

TEST REPORT



Report No. : 20-054606-02-2

Page of Pages : (1) / (4)



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 : MAGNETIC FLOAT TYPE LEVEL SWITCH

Manufacturer : Seojin Instech Co., Ltd.

Model Name : SHM-B-1-OP-2-A-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 :

1. This report is limited to samples submitted by the applicant and is prohibited from being used for legal or other reasons of dispute.
2. This document is valid only in its original document, and any reproduced copies and electronic copies are not valid. ("Original" means all the reports provided by the KTL including the security procedures.)
3. You can check the contents of the report by scanning the 2D Barcode below. The identity of original reports can be checked in the "Confirm original report" window of the customer's homepage (customer.ktl.re.kr).
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)
-------------	---	---

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.

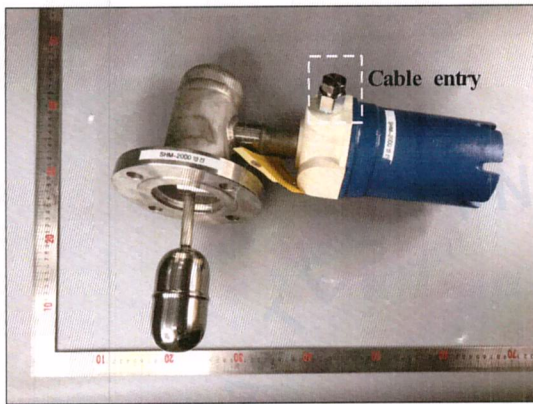
1. Summary of Test

1.1 Test Standard

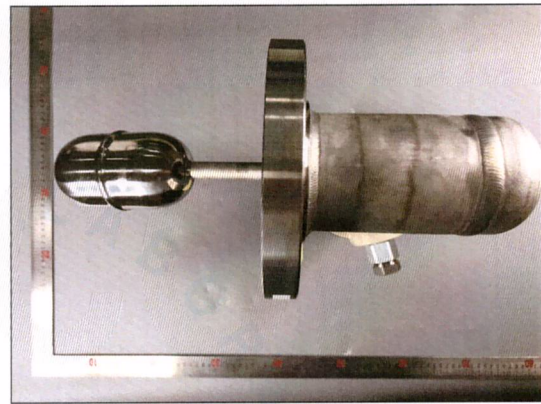
This test was conducted in accordance with "IEC 60529:1989 +AMD1:1999+AMD2:2013 CSV/COR2:2015".

1.2 Test Sample

- Description : MAGNETIC FLOAT TYPE LEVEL SWITCH
- Model Name : SHM-B-1-OP-2-A-6
- Dimensions : Diameter 135 mm × 450 mm



[Fig. 1: Sample]



[Fig. 2: Sample]

1.3 Test Environment

- Temperature : $(23.0 \pm 2.0) ^\circ\text{C}$
- Humidity : $(50 \pm 2) \% \text{ R.H.}$
- Atmospheric Pressure : $(100.1 \pm 2.0) \text{ kPa}$

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	2.1 Dust Test Conditions <ul style="list-style-type: none"> Talcum powder(mesh) wire diameter: 50 μm Talcum powder(mesh) wire width: 75 μm Amount of talcum powder of the test chamber: 2 kg/m³ 2.2 Dust Test Contents <ul style="list-style-type: none"> Volume of the enclosures: About 1 540 cm³ Reduction air pressure: -2.00 kPa (-200 mmH₂O) Flow rate: About 0.4 L/min Extraction rate per hour: About 15.58 volumes/h Test duration: 8 h 	Pass
2nd Characteristic numerals Against ingress of water with harmful effects	6	2.3 Water Test Conditions <ul style="list-style-type: none"> Internal diameter of the nozzle: 12.5 mm Delivery rate: (100 ± 5) L/min Core of the substantial stream: Circle of 120 mm diameter at 2.5 m distance from the nozzle Distance from nozzle to enclosure surface: 2.8 m 2.4 Water Test Contents <ul style="list-style-type: none"> Test duration: 3 min 	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



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

4. Test Figures



[Fig. 3: IP6X]



[Fig. 4: IPX6]

- End -

