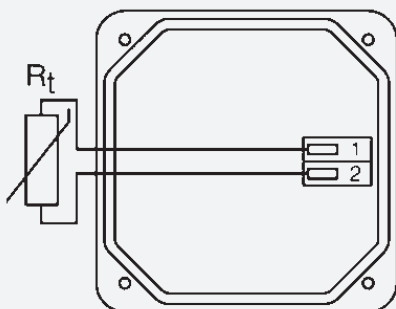


Basic information

Figure 1 - wiring scheme



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. The power-supply cable is connected according to the wiring scheme to the WAGO terminals through the released bushing of the HSK-K type. The recommended cross-section of the wires is 0.35 to 1.5 mm² and the outer diameter of the cable with a circular cross-section is 4 – 8 mm.

In the event that the power cable is run close to high-voltage 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. **To guarantee hermetic sealing, it is necessary, after connecting the supply cable, to retighten the grommet and bolt down the lid.**

In the event of using the central holder or the stainless-steel well, it is necessary first to place these accessories in the area where the temperature will be measured and subsequently to install the gauge on the holder or on the bottom of the well and fix it with bolts. Openings for the assembly of the central holder should be bored in accordance with the attached template on which are also marked the diameters of the openings.

After installation and connection to the electric measuring appliance, the gauge is ready-for-use. The gauge does not require special servicing or maintenance. The working position of the gauge is optional, however the bushing must not point upwards.

Utilisation of gauges:

These resistance gauges are constructed for the contact measurement of the temperature of liquid or gas substances. They are in conformity with the IP 65 standard of protection according to ČSN EN 60 529. Through the combination of the gauge with the central holder or with the well, which are supplied as accessories, it is possible to utilise the gauge for measuring the temperature in air-conditioning channels or conduits.

The range of temperatures for which the gauge can be utilised is -30°C – +150°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

Technical parameters:

Table 1 - technical parameters

Type of sensor	Ni 1000 / 5000 ppm / °C
A accuracy class	For $t < 0\text{ °C}$: $\pm (0,2 + 0,014 t)$ in °C For $t \geq 0\text{ °C}$: $\pm (0,2 + 0,0035 t)$ in °C
B accuracy class	For $t < 0\text{ °C}$: $\pm (0,4 + 0,028 t)$ in °C For $t \geq 0\text{ °C}$: $\pm (0,4 + 0,007 t)$ in °C
Range of measuring	-30 °C - 150 °C
Maximum measuring current	3 mA
Recommended measuring current	1 mA
Dimensions of the head	62 x 62 x 33 mm
Material of the head	LEXAN 500R
Thermal resistance of the head	-30 °C - 100 °C
Coverage of the terminal box	IP 65 according to ČSN EN 60 529
Standard length of the shank	70, 120, 180, 240 mm
Material of the shank	Stainless steel 17240
Insulation resistance	> 200 MΩ for 500 V DC, 25° ± 3°C

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. Shanks and wells or their parts are disposed of as waste metal. Similarly heads made of the LEXAN material are disposed of as plastic.