

**Operating instructions EN**
**Bimetal thermometers  
Model 52**


Model A52.100    Model R52.100


**1. General information**

- The instrument described in the operating instructions has been manufactured using state-of-the-art technology. All components are subject to stringent quality and environmental criteria during production. Our management systems are certified to ISO 9001 and ISO 14001.
- These operating instructions contain important information on handling the instrument. Working safely requires that all safety instructions and work instructions are observed.
- The operating instructions are part of the instrument and must be kept in the immediate vicinity of the instrument and readily accessible to skilled personnel at any time.
- Skilled personnel must have carefully read and understood the operating instructions, prior to beginning any work.
- Subject to technical modifications.
- Further information:
  - Internet address: [www.wika.de](http://www.wika.de)
  - Relevant data sheet: TM 52.01

**Applied standards**

EN 13190: Dial thermometer

Cross-check scope of delivery with delivery note.

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Prior to starting any work, read the operating instructions! Keep for later use!

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11574110.02 11/2015 EN/DEFRES

**2. Safety**

**WARNING!**

Before installation, commissioning and operation, ensure that the appropriate instrument has been selected in terms of measuring range, design and specific measuring conditions. Non-observance can result in serious injury and/or damage to equipment.

**2.1 Intended use**

The model 52 bimetal thermometer is mainly used in the process industry to monitor process temperatures. It is suitable for installation in pipes and tanks. The thermometer offers many application possibilities for temperature measurement in liquid and gaseous media.

The instrument has been designed and built solely for the intended use described here and may only be used accordingly.


**WARNING!**

For hazardous media such as oxygen, acetylene, flammable or toxic gases or liquids, and refrigeration plants, compressors, etc., in addition to all standard regulations, the appropriate existing codes or regulations must also be followed.

**3. Specifications**

For specifications see WIKA data sheet TM 52.01 and the order documentation.

**4. Transport, packaging, storage**
**4.1 Transport**

Check instrument for any damage that may have been caused by transport. Obvious damage must be reported immediately.

**4.2 Packaging**

Do not remove packaging until just before mounting. Keep the packaging as it will provide optimum protection during transport (e.g. change in installation site, sending for repair).

**4.3 Storage**
**Permissible conditions at the place of storage:**

Storage temperature: -20 ... 60 °C

**Avoid exposure to the following factors:**

- Direct sunlight or proximity to hot objects
- Mechanical vibration, mechanical shock (shocks during abrupt positioning)
- Soot, vapour, dust, corrosive gases

**5. Commissioning, operation**

When screwing the gauges in, the force required for this must not be applied through the case or terminal box, rather only through the spanner flats provided for this purpose (using a suitable tool).



Installation with spanner

Observe the following advice during sensor installation:

- If possible, the entire length of the sensor should be exposed to the temperature being measured.
- In pipelines or other measuring points, the temperature probe must be positioned as far towards the flow as possible.
- When using thermowells, they must be filled with a thermal contact medium, in order to reduce the heat transfer resistance between the outer wall of the sensor and the inner wall of the thermowell.
- The working temperature of the thermal compound is -40 ... +200 °C.

Before installing the probe, check whether the probe material used (specified in the delivery note) is chemically resistant/neutral to the medium being measured. This also applies to thermowells.

**6. Maintenance and cleaning**

The instrument is maintenance-free. The indicator should be checked once or twice every year. For this the instrument must be disconnected from the process and checked using a temperature calibrator.

Clean the instrument with a moist cloth (soap water).

**7. Dismounting, return, disposal**

**WARNING!**

Residual media in dismounted instruments can result in a risk to persons, the environment and equipment. Take sufficient precautionary measures.

**7.1 Dismounting**

**WARNING!**

Risk of burns! Let the instrument cool down sufficiently before dismantling it! When dismantling it, there is a risk that dangerously hot pressure media may escape.

**7.2 Return**

**WARNING!**
**Strictly observe the following when shipping the instrument:**

All instruments delivered to WIKA must be free from any kind of hazardous substances (acids, bases, solutions, etc.).

When returning the instrument, use the original packaging or a suitable transport package.



Information on returns can be found under the heading "Service" on our local website.

**7.3 Disposal**

Incorrect disposal can put the environment at risk. Dispose of instrument components and packaging materials in an environmentally compatible way and in accordance with the country-specific waste disposal regulations.

Applies to the following articles:

**Bi-metallic thermometer – industrial design**

**Bi-metallic thermometer, connection rear, class 1.0**

Article No.	Type No.
102771 to 102782	5201 to 5214

**Bi-metallic thermometer – high quality design**

**Bi-metallic thermometer, connection rear, class 1.0**

Article No.	Type No.
102783 to 102809	5221 to 5255