

EU RO Mutual Recognition Type Approval Certificate

[Pressure Transmitter]



Initial Approval 10 March 2020
Manufacturer ABB S.p.A.
 Via Luigi Vaccani, 4, Tremezzina Loc. Ossuccio(CO), Italy
Product Description Type : 2600T series (266AST, 266CSH, 266DSH, 266HSH)
 " See Appendix 1 "

Approval Condition " See Appendix 1 & 2 "

THIS IS TO CERTIFY that the Product referred to herein has been inspected for the Manufacturer, pursuant the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those

EU RO Framework Document for the Mutual Recognition of Type Approval version 12.0 and
 EU RO Mutual Recognition Technical Requirements - Pressure Guages - Transmitters - Version 0.0

This Certificate is valid until 9 March 2025 subject to periodical audit.

Issued at Busan, Korea on 10 March 2020



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(ME22011182445) and certificate No.(MIL39634-MR001).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

- 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 : 10 March 2020

A. Product Description

1. System Description (Type : 266AST, 266CSH, 266DSH, 266HSH)

2600T series is gauge, absolute and differential pressure transmitters.

2. Type designation 2600T - 266abc

- a = Measure type and construction
 - A : Absolute, C : Multivariable, D : Differential, H : Gauge high overload
- b = Application
 - S : Standard construction
- c = Model code option (performance)
 - H : High performance, T : Top performance

266AST : Absolute transmitter with standard construction and top performance
 266CSH : Multivariable transmitter with standard construction and high performance
 266DSH : Differential transmitter with standard construction and high performance
 266HSH : Gauge high overload transmitter with standard construction and high performance.

3. Approved drawings and documents

1) Data sheet / Ex-proof Certificate

- Data sheet
 - 2600T - 266DSH : DS/266CSX/JSX-EN Rev. B (2018)
 - 2600T - 266DSH : DS/266DSH-EN REV. M (2018)
 - 2600T - 266HSH : DS/266HSH/NSH-EN REV. Q (2018)
 - DS/266HSH/LowP-EN Rev. D (2019)
 - 2600T - 266AST : DS/266GST/AST-EN Rev. F (2019)
- IECEx Certificate
 - IECEx FME 16.0004X, issue No.5 (2019.01.23)
 - IECEx FME 16.0003X, issue No.4 (2019.01.23)
 - IECEx FME 16.0002X, issue No.5 (2019.01.23)

4. Test Reports

1) Environmental / EMC Test Report

- Environmental Test report
 - IIME-A20/2009 T, IIME-A21/2009 T, IIME-A24/2009 T, IIME-A28/2009 T,
 - IIME-A30/2009 T, IIME-A31/2009 T, IIME-A25/2009 T, IIME-A26/2009 T,
 - IIME-A27/2009 T, IIME-A34/2009 T, 11758 Rev.00, 11791 Rev.00, TRT192-00,
 - OT-201-RRD-018, OT-201-RRD-019, OT-201-RRD-020, OT-201-RRD-021, TRQA-039 Rev.1
- EMC Test Report
 - IIME-A16/2009 T, IIME-A17/2009 T, IIME-A18/2009 T, IIME-A19/2009 T,
 - IIME-A35/2009 T, IIME-A36/2009 T, IIME-A37/2009 T, IIME-A38/2009 T,
 - 11758 Rev.00, 11791 Rev.00, TRT192-00,
 - TR-W2001-005, TR-W2001-006, TR-W2001-007, TR-W2001-008,

2) Performance Test Report

- ABB Test report
 - IIME-A09/2009 T, IIME-A10/2009 T, IIME-A11/2009 T, IIME-A12/2009 T,
 - IIME-A14/2009 T

3) Salt Mist Test report

- 2011013 Rev.0, 2011019 Rev.0

B. Approval Condition

1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and the approved documentation.
- 2) The manufacturer should inform this Society of all kinds of revisions of the equipment. If the changes are recognized to affect functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.

Product Description and/or Approval Condition

Date of Issue : 10 March 2020

- 3) Explosion-proof certification by a notified/recognized Certification Body is not covered by this certificate. Ratings and Special Condition 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 including the bridge and deck zone	-
Temperature	-25 ~ +55°C	-
Vibration	Acceleration $\pm 4.0g$	-
Salt mist	Applied	-

< End of Certificate >

KOREAN REGISTER

Endorsement for Periodical Assessment

Date of Issue : 10 March 2020

Anniversary Date : 9 March

This is to certify that the Production Quality Assurance Scheme is in compliance with the relevant requirements of the Guidance of EU RO MR for Type Approval and the Certificate is valid until 9 March 2021

■ Periodical/Confirmation/Occasional Assessment

Periodical/Confirmation/Occasional Assessment has been carried out and Certificate is valid until

Branch(Office) : _____

Date : _____

Surveyor : _____

■ Periodical/Confirmation/Occasional Assessment

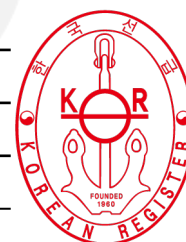
Periodical/Confirmation/Occasional Assessment has been carried out and Certificate is valid until

9 March 2023

Branch(Office) : _____ Milano Branch Office

Date : _____ 13 April 2022

Surveyor : _____ MOON Kyunghak



■ Periodical/Confirmation/Occasional Assessment

Periodical/Confirmation/Occasional Assessment has been carried out and Certificate is valid until

Branch(Office) : _____

Date : _____

Surveyor : _____

■ Periodical/Confirmation/Occasional Assessment

Periodical/Confirmation/Occasional Assessment has been carried out and Certificate is valid until

Branch(Office) : _____

Date : _____

Surveyor : _____

Note : The approval will be automatically suspended and the Certificate become invalid if not endorsed annually within 3 months after the anniversary date of this Certificate

Generic Statement

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- *American Bureau of Shipping (ABS);*
- *Bureau Veritas (BV);*
- *China Classification Society (CCS);*
- *Croatian Register of Shipping (CRS);*
- *DNV GL;*
- *Indian Register of Shipping (IRS);*
- *Korean Register (KR);*
- *Lloyd's Register Group Ltd. (LR);*
- *Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);*
- *Polish Register of Shipping (PRS);*
- *RINA Services S.p.A. (RINA);*
- *Russian Maritime Register of Shipping (RS).*

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391 /2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

< End of Certificate >