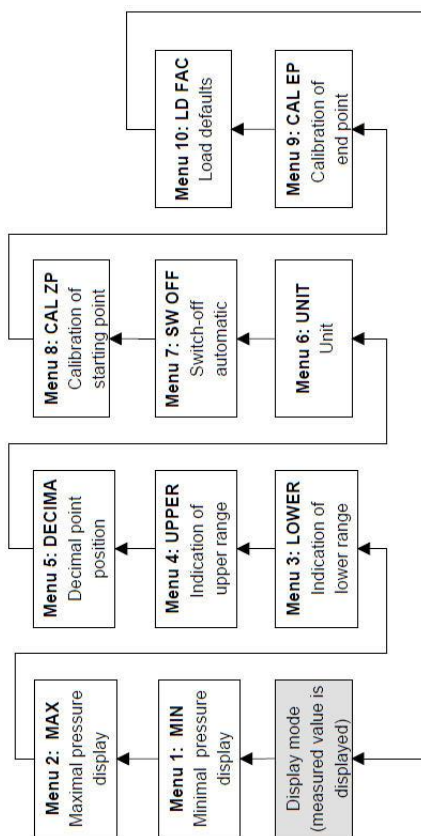


7.2 Structure of the menu system



7.3 Menu list

| | |
|------------------|--|
| 1 P MIN | Minimum pressure display ▼-button: puts the current pressure as minimum value ▲-button: puts the value on zero |
| 2 P MAX | Maximum pressure display ▼-button: puts the current pressure as maximum value ▲-button: puts the value on zero |
| 3 LOWER | Displaying of the lower range This value was determined on the order and cannot be changed. |
| 4 UPPER | Displaying of the upper range This value was determined on the order and cannot be changed. |
| 5 DECIMA | Setting of the decimal point position Depending on the nominal pressure range and on the set unit, only a limited number of positions after the decimal point can be displayed. |
| 6 UNIT | Setting of the pressure unit Permissible units: bar, mbar, PSI, InHg, cmHg, mmHg, hPa, kPa, Mpa, mH ₂ O, InH ₂ O. Along with the unit, the decimal point position has probably to be changed in order to get a correct indication of the measured value. Besides, depending on the nominal pressure range, perhaps not all available units can be used. |
| 7 SW OFF | Configuration of the switch-off automatic Meaning of the permissible number: "0": switch-off automatic is turned off "1" – "5": automatic switch-off in 1 to 5 minutes |
| 8 CAL ZP | Calibration of initial point If you detect a shifting of the measured value deviating from the offset, the display can be re-calibrated. For this, a pressure reference is necessary if the offset differs from the ambient pressure. The used pressure must be identical to the starting point of the pressure measuring range. For reading the new pressure into the device, push the ▲-button. Please note the following characteristic: -1 ... x bar: the offset is calibrated at -0.9 bar; during calibration we check whether the device will be within tolerance at -1 bar (in theory); for re-calibration a pressure reference of -0.9 bar is necessary 0 ... x bar abs.: the offset is calibrated at 0.1 bar abs.; during calibration we check whether the device will be within tolerance at 0 bar abs.; for re-calibration, a pressure reference of 0.1 bar is necessary If the re-calibration leads to a worsening of the original calibration, e. g. as a result of a defect pressure reference, the defaults can be re-set by the menu item "LD FAC" according to your order |
| 9 CAL EP | Calibration of end point If you detect a shifting of the measured value deviating from the end point, the display can be re-calibrated. For this, a pressure reference is necessary if the offset differs from the ambient pressure. The used pressure must be identical to the end point of the pressure measuring range. For reading the new pressure into the device, push the ▲-button. If the re-calibration leads to a worsening of the original calibration, e. g. as a result of a defect pressure reference, the defaults can be re-set by the menu item "LD FAC" according to your order. |
| 10 LD FAC | Load defaults To load the defaults, you have to push the ▲-button. After the action "LOADED" and "OK" appears in the display for a short time. The configuration mode will be left automatically. |

To configure the different menu items, set the desired values by pushing the "▼" or "▲" buttons. Confirm the setting with the "OK" button and the menu item will start blinking to indicate that you can start the configuration. To save the configured values or to leave a menu item, you also have to push the "OK" button.

Changes of the adjustable parameters become only effective after pushing the OK button and leaving the menu item. After leaving the menu system, all parameters will be checked against each other and in reference to the characteristics of the device. If the message "OK" appears in the display for some seconds, the configuration was successfully.

If the message "ERROR" appears, at least one of the set values is out of the permissible range. For example, an error will occur if a device with a nominal pressure range of 400 bar should be set on 4 positions after the decimal point. If an error has been detected, the lastly runnable parameters will be set again.

After configuring the unit, the conversion of the pressure range (in menus UPPER and LOWER) into the new unit will only occur after leaving the complete menu system. Besides, depending on the number of displayed figures of the respective nominal pressure range, probably not all available units (in menu UNIT) can be used.

8. Maintenance

| | |
|--|---|
| | Danger of death from airborne parts, leaking fluids, electric shock - Always service the device in a depressurized and de-energized condition! |
| | Danger of injury from aggressive fluids or pollutants - Depending on the measured medium, this may constitute a danger to the operator. - Wear suitable protective clothing e.g. gloves, safety goggles. |

If necessary, clean the housing of the device using a moist cloth and a non-aggressive cleaning solution.

During the cleaning processes, note the compatibility of the cleaning media used in combination with the media-wetted materials of the pressure measuring devices. Permissible concentrations and temperatures must be observed. Verification/ validation by the user is essential.

For EHEDG certified devices in tanks, the cleaning device must be positioned in such a way that the sensor is directly assessed and wetted for cleaning. The device has been developed for Cleaning in Place (CIP) applications and must not be dismantled for cleaning.

Deposits or contamination may occur on the diaphragm/ pressure port in case of certain media. Depending on kind and quality of the process, suitable cyclical maintenance intervals must be specified by the operator. As part of this, regular checks must be carried out regarding corrosion, damage of diaphragm/seal(s) and signal shift. A periodical replacement of the seal(s) may be necessary.

If the diaphragm is calcified, it is recommended to send the device to BD|SENSORS for decalcification. Please note the chapter "Service / repair" below.

NOTE - Wrong cleaning or improper touch may cause an irreparable damage on the diaphragm. Therefore, never use pointed objects or pressured air for cleaning the diaphragm.

9. Removal from service

| | |
|--|---|
| | Danger of death from airborne parts, leaking fluids, electric shock - Disassemble the device in a depressurized and de-energized condition! |
| | Danger of injury from aggressive media or pollutants - Depending on the measured medium, this may constitute a danger to the operator. - Wear suitable protective clothing e.g. gloves, goggles. |

NOTE - After dismounting, mechanical connections must be fitted with protective caps.

10. Service / repair

Information on service / repair:

- www.bdsensors.de
- info@bdsensors.de
- Service phone: +49 (0) 92 35 98 11 0

10.1 Recalibration

During the lifetime of a transmitter, the value of offset and span may shift. As a consequence, a deviating signal value in reference to the nominal pressure range starting point or end point may be transmitted. If one of these two phenomena occurs after prolonged use, a recalibration is recommended to ensure furthermore high accuracy.

10.2 Return

| | |
|--|---|
| | Danger of injury from aggressive media or pollutants - Depending on the measured medium, this may constitute a danger to the operator. - Wear suitable protective clothing e.g. gloves, goggles. |
|--|---|

Before every return of your device, whether for recalibration, decalcification, modifications or repair, it has to be cleaned carefully and packed shatter-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. Download these by accessing www.bdsensors.com or request them:
info@bdsensors.de | phone: +49 (0) 92 35 / 98 11 0

In case of doubt regarding the fluid used, devices without a declaration of decontamination will only be examined after receipt of an appropriate declaration!

11. Disposal

| | |
|--|---|
| | Danger of injury from aggressive media or pollutants - Depending on the measured medium, this may constitute a danger to the operator. - Wear suitable protective clothing e.g. gloves, goggles. |
|--|---|

The device must be disposed of according to the European Directive 2012/19/EU (waste electrical and electronic equipment). Waste equipment must not be disposed of in household waste!

NOTE - Dispose of the device properly!

12. Warranty terms

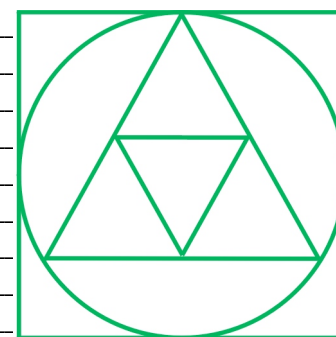
The warranty terms are subject to the legal warranty period of 24 months, valid from the date of delivery. If the device is used improperly, modified or damaged, we will rule out any warranty claim. A damaged diaphragm will not be accepted as a warranty case. Likewise, there shall be no entitlement to services or parts provided under warranty if the defects have arisen due to normal wear and tear.

13. EU declaration of conformity / CE

The delivered device fulfils 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.de>.

Additionally, the operational safety is confirmed by the CE sign on the manufacturing label.

Notes:



**APPLIED
MEASUREMENTS
LIMITED**