

different types of sensor connections accurate measurement and short reaction time to temperature changes small dimensions enable working in hard-to-reach places

resistance to vibrations and the possibility of bending

sheath made of acid-resistant steel

mineral insulated resistance sensor

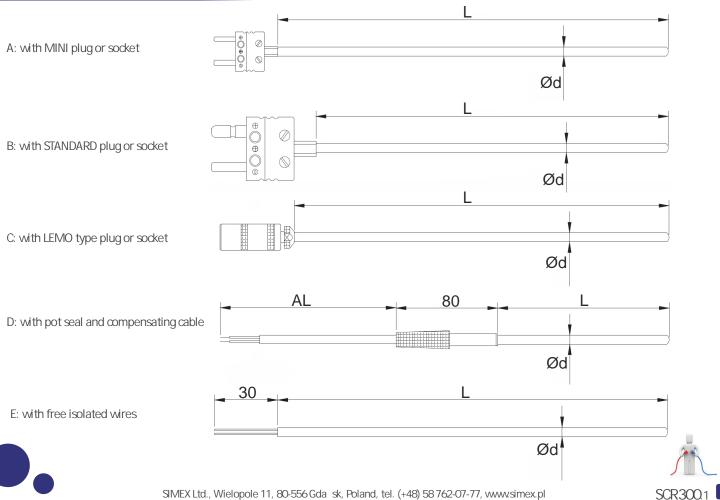
Resistance thermometers SCR300 are made of metal-sheathed cables with internal wires (Ou or Ni). They are insulated from each other, with the outer sheath with magnesium oxide (MgO) powder. It provides the sensor with high vibration resistance, flexibility, as well as temperature resistance, and good 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

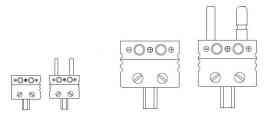
Sensing element	Pt100, Pt500, Pt1000 (2-, 3- or 4-wire)		
Measuring range	-50 ÷ 400°C (depending on the cable used)		
Process connection	standard / mini / Lemo plug or socket		
Class	A or B		
Thermowell	material: stainless steel length: any diameter: 1,5 ÷ 8 mm		
Cable	type with table, standard length 1500 mm or other according to order		

#### CONSTRUCTION



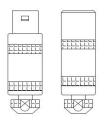
# **Simex**

### CONNECTION



MINI plug or socket

STANDARD plug or socket



LEMO type plug or socket

#### CONNECTION CABLES

Diagram	Insulation design	Temperature range	Code
	Double fibreglass - stainless steel	400°C max.	WS
	PVC	105°C max.	PVC
	Teflon - stainless steel - teflon	260°C max.	ТОТ
	Teflon - stainless steel	260°C max.	ТО
	Silicon - stainless steel - silicon	180°C max.	SOS
	Silicon - silicon	250°C max.	SS
	Teflon - teflon	260°C max.	ТТ

#### ORDERING

## SCR300-X-X-X-X-X-X-X-X-X temperature sensor: 1: single 2: double construction: A: MINI plug or socket B: STANDARD plug or socket C: LEMO type plug or socket $\ensuremath{\mathsf{D}}$ : with pot seal and compensating cable E: with free isolated wires sensing element: Pt 100 Pt 500 Pt 1000 other, please specify sheath diameter (Ød): 3 mm 6mm other, please specify sheath length (L): please specify [mm]

- measuring circuit: 2: 2-wire

3: 3-wire 4: 4-wire

accuracy dass:

A B

connection type:

G : socket W : plug

connection cable length (AL):

1500: 1,5 linear meter other, please specify [mm]

insulation types of connection cable:

PVC: PVC / PVC (105°C max.) TT: teflon / teflon (260°C max.) SS: silicon / silicon (250°C max.)

WS: double fibreglass / stainless steel (400°C max.)

## Ordering example:

#### SCR300-1-B-Pt100-6-500-TT-1500-W-A-2

Single mineral insulated RTD temperature sensor, 1xPt100, A tolerance class, 2-wire, thermowell diameter 6 mm, length 500 mm, teflon insulation, connection cable length 1500 mm, standard size plug.

