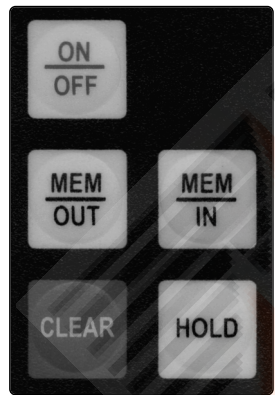


Fig. 1



*Operating Instructions*

Fig. 2



**Serie P400**



## Summary

### 1. Handling

- 1.1. General advice
- 1.2. Operation
- 1.3. Switching on/off
- 1.4. Functions
  - 1.4.1. Measuring unit switching °C/°F
  - 1.4.2. Calibration (Offset-adjustment)
- 1.5. Recalling memory data (HOLD/MAX/MIN/AVG)
- 1.6. 19-measurment memory
- 1.7. AUTO-OFF-function

### 2. Power supply / Changing the battery

### 3. Guarantee

### 4. Technical data

When the instrument displays the "BAT" segment, it indicates that the batteries need replacing and the instrument allows app. 1 hour of further measurement time.

**Note:** For protection of our environment please dispose of the batteries according to current local regulations.


### 3. Guarantee

With normal use, the guarantee lasts for 12 months for the instruments and 6 months for the probes and sensors. Opening of the instruments leads to expiration of guarantee.

The producer guarantees that his product will not have any material defect or defect in workmanship during the above-mentioned period if the product is accordingly used and maintained. Exceptions are defined in the following way:

The guarantee does not apply for batteries and fuses. The guarantee does not cover products that are damaged, used improperly or negligent, practised or stored incorrectly.

These guarantee conditions replace all possible expressly or tacitly confirmations. No liability will be assumed for special, casual or constructive damages when it occurs through unauthorized act or through another way even if it is within the contract.

**P400 Series – Precision measuring instruments** **1.6 19-Measurement Memory**


The instruments series P400 provides a 19 measurement memory function. For saving the displayed measurement push the MEM IN-Button. On the bottom of the display the memory position will shown. To readout the memory push the MEM OUT-button. On the bottom of the display "REC" and the position of the memory will be displayed (REC 1-19). For clearing the memory push once the CLEAR-Button while displaying the memory measurements.

**1.7 AUTO-OFF-function**

P400 and P410 instruments will switch off automatically after 15 minutes without pressing any key. Pressing the CLEAR-Button and switching on the instrument simultaneously can disable this function when "dAo" is displayed.

**2. Power supply**

For the power supply of the instrument two 1,5 Volt battery (AA size) are used. To exchange the batteries switch off the instrument and open the battery cover on the back of the instrument. Replace the used batteries with new ones.

**P400 Series – Precision measuring instruments** **1. Handling****1.1 General advice**

- For cleaning the instrument please do not use abrasive cleaner, but a dry or damp cloth.
- Please store the measuring instrument in a dry and clean place when not in use.
- Avoid any force like shocks or pressure to the instrument.
- Do not use force to connect the probe or interface plugs in. The interface plug is different from the probe plug.
- If no sensor is connected to the instrument while switching on "OPN" shows on the display.
- A retractable stand on the back of the instrument allows it to be used as a bench top instrument.

**1.2. Operation**

Before switching on the instrument, connect the probes to the instrument and insert the battery (Please refer to chapter 6. Power supply / battery changing). A number on the instrument's housing marks each port.

**1.3. Switching on and off**

By operating the ON/OFF-key the instrument switches on or off. After switching on the instrument indicates

## P400 Series – Precision measuring instruments

a full segment test (Fig. 1) for 1,5 sec. afterwards the instrument starts operating in measurement mode indicating the actual measurement temperature.

### 1.4 Functions

#### 1.4.1 Measuring unit switching °C and °F (Celsius / Fahrenheit)

To change the measuring unit push ON/OFF- and MEM/OUT-Button simultaneously until the measurement value will shown.

#### 1.4.2 CAL-option (how to adjust the instrument)

The instrument offers an easy calibration function to adjust the temperature at one point – to compensate sensor tolerances.

Push once the Hold-Button. On the bottom of the display you will see HLD and the displayed measurement value is "frozen". By using now the MEM IN-Button the instrument switch to CAL-mode. On the instrument you will see:

00.0

The first "0" is blinking. By using the MEM IN-Button you increase the blinking figure and by using the MEM OUT-Button you decrease the measurement

## P400 Series – Precision measuring instruments

value. By using the Hold button you will switch to the next figure or you will end the adjustment.

**Note:** The mentioned offset will add or subtract (negative value) from the measurement.

**Note:** When the offset is not equal to 00.0 the Celsius-sign "°C" will be not completely displayed.



Offset has been not changed e.g.: 00.0



Offset has been changed e.g.: -00.5

### 1.5 Recalling the memory data (HOLD MAX MIN AVE)

After pushing first time the key [HOLD MAX MIN AVE] the actual value will be held on the display. Pushing again the key [HOLD MAX MIN AVE], the saved maximum-, minimum and average value will be displayed.

**Note:** During the recall of the memory data the extremes (MAX MIN) and the average value (AVE) will not be calculated or carried on.

#### Clearing the memory (MAX MIN AVE)

Press [CLEAR] key once to erase the stored maximum, minimum and average from memory