



Level



Pressure



Flow



Temperature



Liquid
Analysis



Registration



Systems
Components



Services



Solutions

Safety Instructions

Waterpilot FMX21

Ex ia IIC T6...T4 Gb

IECE_x KEM 09.0026



XA455P-A

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

Waterpilot FMX21

english

**Associated
Documentation**

This document is an integral part of the following Operating Instructions:
BA380P/00

The Operating Instructions which are supplied and correspond to the device type apply.

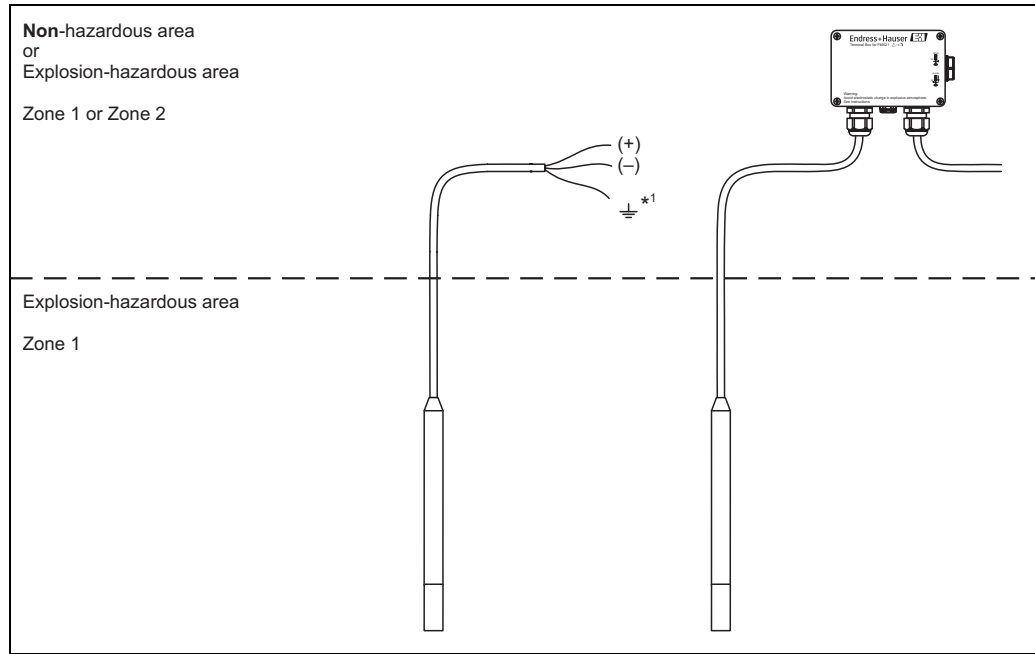
**Supplementary
Documentation**

Explosion-protection brochure:
CP021Z/00

Designation

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

Designation of explosion protection**Ex ia IIC T6...T4 Gb**



*1 Only for versions with outside diameters 22 mm and 42 mm.

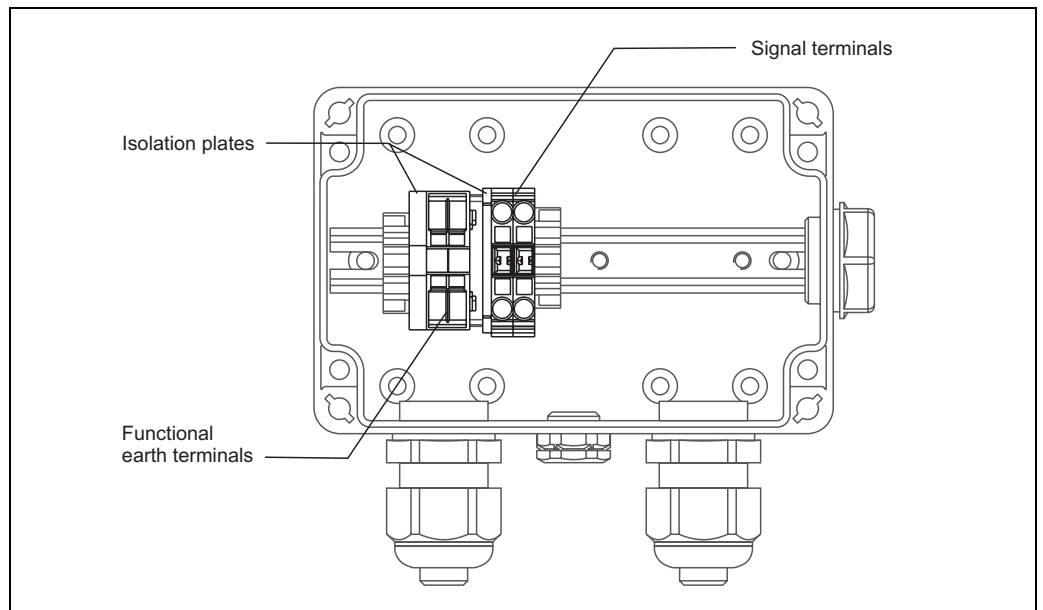
Type of protection / Equipment Protection Level (EPL)	Ambient temperature range	Temperature class	Max. ambient temperature	Electrical Data
Ex ia IIC T6...T4 Gb	$-10\text{ °C} \leq T_a \leq +70\text{ °C}$	T4	+70 °C	$U_i \leq 30\text{ V DC}$ $I_i \leq 133\text{ mA}$ $P_i \leq 1\text{ W}$ Sensor: $C_i \leq 10.3\text{ nF}$, $L_i = 0$ Cable: $C_i \leq 180\text{ pF/m}$, $L_i \leq 1\text{ μH/m}$
		T5	+55 °C	
		T6	+40 °C	

Terminal box

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

Safety instructions: Installation

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations.
- 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 $500\text{ V}_{\text{rms}}$ 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

XA455en02

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

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