

# Safety Instructions

## Cerabar PMC71B

0/1Ex ia IIC T6...T1 Ga/Gb

1Ex db ia IIC T6...T1 Gb

Ex ia IIIC T<sub>200</sub> xxx°C Da/Db



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# Cerabar PMC71B

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**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](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:

BA02010P, TI01507P

**Supplementary documentation**

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:

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

**General notes:  
Combined approval**

The device is suitable for installation with explosion protection "Intrinsic safety Ex ia" or "Flameproof enclosure Ex db".

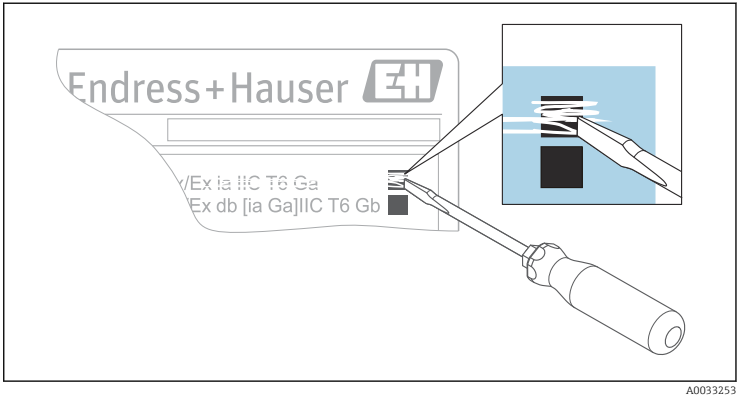
- Before initial commissioning, specify the type of protection.
- It is not permitted to change the type of protection after initial commissioning as this can jeopardize the explosion protection.

For aluminum enclosures:

Void out the explosion protection that is not used on the nameplate.

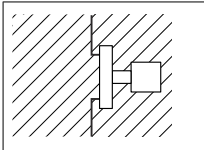
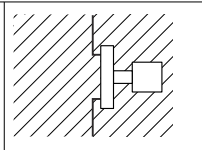
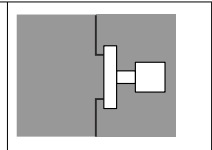
For stainless steel enclosures:

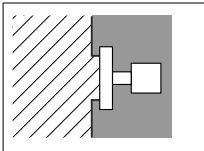
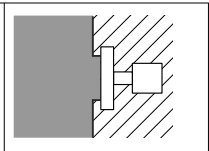
Using a striking tool, mark the explosion protection used, or void out the explosion protection that is not used.



 1

 Depending on the type of protection used: Observe the safety instructions for installation with explosion protection "Intrinsic safety Ex ia" or "Flameproof enclosure Ex db".

|                                                                                   |        |                                                                                   |        |                                                                                   |         |
|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|---------|
|  |        |  |        |  |         |
| Ex ia IIC                                                                         |        | Ex db ia IIC                                                                      |        | Ex ia IIIC                                                                        |         |
| Zone 0<br>or<br>Zone 1                                                            | Zone 1 | Zone 1                                                                            | Zone 1 | Zone 20<br>or<br>Zone 21                                                          | Zone 21 |

|                                                                                     |            |                                                                                     |           |
|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|-----------|
|  |            |  |           |
| Ex ia IIC                                                                           | Ex ia IIIC | Ex ia IIIC                                                                          | Ex ia IIC |
| Zone 0<br>or<br>Zone 1                                                              | Zone 21    | Zone 20<br>or<br>Zone 21                                                            | Zone 1    |

The device is designed for operation in explosive gas or explosive dust atmosphere as shown in the sketch above. In the event of potentially explosive gas-air and dust-air mixtures occurring simultaneously: Suitability requires further assessment.

Certificates and  
declarations

Certificate of Conformity TP TC 012/2011

Inspection authority:  
LLP "T-Standard" (ТОО/ЖШС "Т-Стандарт")

Certificate number:  
EAЭC KZ 7500525.01.01.01734 (Ex ia)  
EAЭC KZ 7500525.01.01.01735 (Ex db)

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

- GOST 31610.0-2019 (IEC 60079-0:2017)
- GOST IEC 60079-1-2013
- GOST 31610.11-2014 (IEC 60079-11:2011)
- GOST 31610.26-2016 (IEC 60079-26:2014)

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

PMC71B

–

\*\*\*\*\*

+

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: Cerabar

-  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

PMC71B

Basic specifications

| Position 1, 2 (Approval) |    |                                             |
|--------------------------|----|---------------------------------------------|
| Selected option          |    | Description                                 |
| PMC71B                   | GO | EAC 0/1Ex ia IIC T6...T1 Ga/Gb              |
|                          |    | EAC 1Ex ia IIC T6...T1 Gb                   |
|                          |    | EAC 1Ex db ia IIC T6...T1 Gb                |
|                          |    | EAC Ex ia IIIC T <sub>200</sub> xxx°C Da/Db |
|                          |    | EAC Ex ia IIIC T <sub>L</sub> xxx°C Db      |

| Position 3, 4 (Output) |    |                                  |
|------------------------|----|----------------------------------|
| Selected option        |    | Description                      |
| PMC71B                 | BA | 2-wire, 4-20 mA HART             |
|                        | DA | 2-wire, PROFIBUS PA              |
|                        | FA | 2-wire, PROFINET, 10Mbit/s (APL) |

| Position 5 (Display, Operation) |   |                                             |
|---------------------------------|---|---------------------------------------------|
| Selected option                 |   | Description                                 |
| PMC71B                          | M | Prepared for display FHX50B + Gland M20     |
|                                 | N | Prepared for display FHX50B + Thread NPT1/2 |
|                                 | O | Prepared for display FHX50B + Thread M20    |

| Position 6 (Housing, Material) |   |                                 |
|--------------------------------|---|---------------------------------|
| Selected option                |   | Description                     |
| PMC71B                         | B | Single compartment; Alu, coated |
|                                | J | Dual compartment; Alu, coated   |
|                                | K | Dual compartment; 316L          |

| Position 7 (Electrical Connection) |   |                                        |
|------------------------------------|---|----------------------------------------|
| Selected option                    |   | Description                            |
| PMC71B                             | F | Thread M20, IP66/68 NEMA Type 4X/6P    |
|                                    | G | Thread G1/2, IP66/68 NEMA Type 4X/6P   |
|                                    | H | Thread NPT1/2, IP66/68 NEMA Type 4X/6P |

*Optional specifications*

| ID Ex (Application Package) |    |                                               |
|-----------------------------|----|-----------------------------------------------|
| Selected option             |    | Description                                   |
| PMC71B                      | EC | High temperature version, 150°C/302°F process |

| ID Nx, Ox (Accessory Mounted) |    |                                      |
|-------------------------------|----|--------------------------------------|
| Selected option               |    | Description                          |
| PMC71B                        | NA | Overvoltage protection <sup>1)</sup> |

1) Only in connection with Position 6 = J, K

| ID Px, Rx (Accessory Enclosed) |    |                                              |
|--------------------------------|----|----------------------------------------------|
| Selected option                |    | Description                                  |
| PMC71B                         | PA | Weather protection cover, 316L <sup>1)</sup> |

1) Only in connection with Position 6 = J, K



## Safety instructions: General

- The device is intended to be used in explosive atmospheres as defined in the scope of IEC 60079-0 or equivalent national standards. If no potentially explosive atmospheres are present or if additional protective measures have been taken: The device may be operated according to the manufacturer's specifications.
- Devices suitable for zone separation (marked Ga/Gb or Da/Db) are always suitable for installation in the less critical zone (Gb or Db). Due to space limitations the corresponding marking maybe not indicated on the nameplate.
- 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

- In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
- For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
- 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.

*Optional specification, ID Px, Rx = PA*

Connect the weather protection cover to the local potential equalization.

*Ex db ia IIC*

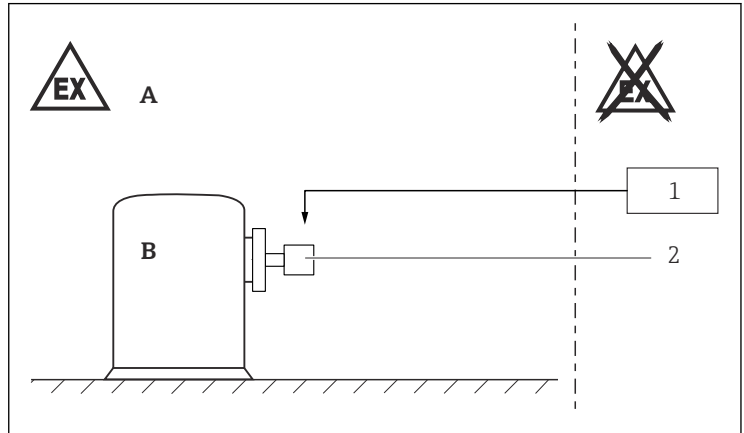


Internal Ex i circuit:

- Not accessible from the outside
- Not relevant during installation

0/1Ex ia IIC T6...T1 Ga/Gb,  
1Ex ia IIC T6...T1 Gb

## Safety instructions: Installation



A0041997

- A Zone 1, Electronic  
B Zone 0 or Zone 1, Process  
1 Associated intrinsically safe power supply units  
2 PMC71B

- After aligning (rotating) the enclosure, retighten the fixing screw.
- 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. Do not operate the sensor in Zone 0 if connecting to an intrinsically safe circuit of Category Ex ib.
- Continuous service temperature of the connecting cable:  $\geq T_a + 20\text{ K}$ .
- Observe the pertinent guidelines when interconnecting intrinsically safe circuits.
- Observe the maximum process conditions according to the manufacturer's Operating Instructions.
- Install the device to exclude any mechanical damage or friction during the application. Pay particular attention to flow conditions and tank fittings.

### Basic specification, Position 5 = N

Observe the requirements according to IEC/EN 60079-14 for conduit systems and the wiring and installation instructions of the suitable Safety Instructions (XA). In addition, observe national regulations and standards for conduit systems.

**Intrinsic safety**

- The device is only suitable for connection to certified, intrinsically safe equipment with explosion protection Ex ia / Ex ib.
- The intrinsically safe input power circuit of the device is isolated from ground. The dielectric strength is at least 500 V<sub>rms</sub>.

*Optional specification, ID Nx, Ox = NA*

The intrinsically safe input power circuit of the device is isolated from ground. The dielectric strength is at least 290 V<sub>rms</sub>.

**Potential equalization**

Integrate the device into the local potential equalization.

**Temperature tables**

- 
- The specified ambient and process 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.
  - The process temperatures refer to the temperature at the separation membrane.

| Temperature class | Process temperature range                    | Ambient temperature range                   |
|-------------------|----------------------------------------------|---------------------------------------------|
| T6                | $-40\text{ °C} \leq T_p \leq +80\text{ °C}$  | $-40\text{ °C} \leq T_a \leq +45\text{ °C}$ |
|                   | $-40\text{ °C} \leq T_p \leq +60\text{ °C}$  | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |
| T4                | $-40\text{ °C} \leq T_p \leq +100\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |
| T4...T1           | $-40\text{ °C} \leq T_p \leq +125\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +45\text{ °C}$ |

*Optional specification, ID Ex = EC*

| Temperature class | Process temperature range                    | Ambient temperature range                   |
|-------------------|----------------------------------------------|---------------------------------------------|
| T6                | $-40\text{ °C} \leq T_p \leq +80\text{ °C}$  | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |
| T4                | $-40\text{ °C} \leq T_p \leq +100\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +60\text{ °C}$ |
| T4                | $-40\text{ °C} \leq T_p \leq +125\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +55\text{ °C}$ |
| T3...T1           | $-40\text{ °C} \leq T_p \leq +150\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |

Connection data

Basic specification, Position 3 = BA

| Power supply                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------|
| $U_i \leq 30\text{ V}_{\text{DC}}$<br>$I_i \leq 300\text{ mA}$<br>$P_i \leq 1\text{ W}$<br>$C_i \leq 10\text{ nF}$<br>$L_i = 0$ |

Basic specification, Position 3 = DA

| Power supply                         |                                    |
|--------------------------------------|------------------------------------|
| FISCO                                | Entity                             |
| $U_i \leq 17.5\text{ V}_{\text{DC}}$ | $U_i \leq 24\text{ V}_{\text{DC}}$ |
| $I_i \leq 380\text{ mA}$             | $I_i \leq 300\text{ mA}$           |
| $P_i \leq 5.32\text{ W}$             | $P_i \leq 1.2\text{ W}$            |
| $C_i \leq 5\text{ nF}$               | $C_i \leq 5\text{ nF}$             |
| $L_i = 0$                            | $L_i = 0$                          |

Basic specification, Position 3 = FA

| Power supply                         |                                      |
|--------------------------------------|--------------------------------------|
| 2-WISE                               | Entity                               |
| $U_i \leq 17.5\text{ V}_{\text{DC}}$ | $U_i \leq 17.5\text{ V}_{\text{DC}}$ |
| $I_i \leq 380\text{ mA}$             | $I_i \leq 300\text{ mA}$             |
| $P_i \leq 5.32\text{ W}$             | $P_i \leq 1.2\text{ W}$              |
| $C_i \leq 5\text{ nF}$               | $C_i \leq 5\text{ nF}$               |
| $L_i = 0$                            | $L_i = 0$                            |

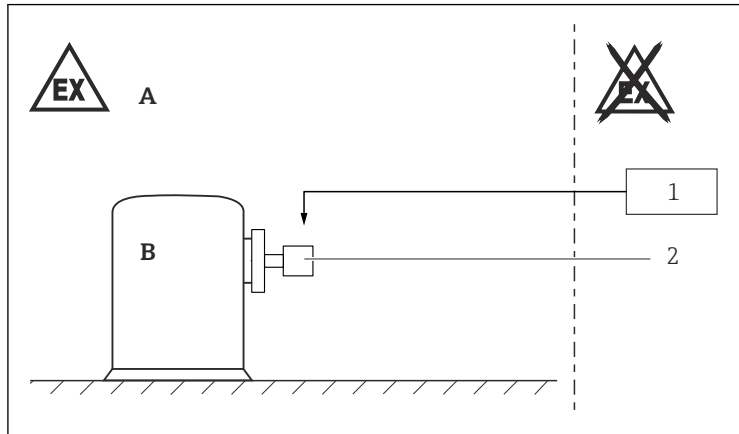
In connection with: *Basic specification, Position 5 = M, N, O*  
Installation according to the specifications of FHX50B.



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

# 1Ex db ia IIC T6...T1 Gb

## Safety instructions: Installation



A0041997

- A Zone 1, Electronic  
 B Zone 1, Process  
 1 Power supply  
 2 PMC71B

- After aligning (rotating) the enclosure, retighten the fixing screw.
- In potentially explosive atmospheres: Do not open the connection compartment cover and the electronics compartment cover when energized.
- Before operation:
  - Screw in the cover all the way.
  - Tighten the securing screw on the cover.
- Connect the device:
  - Using suitable cable and wire entries of protection type "Flameproof Enclosure (Ex db)".
  - Using piping systems of protection type "Flameproof Enclosure (Ex db)".
- When connecting through a conduit entry approved for this purpose, mount the associated sealing unit directly at the enclosure.
- Seal unused entry glands with approved sealing 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.
- Only use certified cable entries or sealing plugs. The metal sealing plugs supplied meet this requirement.
- Only use genuine spare parts from Endress+Hauser which are specified for the device.

*Basic specification, Position 5 = N*

Observe the requirements according to IEC/EN 60079-14 for conduit systems and the wiring and installation instructions of the suitable Safety Instructions (XA). In addition, observe national regulations and standards for conduit systems.

*Basic specification, Position 7 = G*

Flameproof equipment with G threaded holes is not intended for new installations, but only for replacing equipment in existing installations. Use of this equipment shall comply with the local installation requirements.

**Safety instructions: Ex d joints**

- Flameproof joints are not intended to be repaired.
- If required or if in doubt: ask manufacturer for specifications.

**Temperature tables**



- The specified ambient and process 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.
- The process temperatures refer to the temperature at the separation membrane.

For detailed information see Technical Information.

| Temperature class | Process temperature range                    | Ambient temperature range                   |
|-------------------|----------------------------------------------|---------------------------------------------|
| T6                | $-40\text{ °C} \leq T_p \leq +80\text{ °C}$  | $-40\text{ °C} \leq T_a \leq +55\text{ °C}$ |
| T4                | $-40\text{ °C} \leq T_p \leq +100\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |
| T4...T1           | $-40\text{ °C} \leq T_p \leq +125\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +40\text{ °C}$ |

*Optional specification, ID Ex = EC*

| Temperature class | Process temperature range                    | Ambient temperature range                   |
|-------------------|----------------------------------------------|---------------------------------------------|
| T6                | $-40\text{ °C} \leq T_p \leq +80\text{ °C}$  | $-40\text{ °C} \leq T_a \leq +55\text{ °C}$ |
| T4                | $-40\text{ °C} \leq T_p \leq +125\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +50\text{ °C}$ |
| T3...T1           | $-40\text{ °C} \leq T_p \leq +150\text{ °C}$ | $-40\text{ °C} \leq T_a \leq +40\text{ °C}$ |

**Connection data**      *Basic specification, Position 3 = BA*

| Power supply                                                                                            |
|---------------------------------------------------------------------------------------------------------|
| $U \leq 35 \text{ V}_{\text{DC}}$<br>$U_{\text{m}} = 250 \text{ V}_{\text{AC}}$<br>$P \leq 1 \text{ W}$ |

*Basic specification, Position 3 = DA*

| Power supply                                                                                              |
|-----------------------------------------------------------------------------------------------------------|
| $U \leq 32 \text{ V}_{\text{DC}}$<br>$U_{\text{m}} = 250 \text{ V}_{\text{AC}}$<br>$P \leq 0.7 \text{ W}$ |

*Basic specification, Position 3 = FA*

| Power supply                                                                                              |
|-----------------------------------------------------------------------------------------------------------|
| $U \leq 15 \text{ V}_{\text{DC}}$<br>$U_{\text{m}} = 250 \text{ V}_{\text{AC}}$<br>$P \leq 0.7 \text{ W}$ |

In connection with: *Basic specification, Position 5 = M, N, O*  
Installation according to the specifications of FHX50B.

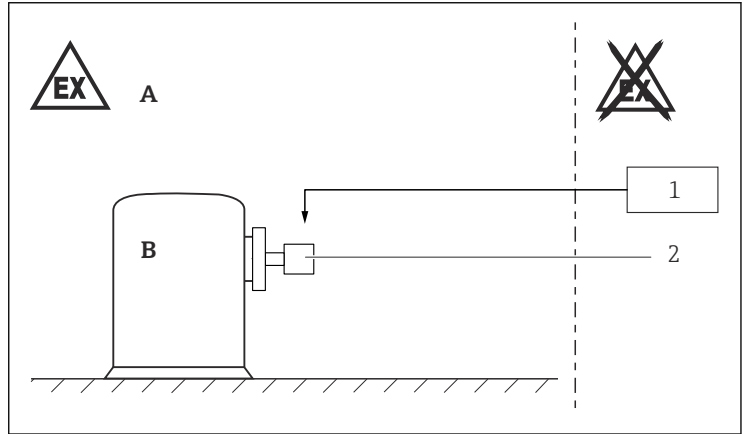
 Only the type of protection suitable for the device shall be connected!



Ex ia IIIC T<sub>200</sub> xxx°C Da/Db,

Ex ia IIIC T<sub>L</sub> xxx°C Db

**Safety  
instructions:  
Installation**



A0041997

- A Zone 21, Electronic  
 B Zone 20 or Zone 21, Process  
 1 Associated intrinsically safe power supply units  
 2 PMC71B

- After aligning (rotating) the enclosure, retighten the fixing screw.
- Continuous service temperature of the connecting cable:  $\geq T_a + 20\text{ K}$ .
- Perform the following to achieve the degree of protection IP66/67:
  - Screw the cover tight.
  - Mount the cable entry correctly.
- Seal unused entry glands with suitable sealing plugs that correspond to the type of protection.
- Supplied metallic sealing plugs comply with the requirements of type of protection marked on the nameplate.
- The plastic sealing plug is used only as transport protection.
- Observe the pertinent guidelines when interconnecting intrinsically safe circuits.
- Observe the maximum process conditions according to the manufacturer's Operating Instructions.
- Install the device to exclude any mechanical damage or friction during the application. Pay particular attention to flow conditions and tank fittings.

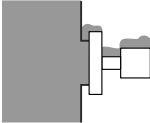
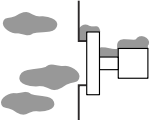
*Basic specification, Position 5 = N*

Observe the requirements according to IEC/EN 60079-14 for conduit systems and the wiring and installation instructions of the suitable

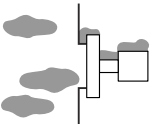
Safety Instructions (XA). In addition, observe national regulations and standards for conduit systems.

Permitted ambient conditions

Ex ia IIIC T<sub>200</sub> xxx°C Da/Db

| Process<br>Zone 20                                |                                                                                   | Enclosure<br>Zone 21                                     |
|---------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|
| Continuous dust submersion                        |  | Dust accumulation or temporary explosive dust atmosphere |
| Continuous explosive dust atmosphere and deposits |  | Dust accumulation or temporary explosive dust atmosphere |

Ex ia IIIC T<sub>L</sub> xxx°C Db

| Process<br>Zone 21                                              |                                                                                   | Enclosure<br>Zone 21                                     |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|
| Continuous dust deposits or temporary explosive dust atmosphere |  | Dust accumulation or temporary explosive dust atmosphere |

Intrinsic safety

- The device is only suitable for connection to certified, intrinsically safe equipment with explosion protection Ex ia / Ex ib.
- The intrinsically safe input power circuit of the device is isolated from ground. The dielectric strength is at least 500 V<sub>rms</sub>.

Optional specification, ID Nx, Ox = NA

The intrinsically safe input power circuit of the device is isolated from ground. The dielectric strength is at least 290 V<sub>rms</sub>.

Potential equalization

Integrate the device into the local potential equalization.

Temperature tables



- The specified surface temperature takes into account all direct heat influences from process heat and self-heating at the enclosure.
- The specified ambient and process 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.
- The process temperatures refer to the temperature at the separation membrane.

For detailed information see Technical Information.



Protection type of enclosure: IP66/67

Ex ia IIIC T<sub>200</sub> 135°C Da/Db

Ex ia IIIC T<sub>L</sub> 135°C Db

| Maximum surface temperature | Process temperature range         | Ambient temperature range        |
|-----------------------------|-----------------------------------|----------------------------------|
| T135 °C                     | -40 °C ≤ T <sub>p</sub> ≤ +80 °C  | -40 °C ≤ T <sub>a</sub> ≤ +55 °C |
|                             | -40 °C ≤ T <sub>p</sub> ≤ +100 °C | -40 °C ≤ T <sub>a</sub> ≤ +50 °C |
|                             | -40 °C ≤ T <sub>p</sub> ≤ +125 °C | -40 °C ≤ T <sub>a</sub> ≤ +45 °C |

Ex ia IIIC T<sub>200</sub> 150°C Da/Db

Ex ia IIIC T<sub>L</sub> 150°C Db

Optional specification, ID Ex = EC

| Maximum surface temperature | Process temperature range         | Ambient temperature range        |
|-----------------------------|-----------------------------------|----------------------------------|
| T150 °C                     | -40 °C ≤ T <sub>p</sub> ≤ +125 °C | -40 °C ≤ T <sub>a</sub> ≤ +55 °C |
|                             | -40 °C ≤ T <sub>p</sub> ≤ +150 °C | -40 °C ≤ T <sub>a</sub> ≤ +50 °C |

Specific conditions of use:

- The surface temperature is
  - for equipment protection level (EPL) Da:  $T_{200}$  135 °C / 150 °C (with 200 mm dust deposit)
  - and equipment protection level (EPL) Db:  $T_L$  135 °C / 150 °C (with dust accumulation  $T_L$ )
- The surface temperature is for equipment protection level (EPL) Db:  $T_L$  135 °C / 150 °C (with dust accumulation  $T_L$ )



$T_L$  marking:  
The assigned surface temperature without dust layer is the same.

Connection data

Basic specification, Position 3 = BA

| Power supply                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------|
| $U_i \leq 30\text{ V}_{DC}$<br>$I_i \leq 300\text{ mA}$<br>$P_i \leq 1\text{ W}$<br>$C_i \leq 10\text{ nF}$<br>$L_i = 0$ |

Basic specification, Position 3 = DA

| Power supply                                                                                                                 |                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| FISCO                                                                                                                        | Entity                                                                                                                    |
| $U_i \leq 17.5\text{ V}_{DC}$<br>$I_i \leq 380\text{ mA}$<br>$P_i \leq 5.32\text{ W}$<br>$C_i \leq 5\text{ nF}$<br>$L_i = 0$ | $U_i \leq 24\text{ V}_{DC}$<br>$I_i \leq 300\text{ mA}$<br>$P_i \leq 1.2\text{ W}$<br>$C_i \leq 5\text{ nF}$<br>$L_i = 0$ |

Basic specification, Position 3 = FA

| Power supply                                                                                                                 |                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 2-WISE                                                                                                                       | Entity                                                                                                                      |
| $U_i \leq 17.5\text{ V}_{DC}$<br>$I_i \leq 380\text{ mA}$<br>$P_i \leq 5.32\text{ W}$<br>$C_i \leq 5\text{ nF}$<br>$L_i = 0$ | $U_i \leq 17.5\text{ V}_{DC}$<br>$I_i \leq 300\text{ mA}$<br>$P_i \leq 1.2\text{ W}$<br>$C_i \leq 5\text{ nF}$<br>$L_i = 0$ |

In connection with: Basic specification, Position 5 = M, N, O  
Installation according to the specifications of FHX50B.



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

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