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Safety Instructions
Liquifloat FTS20

II 2 G Ex ia IIB T5 Gb

Endress+Hauser
People for Process Automation

Liquifloat FTS20

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About this document

This document has been translated into several languages. Legally determined is solely the English source text.

The document translated into EU languages is available:
- In the download area of the Endress+Hauser website: www.endress.com -> Downloads -> Manuals and Datasheets -> Type: Ex Safety Instruction (XA) -> Text Search: ...
- In the Device Viewer: www.endress.com -> Product tools -> Access device specific information -> Check device features

If not yet available, the document can be ordered.

Associated documentation

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

KA00180F/00

Supplementary documentation

Explosion-protection brochure: CP00021Z/11

The Explosion-protection brochure is available:
- In the download area of the Endress+Hauser website: www.endress.com -> Downloads -> Brochures and Catalogs -> Text Search: CP00021Z
- On the CD for devices with CD-based documentation

Manufacturer's certificates

EU Declaration of Conformity

Declaration Number:
EG01033

The EU Declaration of Conformity is available:
In the download area of the Endress+Hauser website:
www.endress.com -> Downloads -> Declaration -> Type: EU Declaration -> Product Code: ...

EU type-examination certificate

Certificate number:
TÜV 01 ATEX 1709

List of applied standards: See EU Declaration of Conformity.

Manufacturer address

Endress+Hauser SE+Co. KG
Hauptstraße 1
79689 Maulburg, Germany

Address of the manufacturing plant: See nameplate.

Other standards

Among other things, the following standards shall be observed in their current version for proper installation:

- IEC/EN 60079-14: "Explosive atmospheres - Part 14: Electrical installations design, selection and erection"
- EN 1127-1: "Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology"

Ordering information

Approval
ATEX II 2 G Ex ia IIB T5 Gb

Type of switch
2-wire NAMUR >2,1 mA / <1,2 mA

Order code	Cable material
52010119	PVC, 5 m
71035516	PVC, 20 m
52010120	PUR, 5 m
71035517	PUR, 20 m
52010121	CSM, 5 m
71035518	CSM, 20 m

Safety instructions: General

- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
  - Be suitably qualified for their role and the tasks they perform
  - Be trained in explosion protection
  - Be familiar with national regulations
- Install the device according to the manufacturer's instructions and national regulations.
- Only use the device in media to which the wetted materials have sufficient durability.
- Avoid electrostatic charging:
  - Of plastic surfaces (e.g. enclosure, sensor element, special varnishing, attached additional plates, ..)
  - Of isolated capacities (e.g. isolated metallic plates)

Safety instructions: Special conditions

- To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
- In the event of additional or alternative special varnishing on the enclosure or other metal parts or for adhesive plates:
  - Observe the danger of electrostatic charging and discharge.
  - Do not install in the vicinity of processes (≤ 0.5 m) generating strong electrostatic charges.

Safety instructions: Installation

Intrinsic safety

- When the device is connected to certified intrinsically safe circuits of Category Ex ib for Equipment Groups IIC and IIB, the type of protection changes to Ex ib IIC and Ex ib IIB.
- The intrinsically safe input power circuit of the device is isolated from ground. The dielectric strength is at least 500 V_{rms}.

Potential equalization

If the potential equalization cannot be guaranteed by the installation: In order to avoid electrostatic charging, integrate metallic parts of the enclosure into the potential equalization.

Temperature tables

Temperature class	Ambient temperature T_a (ambient)
T4	–20 to +70 °C
T5	–20 to +40 °C
	–20 to +55 °C
	–20 to +70 °C

Process temperature depending on cable material:
- PVC, PUR: +5 to +70 °C
- CSM: –20 to +70 °C

Connection data

Temperature class	Electrical data
T4 (−20 to +70 °C) T5 (−20 to +40 °C)	U_i = 16 V I_i = 72 mA P_i = 242 mW C_i = 153 nF L_i = 1 mH
T5 (−20 to +55 °C)	U_i = 16 V I_i = 52 mA P_i = 208 mW C_i = 153 nF L_i = 1 mH
T5 (−20 to +70 °C)	U_i = 16 V I_i = 52 mA P_i = 180 mW C_i = 153 nF L_i = 1 mH

www.addresses.endress.com

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