



1. EU-TYPE EXAMINATION CERTIFICATE

2. Equipment and Protective systems intended for use in potentially explosive atmospheres:

Directive 2014/34/EU

3. EU-Type Examination Certificate Number: **KRH 22 ATEX 1025X**
4. Equipment or protective system: **Float Type Level Switch (SMC-7)**
5. Manufacturer: **SEOJIN INSTECH CO., LTD.**
6. Address: **14 Dunchon-daero 457beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea**
7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. The KRH certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive 2014/34/EU of 26 February 2014.

The examination and test results are recorded in the confidential report listed in section 16.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-1:2014

10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
11. This EU-Type Examination Certificate relates only to the design and construction of the specified equipment or protective system in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacturing process and supply of this equipment or protective systems. These are not covered by this certificate.
12. The marking of the equipment or protective system shall include the following:

 **II 2 G Ex db IIC T6 Gb**

This certificate is issued at Athens on 2022-11-25, under the authority of the Hellenic Republic of Greece by KR Hellas Ltd., Notified Body No. 2198.



Dr. Nikos Katiforis
Quality Manager of KR Hellas Ltd



13.

SCHEDULE

14. **EU-Type Examination Certificate KRH 22 ATEX 1025X**

15. **Description of equipment or protective system**

The Float Type Level Switch (SMC-7) is designed for;

1) This SMC-7 is a method to output contacts using Float Type Level Switch. This product can be installed in non-hazardous areas and in place where explosive gas atmosphere is likely to occur in normal operation occasionally.

The level switch is operated on the principle that a magnetic field passes through non-magnetic substance stainless steel. In this case, a core magnetic substance connected to float will be moved up and down within STEM connected to the chamber.

While this core moves up and down, it actuates the dry contact switch containing a permanent magnet. The inside of the STEM plays either as a role to be interrupted from the pressurized part or chamber or as a guided post letting the core move up and down.

The Float Type Level Switch (SMC-7) is designed for use in potentially explosive atmosphere of Gas Group IIC in Zone 1. The body consist of a Head, Head cover and O-ring. The enclosure body is made of stainless steel (STS316SS or STS304)

The equipment has the degree of protection "IP65" in accordance with IEC 60529 standard after preconditioning according to IEC 60079-0.

2) Electrical Ratings

- AC 250 V, 10 A

- DC 125 V, 0.6 A

3) Marking

Warning Marking

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

The equipment shall also bear the usual marking required by the manufacturing standards applying to such equipment.

16. **Descriptive documents**

Report No.: KRH-ATEX-0054-2022





17. Specific Conditions of Use

- 1) Ambient temperature range: -20 °C to +60 °C
- 2) Contact the manufacturer for information on the dimensions of flameproof joints.
- 3) For entries, use suitably Ex certified cable glands and blanking elements only with a minimum IP degree in accordance with the marking.
- 4) The service temperature is 74 °C at entry point. The user shall see manufacturer's instructions for proper selection of cable and cable entry devices.

18. Essential Health and Safety Requirements

Covered by the standards listed at 9.

19. Routine Verifications and Tests

Overpressure test in accordance with clause 16.1 of EN 60079-1 shall be carried out for flameproof enclosure (12.5 bar)

20. Drawings and Documents

Number	Issue	Date	Description
SJ-M015-DWG-AS001-EX	0	2021-09-29	ASSEMBLY SECTION DRAWING
SJ-M015-DWG-PB002-EX	0	2021-09-29	HEAD
SJ-M015-DWG-PB003-EX	0	2021-09-29	HEAD COVER
SJ-M015-DWG-PB004-EX	0	2021-09-29	ROD
SJ-M015-DWG-PB005-EX	0	2021-09-29	COUPLING
SJ-M015-DWG-PB006-EX	0	2021-09-29	CORE
SJ-M015-DWG-PB007-EX	0	2021-09-29	CHAMBER
SJ-M015-DWG-PB008-EX	0	2021-09-29	SPACER
SJ-M015-DWG-PB009-EX	0	2021-09-29	HEAD COUPLING
SJ-M015-DWG-PB010-EX	0	2021-09-29	SPIRAL WOUND GASKET
SJ-M015-DWG-PB011-EX	0	2021-09-29	STEM
SJ-M015-DWG-PB012-EX	0	2021-09-29	MOUNT COUPLING
SJ-M015-DWG-PB013-EX	0	2021-09-29	CAP
SJ-M015-DWG-PB014-EX	0	2021-09-29	FLOAT CAP
SJ-M015-DWG-PB015-EX	0	2021-09-29	CHAMBER MOUNT BRANCH
SJ-M015-DWG-PB016-EX	0	2021-09-29	MOUNT BRANCH
SJ-M015-DWG-PB017-EX	0	2021-09-29	SWITCH
SJ-M015-DWG-PB018-EX	0	2021-09-29	NAME PLATE



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Certificate No:
KRH 22 ATEX 1025X
Issue Number: 0
Date of initial issue: 2022-11-25
Date of reissue:
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21. **Details of Certificate changes**

Issue Number	Issue Date	Description
0	2022-11-25	Initial issue

End of Certificate

