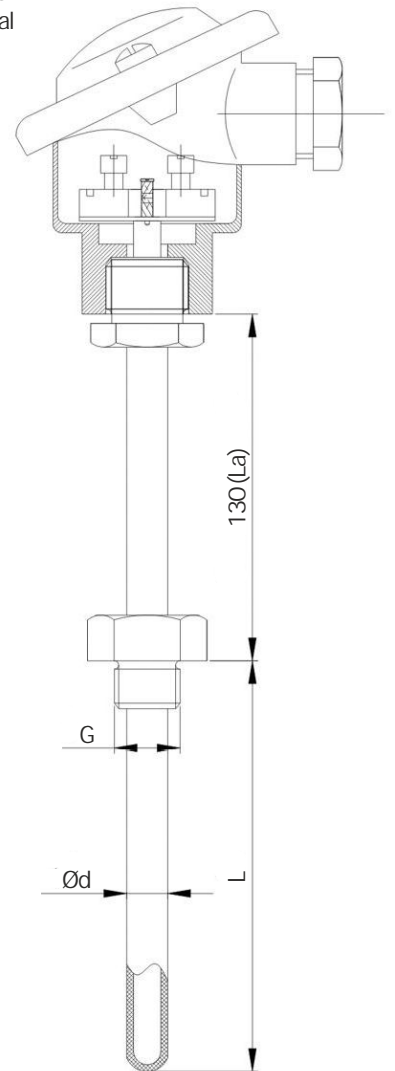
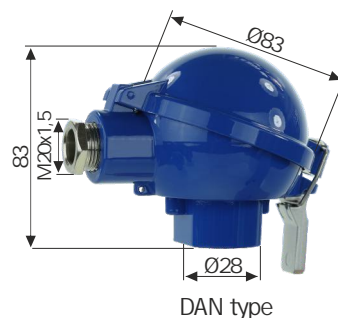
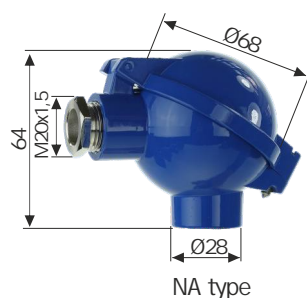
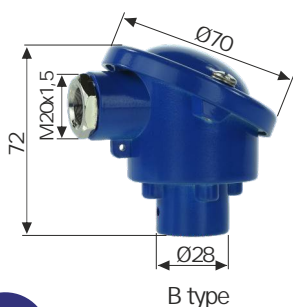
TECHNICAL DATA

Sensing element	Pt100, Pt500 or Pt1000 (2-, 3- or 4-wire)
Measuring range	$-40 \div 450^{\circ}\text{C}$ (with non-replaceable insert), $-40 \div 550^{\circ}\text{C}$ (with replaceable insert)
Connection head	B, NA or other, operating temperature $-40 \div 150^{\circ}\text{C}$
Class	A, B or 1/3B
Sheath	material: stainless steel 1.4541 or other nominal length: 130 mm (standard) or other diameter: 3, 4, 4.5, 5, 6, 7, 8, 9, 10, 11, 12, 15 mm (with non-replaceable insert), 8, 9, 10, 11, 12, 15 mm (with replaceable insert)
Process connection	G1/2", M20x1,5 or other
ATEX approval	II 1G Ex ia IIC T4-T1 Ga; II 1D Ex ia IIIC T135°C÷450°C Da

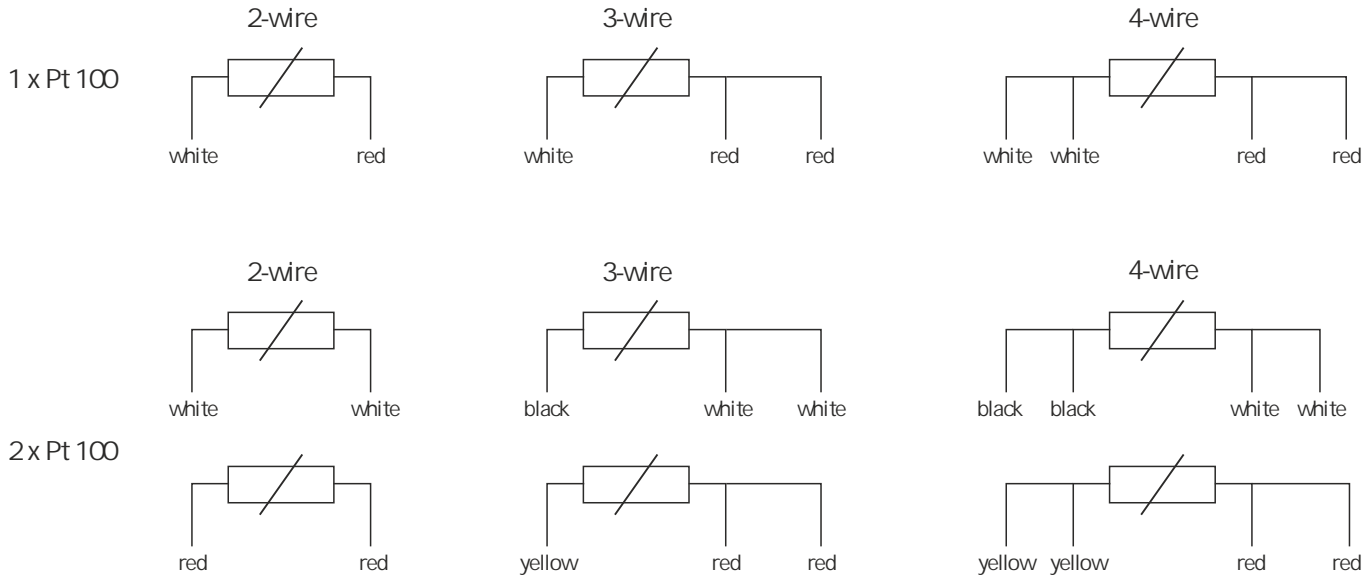
RESISTOR TOLERANCE ACC. TO PN-EN 60751

Class	Tolerance [$^{\circ}\text{C}$]
1/3B	$t = 0,10 + 0,002 \times t $
A	$t = 0,15 + 0,002 \times t $
B	$t = 0,30 + 0,005 \times t $

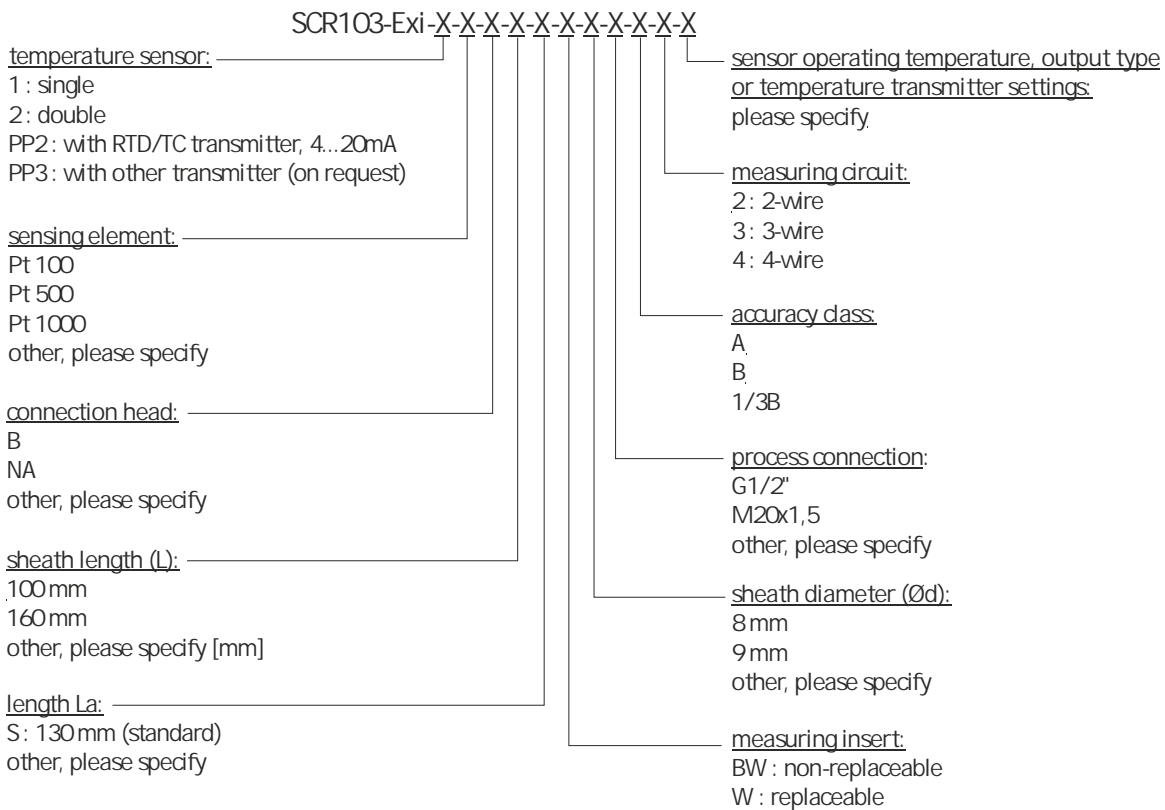
CONNECTION HEAD TYPES



ELECTRICAL CONNECTION



ORDERING



Ordering example:
 SCR103-Exi-1-Pt100-B-100-S-W-8-M20x1,5-B-2-250
 Single RTD intrinsically safe temperature sensor, 1xPt100, B tolerance class, 2-wire, measuring insert replaceable, B head type, process connection M20x1,5, sheath diameter 8 mm and length 100 mm, max. operating temperature 250°C.

