

# TEST REPORT



Report No. : 20-054606-01-2

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## 1. Client

Name : Seojin Instech Co., Ltd.

Address : 12, Sagimakgol-ro, 148beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea

Date of Receipt : 2020. 08. 26

2. Use of Report : To verify IP grade to IEC 60529

## 3. Test Sample

Description : FLOAT TYPE LEVEL SWITCH

Manufacturer : Seojin Instech Co., Ltd.

Model Name : ST-1S-A-1-A-1-OP-1-B-6

Serial Number : -

Remark : Please refer to the clause 1.4 regarding the test sample and results.

4. Date of Test : 2020. 08. 31. ~ 2020. 08. 31.

## 5. Location of Test :

■ KTL Permanent Test Lab (Address : 87, Digital-ro 26-gil, Guro-gu, Seoul, KOREA)



□ On Site Testing

6. Test Standard/Method : IEC 60529:1989 +AMD1:1999+AMD2:2013 CSV/COR2:2015

7. Test Results : Pass (IP66)

### Note :

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4. The results marked as '※' are out of KOLAS accreditation scope.

Affirmation	Tested by Name : Chae Hui-dong  (Signature)	Technical Manager Name : Min Yeong-seung  (Signature)
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The above test report is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

2020. 09. 07

## Korea Testing Laboratory

Accredited by KOLAS, Republic of KOREA



87, Digital-ro 26-gil, Guro-gu, Seoul, KOREA Tel.+82-2-860-1537 Fax. +82-2-860-1549

FP104-03-00



※ 위 마크는 추후 전자확인증 대조 프로그램에서 원본대조시 사용되는 2D코드입니다.



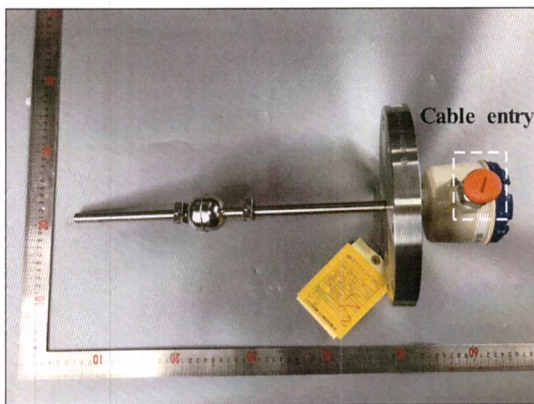
## 1. Summary of Test

### 1.1 Test Standard

This test was conducted in accordance with "IEC 60529:1989 +AMD1:1999+AMD2:2013 CSV/COR2:2015".

### 1.2 Test Sample

- Description : FLOAT TYPE LEVEL SWITCH
- Model Name : ST-1S-A-1-A-1-OP-1-B-6
- Dimensions : Diameter 95 mm × 101 mm



[Fig. 1: Sample]



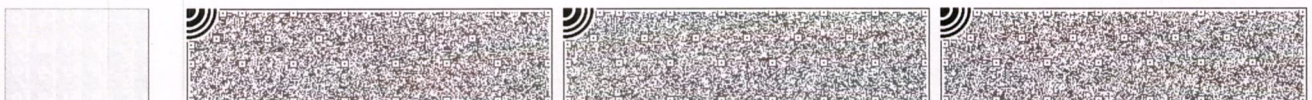
[Fig. 2: Sample]

### 1.3 Test Environment

- Temperature : (23.0 ± 2.0) °C
- Humidity : (50 ± 2) % R.H.
- Atmospheric Pressure : (100.1 ± 2.0) kPa

### 1.4 Remark

The cable entry was assembled with the stop plug(Refer to Fig. 1)





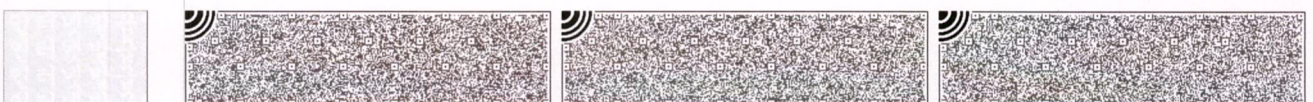
2. Results

Code Letters	IP	Conditions	Results
1st Characteristic numerals Against ingress of solid foreign objects	6	<b>2.1 Dust Test Conditions</b> <ul style="list-style-type: none"> <li>Talcum powder(mesh) wire diameter: 50 <math>\mu</math>m</li> <li>Talcum powder(mesh) wire width: 75 <math>\mu</math>m</li> <li>Amount of talcum powder of the test chamber: 2 kg/m<sup>3</sup></li> </ul> <b>2.2 Dust Test Contents</b> <ul style="list-style-type: none"> <li>Volume of the enclosures: About 312.6 cm<sup>3</sup></li> <li>Reduction air pressure: -2.00 kPa (-200 mmH<sub>2</sub>O)</li> <li>Flow rate: About 0.3 L/min</li> <li>Extraction rate per hour: About 57.58 volumes/h</li> <li>Test duration: 2 h</li> </ul>	Pass
2nd Characteristic numerals Against ingress of water with harmful effects	6	<b>2.3 Water Test Conditions</b> <ul style="list-style-type: none"> <li>Internal diameter of the nozzle: 12.5 mm</li> <li>Delivery rate: (100 <math>\pm</math> 5) L/min</li> <li>Core of the substantial stream: Circle of 120 mm diameter at 2.5 m distance from the nozzle</li> <li>Distance from nozzle to enclosure surface: 2.8 m</li> </ul> <b>2.4 Water Test Contents</b> <ul style="list-style-type: none"> <li>Test duration: 3 min</li> </ul>	Pass

3. List of Testing Equipments

Equipment	Manufacture	Model	ICP No.	Date of Calibration	Calibration Laboratory
Thermo-hygrometer	TESTO	Testo 622	ICP20140892	2020. 04. 09	KTL
Vernia Caliper	MITUTOYO	CD-20APX	ICP20160207	2020. 05. 14	KTL
Flow Meter	DWYER	RMA-13-SSV	ICP20150476	2020. 05. 11	KTL
Flow Meter (Nozzle)	KOMETER	GA-101	ICP20150325	2020. 04. 13	KOMETER
Nozzle	SCM	NONE	ICP20190032	2020. 01. 10	KTL

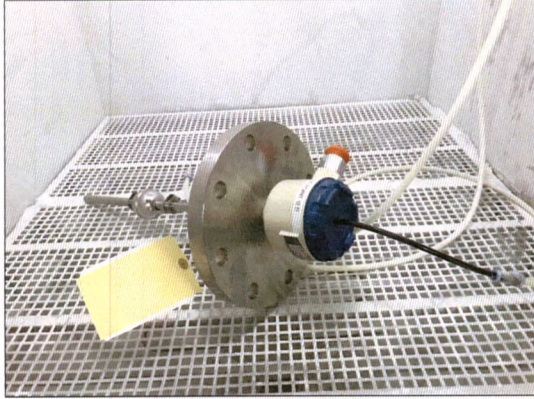
FP104-04-00



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#### 4. Test Figures



[Fig. 3: IP6X]



[Fig. 4: IPX6]

- End -

