

# Safety Instructions

## Remote display FHX50B

Control Drawing  
Class II, III, Div. 1, Groups E-G





# Remote display FHX50B

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**Associated documentation**

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

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

SD02991F

**Certificates and declarations****CSA C/US certificate**

Certificate number:  
 80192690

**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**

FHX50B	–	*****	+	A*B*C*D*E*F*G*..
<i>(Device type)</i>		<i>(Basic specifications)</i>		<i>(Optional specifications)</i>

\* = 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: Remote display



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

FHX50B

### Basic specifications

Position 1, 2 (Approval)		Description
Selected option		Description
FHX50B	CG	CSA C/US Cl. II, III, Div. 1, Gr. E-G

Position 4 (Housing, Material)		Description
Selected option		Description
FHX50B	B	Single compartment; Alu, coated

Position 5 (Electrical Connection, Cable)		Description
Selected option		Description
FHX50B	7	Thread NPT1/2; w/o

*Optional specifications*

ID Jx, Kx (Test, Certificate, Declaration)	
Selected option	Description
FHX50B JL	Ambient temperature -50°C/-58°F

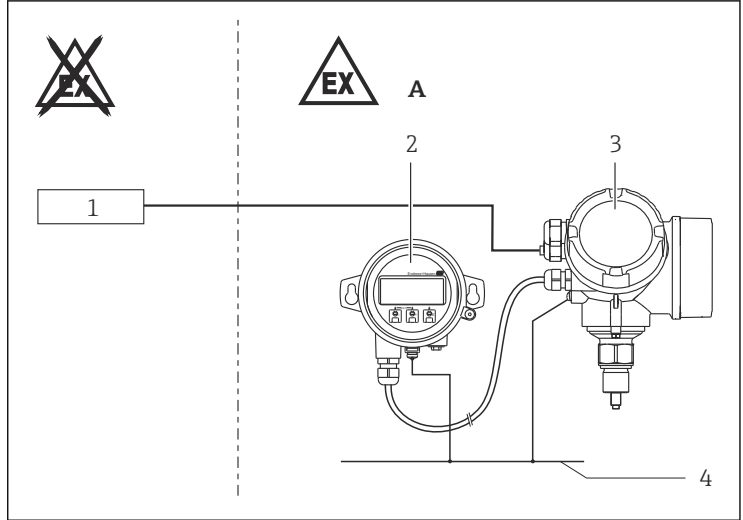
**Safety instructions:**  
**General**

- 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.
- 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)
- Alterations to the device can affect the explosion protection and must be carried out by staff authorized to perform such work by Endress+Hauser.

**Safety instructions:**  
**Specific conditions of use**

- 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 ( $\leq 0.5$  m) generating strong electrostatic charges.
- Avoid sparks caused by impact and friction.
- In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.

## Safety instructions: Installation



A0053800

- A Class II, III, Div. 1, Groups E-G  
 1 Power supply  
 2 FHX50B  
 3 Endress+Hauser measuring device  
 4 Potential equalization

- After aligning (rotating) the enclosure, retighten the fixing screw.
- Do not open in a potentially explosive dust atmosphere.
- Seal the cable entry or piping tight (see protection type of enclosure in the "Temperature tables" chapter).
- Before operation:
  - Screw in the cover all the way.
  - Tighten the securing screw on the cover.

### Class II, III, Div. 1, Groups E, F, G

- Install per National Electrical Code (NFPA70) or Canadian Electrical Code, Part I (C22.1), as applicable.
- Use wiring and sealing methods appropriate for the location.
- Use a dust-tight seal for wiring at the conduit/cable entry.
- Seal unused entries with approved plugs that correspond to the type of protection. The plastic transport sealing plug does not meet this requirement and must therefore be replaced during installation.
- **WARNINGS:** Keep covers tight when explosive atmosphere is present.

## Temperature tables



- The specified surface temperature takes into account all direct heat influences from the ambient temperature and from self-heating at the enclosure.
- The specified ambient temperature ranges exclusively refer to the explosion protection and must not be exceeded. Operationally permitted ambient temperature ranges can be restricted depending on the version: See Operating Instructions.
- Do not exceed the max. ambient temperature at the enclosure.



*Optional specification, ID Jx, Kx = JL*

Lower limit of the ambient temperature for explosion protection changes to  $-50\text{ }^{\circ}\text{C}$ .

Max. surface temperature	Ambient temperature range
$T_L\ 85\text{ }^{\circ}\text{C}$	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +80\text{ }^{\circ}\text{C}$

## Connection data

### FHX50B

Power supply
$U \leq 6\ V_{DC}$

Only for connection to Endress+Hauser devices.



Only the type of protection suitable for the device shall be connected!

### Connectable transmitters

In order to be connected to an Endress+Hauser measuring device, the device must specifically show the information "Prepared for display FHX50B".

The measuring device that has already been prepared for the FHX50B has an display circuit with the following characteristic values:

Power supply
$U \leq 6\ V_{DC}$

### Connectable cables

- Maximum cable length: 60 m.
- A customer's cable can be used.











71625349

[www.addresses.endress.com](http://www.addresses.endress.com)

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