

Basic information

Figure 1 - wiring scheme



2-wire

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"! .

Mounting:

1. Place the sensor in location where the temperature will be measured. For assembly and attachment of sensor must be used hexagonal key. As a seal can be used suitable sealing mastic or sealing tape

2. Sensor wires can be connected according to wiring diagram bellow. The shielding is connected with sensing element, but not with the case.

Sensor is ready for use immediately after mechanical fixation and electrical connection. Sensor does not require any special attendance and service. Sensor working position is not specified.

Warning:

Pay attention to sensor cable positioning. For instance parallel cable position to ones with the main power supply could bring the problems with the signal interference. Refer to our experiences the distance from supply cable till 0,5 m had to be used. Generally it depends on the type and intensity of the interference field

Sensors use:

These sensors were designed for temperature measurement of chemically non aggressive gas and liquid substances or solids. Usable temperature range is 0°C up to 350°C, in a short time the temperature range may be exceeded up to 400°C. They can been used for all electronics control units designed for Pt 100 sensors with temperature coefficient 3850 ppm/°C. Sensors are intended for universal application. Ingress protection class of measuring part of probe is IP 68 according to ČSN EN 60 529 in valid version. The case construction and diameter provides a rapid response to temperature changes..

Notice:

Sensors must not be used in areas:

- 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

Technical parameters:

Table 1 - technical parameters	
Sensor	Pt 100/3850
Temperature range	0 ÷ 350 °C (400 °C in a short time)
Accuracy class A *	± (0,15 + 0,002 t) in °C
Accuracy class B *	± (0,3 + 0,005 t) in °C
Recommended measuring current	1 mA
Maximum measuring current	3 mA
Sensor connection	two wire
Case length	
Thread / OK	
Case diameter	4,0 ± 0,05 mm
Case material	Stainless steel 17240 (DIN 1.4301)
Lead-in cable	2 x 0,35 mm ²
Wire resistance	0,11 Ω / 1 m
Ingress protection (measuring part)	IP 68 (ČSN EN 60529)
Maximum cable temperature	350 °C
Nominal pressure exerted on sensor stem	2,5 MPa

Formula describes accuracy of the resistance chip only. For whole sensor the influence of the leading cable must be add. For instance for temperature 0°C you must add 0,26 °C / 1m.

Waste disposal::

Sensor metal case or their parts belong into metal waste category. Electrical parts are disposed of in correspondence with the regulation for electrical waste. Product suits law No. 185/2001 subsequently amended and execute public notice No. 352/2005., in which is implemented direction the European Parliament and counsel 2002/95/ES – RoHS. At liquidation is necessary act conformable with those regulations.