

# Safety Instructions

## Deltabar M

### PMD55

#### 4-20 mA HART, PROFIBUS PA, FOUNDATION Fieldbus

Ex d IIC T6 Gb

Ex d IIC T4 Gb

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Safety instructions for electrical apparatus for explosion-hazardous areas



# Deltabar M PMD55

4-20 mA HART, PROFIBUS PA, FOUNDATION Fieldbus

## Associated Documentation

This document is an integral part of the following Operating Instructions:  
HART: BA00382P/00  
PROFIBUS PA: BA00383P/00  
FOUNDATION Fieldbus: BA00384P/00

The Operating Instructions which are supplied and correspond to the device type apply.

## Supplementary Documentation

Explosion-protection brochure:  
CP00021Z/11

## Designation

Explanation of the labelling and type of protection can be found in the explosion protection brochure.

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### Designation of type of protection

Ex d IIC T6

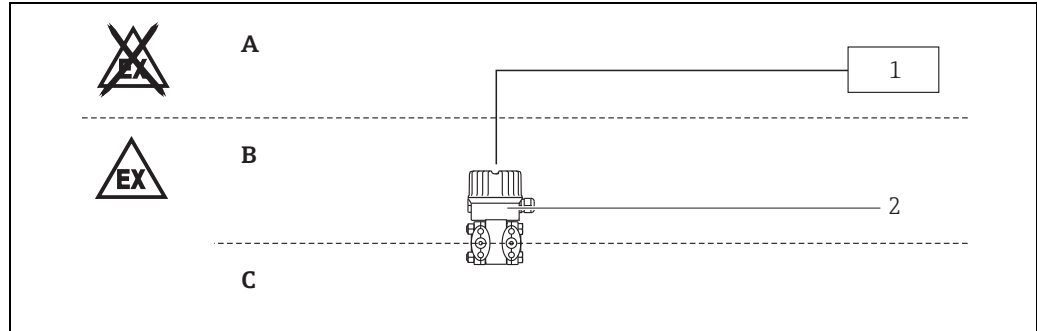
Ex d IIC T4

## Applied standards

ABNT NBR IEC 60079-0 :2008  
ABNT NBR IEC 60079-1 :2009

**Safety instructions:  
General**

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations.
- Only install the devices in media for 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:  
Installation**


- A** Power supply  
**B** Zone 1, Electronic  
**C** Zone 1, Process
- 1** Power supply U  
**2** PMD55

- Do not open the connection or electronics compartments under voltage in an explosive atmosphere.
- During operation, the cover must be screwed all the way in and the cover's safety catch must be fastened.
- The plastic sealing plug is used only as transport protection.
- Connect the device using suitable cable and wire entries or using piping systems of protection type "Pressure-tight Enclosure d".
- For connection through a conduit entry approved for this purpose the associated sealing facility shall be mounted directly to the housing.
- For ambient temperatures higher than +70 °C, use suitable heat-resisting cables or wires.
- Close unused entry glands with approved (Ex d) sealing plugs. (Sealing plugs included in delivery).
- Avoid electrostatic charging of the plastic surfaces, for plastic process connections or plastic coatings.
- Avoid impact or friction sparks for light metal flanges or flange faces (e.g. titanium, zirconium).

**Temperature tables**

Electronic insert	Type of protection	Temperature class	Process temperature	Ambient temperature (Housing)
4-20 mA HART	Ex d IIC T6 or T4 Gb	T6	≤ 80 °C	-40 °C ≤ Ta ≤ +75 °C
		T4	≤ 120 °C	
PROFIBUS PA, FOUNDATION Fieldbus	Ex d IIC T6 or T4 Gb	T6	≤ 80 °C	-40 °C ≤ Ta ≤ +75 °C
		T4	≤ 120 °C	

The process temperatures refer to the temperature at the separation membrane (do not exceed the max. ambient temperature at the housing).

**Connection data**

Electronic insert	Electrical data
4-20 mA HART	U ≤ 45 V DC P ≤ 1.1 W
PROFIBUS PA, FOUNDATION Fieldbus	U ≤ 32 V DC P ≤ 1.25 W







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