


# Safety Instructions

## Liquipoint T FTW31, FTW32

1Ex ia IIC T6 Gb



Document: XA02096F-A  
Safety instructions for electrical apparatus for explosion-hazardous areas →  3

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# Liquipoint T FTW31, FTW32

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<b>Associated documentation</b>	This document is an integral part of the following Operating Instructions: KA00204F/00, TI00375F/00										
<b>Supplementary documentation</b>	Explosion-protection brochure: CP00021Z/11 The Explosion-protection brochure is available: <ul style="list-style-type: none"> <li>■ In the download area of the Endress+Hauser website: <a href="http://www.endress.com">www.endress.com</a> -&gt; Downloads -&gt; Brochures and Catalogs -&gt; Text Search: CP00021Z</li> <li>■ On the CD for devices with CD-based documentation</li> </ul>										
<b>Manufacturer's certificates</b>	<p><b>Certificate of Conformity TP TC 012/2011</b></p> <p>Inspection authority: LLC NANIO CCVE (ООО «НАННО ЦСВЭ»)</p> <p>Certificate number: EAЭC RU C-DE.AA87.B.00373/20</p> <p>Affixing the certificate number certifies conformity with the following standards (depending on the device version):</p> <ul style="list-style-type: none"> <li>■ GOST 31610.0-2014 (IEC 60079-0:2011)</li> <li>■ GOST 31610.11-2014 (IEC 60079-11:2011)</li> </ul>										
<b>Manufacturer address</b>	Endress+Hauser SE+Co. KG Hauptstraße 1 79689 Maulburg, Germany Address of the manufacturing plant: See nameplate.										
<b>Extended order code</b>	<p>The extended order code is indicated on the nameplate, which is affixed to the device in such a way that it is clearly visible. Additional information about the nameplate is provided in the associated Operating Instructions.</p> <p><b>Structure of the extended order code</b></p> <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="text-align: center;">FTW3x</td> <td style="text-align: center;">-</td> <td style="text-align: center;">*****</td> <td style="text-align: center;">+</td> <td style="text-align: center;">A*B*C*D*E*F*G*..</td> </tr> <tr> <td style="text-align: center;"><i>(Device type)</i></td> <td></td> <td style="text-align: center;"><i>(Basic specifications)</i></td> <td></td> <td style="text-align: center;"><i>(Optional specifications)</i></td> </tr> </table> <p>* = Placeholder At this position, an option (number or letter) selected from the specification is displayed instead of the placeholders.</p> <p><i>Basic specifications</i></p> <p>The features that are absolutely essential for the device (mandatory features) are specified in the basic specifications. The number of positions depends on the number of features available. The selected option of a feature can consist of several positions.</p> <p><i>Optional specifications</i></p> <p>The optional specifications describe additional features for the device (optional features). The number of positions depends on the number of features available. The features have a 2-digit structure to aid identification (e.g. JA). The first digit (ID) stands for the feature group and consists of a number or a letter (e.g. J = Test, Certificate). The second digit constitutes the value that stands for the feature within the group (e.g. A = 3.1 material (wetted parts), inspection certificate).</p>	FTW3x	-	*****	+	A*B*C*D*E*F*G*..	<i>(Device type)</i>		<i>(Basic specifications)</i>		<i>(Optional specifications)</i>
FTW3x	-	*****	+	A*B*C*D*E*F*G*..							
<i>(Device type)</i>		<i>(Basic specifications)</i>		<i>(Optional specifications)</i>							

More detailed information about the device is provided in the following tables. These tables describe the individual positions and IDs in the extended order code which are relevant to hazardous locations.

#### Extended order code: Liquipoint T



The following specifications reproduce an extract from the product structure and are used to assign:

- This documentation to the device (using the extended order code on the nameplate).
- The device options cited in the document.

#### Device type

FTW31, FTW32

#### Basic specifications

Position 1 (Approval)		
Selected option		Description
FTW3x	V	EAC 1Ex ia IIC T6 Gb

Position 7 (Electronics; Output)		
Selected option		Description
FTW3x	0	Separate instrumentation
	8	FEW58; NAMUR

#### Optional specifications

No options specific to hazardous locations are available.

#### Safety instructions: General

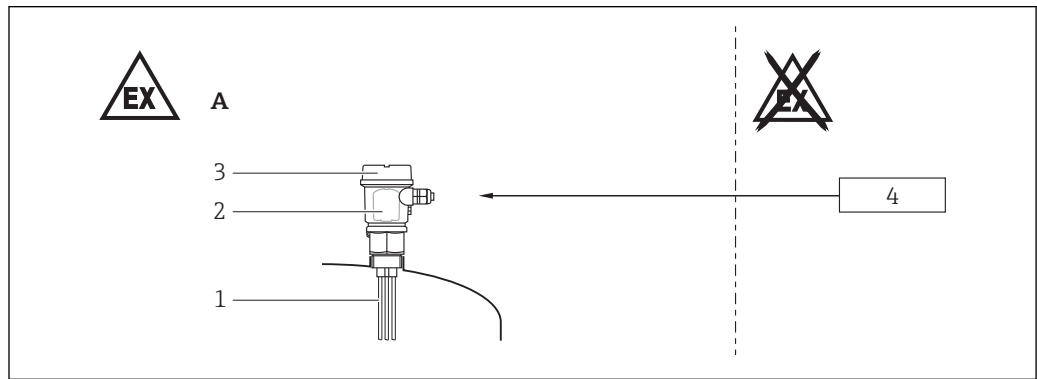
- Comply with the installation and safety instructions in the Operating Instructions.
- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
  - Be suitably qualified for their role and the tasks they perform
  - Be trained in explosion protection
  - Be familiar with national regulations
- Install the device according to the manufacturer's instructions and national regulations.
- Do not operate the device outside the specified electrical, thermal and mechanical parameters.
- Avoid electrostatic charging:
  - Of plastic surfaces (e.g. housing, sensor element, special varnishing, attached additional plates, ..)
  - Of isolated capacities (e.g. isolated metallic plates)

#### Safety instructions: Special conditions

- Probes can be used in gases of Group IIC if avoiding electrostatic charging (e.g. through friction, cleaning, maintenance, strong medium flow). These probes are marked by the warning sign "Avoid Electrostatic Charge".
- In the event of additional or alternative special varnishing on the housing or other metal parts:
  - Observe the danger of electrostatic charging and discharge.
  - Do not rub surfaces with a dry cloth.

**Safety instructions:**  
**Installation**

Basic specification, Position 7 (Electronics; Output) = 8

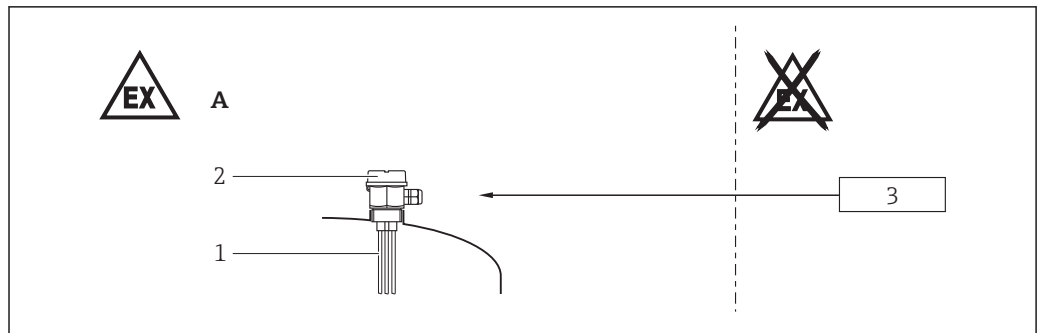


A0038912

**1**

- A Zone 1
- 1 FTW3x
- 2 Electronic insert
- 3 Housing
- 4 Associated intrinsically-safe power supply unit

Basic specification, Position 7 (Electronics; Output) = 0



A0038913

**2**

- A Zone 1
- 1 FTW3x
- 2 Housing
- 3 Certified associated apparatus

- Observe the pertinent guidelines when interconnecting intrinsically safe circuits.
- To maintain the ingress protection of the housing IP66: Install the housing cover and cable glands correctly.

**Temperature tables**

Temperature class	Process temperature T <sub>p</sub> (process)	Ambient temperature T <sub>a</sub> (ambient)
T6	≤ 85 °C	-40 °C ≤ T <sub>a</sub> ≤ +60 °C
T5	≤ 100 °C	-40 °C ≤ T <sub>a</sub> ≤ +60 °C

Connection data

<i>Basic specification, Position 7 (Electronics; Output)</i>	<b>Electrical data</b>
8	U <sub>o</sub> < 16 V I <sub>o</sub> < 52 mA P <sub>o</sub> < 242 mW L <sub>t</sub> = 0 C <sub>t</sub> < 120 nF



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