

OBAC

Ośrodek Badań, Atestacji i Certyfikacji Sp. z o.o.
44-121 Gliwice, ul. Łabędzka 21

(1) **EU-TYPE EXAMINATION CERTIFICATE**

(Translation)

- (2) Equipment, components and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.
- (3) Type examination certificate No: **OBAC 19 ATEX 0358X**
- (4) Product: **Displacement Type Level Switch SMC**
- (5) Manufacturer: **SeoJin Instech CO., Ltd**
- (6) Address: 14. Dunchon-daero 457beon –gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea
- (7) This equipment, component or protective system and any of its approved version is specified in this certificate and in documents listed in p. 19.
- (8) The Institute for Research and Certification „OBAC” Ltd., notified body No.1461 in accordance with Article 17 of the European Council Directive 2014/34/EU of February 26, 2014, certifies that this equipment, component or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment, component or protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. OBAC/19/ATEX/0358.
- (9) Compliance with the Safety Requirements has been assured by conformity with:
- EN IEC 60079-0:2018** **EN 60079-31:2014**
- (10) If the sign „X” is placed after the certificate number, it indicates that the product concerned is subject to special conditions for safe use specified in the schedule to this certificate.
- (10) This EU-type examination certificate relates only to the design, evaluation and tests of the specified equipment, component or protective system according to the Directive 2014/34/EU. The certificate does not apply to further requirements of the Directive relating to the manufacture and placing on the market of this equipment, component or protective system.
- (12) The marking of the equipment, component or protective system must include the following:

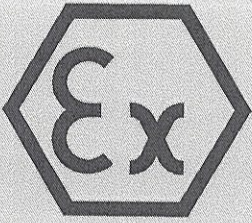
 **II 2 D Ex tb IIIC T85°C Db**



**Certification Body
Manager**

Piotr Tarnawski M.Com.

Gliwice, 29 October 2019



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(13) **SCHEDULE**
(14) **to the EU-Type Examination Certificate**
No. OBAC 19 ATEX 0358X

(15) Ex Product description:

Level Switch SMC is designed for continuous control of fluid levels in tanks. Level Switch SMC is a liquid level indicator, whose operating principle is based on the float's movement according to the changing liquid level. The float is connected by a coil spring to a movable rod moving in the casing tube. At the end of the rod is a core that slides between the two magnets "A" and "B". The magnet "A" is a movable contact. Magnet "B" is a fixed contact. In the case of an acceptable level of liquid in the tank, the core is located between the magnets "A" and "B", and the end of the contact "A" mechanically presses the microswitch arm. If the level of liquid in the tank decreases, the float falls with the liquid by pulling the rod with it. The core with the rod slides down, sliding out from between the magnets "A" and "B", and the end of the "A" contact deflects, releasing the pressure on the microswitch arm, which activates the next planned actions.

Rated data:

Application	Liquid	
Ambient temperature	-20°C ≤ Ta ≤ +60°C	
Max process temperature is	-40°C - +230°C (UNFREEZE).	
Specific Gravity	0.7 ~ 1.3	
Pressure	30 kgf/cm2 (MAX.)	
Enclosure	Weather Proof Explosion Proof	
Output	1 ~ 4 SPDT, 1 ~ 4 DPDT	
Range	5 m MAX.	
Switch type	Micro Switch	
Contact rating	AC 250V 10A/ DC 125V 0.6A AC 250V 5A/DC 125 V 0.5 A	
Cable gland	PF 1/2", PF 3/4", PT 1/2", PT 3/4"	
Material	Housing	ADC12 / AC2B
	Flange	C.S, 304SS, 316SS
	Spring	304SS, 316DD & INCONEL
	Chain	304SS, 316SS & MONEL
	Displacer	304SS, 316SS & MONEL

Marking: Displacement Type Level Switch. Model: SMC.

(16) **Displacement Type Level Switch SMC** meet the requirements for devices with explosion proof design and may be used as a device of Group II category 2D.

(17) Special conditions for safe operation:

- The Displacement Type Level Switch are not intended to be repaired.
- Ambient temperature range: -20°C ≤ Tamb ≤ +60°C





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(13)

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to the EU-Type Examination Certificate
No. OBAC 19 ATEX 0358X

(18) The compliance with Safety Requirements has been assured by compliance with standards shown in p.9 of this certificate.

(19) List of agreed documentation:

- Instruction Manual no SJ-M013-MNU-DC001, REV.: 1 for Displacement Type Level Switch model: SMC. SeoJin Instech CO., Ltd. 14. Dunchon-daero 457beon –gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea.

- Drawing:

No.	Drawing No.	Description	Rev.	Date:
1	SSS06SS-S901-E	Volume calculation	0	2019.07.19
2	SSS06SS-S001-E	Assembly drawing	7	2019.09.24
3	SSS06SS-S002-E	Ordering information	0	2019.09.03
4	SSS06RB-S001-EX	Spring guard and stem ass'y	5	2019.08.13
5	SSS06PB-S001-E	Housing	5	2019.09.24
6	SSS08PB-S002-E	Base cover	4	2019.09.24
7	SSS08PB-S003-E	Base cover	5	2019.09.24
8	SSS00PB-S102-E	Name plate	5	2019.10.28
9	SSS06PB-S902-E	Bracket cover	1	2019.08.13
10	SJ-M013-DWG-PB004	Connector	3	2018.01.08
11	SJ-M013-DWG-PB008	Hex nut	2	2019.09.24

