# Safety Instructions Cerabar PMC21, PMP21

II 3 G Ex ec IIC T4 Gc







Cerabar PMC21, PMP21 XA01533P-A

# Cerabar PMC21, PMP21

### Table of contents

About this document	4
Associated documentation	4
Supplementary documentation	4
Certificates and declarations	4
Manufacturer address	4
Other standards	5
Extended order code	5
Safety instructions: General	6
Safety instructions: Specific conditions of use	7
Safety instructions: Installation	7
Temperature tables	8
Connection data	8

XA01533P-A Cerabar PMC21, PMP21

### 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:

BA01271P

# 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 01154

The EU Declaration of Conformity is available on the Internet:

www.endress.com/Downloads

### EU type-examination certificate

Certificate number:

EC 00394

List of applied standards: See EU Declaration of Conformity.

# Manufacturer address

Endress+Hauser SE+Co. KG

Hauptstraße 1

79689 Maulburg, Germany

Address of the manufacturing plant: See nameplate.

Cerabar PMC21, PMP21 XA01533P-A

#### 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

PMC21, PMP21	-	*****	+	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 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.

XAO1533P-A Cerabar PMC21, PMP21

#### 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

PMC21, PMP21

Basic specifications

Position 1	, 2 (Approval)	
Selected option		Description
PMC21 PMP21	ВС	II 3 G Ex ec IIC T4 Gc

Position 3	on 3 (Output)	
Selected o	ption	Description
PMC21 PMP21	1	4 to 20 mA

#### Optional specifications

No options specific to hazardous locations are available.

### Safety instructions: General

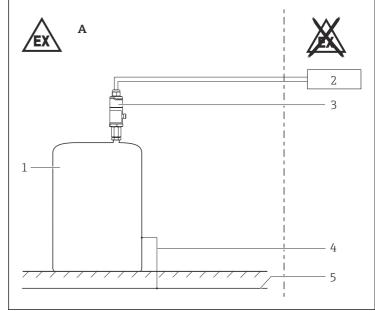
- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
  - Be suitably qualified for their role and the tasks they perform
  - Be trained in explosion protection
  - Be familiar with national regulations
- Install the device according to the manufacturer's instructions and national regulations.
- 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)

Cerabar PMC21, PMP21 XA01533P-A

Safety instructions: Specific conditions of use 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



A0031218

- A Zone 2
- 1 Tank; Zone 2
- 2 Power supply
- 3 Transmitter enclosure
- 4 Potential equalization line
- 5 Potential equalization
- Continuous service temperature of the connecting cable:  $\geq T_a + 5 \text{ K}$ .
- Use a suitable certified M12 plug connector.
- During operation: Ensure that ingress protection IP54 is observed.
- In potentially explosive atmospheres: Do not disconnect electrical connections when energized.
- If no potentially explosive mixtures are present, or if additional protective measures have been taken, the device may also be operated under non-atmospheric conditions in accordance with the manufacturer's specifications.

XA01533P-A Cerabar PMC21, PMP21

### Potential equalization

If the potential equalization cannot be guaranteed by the installation: In order to avoid electrostatic charging, integrate metallic parts of the enclosure into the potential equalization.

# Temperature tables

Temperature class	Process temperature T <sub>p</sub> (process)	Ambient temperature T <sub>a</sub> (ambient): enclosure
T4	≤ 100 °C	$-40 ^{\circ}\text{C} \le \text{T}_{\text{a}} \le +70 ^{\circ}\text{C}$

### Connection data

Electrical data	
$U \le 30 V_{DC}$	







www.addresses.endress.com