

Level Probe
LGC2

IECEX: Ex ia IIC T6...T4 Gb



SI00455O-A

Safety instructions for electrical apparatus for explosion-hazardous areas according to IEC standards



Level Probe LGC2

Associated Documentation

This document is an integral part of the following documents:
BA01605O, KA01244O
The documents which are supplied and correspond to the device type apply.

Supplementary Documentation

Explosion protection manual

Manufacturer's certificates

IECEX certificate
Certificate number: IECEX DEK 17.0045

Affixing the certificate number certifies conformity with the standards under www.IECEX.com (depending on the device version).

- IEC 60079-0:2011
- IEC 60079-11:2011

Designation

Explanation of the labelling and type of protection can be found in the explosion protection manual.

**Designation according to IECEX
Equipment protection level (EPL)**

Gb

Designation of type of protection

Ex ia IIC T6...T4

Safety instructions:
Installation

EN

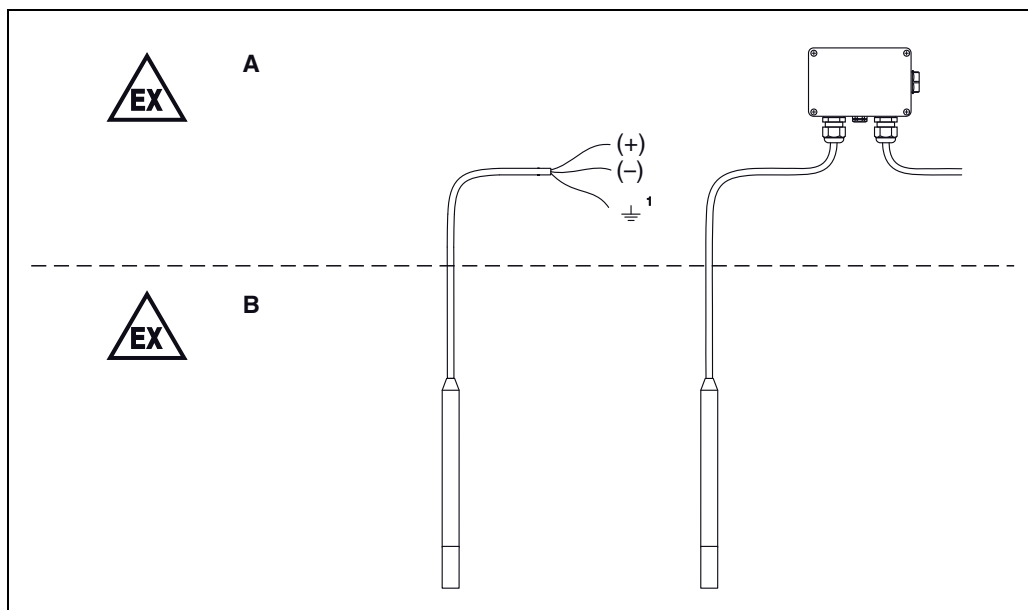


Figure 1

A Zone 1 or Zone 2

B Zone 1

¹ only for versions with outside diameters 22 mm and 42 mm.

- Comply with the installation and safety instructions in the manual.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations (e. g. IEC/EN 60079-14).
- The type of protection changes as follows when the devices are connected to certified intrinsically safe circuits of Category ib: Ex ib.
- When interconnecting intrinsically safe circuits, take into account sensor capacitance and length-dependent cable capacitance and inductance (see table).
- Connect cable screen to earth ground of the installation.
- The intrinsically safe input power circuit of the device is isolated from ground potential and has a dielectric strength of at least $500 V_{rms}$ with respect to it. When shortening the length of the cable ensure that this dielectric strength is maintained for connection wires and earth grounded screen.
- Avoid impact and friction sparks (anchor equipment if necessary/secure against swinging).
- Avoid electrostatic charging of the plastic surfaces (especially at the version with outside diameter 29 mm and at the terminal box). Do not rub. Do not use in media or environments which may generate electrostatic charges on the plastic surfaces.

Terminal Box

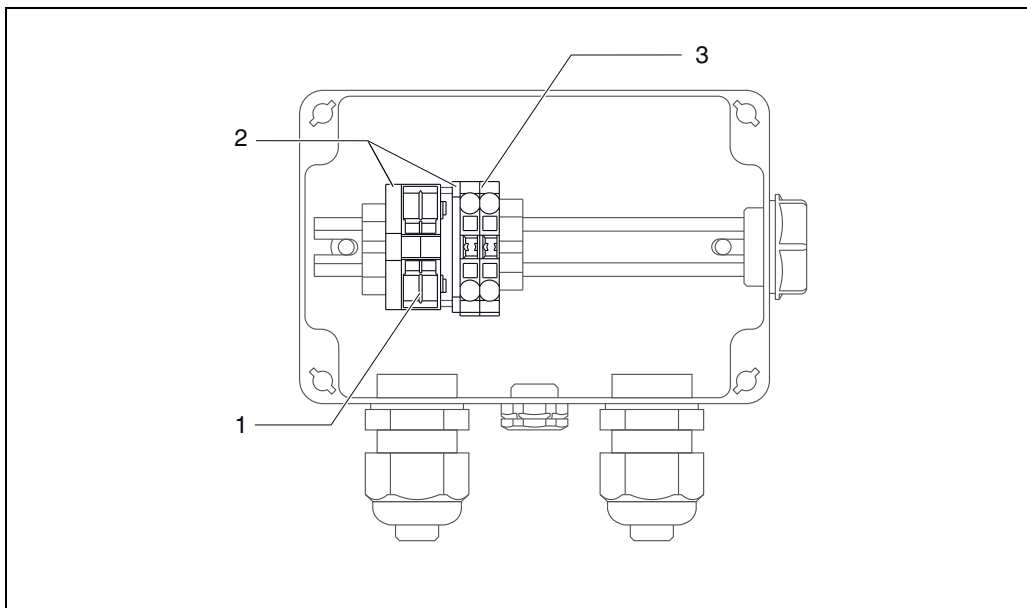


Figure 2

- 1 Functional earth terminals
- 2 Isolation plates
- 3 Signal terminals

- Use a connecting cable for continuous duty temperature $\geq 85\text{ °C}$.
- Do not remove or move terminal blocks, isolation plates or fastening elements.
- Do not build in additional components.

Temperature tables

Ambient temperature range	Temperature class	Max. ambient temperature
$-10\text{ °C} \leq T_{\text{amb}} \leq +70\text{ °C}$	T4	+70 °C
	T5	+55 °C
	T6	+40 °C

Terminal box

Ambient temperature range	Temperature class
$-40\text{ °C} \leq T_{\text{amb}} \leq +80\text{ °C}$	T6

Connection data

Electrical data
$U_i \leq 30\text{ V DC}$ $I_i \leq 133\text{ mA}$ $P_i \leq 1\text{ W}$ Sensor: $C_i \leq 10.3\text{ nF}$, $L_i = 0$ Cable: $C_i \leq 180\text{ pF/m}$, $L_i \leq 1\text{ }\mu\text{H/m}$



With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the "Elektrotechnik und Elektroindustrie (ZVEI) e.V." including the supplementary clause: "Erweiterter Eigentumsvorbehalt".

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