Operating Instructions

for

Temperature Sensor

Model: TSA

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2. Note

Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.
The instruction manuals on our website www.kobold.com are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email (info.de@kobold.com) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via www.kobold.com

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

By usage in machines, the measuring unit should be used only when the machines fulfil the EC-machine guidelines.

As per PED 2014/68/EU

No CE marking, see Article 4, Section 3 "Sound Engineering Practice", Directive 2014/68/EU
Diagram 6, Piping, Group 1, Dangerous Fluids

3. Regulation Use

The Temperature Sensor, model: TSA, is to be installed only in the specified applications. Any usage which exceeds the specifications may invalidate its warranty. Therefore, any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage. The application specifications include the installation, start-up and service requirements specified by the manufacturer.

4. Operating Principle

Model TSA Temperature Sensors respond quickly and are designed to work from -40 to +150 °C. The measuring device is a laser-trimmed electronic sensor enclosed in a sturdy brass or stainless steel housing and is suitable for harsh industrial applications.
Laser trimming allows a high output signal at the temperature sensor to be achieved with respect to the measured temperature change. This system means that no line compensation is required for cabling under 20 meters.
This relationship is linear with positive temperature coefficients. For evaluation of the output signal control and indicating instruments, which allow a flexible application in a wide range of installations, are being used.

The sensors come in housing with female threaded connections on both sides (G 1/4” to G 1 1/2”) and a 1.5 m connection cable with a silicone jacket.

5. Instrument Inspection

Instruments are inspected before shipping and sent out in perfect condition. Should the damage to a device be visible, we recommend a thorough inspection of the delivery packing. In case of damage, please inform your parcel service/ forwarding agent immediately, since they are responsible for damages during transit.

Scope of supply:
The standard delivery includes the following:

- Temperature sensor model: TSA

6. Mechanical Connection

Before installation:

- Remove all packing materials and transport retainers and ensure that no such materials remain in the device.
- Make sure that the maximum operating pressures and temperatures will not be exceeded in the intended installation of the device (see “Technical Information”).
- Install the temperature sensor tension-free in the piping.
- This device must not be installed within an induction field.
- If possible, after completing the mechanical installation, immediately check the threaded connection between the device and the piping for leakage.

7. Electrical Connection

The temperature sensor is connected with a two-wire silicone cable. The polarity of the connection does not matter.

8. Maintenance

This temperature sensor is maintenance-free. If it is necessary to remove accumulated dirt, loosen the sleeve nut and remove the sensor for cleaning.

Caution! Before removing the sensor, be sure to relieve the pressure in the piping and drain it of fluid.

9. Technical Information

Operating instructions, data sheet, approvals and further information via the QR code on the device or via www.kobold.com

10. Order Codes

Operating instructions, data sheet, approvals and further information via the QR code on the device or via www.kobold.com

11. Dimensions

Operating instructions, data sheet, approvals and further information via the QR code on the device or via www.kobold.com

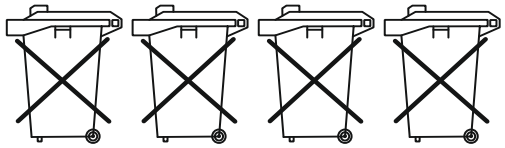
12. Disposal

Note!

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

Batteries

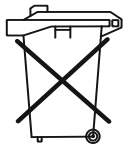
Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



Cd[1] Hg[2] Pb[3] Li[4]

1. „Cd" stands for cadmium
2. „Hg" stands for mercury
3. „Pb" stands for lead
4. „Li" stands for lithium

Electrical and electronic equipment



13. EU Declaration of Conformance

We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

Temperature sensor **Model: TSA-...**

to which this declaration relates is in conformity with the following EU directives stated below:

2011/65/EU **RoHS** (category 9)
2015/863/EU Delegated Directive (RoHS III)

Also, the following standards are fulfilled:

EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Hofheim, 05 Sept 2023

H. Volz
General Manager

J. Burke
Compliance Manager

14. UK Declaration of Conformity

We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

Temperature sensor **Model: TSA-...**

to which this declaration relates is in conformity with the following UK directives stated below

S.I. 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Also, the following standards are fulfilled:

BS EN IEC 63000:2018
Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

Hofheim, 05 Sept 2023

H. Volz
General Manager

J. Burke
Compliance Manager