Safety Instructions
Cerabar T PMP131, PMP135

Ga/Gb Ex ib IIC T6 X
1 Ex ib IIC T6 Gb X

Document: XA01548P-A
Safety instructions for electrical apparatus for explosion-hazardous areas → 3

Endress+Hauser
People for Process Automation

Cerabar T PMP131, PMP135

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Associated documentation

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

- KA00103P/00 (PMP131)
- KA00198P/00 (PMP135)

Supplementary documentation

Explosion-protection brochure: CP00021Z/11

The Explosion-protection brochure is available:
- In the download area of the Endress+Hauser website: www.endress.com -> Download -> Advanced -> Documentation Code: CP00021Z
- On the CD for devices with CD-based documentation

Manufacturer's certificates

Certificate of Conformity TP TC 012/2011

Inspection authority:
NANIO CCVE («НАНИО ЦСВЭ»)

Certificate number:
TC RU C-DE.GB05.B.00831

Affixing the certificate number certifies conformity with the following standards (depending on the device version):
- GOST R IEC 60079-0-2011
- GOST R IEC 60079-11-2010
- GOST 31610.26-2012/ IEC 60079-26:2006

Manufacturer address

Address of manufacturer: 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

PMP13x	–	**********	+	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 T

Device type

PMP131, PMP135

Basic specifications

Position 1, 2 (Electrical Connection)		
Selected option		**Description**
PMP13x	A1	Plug ISO4400 M16, IP65 NEMA4X
	A2	Plug ISO4400 NPT1/2, IP65 NEMA4X
	A3	Cable 5m, IP68 NEMA6P
	A4	Plug M12, IP65 NEMA4X
PMP131	A5	Plug DIN43650/C, IP65 NEMA4X

Position 4 (Output)		
Selected option		**Description**
PMP13x	D	4-20mA SIL, ATEX II 1/2 G Ex ib IIC T6 Ga/Gb EAC Ga/Gb Ex ib IIC T6 X
	1	4-20mA SIL, ATEX II 2 G Ex ib IIC T6 Gb EAC 1 Ex ib IIC T6 Gb X

Position 5 (Additional Option)		
Selected option		**Description**
PMP13x	5	EAC

Optional specifications

No options specific to hazardous locations are available.

Safety instructions: General

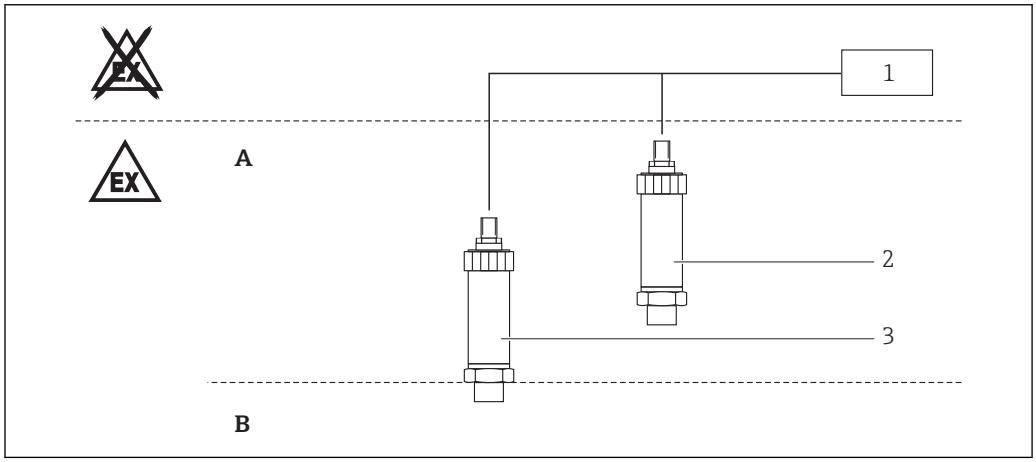
- Comply with the installation and safety instructions in the Operating Instructions.
- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
  - Be suitably qualified for their role and the tasks they perform
  - Be trained in explosion 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. housing, sensor element, special varnishing, attached additional plates, ..)
  - Of isolated capacities (e.g. isolated metallic plates)

Safety instructions: Special conditions

Permitted ambient temperature range:
$-25\ °C \leq T_a \leq +65\ °C$

- Wall thickness of the seperating diaphragm (stainless steel) ≥ 0.025 mm.
  Do not expose the separating diaphram to any environmental strain that may have detrimental effects on it.
- 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.

Safety instructions: Installation



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A Zone 1, Electronics
B Zone 0, Process
1 Power supply
2 Basic specification, Position 4 (Output) = 1
3 Basic specification, Position 4 (Output) = D

Safety instructions: Zone 0

- In the event of potentially explosive vapor/air mixtures, only operate the device under atmospheric conditions.
  – Temperature: −20 to +60 °C
  – Pressure: 80 to 110 kPa (0.8 to 1.1 bar)
  – Air with normal oxygen content, usually 21 % (V/V)
- 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.
- Associated devices with galvanic isolation between the intrinsically safe and non-intrinsically safe circuits are preferred.

Connection data

Power supply
$U_i \leq 26\ V_{DC}$ $I_i \leq 100$ mA $P_i \leq 0.8$ W
Basic specification, Position 1, 2 (Electrical Connection) = A1, A2, A4, A5 $C_i = 3$ nF $L_i = 0$ *Basic specification, Position 1, 2 (Electrical Connection) = A3* $C_i = 3\ nF + C_{cable}$ $L_i = L_{cable}$ $C_{cable} \leq 200$ pF/m $L_{cable} \leq 1$ µH/m

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