Safety Instructions **Nivector FTI26**

Control Drawing



Document: XA01821F-A

Safety instructions for electrical apparatus for explosion-hazardous areas \rightarrow $\stackrel{ all}{=}$ 3



Nivector FTI26 XA01821F-A

Nivector FTI26

Table of contents

Associated documentation
Manufacturer's certificates
Manufacturer address
Extended order code
Safety instructions: General
Safety instructions: Special conditions
Safety instructions: Installation
Temperature tables
Connection data

XAO1821F-A Nivector FTI26

Associated documentation

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

- BA01830F/00 (IO-Link)
- BA01832F/00 (Analog)

Manufacturer's certificates

CSA C/US certificate

Certificate number: CSA 18CA70197496

Manufacturer address

Endress+Hauser SE+Co. KG

Hauptstraße 1

79689 Maulburg, Germany

Address of the manufacturing plant: See nameplate.

Extended order code

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.

Structure of the extended order code

FTI26	-	*******	+	A*B*C*D*E*F*G*
(Device type)		(Basic specifications)		(Optional specifications)

^{* =} Placeholder

At this position, an option (number or letter) selected from the specification is displayed instead of the placeholders.

Basic specifications

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.

Optional specifications

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).

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: Nivector



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.

Nivector FTI26 XA01821F-A

Device type

FTI26

Basic specifications

Position 1, 2 (Approval)		
Selected option		Description
FTI26	СО	CSA C/US AEx/Ex ta/tc IIIC Da/Dc

Position 3 (Power; Output)		
Selected option		Description
FTI26	4	12-30VDC; 3-wire PNP
	7	IO-Link; DC-PNP

Optional specifications

No options specific to hazardous locations are available.

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.
- 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

Permitted ambient temperature range at the electronics housing:

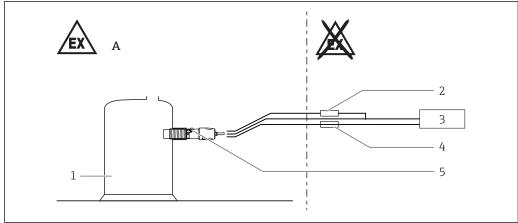
 \rightarrow \blacksquare 7, "Temperature tables".

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.

XA01821F-A Nivector FTI26

Safety instructions: Installation



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■ 1

- A Zone 22
- 1 Tank; Zone 20
- 2 Load:

When using one output: 200 mA When using both outputs: 105 mA each

- 3 Power supply or switching unit
- 4 Fuse: 500 mA delayed
- 5 Potential equalization
- Install as per National Electrical Code (NFPA70) or Canadian Electrical Code, Part I (C22.1), as applicable.
- Do not open in a potentially explosive dust atmosphere.
- Install the device to exclude any mechanical damage or friction during the application.
 Pay particular attention to flow conditions and tank fittings.
- Lay connecting cable and secure.
- Do not disconnect M12 plug connector when energized.
- Use supply wires suitable for 20 K above the ambient temperature.

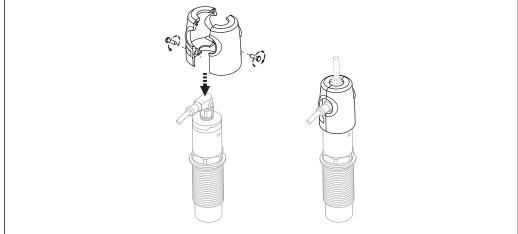
Potential equalization

- Integrate the threaded sleeve into the local potential equalization.
- Sensor housing consists of conductive material and must be connected to the local grounding system of the plant.

Protective cover for hazardous locations

To ensure safety in the explosion-hazardous area:

Mount the protective cover before operating the device.



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Nivector FTI26 XA01821F-A

Temperature tables

Maximum surface temperature (limited by fuse in the device)	
105 °C	

Permitted ambient temperature range		
Zone 20:	$-20 ^{\circ}\text{C} \le \text{T}_{\text{a}} \le +75 ^{\circ}\text{C}$	
Zone 22:	$-20 ^{\circ}\text{C} \le \text{T}_{\text{a}} \le +60 ^{\circ}\text{C}$	

Connection data

Power supply	
Operating voltage:	12 to 30 V
Connectable loads: When using one output: 200 mA When using both outputs: 105 mA each	



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