Brief Instructions

Vibration Limit Switch LVL-B2

KA01670O/98/A2/01.23-00 71684385

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.pepperlfuchs.com. Enter the order designation in the search field \rightarrow Select the appropriate device

- \rightarrow Open the product detail page \rightarrow 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 vibration limit switch for minimum or maximum detection for silos with fine-grained or coarse-grained, nonfluidized 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 the personnel and the plant is not ensured if the device is not used according to its intended use.

Mounting

Note

Do not bend, shorten or extend the rod probe. Take buildup into account.

Mounting Requirements

Note

Comply with the following according to IEC/EN61010-1: provide a suitable isolator for the device.

Ambient Temperature

-40 to +70 °C (-40 to +158 °F) **Process Temperature** -40 to +150 °C (-40 to +302 °F) **Process Pressure** max. 25 bar (362.5 psi) **Bulk Weight** min. 200 g/l **Particle Size** max. 25 mm (0.98 inch) Sensor Lengths

500 mm (20 inch), 1000 mm (40 inch), 1500 mm (60 inch)



Figure 1 Installation in any direction in the bulk solids silo

- 1 Protective roof
- 2 Protection pipe

Required tools: Open-ended wrench, see figure Torque: 5 to 12 Nm (3.7 to 8.9 lbf ft)



- Wrap PTFE tape around the thread of the device. (1)
- (2) Screw-in the device. Tighten by the hexagonal nut only.



Figure 2 Device mounting

- Thread with PTFE tape 1
- NPT1-3/4 (SW1-3/4); R1 (SW41); NPT1-1/2 (SW2); R1-1/2 (SW50); 2 G1-1/2 (SW55)





Brief Instructions

Vibration Limit Switch LVL-B2



Aligning the Device

(1) Align the housing in such a way that no rainwater can enter the housing via the cable entry.



Figure 3

- A F16 housing (polyester)
- B F18 housing (aluminium)

Electrical Connection

Note

Depending on the application, the device is fitted with one of the various electronic inserts, see technical information.

Required tools

- Flat-blade screwdriver (0.6 mm (0.02 inch) x 3.5 mm (0.14 inch)) for terminals
- Suitable tool with width across flats AF24/25 (8 Nm (5.9 lbf ft)) for M20 cable gland

Connecting the Device

- (1) Connect the device according to the connection diagram of the electronic insert used, see technical information.
- (2) Configure the device for the intended purpose via the electronic insert used, see technical information.



Figure 4 Example of coupling with cable entry, electronic insert with terminals

- 1 M20 coupling (with cable entry), example
- Ød Nickel-plated brass 7 to 10.5 mm (0.28 to 0.41 inch)
- Ød Plastic 5 to 10 mm (0.2 to 0.38 inch)

Pepperl+Fuchs Group

www.pepperl-fuchs.com

- Ød Stainless steel 7 to 12 mm (0.28 to 0.47 inch)
- 2 Conductor cross-section maximum 2.5 mm² (AWG14), ground terminal inside the housing + terminals on the electronics
- 3 Conductor cross-section maximum 4.0 mm² (AWG12), ground terminal on outside of the housing (example: plastic housing with outer protective ground connection (PE))

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Tel: +49 621 776-0

E-Mail: info@de.pepperl-fuchs.com

Ensuring the Degree of Protection

Testing as per IEC 60529: IP66/IP67, NEMA4X



© PepperI+Fuchs · Subject to modifications / DOCT-9668 - 2025-02