KA01715O/98/A2/01.24-00
71684374

71684374

General Information

This document contains information that you need in order to mount and install your product.

This document does not substitute the instruction manual.

For full information on the product, refer to the instruction manual and further documentation on the Internet at www.pepperl-fuchs.com.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

Note

Further information is available on the product detail page of the device on the Internet at www.pepperl-fuchs.com. Enter the order designation in the search field → Select the appropriate device → Open the product detail page → Open the **Product Documentation** tab.

Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

Only use the device in the industrial location.

The device is a capacitive limit switch for limit detection of light bulk solids.

Use the device only within the specified ambient and operating conditions.

Only use the device in media to which the process-contacting materials of the device are sufficiently resistant.

Improper Use

Protection of personnel and the plant is not ensured if the device is not used according to its intended use.

Mounting

Mounting Requirements

Required tools: open-ended wrench or socket wrench 50AF

- The stream of filling material must not be directed onto the probe.
- The device can be used in silos consisting of different materials.
- Pay attention to the expected slope angle of the material mounds and the outlet funnel when determining the mounting location.

Ambient Temperature

- -40 to +70 °C (-40 to +158 °F)
- For the dust Ex version: -40 to +60 °C (-40 to +140 °F)

Process Temperature

- -40 to +80 °C (-40 to +176 °F)

Mounting Position

Minimum Distances

There should be sufficient distance to the material feed and to another probe.

Mounting Location

Not in the center of the discharge cone. There should be sufficient distance to the silo wall and the material approach on the silo wall.

Load-Bearing Capacity

Consider the maximum tensile strength of the probe rope and the stability of the silo ceiling structure when used for minimum detection. Removing materials may result in very high tensile forces, particularly in the case of heavy and powdery solids that have a tendency to build up. These forces are much greater in the middle of the silo above the material outlet than in the vicinity of the silo wall. For minimum detection, the device should therefore only be used in light, free-flowing bulk solids that do not have a tendency to build up.

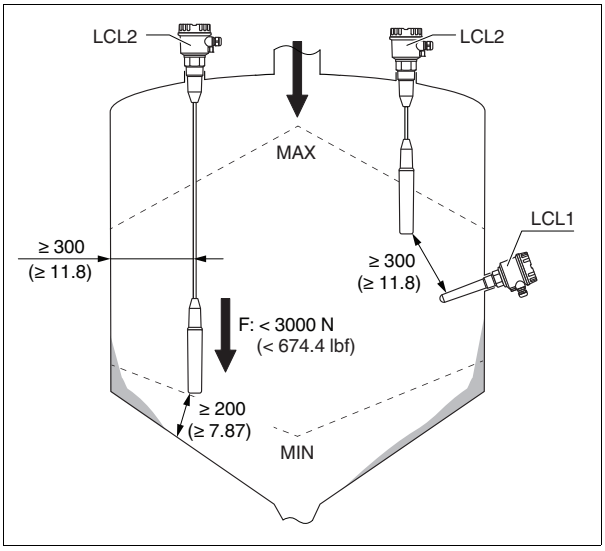


Figure 1 Minimum distances during installation in a silo in mm (inch)

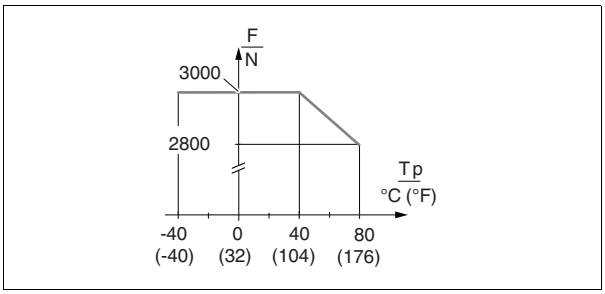


Figure 2 Maximum forces depending on temperature.

- max. 3000 N up to 40 °C (104 °F)
- max. 2800 N at 80 °C (176 °F)

© Pepperl+Fuchs · Subject to modifications / DOCT-9735 - 2025-03

Mounting the Device

(1) Wrap PTFE tape around the thread of the device.

(2) Screw-in the device. Tighten by the hexagonal nut only. Use the open-ended wrench.

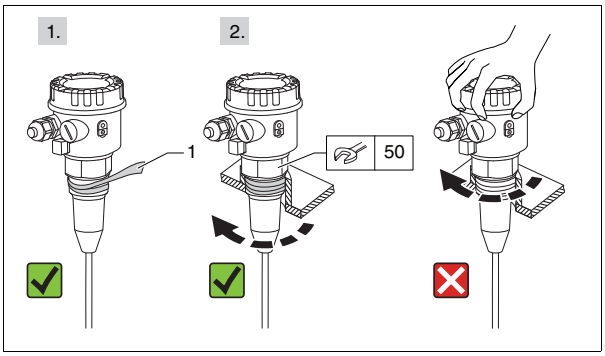


Figure 3 Device mounting

Electrical Connection

Danger!

Explosion hazard due to faulty connection

Incorrect or faulty connection of the device can impair safety. This can cause sparks that can ignite the surrounding potentially explosive atmosphere.

- Observe the applicable national standards.
- Observe the safety notes in the instruction manual.
- Check to ensure that the power supply matches the information on the nameplate.
- Switch off the supply voltage before connecting.
- If using the device in a dust explosive atmosphere, connect a potential compensation (PAL).

Note

To ensure that the device operates safely and without interference, the device must be connected to the grounded silo with metal or reinforced concrete walls.

For silos made of non-conductive material, the external ground connection of the device must be connected to conductive and grounded parts in the vicinity of the silo. The protective ground of the mains connection can be connected to the internal ground connection of the device. A commercially available installation cable can be used for the connections. For general information on EMC (test procedure, installation recommendations), see technical information.

Connecting the Device

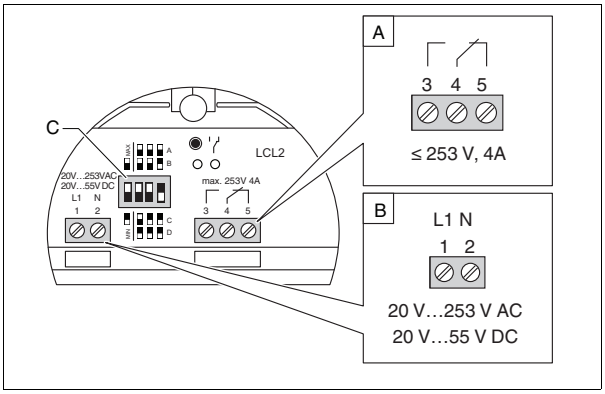


Figure 4 Device with AC or DC connection and relay output

A Relay connection
B AC or DC connection
C DIP switch (in factory setting)

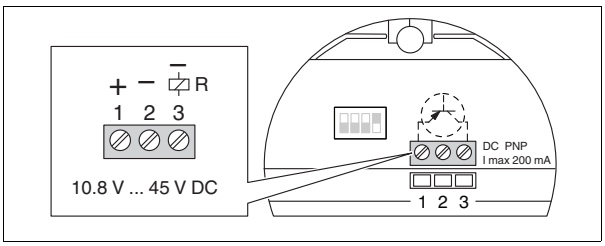


Figure 5 Device with DC connection

The device is configured via the DIP switches, refer to the supplementary documentation.

Ensuring the Degree of Protection

Testing as per IEC 60529

- Plastic housing: IP66; type 4 enclosure
- Aluminum housing: IP66; type 4x enclosure

© Pepperl+Fuchs · Subject to modifications / DOCT-9735 - 2025-03