

Pt100 Simulators

In small design

Model 4512

Model 4511



4512 EN

Technical Data

- 11 fixed temperature values
- Simulation of 10 and 20 Ω connecting cable resistances at model 4512
- Calibration according DIN EN 60751
- Accuracy:
 - $\pm (0.2 + 0.001 \cdot t)$ in $^{\circ}\text{C}$ [with $t =$ adjusted value in $^{\circ}\text{C}$ with $t > -20^{\circ}\text{C}$
 - $\pm (0.2 + 0.0007 \cdot t)$ in $^{\circ}\text{C}$ [with $t =$ adjusted value in $^{\circ}\text{C}$ with t from $-200^{\circ}\text{C} \dots -20^{\circ}\text{C}$
- Switch contacts Ag cladded over E Cu and gold-plated
- Resistance material MANGANIN[®], TK < 10 ppm/K
- Negligible ambient temperature influence
- Long-term stability 0.02 % for years
- 2-wire connection technique
- Height 35 mm, width 66 mm, depth 88 mm
- Weight approx. 100 g
- Protection class IP52
- Successful in use for years
- Maintenance-free

Technical Data

A little compact sturdy plastic housing contains a high-class switch with wire-wound precision resistors made of MANGANIN[®]. Using this selector switch 11 fixed temperature values according to DIN EN 60751 of the resistance thermometer Pt100 are simulated. The simulated resistance value, which corresponds to the selected temperature, will be picked up at the terminals "R_{sim}". Two other terminal sockets help to simulate connecting cable resistances between 10 and 20 Ω .

The selector switch of model 4511 is presetted with 11 temperature values as individually given by the customer. Within a range from $-200^{\circ}\text{C} \dots +850^{\circ}\text{C}$ each temperature value can be selected. The resistance material MANGANIN[®] used in the instrument has a temperature coefficient of < 10 ppm. Therefore the ambient temperature needs not be taken into account.

Pt100 Simulator, Model 4511 with temperature values according to customer specification

Application

The Pt100 simulator is used wherever measuring instruments or controlling systems have to be adjusted and tested with individually selected temperature values. It can be used if the temperature values of our standardized models do not fit.

The model 4511 has been developed for customers with a need for higher quantities of identical items having the same temperature values. The minimum order quantity is 10 items.

Order Information

Pt100 simulator with test protocol **Model 4511**
(Please indicate the temperature values you need)

Adjustable Temperature Values in °C
Please indicate 11 values within the range from - 200 °C to + 850 °C in this range every value is possible

Delivery period: 10 - 12 weeks, due to individual specifications

DKD Calibration Certificate

for Pt100 simulator in small design **Model 45DKD-4511**

Manufacturer Calibration Certificate

for Pt100 simulator in small design **Model 45WKS-4511**

Pt100 Standardized, Model 4512

Application

An instrument that simulates the resistance thermometer accurately over a wide temperature range is very useful for testing industrial temperature measuring and control devices. The standardized simulator model 4512 is the answer to this challenge. A special advantage of this simulator is the division of the scale in centigrade (°C). Long-winded checking of tables is unnecessary.

Order Information

Pt100 simulator with test protocol **Model 4512**

Adjustable temperature in °C	Simulation of power resistance in Ω
- 20, 0, +10, +20, +40, +60, +80, +100, +150, +200, +300	0, 10, 20

Available ex stock

DKD Calibration Certificate

for Pt100 simulator in small design **Model 45DKD-4512**

Manufacturer Calibration Certificate

for Pt100 simulator in small design **Model 45WKS-4512**

Terminal Application

