

PT100 thermo sensor Type 8433 for 2- and 3-wire measurement

8433



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Technical data

Dimensions	LxB ca. 70 mm x 35 mm; s. Abb.
Housing	FRP / protection class: IP 67
Electrical connection	cable tail, 5m
Wire diameter	3x0,75 mm ²
Wire insulation	
Cable diameter	5,6 - 8,0 mm
Mounting screws	M4
Ambient temperature	-50° C bis +50° C
Hysteresis	min. 1° C max.: ± 0,5° C
Function: 2-wire sensor	PT100 resistor is connected between wire no. 1 and wire no. 2, polarity is not to consider.
3-wire sensor	Sensor wire is connected to wire no. 3. This is used to compensate the resistance of the supply cable.
Accessories:	
PT100 amplifier	e.g. 420500, 420501

Description

In view of the option to specify the trigger value and the reset value in steps of 1°C within a wide measuring range (this must be specified explicitly when ordering), these thermostats (temperature sensors) or the 8434 series are especially suitable for applications that place high requirements concerning switching accuracy and reproducibility.

The robust construction permits reliable use at the rail as a precision thermostat for points heater controllers. The compact construction allows, for example, use as a two-step controller for switch cabinet heaters or as an overtemperature detector.

The temperature sensor is available in two different electrical versions. The two-core cable version in connection with suitable evaluation equipment (for example, the type 8582) as a three-core cable version that triggers relays directly.

The new type of electrical quick-connection technology allows simple inventory without needing to worry about various cable lengths.

Function

The heart of the sensor is the temperature sensor whose digitized measured value is permanently compared with the one specified by the user and the switching thresholds that had been specified by the manufacturer. The switching state of the sensor changes if the measured temperature reaches the higher one of the two switching thresholds. This state is held until the temperature once again reaches the value of the lower switching threshold.

This change of switching state leads to a change in the power circuit in the version with a two-core cable and to a change in the switching state of the third core in the version with a three-core cable.

Installation notes

Remove about 15 mm of the cable insulation (see the technical data), push on the PG coupling ring, crown and sealing rubber piece (up to the edge of the insulation). Push the ends of the wires into the cutouts in the splicing ring (note the numbers, see the back of the ring), cut off the ends of the wires so that they are flush with the splicing ring. Guide the cable that has been prepared in this way into the contact holder and tighten up the coupling ring – done!

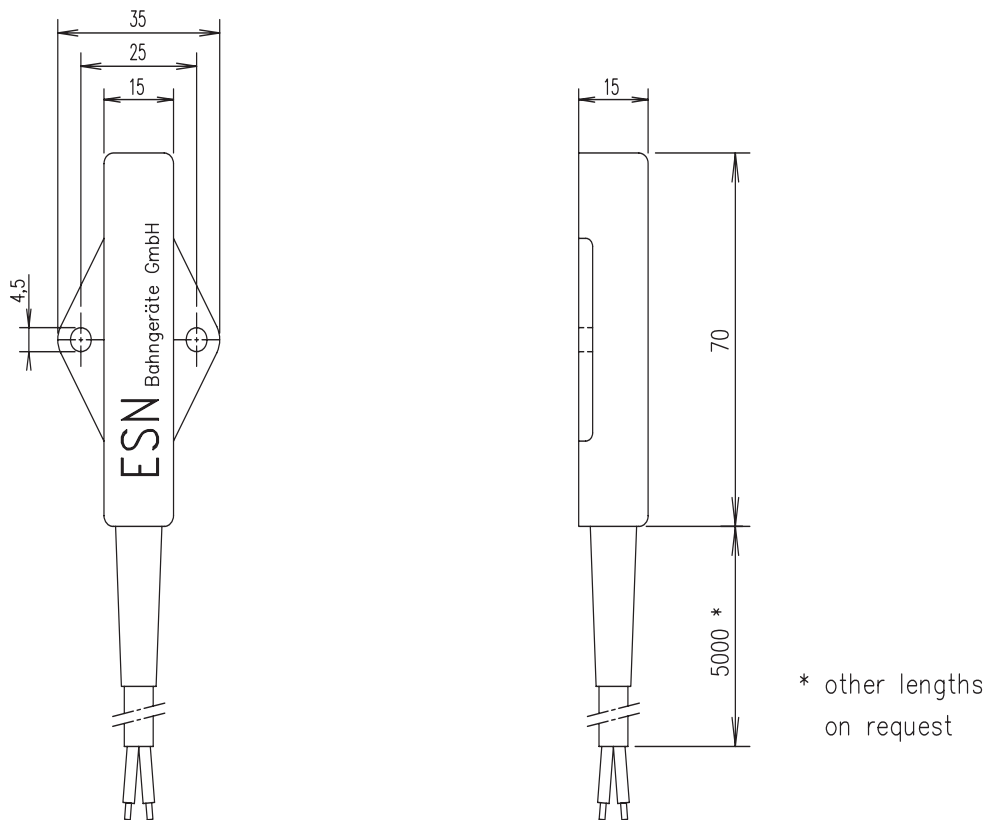
See the complete brochure folder for additional temperature monitors, evaluation equipment and accessories.

Ordering information

Type	Part No.
PT100-Temperature sensor in fiberglass-reinforced plastic housing	110501

8433

Dimensions:



electrical connection as 2- and 3-wire sensor:

