

Basic information

Figure 1 - wiring and the plan of the base



Attention:

The installation of the gauge must be carried out only by a person who has been familiarised in detail with the "Directions for Use"!

Assembly of the gauge:

Prior to connecting the power-supply cable, it is necessary to separate the perforated cover from the plastic box. **During this operation, it is necessary to proceed cautiously, so as not to mechanically damage the sensor**. Through the opening with a 9 mm diameter, the;x power cable will be placed, which will be connected to the WAGO terminals, in accordance with the wiring scheme. The recommended cross-section of the wires is 0.35 to 1.5 mm2.

In the event that the power cable is run close to highvoltage wires, or those which supply a device which creates an electromagnetic field interference (e.g. inductive devices), it is necessary to use a shielded cable. After connection of the power cable the base will be mounted on a flat surface with screws with a maximum diameter of 4 mm. The final assembly operation is fixing and snapping the cover to the respective openings in the base.

After the installation and connection to a viable electrical measuring device, the sensor is ready for operation. The sensor does not require special operation or maintenance. The working position of the sensor is optional.

Utilisation of gauges:

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These resistance gauges are constructed for the measurement of the temperature of gas substances in an environment protected against water. Attractive design and the use of quality materials guarantee that the gauges do not appear out-of-place even in interiors where high esthetical requirements are demanded. The gauges are in conformity with the IP 30 standard of protection according to ČSN EN 60 529. The range of temperatures for which the gauge can be utilised is -30°C – 100°C and these limits must not be exceeded even for a short period. The gauges can be used for all control systems which are compatible with the Ni 1000 sensor with a temperature co-efficient of 5,000 ppm/°C. The gauges are designed for chemically non-aggressive environments.

Warning:

The gauges must not be utilised for:

- measurement of temperature in locations where oscillation of the gauge or mechanical interference with the gauge could occur

- measurement of temperature in locations with explosive hazards

- measurement of temperature in chemically aggressive environments

- measurement of temperature in locations with a high level of electric interference

- measurement of temperature in locations, where exposure to direct thermal radiation (lights, heaters etc.) or sunlight could take place

- measurement of temperature in locations with high humidity

apod.) nebo slunci

- měření teploty v místech s vysokou vlhkostí

Technical parameters:

Table 1 - technical parameters

Type of sensor	Ni 1000 / 5000 ppm / °C	
A accuracy class	For t < 0 °C : ± (0,2 + 0,014 t) in °C	2
	For t ≥ 0 ℃ : ± (0,2 + 0,0035 t) in ℃	;
B accuracy class	For t < 0 ℃ : ± (0,4 + 0,028 t) in ℃	2
	For $t \ge 0 \ ^{\circ}C$: $\pm (0,4 \pm 0,007 \ t)$ in $^{\circ}C$	
Range of measuring	-30 °C - 100 °C	
Maximum measuring current	3 mA	
Recommended measuring current	1 mA	
Dimensions of the box	62 x 62 x 27 mm	
Coverage of the terminal box	IP 30 according to ČSN EN 60 529	
Material of the box	LEXAN 500R	

Disposal:

The paper packaging that the gauge comes in is fully recyclable. Electrical parts of the gauge are disposed of according to the regulations for electrical waste. Heads of gauges made of LEXAN material, or their parts, are disposed of as plastic.