Safety Instructions Nivector FTI26

ATEX, IECEx: Ex ta/tb IIIC T₂₀₀ 110 °C Da/Db







Nivector FTI26

Table of contents

About this document
Associated documentation
Supplementary documentation
Certificates and declarations
Manufacturer address 5
Other standards 5
Extended order code 5
Safety instructions: General
Safety instructions: Specific conditions of use
Safety instructions: Installation
Temperature tables 8
Connection data 9

XA01734F-C Nivector FTI26

About this document



The document number of these Safety Instructions (XA) must match the information on the nameplate.

Associated documentation

All documentation is available on the Internet: www.endress.com/Deviceviewer (enter the serial number from the nameplate).



If not yet available, a translation into EU languages can be ordered

To commission the device, please observe the Operating Instructions pertaining to the device:

- BA01830F
- BA01832F

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet: www.endress.com/Downloads

Certificates and declarations

EU Declaration of Conformity

Declaration Number:

EU 01226

The EU Declaration of Conformity is available on the Internet: www.endress.com/Downloads

EU type-examination certificate

Certificate number: SEV 18 ATEX 0146 X

List of applied standards: See EU Declaration of Conformity.

IEC Declaration of Conformity

Certificate number: IECEx SEV 18.0019X

Affixing the certificate number certifies conformity with the following standards (depending on the device version):

IEC 60079-0:2017IEC 60079-31:2022

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"

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		(Basic		(Optional
type)		specifications)		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 entire of a feature can consist of source positions.

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).

XA01734F-C Nivector FTI26

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.

Device type

FTI26

Basic specifications

Position 1, 2 (Approval)			
Selected option		Description	
FTI26 BO		ATEX II 1/2 D Ex ta/tb IIIC T ₂₀₀ 110 °C Da/Db	
	IO	IECEx Ex ta/tb IIIC T ₂₀₀ 110 °C Da/Db	

Position 3 (Power Supply, Output)		
Selected option		Description
FTI26 4		12 to 30 V _{DC} ; 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. enclosure, sensor element, special varnishing, attached additional plates, ...)
 - Of isolated capacities (e.g. isolated metallic plates)

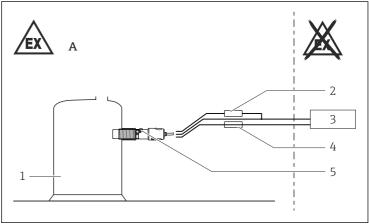
Safety instructions: Specific conditions of use Permitted ambient temperature range at the electronics enclosure:

 \rightarrow \blacksquare 8, "Temperature tables".

In the event of additional or alternative special varnishing on the enclosure or other metal parts:

- Observe the danger of electrostatic charging and discharge.
- Do not rub surfaces with a dry cloth.

Safety instructions: Installation



A003622

■ 1

- A Zone 21. Zone 22
- 1 Tank; Zone 20
- 2 Load
- 3 Power supply or switching unit
- 4 Fuse: 500 mA delayed
- 5 Potential equalization

XA01734F-C Nivector FTI26

- 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.

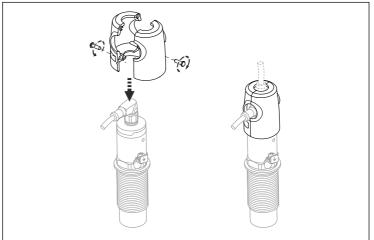
Potential equalization

Integrate the threaded sleeve into the local potential equalization.

Protective cover for hazardous locations



To ensure safety in the explosion-hazardous area: Mount the protective cover before operating the device.



A0036220

Temperature tables

Maximum surface temperature

110°C

Load when using one output

Input voltage	Output	Maximum permitted process or ambient temperature
24 V _{DC}	60 mA	64 °C
	80 mA	62 °C
30 V _{DC}	70 mA	61 °C
	100 mA	57 ℃
	200 mA	44 ℃

Load when using both outputs

Input voltage	Output (each)	Maximum permitted process or ambient temperature
24 V _{DC}	20 mA	63 ℃
30 V _{DC}	70 mA	50 ℃
	90 mA	46 °C
	105 mA	43 ℃

Connection data

Power supply	
Operating voltage:	12 to 30 V_{DC}





www.addresses.endress.com