EU-TYPE EXAMINATION
CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

1. **EU-Type Examination Certificate Number:** **ITS16ATEX101534X** **Issue 4**

2. **Product:** KM26 Magnetic Level Gauge

3. **Manufacturer:** ABB Inc.

4. **Address:** 125 East County Line Road
Warminster, PA 18974
USA

5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

6. Intertek Testing and Certification Limited, Notified Body number 0359 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council dated 26 February 2014, certifies that the product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.

7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with BS EN ISO 80079-36:2016, BS EN ISO 80079-37:2016 except in respect of those requirements referred to within item 14 of the Schedule.

8. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.

9. This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

10. The marking of the product shall include the following:

II 2 G Ex h TX Gb (External)

II 1 G Ex h TX Gb (Internal)

Certification Officer: Todd L. Relyea **Date:** 16 November 2020

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11. Description of Equipment or Protective System

KM 26 (S/T) is a magnetic level gauge, suitable for liquids only.

It is available in two different models: KM26S (Side Mounting) and KM26T (Top Mounting). It is constructed from one of the following materials; 321 SS, 304/304L SS, 316/316L SS, 347SS, 904 SS, Hastelloy C-276, Hastelloy B, Teflon "S" One Coat Coated 304/304L SS, Teflon "S" One Coat Coated 316/316L SS, Halar Coated 304 SS, Halar Coated 316 SS, TEFZEL Coated 304 SS, TEFZEL Coated 316 SS, Incoloy Alloy 20, Inconel Alloy 600, Inconel Alloy 625, Incoloy Alloy 800, Incoloy Alloy 825, Monel 400, Carbon Steel, Low Temperature Carbon Steel or DUPLEX Stainless Steel, Titanium Grade 2, Titanium Grade 5, Titanium Grade 7, or Zirconium 702.

The KM26 (S and T) consists of a float, a float chamber and an optional indicator assembly. The float chamber is connected directly to the process vessel. The float chamber contains a magnet assembly and is designed and weighted to float in the process liquid.

The indicator assembly is IP68 certified and consists of a hermetically sealed glass or polycarbonate tube containing the shuttle or magnetic bar graph indicator and a graduated scale corresponding to the desired operating range. The indicator assembly is mounted parallel and in close proximity to the float chamber. Magnetic coupling exists between the float and the indicator. As the float follows changing liquid level, the indicator changes position to reflect that level due to the coupling action.

TX is limited to process temperatures up to 5°C below the maximum surface temperature allowed for each of the Temperature classes as per below table.

Maximum Process Temperature	Temperature Code	Maximum Surface Temperature
<80°C	T6	85°C
<95°C	T5	100°C
<130°C	T4	135°C
<195°C	T3	200°C
<295°C	T2	300°C
<445°C	T1	450°C

12. Report Number

Intertek Report Ref 104437131CRT-002A, 104437131CRT-002B, and 104437131CRT-002C dated 12 November 2020.

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13. Special Conditions of Certification

(a). Special Conditions of Use

- For Category II 1 G installations, parts of the equipment shall be protected so that impact or friction sparks cannot occur, taking into account rare malfunction. Measures to prevent impact or friction sparks when using the equipment include but are not limited to:
  - o Limited mechanical agitation shall be used;
  - o Use of stilling wells to mitigate effect of agitation.
  - o Limit rate of change of level to values such that friction sparks cannot occur, less than 1 m/s, at all times.
  - o Extra precaution should be taken during installation and maintenance to prevent float from traveling down/up chamber too fast while initially filling and/or pressurizing the vessel/chamber and likewise while depressurizing and emptying vessel.
- The user shall take the appropriate mitigation measures in accordance with their own risk assessment to prevent any other conditions capable of producing impact or friction sparks.
- If additional non-conductive paint/coatings are applied to the process connection, flange or instrument housing (for example to provide additional corrosion resistance) there may exist a risk of electrostatic discharge due to charge build-up on the non-conductive paint/coating layer. The user shall take the appropriate mitigation measures in accordance with their own risk assessment.
- When non-metallic sensor well or probe sleeve materials are used there is a risk of ignition from electrostatic discharge due to the flow of non-conductive media (for example in stirring vessels and pipes). The user shall decide on the suitability of the equipment for the particular application.
- The equipment temperature class rating, TX, cannot exceed the auto-ignition temperature of the process fluid contained within the chamber by a safety margin and should take into account variations, fluctuations and upset conditions of process fluid temperature that may be encountered. The end user should conduct their own risk assessment to prevent auto ignition of its process fluid.
- The equipment and any ancillary equipment attached shall be grounded using at least a 4mm2 cross sectional area connection device onto non-painted surface for good coupling/bonding.
- To help prevent a stuck float, keep process fluid debris free and when warranted carry out cleaning of chamber considering the type of process fluid in use. These actions are the responsibility of the end user.
- CHAMBERS AND FLOATS CONTAINING TITANIUM MATERIALS SHALL NOT BE USED IN OXYGEN SERVICE

(b). Conditions of Manufacture - Routine Tests

No Conditions of Manufacture

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14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104437131CRT-002C Dated: 12 November 2020.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
KM26 SERIES ATEX CERTIFICATION DRAWING	KM26-0310-1	B	11/09/2020
KM26 SERIES ATEX & CE NAMEPLATE WITH PED NOTIFIED BODY	TAG0264	C	09/10/2020
KM26 SERIES ATEX NAMEPLATE WITH CE NOTIFIED BODY	TAG0265	B	09/10/2020
Operation instruction manual OI/KM26-EN KM26 Magnetic level gauges	OI/KM26-EN	J	10.2020

16. Details of Certificate changes Issue 4

Description Drawings and Documents

- Updated drawing From: KM26 SERIES ATEX CERTIFICATION DRAWING rev A dated 10-5-2020 TO: rev B dated 11-09-2020
- Removed reference to static dissipative coatings on titanium and zirconium components