IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx FMG 24.0008X**	Page 1 of 5	Certificate history: Issue 0 (2024-09-04)
Status:	**Current**	Issue No: 1	
Date of Issue:	2025-03-12		
Applicant:	**Endress + Hauser SE + Co. KG** Hauptstrasse 1 79689 Maulburg **Germany**		
Equipment:	**CERABAR PMP50, DELTABAR PMD50 Pressure Transmitters**		
Optional accessory:			
Type of Protection:	**Flameproof protection "d", Increased safety 'e', Intrinsic safety "i", Dust ignition protection by enclosure "t"**		
Marking:	Refer to attachment "Marking for IECEx FMG 24 0008X Issue 1"		

Approved for issue on behalf of the IECEx Certification Body: **J. E. Marquedant**

Position: **VP, Manager - Electrical Systems**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

FM Approvals LLC
One Technology Way
Norwood MA 02062
United States of America

IECEx Certificate of Conformity

Manufacturer:
Endress + Hauser SE + Co. KG
Hauptstrasse 1
79689 Maulburg
Germany

Manufacturing locations:

Endress + Hauser SE + Co. KG
Hauptstrasse 1
79689 Maulburg
Germany

Endress+Hauser (USA) Automation Instrumentation Inc.
2340 Endress Place
Greenwood , Indiana 46143
United States of America

Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.
Suzhou Industrial Park
491 Su Hong Zhong Road No.
Jiangsu Province
Suzhou 215021
China

See following pages for more locations

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-11:2023 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:7.0

IEC 60079-26:2021 Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection
Edition:4.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

US/FMG/ExTR24.0007/00 US/FMG/ExTR24.0007/01

Quality Assessment Report:

DE/TUN/QAR06.0003/11

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

CERABAR PMP50-*A**********

CERABAR PMP50-*B**********

CERABAR PMP50-*F**********

CERABAR PMP50-*G**********

CERABAR PMP50-*H**********

CERABAR PMP50-*K**********

CERABAR PMP50-*L**********

CERABAR PMP50-*N**********

DELTABAR PMD50-*A**********

DELTABAR PMD50-*B**********

DELTABAR PMD50-*F**********

DELTABAR PMD50-*G**********

DELTABAR PMD50-*H**********

DELTABAR PMD50-*K**********

DELTABAR PMD50-*L**********

DELTABAR PMD50-*N**********

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to "Specific Conditions of use for IECEx FMG 24.0008X Issue 1" attached

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Offer a stainless steel or aluminum window cover, adding an alternate feedthrough between the two compartments which meets Ex ia requirements, adding a weather protection cover and add types of protection ‘ec’ and ‘tc’.

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Additional manufacturing locations:

Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.
M-192, Waluj MIDC, Aurangabad - 431 136
Maharashtra State
India

Endress+Hauser (Brasil) Instrumentação e Automação Ltda.
Avenida Antonio Sesti
600, Itatiba/SP
Brazil

Annexes:

Marking for IECEx FMG 24 0008 Issue 1 Cert.pdf
Specific Conditions of use for IECEx FMG 24 0008X Issue 1.pdf

Marking for IECEx FMG 24.0008X Issue 1

CERABAR PMP50-*A**********, DELTABAR PMD50-*A**********

IECEx FMG 24.0008X

Ex ia IIC T4…T1 Ga

CERABAR PMP50-*B**********, DELTABAR PMD50-*B**********

IECEx FMG 24.0008X

Ex ia IIC T4…T1 Ga/Gb

Ex ia IIC T4...T1 Gb

CERABAR PMP50-*F**********, DELTABAR PMD50-*F**********

IECEx FMG 24.0008X

Ex db IIC T6…T1 Gb

CERABAR PMP50-*G**********, DELTABAR PMD50-*G**********

IECEx FMG 24.0008X

Ex ta IIIC T_{200}100°C Da

Ex tb IIIC T125°C Db (PMP50) or T100°C Db (PMD50)

CERABAR PMP50-*H**********, DELTABAR PMD50-*H**********

IECEx FMG 24.0008X

Ex ia IIIC T135°C Da/Db

Ex ia IIIC T135°C Db

CERABAR PMP50-*K**********, DELTABAR PMD50-*K**********

IECEx FMG 24.0008X

Ex ia IIC T4…T1 Ga/Gb

Ex ia IIIC T135°C Da/Db

CERABAR PMP50-*L**********, DELTABAR PMD50-*L**********

IECEx FMG 24.0008X

Ex ec IIC T4…T1 Gc

Ex tc IIIC T125°C (PMP50) Dc or T100°C (PMD50) Dc

CERABAR PMP50-*N**********, DELTABAR PMD50-*N**********

IECEx FMG 24.0008X

- Ex ia IIC T4…T1 Ga/Gb
- Ex ta IIIC T_{200}100°C Da, Ex tb IIIC T125°C (PMP50) Db or T100°C (PMD50) Db
- Ex db IIC T6…T1 Gb

Specific Conditions of Use for IECEx FMG 24.0008X Issue 1

CERABAR PMP50-*F**********, DELTABAR PMD50-*F**********

Ex db IIC T6…T1 Gb (Drawing 961007495) **PMP50 (XA03231P-*)/PMD50 (XA03238P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.
7. Flameproof joints are not intended to be repaired.

CERABAR PMP50-*G**********, DELTABAR PMD50-*G**********

Ex ta IIIC T_{200}100°C Da, Ex tb IIIC T125°C Db (PMP50) / T100°C Db (PMD50) (Drawing 961007496) **PMP50 (XA03232P-*)/PMD50 (XA03239P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.
7. The device must be operated with a 100 mA fuse.

CERABAR PMP50-*A**********, DELTABAR PMD50-*A**********

CERABAR PMP50-*B**********, DELTABAR PMD50-*B**********

Ex ia IIC T4…T1 Ga (Drawing 961007493) and Ex ia IIC T4…T1 Ga/Gb, Ex ia IIC T4…T1 Ga (Drawing 961007494) **PMP50 (XA03230P-*)/PMD50 (XA03237P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.
7. Material specification of the separating element: > 1 mm glass feedthrough edged with > 1 mm stainless steel and ≥ 0.3 mm welds between the glass feedthrough and the stainless steel.

CERABAR PMP50-*H**********, DELTABAR PMD50-*H**********

Ex ia IIIC T135°C Da/Db, Ex ia IIIC T135°C Db, (Drawing 961007497) **PMP50 (XA03233P-*)/PMD50 (XA03240P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.
7. Material specification of the separating element: > 1 mm glass feedthrough edged with > 1 mm stainless steel and ≥ 0.3 mm welds between the glass feedthrough and the stainless steel.

CERABAR PMP50-*K**********, DELTABAR PMD50-*K**********

Ex ia IIC T4…T1 Ga/Gb, Ex ia IIIC T135°C Da/Db (Drawing 961007498) **PMP50 (XA03234P-*)/PMD50 (XA03241P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.

CERABAR PMP50-*L**********, DELTABAR PMD50-*L**********

Ex ec IIC T4…T1 Gc, Ex tc IIIC T125°C Dc (Drawing 961007499) **PMP50 (XA03235P-*)/** Ex ec IIC T4…T1 Gc, Ex tc IIIC T100°C Dc **PMD50 (XA03242P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. The device shall only be used in an area of pollution degree 2 or better.
7. Refer to temperature tables for various ambient and process temperature ranges.

CERABAR PMP50-*N**********, DELTABAR PMD50-*N**********

Ex ia IIC T4…T1 Ga/Gb, Ex ta IIIC T_{200}100°C Da, Ex tb IIIC T125°C Db (PMP50) / T100°C Db (PMD50), Ex db IIC T6…T1 Gb (Drawing 961007500) **PMP50 (XA03236P-*)/PMD50 (XA03243P-*)**

1. In the case of process connections made of polymeric material or with polymeric coatings, avoid electrostatic charging of the plastic surfaces.
2. For light metal flanges or flange faces (e.g. titanium, zirconium), avoid sparks caused by impact and friction.
3. To avoid electrostatic charging: Do not rub surfaces with a dry cloth.
4. 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 (≤ 0.5 m) generating strong electrostatic charges.
5. Avoid sparks caused by impact and friction.
6. Refer to temperature tables for various ambient and process temperature ranges.
7. Refer to the marking requirements in the “General notes: Combined approval” chapter.
8. Flameproof joints are not intended to be repaired.
9. Material specification of the separating element: > 1 mm glass feedthrough edged with > 1 mm stainless steel and ≥ 0.3 mm welds between the glass feedthrough and the stainless steel.
10. Ex ta, Ex tb The device must be operated with a 100 mA fuse.