

## SCR300



with „mini” plug or socket

- mineral insulated resistance sensor
- 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

Resistance thermometers **SCR300** 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

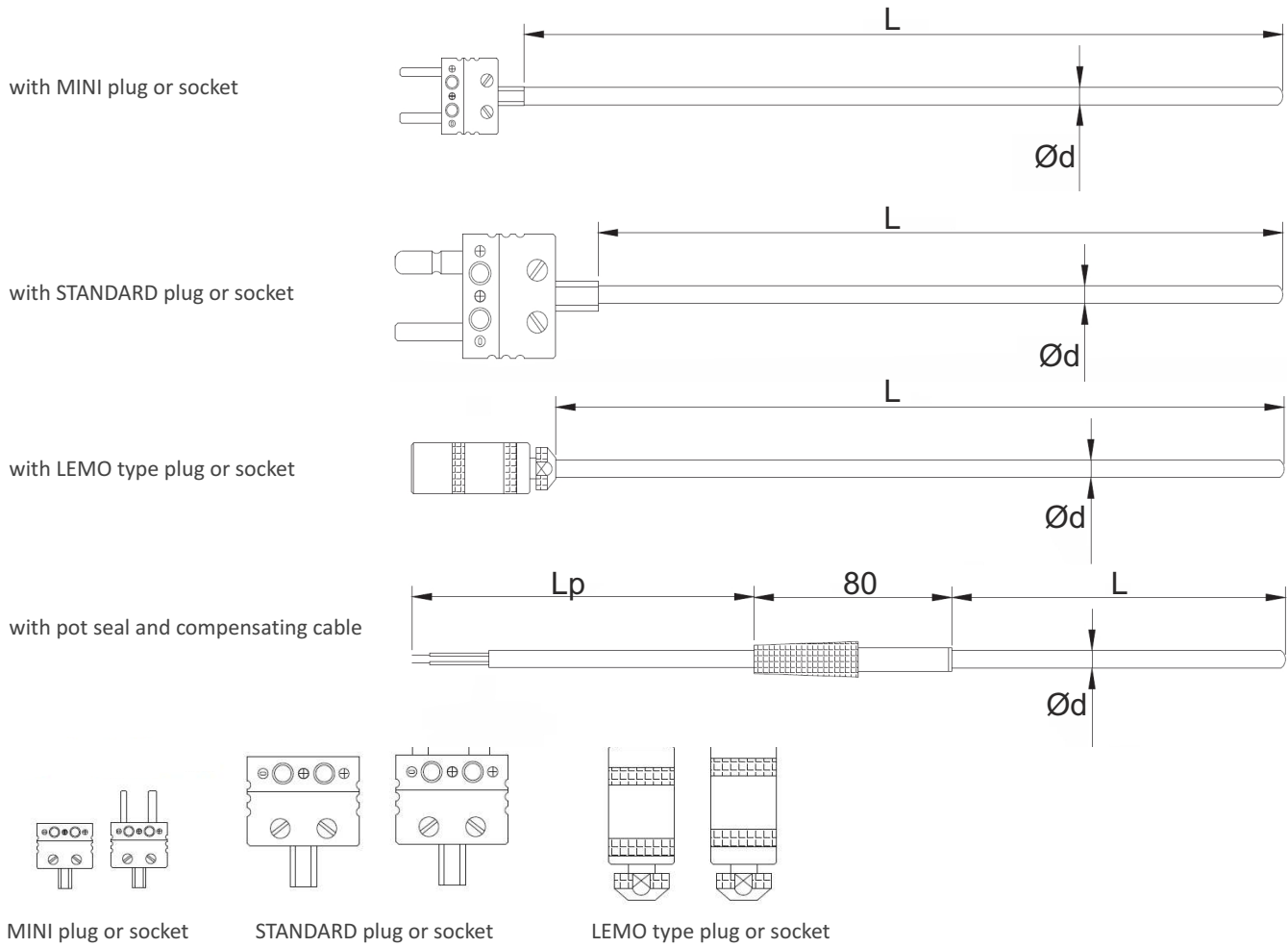
Sensing element	Pt100, Pt500, Pt1000 (2-, 3- or 4-wire)
Measuring range	-50 ÷ 400°C
Process connection	standard / mini / Lemo plug or socket
Class	A or B
Thermowell	material: stainless steel 1.4541 length: any diameter: 1,5 ÷ 8 mm
Cable	type with table, standard length 1500 mm or other according to order

### CONNECTION CABLES

Diagram	Insulation design	Temperature range	Code
	- double fiberglass - stainless steel - cond: nickel plated copper	-50 ÷ 400°C	WS
	- PVC - cond: nickel plated copper	105°C max.	PVC
	- teflon - stainless steel - teflon - cond: nickel plated copper	260°C max.	TOT
	- teflon - stainless steel - cond: nickel plated copper	260°C max.	TO
	- silicon - stainless steel - silicon - cond: nickel plated copper	180°C max.	SOS
	- silicon - silicon - cond: nickel plated copper	250°C max.	SS
	- teflon - teflon - cond: nickel plated copper	260°C max.	TT



**CONSTRUCTION**



**ORDERING**

**SCR300-X-X-X-X-X-X-X-X-X**

- |  |   |
|--|---|
| <p><b>temperature sensor:</b></p> <p>1 : single<br/>2 : double</p> <p><b>construction:</b></p> <p>A : MINI plug or socket<br/>B : STANDARD plug or socket<br/>C : LEMO type plug or socket<br/>D : with pot seal and compensating cable</p> <p><b>sensing element:</b></p> <p>Pt 100<br/>Pt 500<br/>Pt 1000<br/>other, please specify</p> <p><b>sheath diameter (Ød):</b></p> <p>3 mm<br/>6 mm<br/>other, please specify</p> <p><b>sheath length (L):</b></p> <p>please specify [mm]</p> | <p><b>measuring circuit:</b></p> <p>2 : 2-wire<br/>3 : 3-wire<br/>4 : 4-wire</p> <p><b>accuracy class:</b></p> <p>A<br/>B</p> <p><b>connection type:</b></p> <p>G : socket<br/>W : plug</p> <p><b>connection cable length:</b></p> <p>1500 : 1,5 linear meter<br/>other, please specify [mm]</p> <p><b>insulation types of connection cable:</b></p> <p>PVC : PVC / PVC (110°C max.)<br/>TS : teflon / silicon (180°C max.)<br/>SS : silicon / silicon (250°C max.)<br/>WS : double fibreglass / stainless steel (400°C max.)</p> |
|--|---|

Ordering example:

**SCR300-1-B-Pt100-6-500-TS-1500-W-A-2**

Single mineral insulated RTD temperature sensor, 1xPt100, A tolerance class, 2-wire measuring circuit, thermowell diameter Ø6 mm, length L=500 mm, teflon/silicon insulation, connection cable length 1500 mm, standard size plug.

