



Operating instructions
Surface temperature probe
TSMx01

GB

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1 Preliminary note

You will find instructions, technical data, approvals and further information using the QR code on the unit / packaging or at documentation.ifm.com.

1.1 Symbols used

- ✓ Requirement
- Instructions
- ▷ Reaction, result
- [...] Designation of keys, buttons or indications
- Cross-reference
-  Important note
Non-compliance may result in malfunction or interference.
-  Information
Supplementary note

2 Safety instructions

- The unit described is a subcomponent for integration into a system.
 - The system architect is responsible for the safety of the system.
 - The system architect undertakes to perform a risk assessment and to create documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the architect of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Intended use).
- Only use the product for permissible media.
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- Protect units and cables against damage.

3 Intended use

The device detects the medium temperature of liquid and gaseous media non-invasively.

For this purpose, the device is attached to the outside of a pipe.

The TSMxxx series includes types for different pipe outside diameters. The pipe outside diameters are specified in the data sheets available at ifm.com.

4 Installation

- Prepare a grease-free, clean and smooth contact surface for attaching the sensor. The prepared contact surface must be slightly larger than the sensor.

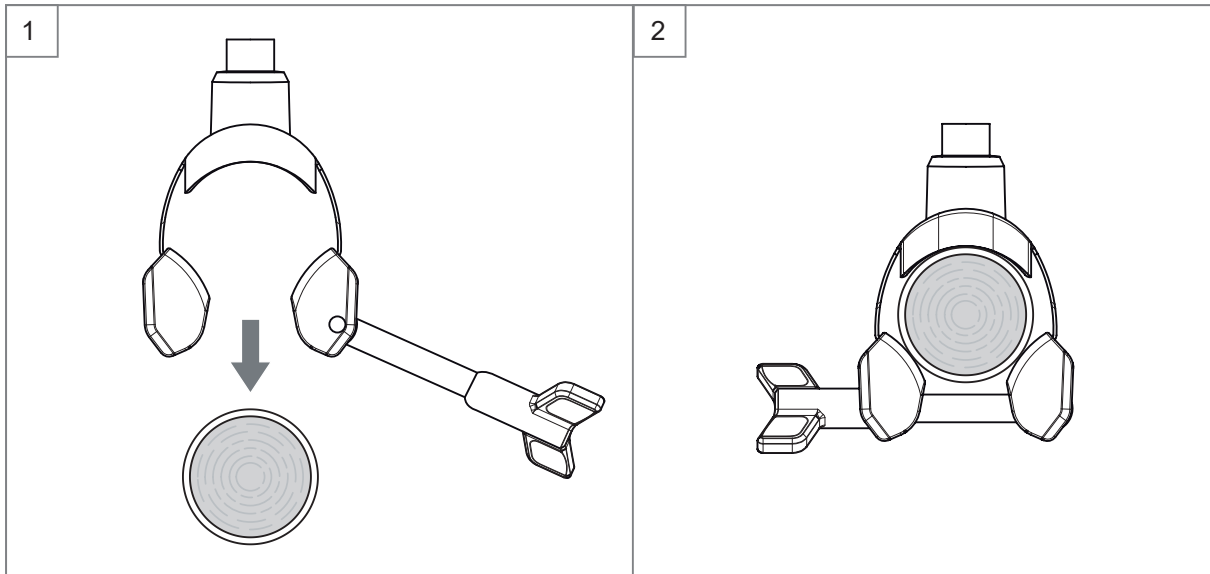


Fig. 1: Mounting the sensor on the pipe

- Open the Tri-Clamp fitting and place the sensor on the pipe.
- Close the fitting and tighten the screw with the wing nut by hand (max. 3 Nm).
- Check the correct position of the seal.

4.1 Use in hygienic areas



The sensor is suited for CIP (clean in place) when installed correctly.

- Observe the application limits (temperature and material resistance) according to the data sheet.

5 Electrical connection

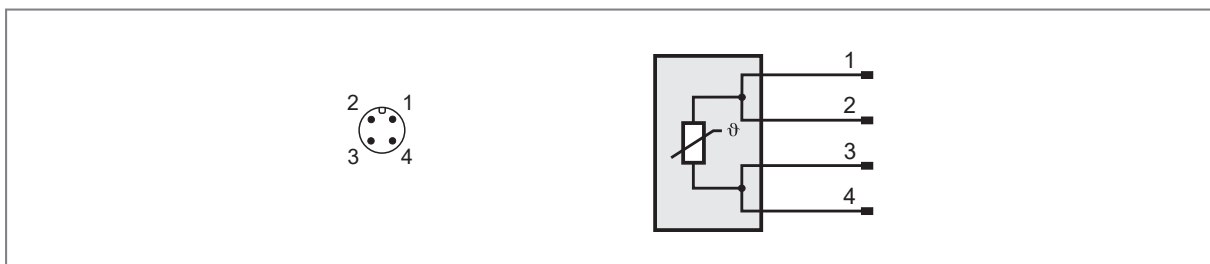


The unit must be connected by a qualified electrician.

Observe the national and international regulations for the installation of electrical equipment.

Voltage supply according to SELV, PELV.

- Disconnect power.
- Connect the unit as follows:



6 Maintenance, repair and disposal

The operation of the unit is maintenance-free.

Only the manufacturer is allowed to repair the unit.

- After use dispose of the device in an environmentally friendly way in accordance with the applicable national regulations.