

# Operating Instructions



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## 1 General Information

This document contains necessary information for the proper installation and use of this device. In addition to this instruction, be sure to observe all statutory requirements, applicable standards, the additional technical specifications on the accompanying data sheet (see [www.labom.com](http://www.labom.com)) as well as the specifications indicated on the type plate.

### 1.1 General Safety Notes

The installation, set up, service or disassembly of this device must only be done by trained, qualified personnel using suitable equipment and authorized to do so.



#### Warning

Media can escape if unsuitable devices are used or if the installation is not correct.

Danger of severe injury or damage

- Ensure that the device is suitable for the process and undamaged.

### 1.2 Intended Use

The device is intended to measure pressure of gases, vapors and liquids as specified in the data sheet.

### 1.3 Conformity with EU Regulations

The CE-marking on the device certifies its compliance with the applicable EU Directives for placing products on the market within the European Union.

You find the complete EU Declaration of Conformity (document no. KE\_019) at [www.labom.com](http://www.labom.com).

### 1.4 ATEX Approval

Devices of the type CK5xx1 are certified for use in explosive environments.

If you purchased a device with ATEX approval, please refer to the accompanying document XA\_009 for ATEX-relevant information.

## 2 Transportation and Storage

Store and transport the device only under clean and dry conditions preferably in the original packaging. Avoid exposure to shocks and excessive vibrations.

Permissible storage temperature:        -40...70 °C

## 3 Installation and Commissioning

Ensure that the device is suitable for the intended application with respect to pressure range, overpressure limit, media compatibility, temperature range and process connection.

After the mechanical installation and electrical connection is completed, the device is ready for operation as soon as the power supply is switched on.

### 3.1 Mechanical Installation

Before starting operation, check the process connection carefully for leaks under pressure.

Use gaskets, if required, that are suitable for the process connection and resistant to the media.

### 3.2 Electrical Connection

Complete the mechanical installation before you connect the device electrically.  
Set up all electrical connections while the voltage supply is switched off.

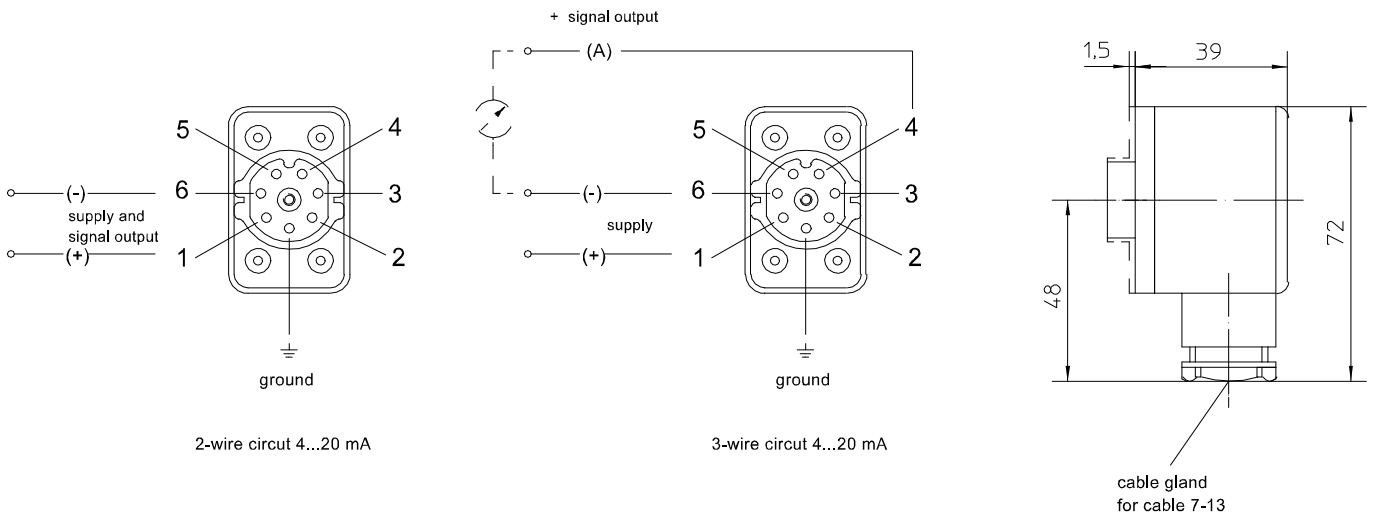


Figure 1: Versions of the electrical connection

## 4 Operation

During operation, take care that the device remains within its intended pressure and temperature ranges. No other monitoring is necessary.

Permissible media temperature: -40...100 °C

Permissible ambient temperature: -40...70 °C

### 4.1 Zero-point setting

Set the zero-point of the measuring device and the angle-of-rotation sensor separately.

#### 4.1.1 Zero-point correction

Small measuring errors or deviations caused by difference in level between pressure gauge and point of measurement can be corrected on measuring devices with micro control position pointers. To do so turn the adjusting screw on the pointer hub (see picture).

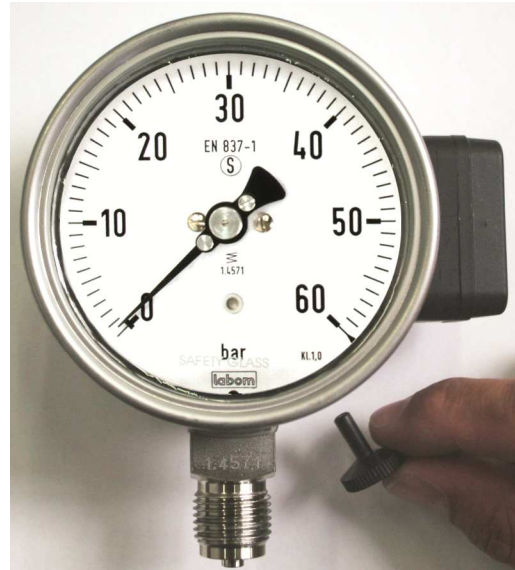
Similarly, a displacement of the zero point caused by use and long service life can be corrected if necessary.



Picture 2: Zero-point correction

### 4.1.2 Adjusting the angle-of-rotation sensor

For adjustable devices the adjustment requires to apply the lower limit pressure respectively the upper limit pressure to the device. Bring the enclosed or another magnet in the alignment position (see picture) to adjust accordingly. After approx. 2 seconds a light signal in the scale acknowledges the adjustment of the measurement range begin and/or the adjusted range. The adjustment is possible within a tolerance of approx.  $\pm 5$  % F.S. Any settings that differ from this will not be accepted.



Picture 3: Alignment position

## 4.2 Devices with Diaphragm Seal

Remove the protective cap or protective wrapping from the diaphragm only just before installation to prevent contamination or damage.

The diaphragm must not be touched. Do not place the device on its diaphragm. Even small scratches or deformations may negatively influence the zero point or other characteristics of the device.

Pressure transmitter and diaphragm seal are a closed system that must not be separated. You can find further information about diaphragm seals in the document TA\_031 on [www.labom.com](http://www.labom.com).

## 4.3 Maintenance / Service

When properly installed in accordance with applicable specifications, this device is maintenance-free. However, we recommend an annual recalibration of the device.

## 5 Disassembly

When measuring hot media, make sure that the device has cooled down prior to any dismounting or wear appropriate protective clothing to avoid burns.

Switch off the power supply to the device before disconnecting the electrical connections. Once this is done, the device may be mechanically removed.



### Warning

Opening pressurized lines might cause severe injuries.

Danger of severe injuries or damage

- Relieve the process pressure before attempting to remove the device. Shut off the pressure supply for all feed lines to the device and relieve the pressure in them.



### Warning

Hazardous deposits and residues might remain on opened process connections and removed devices.

Danger of injury

- After the device has been removed, seal off the measuring point and mark the open process connection accordingly. Consider a possible danger due to residues when handling the removed device.