



Type Approval Certificate

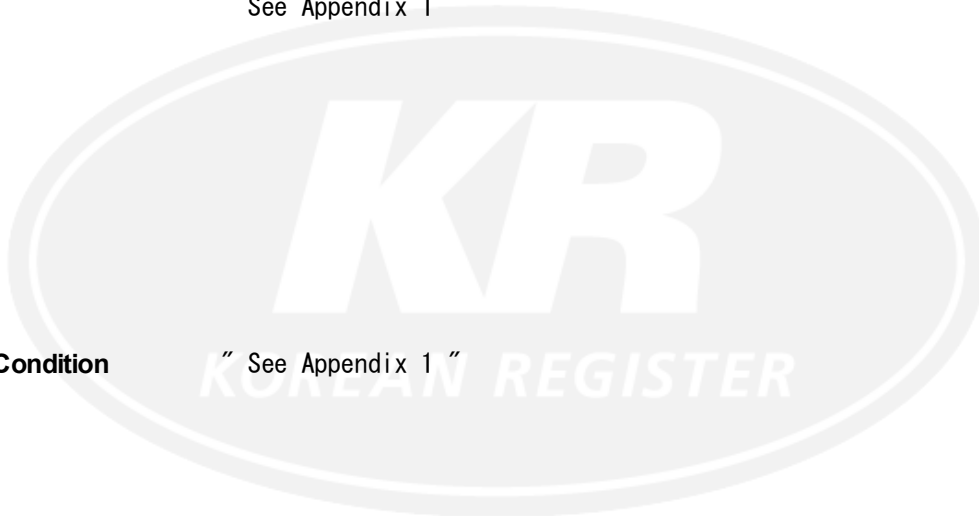
[Pressure Transmitter]

Initial Approval 5 August 2024

Manufacturer MICRO SENSOR CO., LTD.
 No.18, Yingda Road, Baoji, 721006, Shaanxi, P.R.China

Product Description Type : MDM7000

“ See Appendix 1 ”



Approval Condition “ See Appendix 1 ”

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification of Steel Ships.

This Certificate is valid until 4 August 2029
 Issued at Shanghai, China on 5 August 2024



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME24038289068) and certificate No.(NAJ50160-AE001).



KOREAN REGISTER

*General Manager of
 China Plan Approval Center
 CHINA KR Co., Ltd.*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 5 August 2024

A. Product Description

1. Product Specification

- 1) Power Supply : 24V DC
- 2) Output : 4 to 20mA with HART communication protocol
- 3) Pressure Range : 0.06 ~ 400 bar
- 4) IP Grade : IP67

2. Approved Drawings and Documents

- 1) Drawing
 - MDM7000-S-0000 ~ MDM7000-S-0008 Rev. 1
- 2) Type Approval - Product Technical Specifications

3. Test Reports, etc.

- 1) Environmental / EMC Test Report
 - S088A-2024 dated 2024-06-20
 - S088A-DC-2024 dated 2024-06-12
- 2) Ex-proof Certificate
 - GE23.7688X dated 2023-02-13
- 3) MDM7000 Operation Manual V2.1

B. Approval Condition

1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and the approved documentation.
- 2) Degree of protection is to be complied with Rule Pt. 6 Ch. 1 Sec. 2 201.2. (5).
- 3) The manufacturer is to inform this Society of all kinds of revisions of the equipment. If the changes are recognized to affect the functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.
- 4) Explosion-proof certificate by a notified/recognized Certificate Body is not covered by this certificate. Ratings and Special Conditions for safe use in hazardous areas are to be obtained from the relevant valid Ex-Certificate.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is not required.

3. Marking

- 1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

4. Others

- 1) Test condition

Test	Condition	Remark
EMC	All locations excluding the bridge and deck zone	-
Temperature	-25°C ~ +70°C	-
Vibration	Acceleration $\pm 0.7g$	-
Salt Mist	Applied	-
Degree of Protection	IP67	-

< End of Certificate >