### 1. General Information

1.1 Information on the operating manual

This operating manual contains important information on proper usage of the device. Read this operating manual carefully before installing and starting up the pressure measuring device.

Adhere to the safety notes and operating instructions which are given in the operating manual. Additionally applicable regulations regarding occupational safety, accident prevention as well as national installation standards and engineering rules must be complied with!

This operating manual is part of the device, must be kept nearest its location, always accessible to all employees.

This operating manual is copyrighted. The contents of this operating manual reflect the version available at the time of printing. It has been issued to our best knowledge. BD SENSORS is not liable for any incorrect statements and their effects.

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### 2. Product identification

The device can be identified by its manufacturing label. It provides the most important data. By the ordering code the product can be clearly identified.

#### 2.1 Designation

<table>
<thead>
<tr>
<th>Type designation</th>
<th>Ordering code</th>
<th>Serial number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GND</td>
<td>sensor</td>
<td></td>
</tr>
<tr>
<td>VS+</td>
<td>sensor</td>
<td></td>
</tr>
<tr>
<td>VS-</td>
<td>sensor</td>
<td></td>
</tr>
<tr>
<td>GND</td>
<td>supply</td>
<td></td>
</tr>
<tr>
<td>VS+</td>
<td>supply</td>
<td></td>
</tr>
<tr>
<td>VS-</td>
<td>supply</td>
<td></td>
</tr>
</tbody>
</table>

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### 3. Installation

3.1 Mounting and safety instructions

**WARNING!** Install the device only when currentless!

**WARNING!** This device may only be installed by qualified technical personnel who has read and understood the operating manual!

- There are no modifications/changes to be made on the device.
- Do not throw the package/device!
- Handle the terminal box carefully and properly to avoid any damages.
- Do not use any force when installing the device to prevent damage of the device and the plant!

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**Fig. 1 manufacturing label**

- The manufacturing label must not be removed from the device!
6.3 Option overvoltage protection

- With an optional overvoltage protection (KL 1 standard), a solid conductor has additionally to be connected with the ground clamp GND (minimal cross section for KL 1: 4 mm²; for KL 2: 2.5 mm²).
- It also has to be connected with a suitable grounding (earth bus bar; equipotential bonding).

4. Initial start-up

⚠️ WARNING! Before start-up, the user has to check for proper installation and for any visible defects.
⚠️ WARNING! The device can be started and operated by authorized personnel only, who have read and understood the operating manual!
⚠️ WARNING! The device has to be used within the technical specifications, only (compare the data in the data sheet).

5. Placing out of service

⚠️ WARNING! When dismantling the device, it must always be done in the currentless condition.

6. Maintenance

In principle, this device is maintenance-free. If desired, the housing of the device can be cleaned using a damp cloth and non-aggressive cleaning solutions.

7. Return

Before every return of your device, whether for recalibration, decalification, modifications or repair, it has to be cleaned carefully and packed shutter-proofed. You have to enclose a notice of return with detailed defect description when sending the device. If your device came in contact with harmful substances, a declaration of decontamination is additionally required. Appropriate forms can be downloaded from our homepage www.bdsensors.com. Should you dispatch a device without a declaration of decontamination and if there are any doubts in our service department regarding the used medium, repair will not be started until an acceptable declaration is sent.

⚠️ If the device came in contact with hazardous substances, certain precautions have to be complied with for purification!

8. Disposal

The device must be disposed according to the European Directives 2002/96/EG and 2003/108/EG (on waste electrical and electronic equipment) Waste of electrical and electronic equipment may not be disposed by domestic refuse!

9. Warranty conditions

The warranty conditions are subject to the legal warranty period of 24 months from the date of delivery. In case of improper use, modifications or damages to the device, we do not accept warranty claims. Furthermore, defects due to normal wear are not subject to warranty services.

10. Declaration of conformity / CE

The delivered device fulfills all legal requirements. The applied directives, harmonised standards and documents are listed in the EC declaration of conformity, which is available online at: http://www.bdsensors.com.
Additionally, the operational safety is confirmed by the CE sign on the manufacturing label.

11. Error handling

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Possible cause</th>
<th>Error detection / corrective</th>
</tr>
</thead>
<tbody>
<tr>
<td>changing measuring value with varying air pressure and constant filling level (gauge measurement)</td>
<td>pressure balance item is contaminated, clogged or damaged</td>
<td>Check the pressure balance item. If the described error cause is correct, the device should be placed out of service according to the regulations; the pressure balance item has to be replaced. It can be ordered from BD SENSORS as replacement.</td>
</tr>
<tr>
<td>broken signal current (pressure or temperature) or signal current not identifiable</td>
<td>activation of overvoltage protection and its destruction (by overloading the overvoltage protection, further components may also be destroyed)</td>
<td>Please send the device to BD SENSORS for repair.</td>
</tr>
<tr>
<td>released signal wire</td>
<td>tighten the signal wire again</td>
<td></td>
</tr>
<tr>
<td>defective transmitter</td>
<td>replace the transmitter</td>
<td></td>
</tr>
</tbody>
</table>

If you detect an error, please try to eliminate it by using this table or send the device to our service address for repair.

⚠️ Improper action and opening can damage the device. Therefore repairs on the device may only be executed by the manufacturer!