

b.safe Mini-Display Leak

Taking into Operation

Power Supply
Connect the b.safe Mini-Display with the included power plug to a suitable socket.

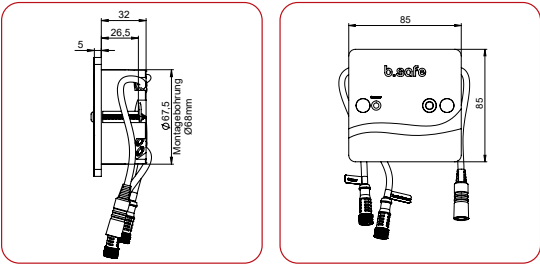
Input
- AC 100 bis 240 V
- Alternating voltage 50-60 Hz

Output
- 24 V
- Direct current
- 1 A

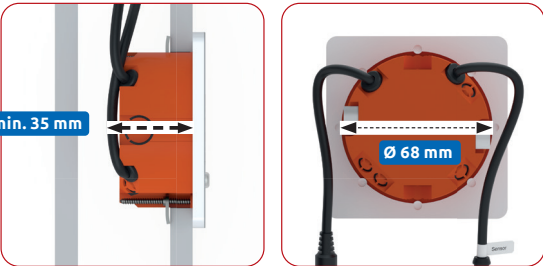
Option: Connection of sensors via isolated amplifier
In explosion-hazardous areas (e.g. safety cabinet) the sensor and its signal cable (both in the safety cabinet) have to be connected via a suitable isolated amplifier to the b.safe Mini-Display. We recommend to use the b.safe Isolated Amplifier with Cat. No. R 660-01 or R 660-04.



Dimensions b.safe Mini-Display Leak

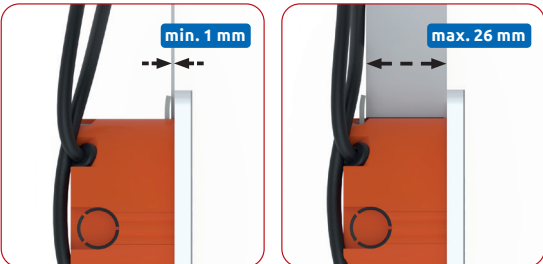


Installation information



For the installation of the b.safe Mini-Display a minimum installation depth of 35 mm is needed.

The mounting hole must have a diameter of 68 mm



You can install the b.safe Mini-Display in wall thicknesses between 1 mm and 26 mm

Connection of b.safe Waste Caps with Main alarm, 1-channel

b.safe Mini-Display Leak 1-channel (Cat. No. R 658-21)



1 Connect signal cable of the **b.safe Isolated Amplifier** with the **b.safe Mini-Display Isolated Amplifier Sensor 1 OUT** with **Sensor 1**

2 **Isolated Amplifier Sensor 2 OUT** with **Leak-Sensor**

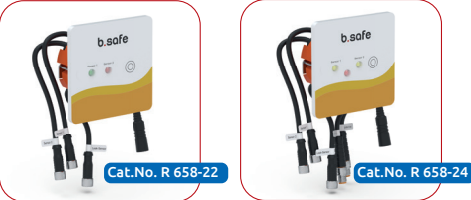
3 Then plug in the power plug and connect the power supply

The b.safe Leak-Sensor triggers the alarm on the Mini-display in the event of a leakage of a collecting container

» Cat. No. R 637-01

b.safe Mini-Display Leak – Monitors not only the level in connected collection containers but also the collecting tray in the safety cabinet. For this purpose, an additional b.safe Leak-Sensor is connected

b.safe Mini-Display Leak, 1-channel » Cat. No. R 658-2 1
b.safe Mini-Display Leak, 2-channel » Cat. No. R 658-22
b.safe Mini-Display Leak Splitter 2-channel » Cat. No. R 658-24



Main alarm

Sensor

Neutral state
As soon as the b.safe Mini-Display Leak is supplied with power and the sensors are connected, the respective sensor LED lights up in **GREEN**.

Alarm state
If a signal is recognized at sensor entry 1, the sensor LED changes from green to a flashing **RED**, a pulsating alarm tone sounds at the same time.

Alarm when container is full: LED flashes **RED** and alarm tone sounds. The alarm state can be released by the following incidents:
- fill level / vacancy level reached
- cable break
- defective sensor
- sensor not connected

Alarm when liquid leaked in the collecting tray or overflows:
The b.safe Leak-Sensor triggers the alarm on the b.safen Mini-Display Leak in the event of a leakage or overflow of a collecting container. Permanently **RED** LED and audible alarm. Snooze and reset function of the alarm is not possible.

Snooze/Reset function of the alarm state

1 x pressing

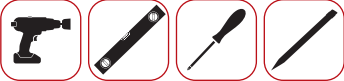
Snooze
The acoustic alarm can be turned silent for 5 minutes by briefly pressing the sensor surface. After the 5 minutes have elapsed, the acoustic signal sounds again.

3 sec. pressing

Reset
The alarm state remains until it is manually reset. (If only the canister is drained, the input signal remains stored and the alarm remains active). The alarm state is reset by removing the input signal Sensor Pre and/or Sensor Main (for example by draining the monitored container) and by pressing the sensor surface for 3 seconds afterwards.

Installation instructions

Tools required: cavity wall drill, Phillips screwdriver, spirit level, pencil



- 1** Mark the hole with a diameter of 68 mm and drill the hole using a cavity wall drill
ATTENTION! Note cable!
- 2** Pull the cables that are ready behind the wall through the hole to the front.
- 3** First connect the sensor to the desired sensor input. Then connect the power cable.
ATTENTION! insert carefully, then screw together. Take care of the sensitive contacts.
- 4** As a sign that there is mains voltage and the sensor connection is okay, the front LED lights up permanently green.

- 5** Push the box of the b.safe Mini-Display into the hole until it rests on the wall
ATTENTION! do not crush the cable!
- 6** Align the b.safe Mini-Display using a spirit level and carefully tighten the screws (hand-tight) using a hand screwdriver.
ATTENTION! tighten the screws by hand!
- 7** Tighten the screws until you feel resistance and the b.safe Mini-Display is fixed firmly on the wall.
- 8** To cover the screw heads, stick the stickers onto the recesses provided.

Scope of Delivery

b.safe Mini-Displays are delivered ready for installation in the variants built-in or stand-alone. Each variant is available with 1 channel or 2 channels. The suitable power plug and various primary plugs for EU, Australia, USA, Japan and UK are included in the delivery of each b.safe Mini-Display.

Functionality

In connection with b.safe Waste Caps and Sensors, the b.safe Mini-Display ensures a reliable optical and acoustic monitoring of filling levels in the lab. Automatic sensor

Compatibility

Our b.safe Mini-Display is compatible with all filling level monitoring devices we offer, including b.safe Isolated Amplifier. The b.safe Mini-Display enables the use of our Waste Caps with pre-alarm function! If filling level monitoring devices of other brands can be used, has to be checked individually.

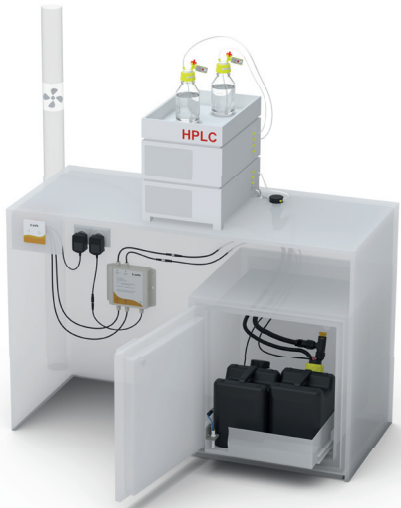
Safety Information

Sensors used in explosion-hazardous areas (EX zone) generally have to be secured with an additional isolated amplifier (Cat. No. R 660-01 or R 660-04).

All components that are connected, e.g. b.safe Mini-Display, b.safe Splitter and b.safe Isolated Amplifier, have to be installed outside of the explosion-hazardous area.

Make sure to use only sensors in this area that are explicitly approved for this purpose!

Generally, electronic components have to be installed by qualified personnel only, especially in explosion-hazardous areas.



Declaration of Conformity

For the following products:

device : Alarmbox for Filling Level Control
type designation :

b.safe Display Wall	Cat.No.: R 650-01 / R 652-01
b.safe Display Table	Cat.No.: R 655-01 / R 657-01
b.safe Display TLC	Cat.No.: R 690-05
b.safe Mini-Display Leak	Cat.No.: R 658-21
b.safe Mini-Display Leak	Cat.No.: R 658-22
b.safe Mini-Display Leak	Cat.No.: R 658-24

The manufacturer / distributor

Bohlender GmbH • Waltersberg 8 • 97947 Germany declares that the products fulfil the provisions of
- of EMC Directive 2014/30EU Electromagnetic Compatibility
- Low Voltage Directive 2006/95/EG
has been complied with according to 2006/42/EG in view of its protection targets.

The following standards were used to assess the products:
EN61000-6-2 : 2019
EN61000-6-4 +A1 : 2011

The products are **RoHS** compliant. They comply with **Directive 2011/65/EU Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment**, including **amendment 2015/863**.

The product fulfils the requirement if the intended use is ensured during installation and operation.

Grünsfeld 03.12.2024

Ernst Schweitzer
Operations manager