

# Safety Instructions

## **Deltabar M**

### **PMD55**

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

Ex ic IIC T6...T4 Gc

IECEX KEM 09.0016

Document: XA00492P-B

Safety instructions for electrical apparatus for explosion-hazardous areas  
according to IEC standards



# Deltabar M PMD55

english

4-20 mA HART, PROFIBUS PA, FOUNDATION Fieldbus

## Associated Documentation

This document is an integral part of the following Operating Instructions:  
BA00382P/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.

**Designation according to IECEx  
Equipment protection level (EPL)**

Gc

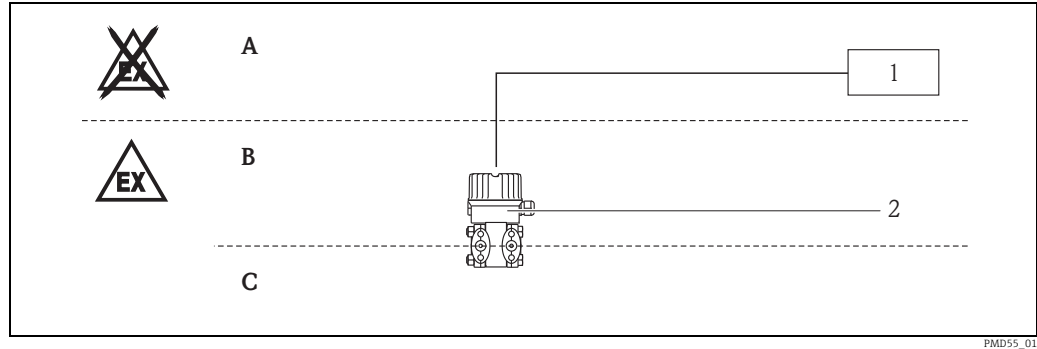
**Designation of type of protection/  
level of protection**

Ex ic IIC T6...T4 Gc

## Applied standards

IEC 60079-0 :2011  
IEC 60079-11 :2011

### Safety instructions: Installation



1

**A** Power supply

**B** Zone 2, Electronic

**C** Zone 2, Process

1 Certified associated apparatus

2 PMD55

- 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 the plastic surfaces, for plastic process connections or plastic coatings.
- The intrinsically safe input power circuit of the device is isolated from ground potential and has a dielectric strength of at least 500 V<sub>rms</sub> with respect to it.
- Avoid impact or friction sparks for light metal flanges or flange faces (e.g. titanium, zirconium).
- In case of additional or alternative special varnishing of the enclosure or other metallic parts the danger of an electrostatic charging must be observed. Do not rub surfaces with dry cloth.

### Temperature tables

Electronic insert	Type of protection/ level of protection	Temperature class	Process temperature	Ambient temperature (Housing)
4-20 mA HART	Ex ic IIC T6...T4 Gc	T6	≤ 80 °C	-40 °C ≤ Ta ≤ +40 °C
		T4	≤ 100 °C	-40 °C ≤ Ta ≤ +70 °C
PROFIBUS PA, FOUNDATION Fieldbus	Ex ic IIC T6...T4 Gc	T6	≤ 80 °C	-40 °C ≤ Ta ≤ +40 °C
		T4	≤ 120 °C	-40 °C ≤ Ta ≤ +70 °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	$U_i \leq 45 \text{ V DC}$ $I_i \leq 300 \text{ mA}$ $P_i \leq 1 \text{ W}$ $C_i \leq 10 \text{ nF}$ $L_i = 0$
PROFIBUS PA, FOUNDATION Fieldbus	$U_i \leq 17.5 \text{ V DC}$ $I_i \leq 500 \text{ mA}$ $P_i \leq 5.5 \text{ W}$ $C_i \leq 5 \text{ nF}$ $L_i \leq 10 \text{ } \mu\text{H}$ (FISCO field device) or $U_i \leq 32 \text{ V DC}$ $I_i \leq 250 \text{ mA}$ $P_i \leq 1.2 \text{ W}$ $C_i \leq 5 \text{ nF}$ $L_i \leq 10 \text{ } \mu\text{H}$







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