

Pressure gauges

Type series BAxxxx, BBxxxx, BDxxxx, BHxxxx

Labom

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) 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_053) 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

BH5xxx, BH8xxx and S3 models with case filling

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.

Seal cylindrical screw threads by fitting a sealing washer to the front face of the gasket. Seal taper screw threads by screwing tight; typically a gasket material is applied to the male thread. Make sure that the set of gasket you use are correct and in perfect condition when mounting the instrument; non-matching gasket can cause faults.

Vent the pressure gauge after installation using the vent valve (Figure 1).

The devices are supplied with a closed vent valve (CLOSED position). Moving the red lever to the OPEN position equalises the pressure level inside and outside the case (Figure 2).



Figure 1: Vent valve

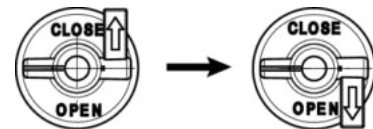


Figure 2: Move valve

No activity is necessary prior to commissioning with ventilation systems positioned in the front glass, like for type series BH8xxx (Figure 3). Avoid contaminating the vent element.



Figure 3: Vent element in the front glass

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 figure 4).

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

You can find further information about zero-adjustment of pressure gauge with micro adjustment pointer in the document TA_029 on www.labom.com.



Figure 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 dismounting 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.