

Operating Instructions



1 General Information	2
1.1 General Safety Notes.....	2
1.2 Intended Use.....	2
1.3 Conformity with EU Regulations.....	2
1.4 ATEX Approval.....	2
2 Transportation and Storage	2
3 Installation and Commissioning	3
3.1 Mechanical Installation	3
4 Operation	3
4.1 Zero-point correction	4
4.2 Devices with Diaphragm Seal	4
4.3 Maintenance / Service.....	4
5 Disassembly	4

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) 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.

The following guidelines apply to these devices:

ATEX Directive 2014/34/EU

PED Directive 2014/68/EU

EMC Directive 2014/30/EU for integrated electronical angle-of-rotation sensor PL110x

You find the complete EU Declaration of Conformity (document no. KE_009, KE_015 or KE_017) at www.labom.com.

1.4 ATEX Approval

If you purchased a device with ATEX approval, please refer to the accompanying document XA_005 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

S3 models with housing packing

Permissible storage temperature: -20...60 °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.


3.1 Mechanical Installation


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

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

Install safety pressure gauges in the line with DIN EN 837-1 S1 and S3 so that the exhaust equipment can freely discharge to the rear in the event of a fault or malfunction. Provide for corresponding openings if mounting the unit on the wall.

Use the spanner flats to screw in the device.

Measuring devices where oil or grease residues in the measuring element are not permitted are marked on the scale with the oil can  icon.

Measuring devices for use with oxygen are marked on the scale with the oil can  icon and the word "oxygen" directly below this.

Use the vent valve (balance to atmospheric pressure, see figure 1) to vent the case after installation of measuring gauges filled with liquid with a display range ≤ 10 bar.



Figure 1: Vent valve

Vent the device in line with the instructions stated on the case:

Either: Open the vent valve as far as possible before operation (see figure 2).

Or: Cut the vent valve before operation (see figure 3).



Figure 2: Pull valve



Figure 3: Cut valve

4 Operation

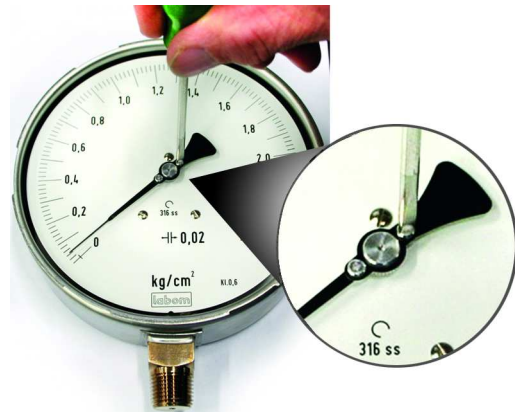
During operation, take care that the device remains within its intended pressure and temperature ranges. No other monitoring is necessary.

The permissible ambient and media temperature depends on the type of device and its design. This information can be found in the relevant data sheet.

4.1 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 4: Zero-point correction

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.

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.

In the event of any damage or defect the customer cannot replace or repair any components or assemblies.

5 Disassembly

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



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.