

Temperature sensor TS-2

Operating Instructions



Application:

The temperature sensor TS-2 is intended for measuring temperatures in ROPEX sealing applications. With the short response time the sensor is suitable for measurements in high dynamic sealing applications.

Storage of the operating instructions:

Please read the operating instructions carefully before using the temperature sensor TS-2. Retain the operating instructions for future reference and ensure that important information and functions are available to the user.

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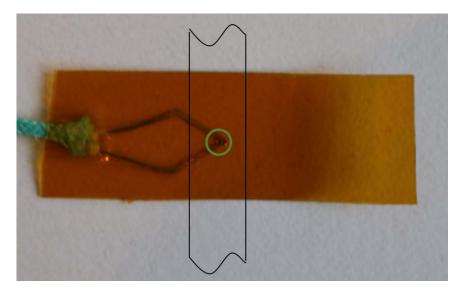
1 Technical data

| | TS-2 |
|---|--|
| Thermocouple type: | К-Туре |
| Sensor dimensions: (carrier film size) | Width:app. 10 mmLength:app. 30 mm |
| | thickness:app. 0,22 mm(Thickness variations due to construction possible) |
| Sensor design: | The sensor is embedded between two thin, polymer laminates. This supports and electrically insulates the junction section as well as provides a flat surface for assembling |
| Response time: | 4060 ms, when full-surface contact or glued to a surface. (Time which is necessary to reach app. 63% of the real temperature after a temperature step occurred) |
| Cable dimensions and type: | Length:800 mmDiameter:36 AWG, or 0,127 mm, massive wireGlass fibre braid |
| Maximum temperatures: | Continuous:260 °Cshort duration (10 hours cumulated):370 °CThe maximum temperatures depend on the ambient conditions, assembly, requested accuracy and life time. The described values are overview values only. |
| Tolerance: | +/- 1.5 K (-50 °C+375 °C) according to DIN IEC 60584 Class 1 |
| Pin assignment: | Green cable (+):NiCr (Cromel)White cable (-):Ni (Alumel)) |
| Assembly / Bonding: | Epoxy adhesives can be used when bonding the sensor to a surface. <u>Note:</u> A cement high temperature glue shall not be used. This glue damages the insulation layer of the sensor. |



2 How to use

The following figure shows the measuring point (thermocouple, marked in green) of the temperature sensor.



| | The temperature of the sealing band can only be determined correct when: | |
|------|---|--|
| NOTE | The thermocouple of the TS-2 is placed in the middle of the sealing band (marked in black) The sensor is in full contact with the surface (i. e. if the sealing bars are closed) | |

The TS-2 can be used in combination with a temperature measurement device which is able to measure type K sensors (e. g. Testo 922)



3 How to order

| Temperature sensor TS-2 TS-2: Article number 890002 |
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| Alternative: Temperature sensor TS-1 TS-1: Article number 890000 |