

Manufacturer's Declaration

Manufacturer LABOM Mess- und Regeltechnik GmbH
Im Gewerbepark 13, 27798 Hude, Deutschland

Calibration of LABOM measuring devices

For type series All LABOM measuring devices

All LABOM measuring devices are calibrated before shipping. If required an optional calibration certificate can be ordered that documents the compliance with the customer's requirements.

Storing, handling and operating the device have an effect on how long this condition remains in acceptable limits.

The period of time after which the device needs to be re-calibrated and the limits that provide an acceptable performance are individual customer decisions. There are no restrictions from LABOM regarding this matter. However we recommend re-calibrating the devices every year.

For many devices an impermissible measurement deviation can be adjusted. Please see the operating instructions of your device for further information.

Pressure measurement devices

When calibrating a pressure measurement device, the zero point at 0 bar rel can be calibrated with little effort (except for devices for absolute pressure).

If a pressure calibrator is available, the end of the measuring range should also be checked.

Procedure for checking the zero point

- De-pressurise the pressure port of the device

pressure transmitter

- Check that the current output corresponds to 0 bar relative pressure (4 mA, if the lower range limit is 0 bar relative).

pressure gauge

- Check that the pointer indicates zero bar relative with sufficient accuracy.

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Procedure for checking the end of measuring range

- Apply the full scale pressure to the device

pressure transmitter

- Check that the current output is 20 mA.

pressure gauge

- Check that the pointer indicates the upper range value with sufficient accuracy

Temperature measurement devices

For the calibration of a temperature measuring instrument, a temperature reference is necessary, usually a tempering bath or a dry calibrator.

During calibration, the start and end of the measuring range should be checked, as this covers all expected measurement deviations. If this is not possible due to the calibration equipment, choose two calibration points as far apart as possible.

Procedure for lower adjustment

- Temper the unit to the lower calibration temperature (preferably the lower range value)

temperature transmitter

- Check that the current output corresponds to the lower calibration temperature (4 mA, if calibrated at the lower range value).

mechanical thermometer

- Check that the pointer indicates the lower calibration temperature with sufficient accuracy.

Procedure for upper adjustment

- Temper the unit to the upper calibration temperature (preferably the upper range value)

temperature transmitter

- Check that the current output corresponds to the upper calibration temperature (20 mA, if calibrated at the upper range value).

mechanical thermometer

- Check that the pointer indicates the upper calibration temperature with sufficient accuracy.

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LABOM Mess- und Regeltechnik GmbH



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