



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 CSA 24.0045X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2024-09-10		
Applicant:	MICRO SENSOR CO., LTD. No.18 Yingda Road, Wein District, Baoli City, Shaanxi Province, China		
Equipment:	MDM7000 Series Smart Pressure Transmitter		
Optional accessory:			
Type of Protection:	Intrinsic Safety "ia"		
Marking:	Ex ia IIC T4 Ga Tamb: -40°C to +70°C		

Approved for issue on behalf of the IECEx
Certification Body:

Dave Magee

Position:

Senior Director of Operations, Toronto

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:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





IECEx Certificate of Conformity

Certificate No.: **IECEx CSA 24.0045X**

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Date of issue: 2024-09-10

Issue No: 0

Manufacturer: **MICRO SENSOR CO., LTD.**
No.18 Yingda Road, Wein District,
Baoji City, Shaanxi Province,
China

Manufacturing
locations: **MICRO SENSOR CO., LTD. (Xi'an
Branch)**
No. 7 Biyuan 2nd Road,
Xi'an City, Shaanxi Province, 710199
China

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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 Report:

[CA/CSA/ExTR24.0050/00](#)

Quality Assessment Report:

[NO/DNV/QAR21.0025/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

MDM7000 Series Smart Pressure Transmitter is a stationary intrinsically safe apparatus rated for process temperature up to 70°C and used for level, density, pressure and flow measurement by means of a pressure sensor in hazardous area. It is intended to be powered by an approved IS safety barrier and use 4-20mA or HART protocol for communication.

The housing and cover of apparatus is constructed from aluminium alloy or stainless steel with an optional display window and it houses printed circuit boards and terminals inside. The sensing electronics is enclosed in a stainless steel enclosure of varying shape and size depending on the models.

Refer to the Annexe for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosure of some models may be manufactured from aluminium alloy and used at the accessible surface of the equipment. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered when the equipment is being installed in Zone 0 locations for group II level of protection Ga.

Annex:

[IECEx CSA 24.0045X Issue 0 Annexe_1.pdf](#)

EQUIPMENT (continued)**Model configuration code as follows:****MDM7000-aaa-12345678**

Configurator code	Description
aaa -	DP: Differential pressure DGP: Double clamp seals-Gauge pressure DAP: Double clamp seals-Absolute pressure
1 -	Output signal H: 4mA~20mA, HART
2 -	Case S: Stainless steel, M20×1.5 U: Stainless steel, 1/2NPT P: Aluminium alloy, M20×1.5 N: Aluminium alloy, 1/2NPT
3 -	Display N: Without display R: Low temperature display
4 -	range
5 -	Wetted parts material
6 -	Process connection
7 -	Filling oil
8 -	Clamp flange fastener

MDM7000-aa-123456789

Configurator code	Description
aa -	GP: Gauge pressure AP: Absolute pressure
1 -	Flange type
2 -	Output signal H: 4mA~20mA, HART
3 -	Case S: Stainless steel, M20×1.5 U: Stainless steel, 1/2NPT P: Aluminium alloy, M20×1.5 N: Aluminium alloy, 1/2NPT
4 -	Display N: Without display R: Low temperature display
5 -	Range
6 -	Sensor structure
7 -	Wetted parts material
8 -	Process connection
9 -	Filling oil

Annexe to: IECEx CSA 24.0045X Issue 0

Applicant: MICRO SENSOR CO., LTD

Apparatus: MDM7000 Series Smart Pressure Transmitter



MDM7000-aa-12345678910

Configurator code	Description
aa -	LT: Single flange LP: Double flange
1 -	Output signal H: 4mA~20mA, HART
2 -	Case S: Stainless steel, M20×1.5 U: Stainless steel, 1/2NPT P: Aluminium alloy, M20×1.5 N: Aluminium alloy, 1/2NPT
3 -	Display N: Without display R: Low temperature display
4 -	Range
5 -	Wetted parts material
6 -	Clamp flange process connection
7 -	Filling oil
8 -	Clamp flange fastener
9 -	Diaphragm system
10 -	LT: Single flange LP: Double flange

The entity parameters are as follows:

Terminal +, -: Entity Parameters	
Ui: 30VDC, Ii: 100mA, Pi: 0.7W, Ci: 0μF, Li: 14.52μH	

Date: 10 September 2024

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