1 General Information

These operating instructions contain information necessary for the proper installation and use of this device. In addition to these instructions, be sure to observe all statutory requirements, applicable standards, the additional technical specifications on the accompanying data sheet (see www.labom.com) as well as the specifications indicated on the type plate.

1.1 Intended Use

TEMPERIX C resistance thermometers are intended for measuring temperatures in technical processes. For a correct function the permissible temperature ranges indicated on the type plate must not be exceeded.

1.2 General Safety Notes

The installation, set up, service or removal of this device must only be done by trained, qualified personnel using suitable equipment and authorized to do so by the plant operator.

⚠️ Improper installation or use of these devices or the use of damaged or defective devices may result in severe injury or property damage!

1.3 CE Marking

The CE marking on these devices certifies their compliance with the applicable EU Directives for placing products on the market within the European Union.
2 Transportation and Storage

Store and transport these devices only under clean, dry conditions. Avoid exposure to shocks and excessive vibrations.

Permissible storage temperature: -40 °C…+100 °C

3 Installation and Commissioning

Before installing the device, be sure that the device is suitable for the intended application with respect to temperature range, pressure range, compatibility with the monitored medium and pressure port fitting type. The used gaskets must be compatible with the used process connection and resistant to the medium.

The process connection determines the permissible process pressure. Operating the device beyond its nominal pressure limit, e.g. clamp-connections, requires specially designed and approved mounting elements.

For threaded process connections with conical, metal-to-metal joint the following tightening torques apply:

- M12 20 Nm
- G 1 A 50 Nm
- G 1/2 20 Nm

Complete the mechanical installation before making the electrical connections.

Before placing the device in service, check it carefully for leaks under pressure.

After the mechanical installation and the electrical connection are both complete, the device is ready for use as soon as the voltage supply is switched on.

3.1 Electrical Connection

Make all electrical connections with the voltage supply switched off.

There are several options for the electrical configuration:

![Figure 1: Pin assignment](image)
4 Operation

During device operation, take care that the device remains within its intended temperature range, that its maximum operating pressure is not exceeded and that it is not harmed by the medium to which it is exposed. No other monitoring is necessary.

Permissible process temperature: -50...+200 °C
Permissible ambient temperature: -40...+100 °C

If the device is equipped with a transmitter the permissible ambient temperature is reduced to 85 °C.

When used in an explosive environment the temperature ranges are further limited (see 1.4).

4.1 Maintenance

When properly installed in accordance with applicable specifications, this device is maintenance-free. However, we recommend an annual recalibration of the device.

In the event of a device malfunction, you can only replace the complete measuring insert resp. the head transmitter.

5 Removal

Make sure that the pipe and the device has cooled down before you attempt to remove it or wear appropriate protection clothing to avoid burns.

Relieve the process system pressure before you attempt to remove the device. Shut off the pressure source for all feed lines and relieve the pressure in them.

⚠️ Attempting to remove the device from a still-pressurized or hot system may result in severe injury.

De-energize the power supply to the device before disconnecting the electrical connections. Once this is done, the device may be mechanically removed.

Be sure that residue in the process system and in the device itself do not present a danger to humans or the environment. During dismantling and removal, the device must be easy to remove from the process system. Do not apply any force during removal work. After the device has been removed, seal off the measuring point and mark the open process accordingly.

⚠️ Removed devices may contain hazardous deposits and residue. When removing or transporting these devices, be sure to take appropriate safety precautions.
EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration UE de Conformité

FAFNIR GmbH
Bahnenfelder Straße 19
22765 Hamburg / Germany

erklärt als Hersteller in alleiniger Verantwortung, dass das Produkt
declares as manufacturer under sole responsibility that the product
déclare sous sa seule responsabilité en qualité de fabricant que le produit

Widerstandsthermometer
Resistance Thermometer
Thermomètre à résistance

TEMPERIX ...

den Vorschriften der europäischen Richtlinien
complies with the regulations of the European directives
est conforme aux réglementations des directives européennes suivantes

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durch die Anwendung folgender harmonisierter Normen entspricht
by applying the harmonised standards
par l'application des normes

RoHS / RoHS / RoHS
EMV / EMC / CEM

Das Produkt ist bestimmt als Elektro- und Elektronikgerät der RoHS-
The product is determined as electrical and electronic equipment of RoHS
Le produit est déterminé comme des équipements électriques et électroniques de RoHS

Kategorie / Category / Catégorie

Das Produkt entspricht den EMV-Anforderungen
The product complies with the EMC requirements
Le produit est conforme aux exigences CEM

Störaussetzung / Emission / Émission
Störfestigkeit / Immunity / D’immunité


Ort, Datum / Place, Date / Lieu, Date

Geschäftsführer / Managing Director / Gérant: René Albrecht