

# INSTRUCTION MANUAL

## Capillary thermometer TTK 2440



### ➤ Description and use

Pressure technical thermometer is used in all industrial applications, where it is essential to measure temperature of remote places by means of capillary. Mainly used in hydraulic systems, food and other industry.

Capillary thermometers consists of capillary system and a head. The head of the thermometer consists of a case and a glass inspection hole, protecting the needle, the dial with scale and the flexible measuring element. The measuring system is terminated in the head by a flexible

measuring element, which transfers its deflection onto the needle indicating point. the measured value. Thermometers can be used for indication of temperatures of range 0-120, 200, 500°C and with maximum working pressure in the system of 0,63MPa. Indicated value of temperature must not exceed max. value of measuring range. Can be used in any position. The head of the thermometer may be placed in environment of max. temperature 60°C. The sensor of the thermometer must be placed in a liquid or gas environment, which do not have a corrosive effect on copper and its alloys. In other cases the sensor must be placed in a well. Thermometers are structurally designed for pressure value of 0,3 MPa, while using the well even up to 0,6 MPa.

### ➤ Installation

The installation of the thermometer is done as follows: Slide the head into the hole and place the temperature sensor in the measured environment or a well. The body of the thermometer may be installed in any position. The capillary must be attached in at least two other points along the capillary in approximately equal distances to prevent the capillary from oscillation during the operation.

### ➤ Storing conditions

The storing room must be without chemical contamination or other factors, that could have a disruptive effect on products. The thermometers must be treated with care and no major shocks.

Packed thermometers must be stored in a dry room with max. humidity 70% and temperature between 0°C and 30°C, with no significant temperature variations.

### ➤ Disposal

Disposal should be performed as follows: Hand into a recycling collection

### ➤ Possible minor failures and their elimination

Any failures of the thermometer must be eliminated by the manufacturer only.

### ➤ Warranty

Provided, that the product has been placed and used according to the instruction manual, the manufacturer provides with warranty in compliance with a valid code, unless agreed otherwise.

The manufacturer will reject warranty repair, in case the product has been damaged:

- during transport and storage of the purchaser, or his customers,
- during installation or disassembly of device of the purchaser or his customer.

### ➤ Warranty and post-warranty repairs

Warranty and post-warranty repairs are provided by the manufacturer. Warranty claim of a faulty product should be done at the seller. The warranty claim will be accepted in case, that following requirements are met:

- submitted warranty list of the given thermometer,
- paid invoice of the thermometer,
- the conditions and requirements of operating manual were met.