

# TEST REPORT



Report No. : 17-015676-03-2

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## 1. Client

Name : SeoJin Instech Co., Ltd

Address : 14, Dunchon-daero 457beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea

Date of Receipt : 2017. 03. 14

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

## 3. Test Sample

Description : Capacitance type level switch

Manufacturer : SeoJin Instech Co., Ltd

Model Name : SCAP-5

Serial Number : -

Remark : -

4. Date of Test : 2017. 04. 06. ~ 2017. 04. 14.

5. Test Standard/Method : IEC 60529: 2001

6. Testing Environment : Temperature : ( 17.8 ± 2.0 ) °C , Humidity : ( 37 ± 2 ) % R.H.

7. Test Results : Pass (IP66)

Note : 1. The test results contained apply only to the test sample(s) supplied by the client  
2. This test report shall not be reproduced in full or in part without approval of the KTL in advance.

Affirmation	Tested by	 (Signature)	Technical Manager	 (Signature)
	Name : Chae Hui-dong		Name : Kim Ji-hoon	

The above test report is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

2017. 04. 18

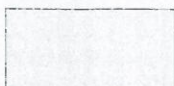
## Korea Testing Laboratory

Accredited by KOLAS, Republic of KOREA



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FP202-03-03



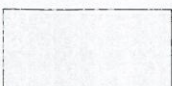
※ 위 마크는 추후 전자확인증 대조 프로그램에서 원본대조시 사용되는 2D코드입니다.



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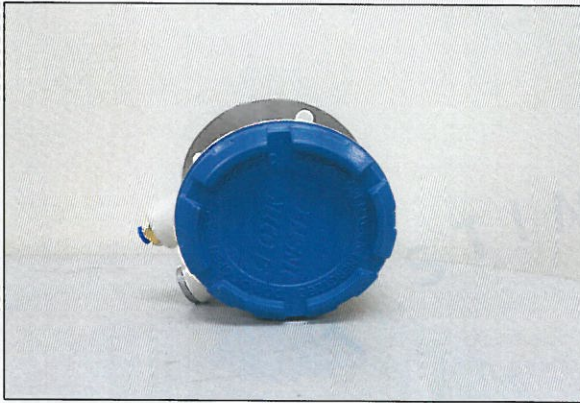
## 1. Summary of Test

### 1.1 Test Standard

This test was conducted in accordance with "IEC 60529: 2001".

### 1.2 Test Sample

- Description : Capacitance type level switch
- Model Name : SCAP-5
- Dimensions : Diameter of 121 mm × 235 mm (except the flange)



[Fig. 1: Head]



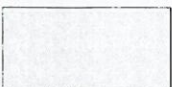
[Fig. 2: Side]

### 1.3 Test Environment

- Temperature :  $(17.8 \pm 2.0) ^\circ\text{C}$
- Humidity :  $(37 \pm 2) \% \text{ R.H.}$
- Atmospheric Pressure :  $(100.1 \pm 2.0) \text{ kPa}$

### 1.4 Remark

N/A



## 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 890 cm<sup>3</sup></li> <li>Reduction air pressure: -2.00 kPa (-200 mmH<sub>2</sub>O)</li> <li>Flow rate: 0.12 L/min</li> <li>Extraction rate per hour: 8.09 volumes/h</li> <li>Test duration: 8 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	2016. 05. 10	KTL
Vernia Caliper	MITUTOYO	CD-20APX	ICP20160207	2016. 05. 19	KTL
Flow Meter (Nozzle)	KOMETER	GA-101	ICP20150325	2016. 05. 13	DDHT
Flow Meter (Dust Chamber)	DWYER	RMA-13-SSV	ICP20150476	2016. 05. 11	KTL

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#### 4. Test Figures



[Fig. 3: IP 6X]



[Fig. 4: IP X6]

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