

SCR108-Exi



- mineral insulated resistance sensor
- temperature range $-40 \div 450^{\circ}\text{C}$
- operating temperature of connection heads max. 150°C
- short response time for temperature change
- small dimensions for operation in hard-to-reach places
- resistance to vibrations and the possibility of bending
- thermowell made of acid-resistant steel

Resistance thermometers SCR108-Exi are made of metal-sheathed cables with internal wires (Cu or Ni). They are insulated from each other, with the outer sheath with magnesium oxide (MgO) powder. It provides the sensor with high vibration resistance, flexibility, as well as temperature resistance, and good electrical insulation. These sensors are designed for direct temperature measuring in places with difficult access. There are also used in every application, where it is required to use flexible and small diameter probe, with high resistance to shock, vibration, and short response time to temperature changes. Due to tight pressing of the insulating layer (MgO) and the appropriate structure of the inner wires and the sheath, the sensors can be bent with a minimal the radius of curvature of three times the outer diameter of the sheath.

Application areas:

- general machinery and equipment design,
- measuring temperature of liquids, gases and solid bodies,
- all branches of industry,
- measurement laboratories.

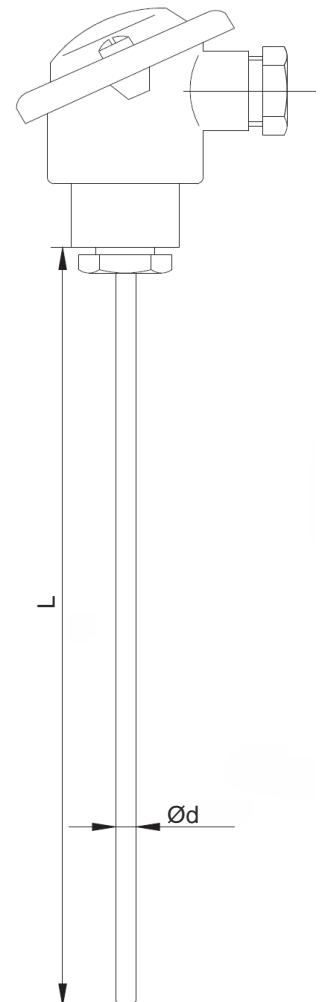
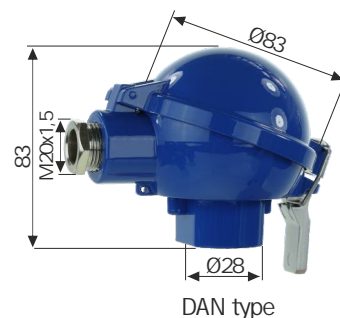
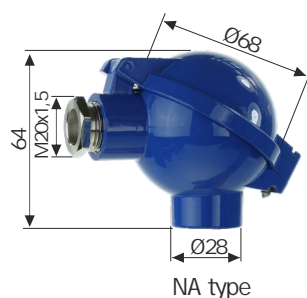
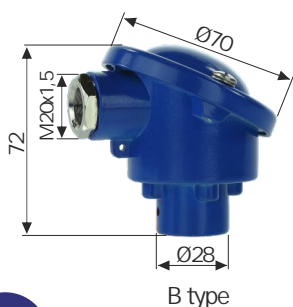
TECHNICAL DATA

Sensing element	Pt100, Pt500 or Pt1000 (2-, 3- or 4-wire)
Measuring range	$-40 \div 450^{\circ}\text{C}$
Connection head	B, NA or other, operating temperature $-40 \div 150^{\circ}\text{C}$
Class	A, B or 1/3 B
Thermowell	material: stainless steel 1.4541 or other any nominal length (specified when ordering) diameter: 3, 4, 4.5, 5, 6, 7, 8, 9, 10, 11, 12, 15 mm
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



OPTIONAL ACCESORIES



S type flange
(stainless steel)

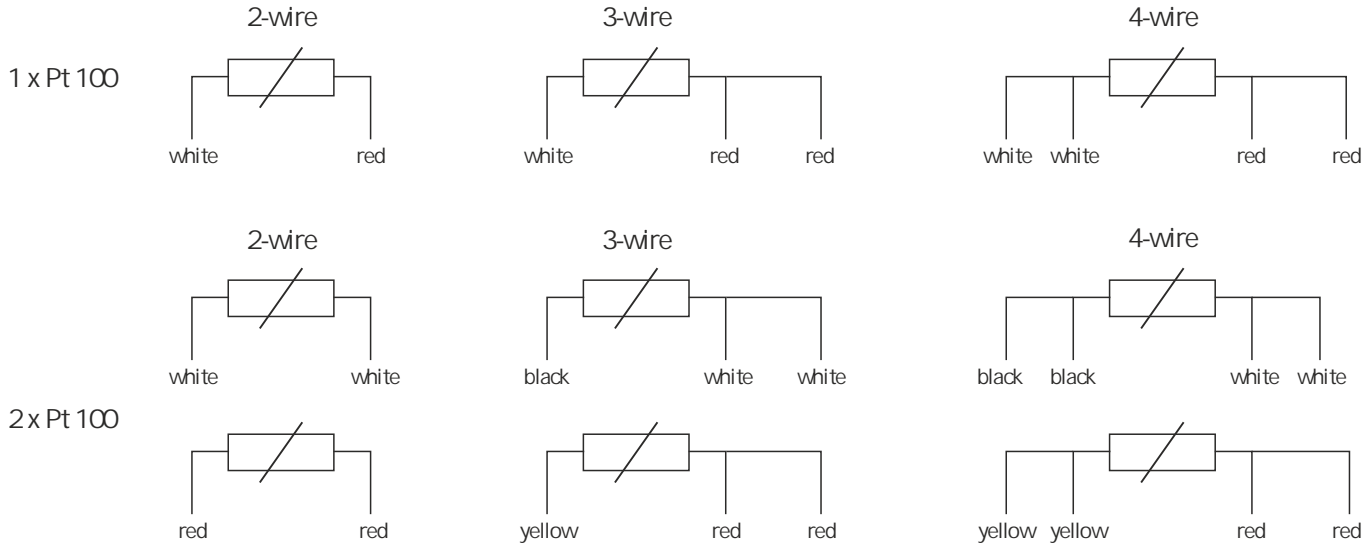


T type flange
(PTFE)

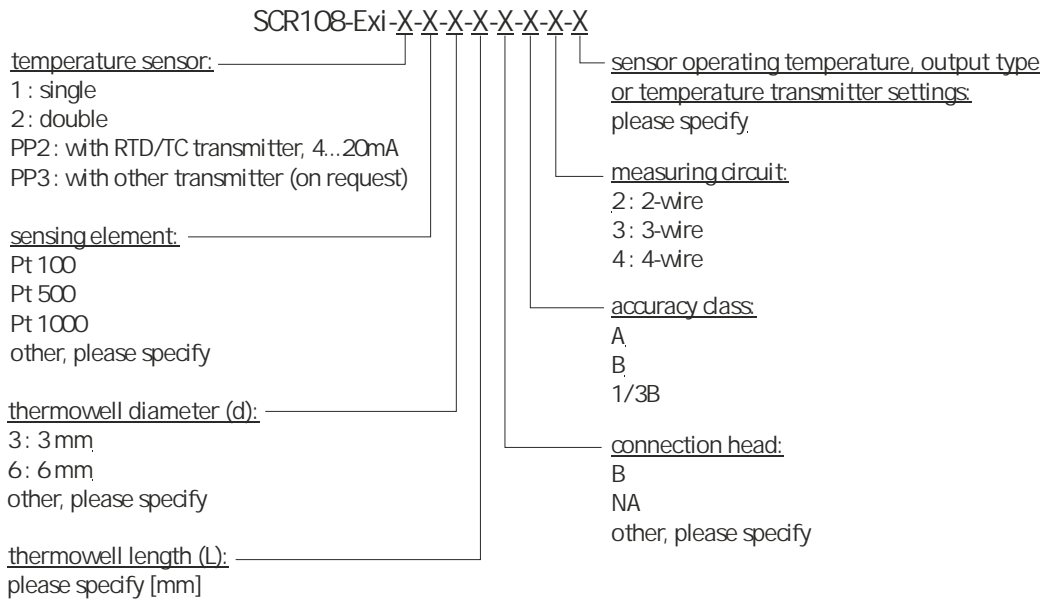


Threaded holder (fitting)
with a compression ferrule
(brass or stainless steel)

ELECTRICAL CONNECTION



ORDERING



Ordering example:
SCR108-Exi-1-Pt100-3-500-B-B-2-150
Single RTD intrinsically safe temperature sensor, 1xPt100, B tolerance class, 2-wire, B head type, sheath diameter 3 mm, sheath length 500 mm, max. operating temperature 150°C.

