

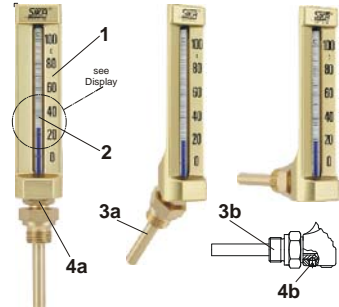


**SIKA  
Industrial thermometer**

**Types:**  
271/272/273 (DIN 16189, DIN 16190, DIN 16191)  
291/292/293 (DIN 16185, DIN 16186)  
174/175/176 (DIN 16181, DIN 16182)  
**Measuring ranges from -60 °C to 250 °C.**

**1. Description**

The SiKA industrial thermometer is available in three sizes (200, 150, 110 mm) and three designs (straight,  $\approx 135^\circ$ ,  $\approx 90^\circ$ ).



- 1) Casing with measuring range.
- 2) Thermometer insert with temperature scale and indicator liquid.
- 3a) Immersion tube "straight" + "  $\approx 135^\circ$ ."
- 3b) Immersion tube "  $\approx 90^\circ$ ."
- 4a) Counternut "straight" + "  $\approx 135^\circ$ ."
- 4b) Locking screw "  $\approx 90^\circ$ ."

**Intended use:**

Only use the thermometer to measure temperatures in systems or machines.

Please visit "www.sika.net" for further information on our industrial thermometers.

**2. Safety information**

Read these instructions thoroughly and follow them carefully.

- ❖ Check whether the thermometer is appropriate for your application prior to installation. This refers to the measuring range, the immersion tube design and material, the sealant and the installation conditions. The risk is transferred to the client after carrying out these checks; our warranty is subsequently null and void.
- ❖ Installation, operation and maintenance must be carried out by fully qualified personnel.
- ❖ Always adhere to relevant regulations as regards accident prevention and occupational health and safety.
- ❖ Never use the thermometer as a handle or foothold. Never expose the thermometer to other mechanical stress.
- ❖ Ensure that the thermometer is in perfect working order prior to use.

**CAUTION! High temperatures!**  
The casing can become hot during use. Never touch the hot thermometer.

**CAUTION! Risk of injuries!**  
Never remove an immersion tube from a system under pressure.

**CAUTION! Risk of injuries!**  
The thermometer insert is extremely delicate. Never squeeze or crush the thermometer insert with your fingers

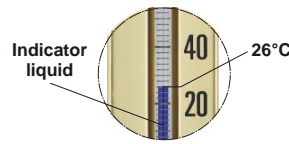
If problems or questions arise, please contact your supplier or the manufacturer directly:



Dr. Siebert & Kühn GmbH & Co. KG  
Struthweg 7-9 • D - 34260 Kaufungen  
☎ 05605-803 0 • 📠 05605-803 54  
info@sika.net • www.sika.net

**3. Display**

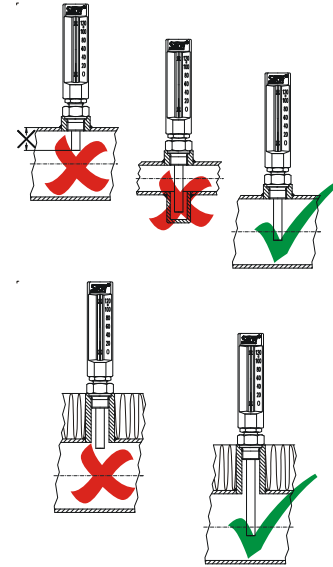
The thermometer provides a clear view (slightly enlarged) of the indicator liquid from the front.



**4. Installation**

Correct thermometer installation is imperative to ensure precise measurements.

Please adhere to the following installation instructions:



**5. Montage**

**CAUTION! Risk of injuries!**  
Inappropriate sealants may result in hot media escaping. Only use suitable sealants.

**ATTENTION! Material damage!**  
Inappropriate sealants may result in damage to the system and environmental pollution. Only use suitable sealants.

Use a sealant which is suitable for the temperature range and resistant to the medium which is to be measured.

**Prior to assembly:**

Before starting work make sure that the prerequisites for thermometer assembly are fulfilled:

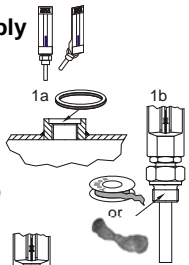
- The system is switched off and pressureless.
- The system cooled down to ambient temperature.
- A threaded port is available at a suitable position in the system.
- An appropriate sealant is used.

During assembly, only use suitably sized tools.

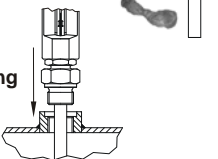
**5.1. Assembly**

**1. Sealing**

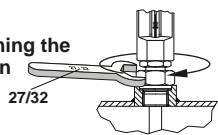
- 1a Flat seal or
- 1b Sealant (e.g. Teflon, hemp, ...)



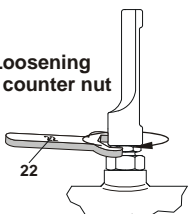
**2. Inserting**



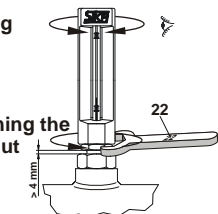
**3. Tightening the immersion tube**



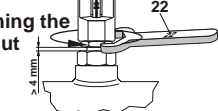
**4. Loosening the counter nut**



**5. Aligning**

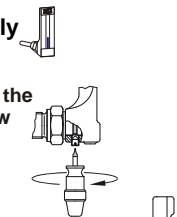


**6. Tightening the counter nut**

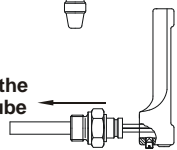


**5.2. Assembly**

**1. Loosening the locking screw**

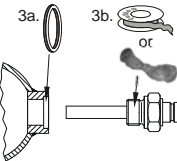


**2. Removing the immersion tube**

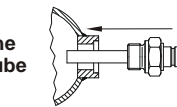


**3. Sealing**

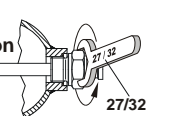
- 3a Flat seal or
- 3b Sealant (e.g. Teflon, hemp, ...)



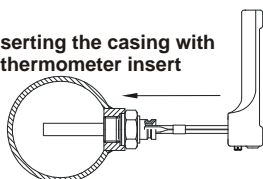
**4. Inserting the immersion tube**



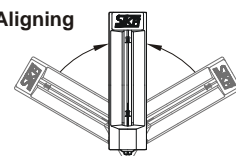
**5. Tightening the immersion tube**



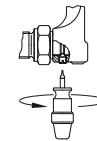
**6. Inserting the casing with the thermometer insert**



**7. Aligning**



**8. Tightening the locking screw**



**6. Maintenance and cleaning**

**Maintenance:**  
SiKA industrial thermometers are maintenance free.

**Cleaning:**

**ATTENTION! Material damage!**  
Do not clean with water! Water must not enter the immersion tube, since the glass insert or the immersion tube may be damaged at temperatures below 0°C.

Clean the casing with a dry or damp cloth. Never clean the thermometer with sharp objects or aggressive cleaning agents.

**7. Disassembly**

**CAUTION! High temperatures!**  
The casing can become hot during use. Never touch the hot thermometer.

**CAUTION! Risk of injuries!**  
Never remove an immersion tube from a system under pressure.

**Prior to disassembly:**

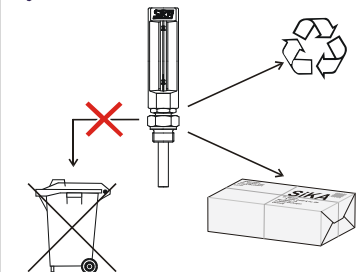
- is switched off, pressureless and cooled down to ambient temperature.

**Disassembly:**

- ❖ Use a suitable tool to loosen the immersion tube and unscrew the industrial thermometer.
- ❖ Seal the installation position with a plug and suitable sealant.

**8. Disposal**

The thermometer should never be disposed of together with domestic waste.



Recycle the thermometer locally or send it to your authorised supplier or to SiKA for correct disposal.

**9. Protective tubes**

An additional protective tube, in accordance with DIN 43772, must be used for applications with high-level loads.

High-level loads occur due to

- high pressure and / or high temperature in the application.
- high flow rates of the medium.
- corrosive and / or abrasive medium.

When using protective tubes, it is possible to install and de-install industrial thermometers during operation. The system can remain pressurised and the pipes do not have to be emptied.