



TEST REPORT

Kunde: <i>Client:</i>	WENZHOU SINO-AMIGO IMPORT & EXPORT CORP		
Adresse: <i>Address:</i>	A5 Building, Sulv Industrial Zone, Yueqing City, Zhejiang Province 325604, P.R. China		
Hersteller: <i>Manufacturer:</i>	ZHEJIANG SINO ELECTRO-TECHNIC CO., LTD.		
Adresse: <i>Address:</i>	A5 Building, Sulv Industrial Zone, Yueqing City, Zhejiang Province 325604, P.R. China		
Name der Marke: <i>Brand Name:</i>	SINOAMIGO		
Beschreibung des Produkts: <i>Product Description:</i>	Flood socket		
Modelle: <i>Models:</i>	SOP-2ZNC, SOP-2ZSC, SOP-2ZBC, SOP-2ZCC, SOP-2ZMBC, SOP-2ZNFC, SOP-2ZSC, SOP-2ZBC, SOP-2ZCC, SOP-2ZMBC, SOP-2ZNFC, SOP-2ZSA, SOP-2ZNA, SOP-2ZBA, SOP-2ZCA, SOP-2ZMBA, SOP-2ZNFA		
Bewertung: <i>Rating:</i>	N/A		
Verfahren: <i>Method:</i>	IEC 60529:1989+A1:1999+A2:2013		
Prüfergebnis*: <i>Test result*:</i>	Pass		
Datum der Prüfung: <i>Date of Test:</i>	Datum der Emission: <i>Date of Issue:</i>	Klassifizierung: <i>Classification:</i>	Gegenstand der Prüfung: <i>Test item:</i>
2024/01/31	2024/01/31	Commission Test	IP44 Test
Prüflabor (Testlabor) / Testing Laboratory: Ningbo LCS Standard Technology Service Co., Ltd. 101-106, 202-206, Building 037, No. 166, Jinghua Road, Meixu Street, Ningbo High-tech Zone, Yinzhou District, Ningbo City, Zhejiang Province, China			
Test von/Test by:	Check von/Check by:	Genehmigt von/Approved by:	
Eric Zhang/ Project Engineer	Laola Li/ Director	Adam Peng/ Manager	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.			
<i>Remark: The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacturer cannot be derived therefore.</i>			





General remarks and General product information:

- The general information of applicant and manufacturer (such as the name and address), product name, model/type reference, trademark and other similar information contained in this report are all provided by the applicant, the laboratory is not responsible for verifying its authenticity.
- The applicant states that all models have same construction except for different model name and enclosure color.
- According to the applicant's requirement, the model SOP-2ZNC was chosen as representative model to perform all test.
- All tests in this report are only for the product front plane, other parts are not evaluated and is sealed during testing.

Equipment used during test:

ID Number	Instrument	Model/ Type	Calibration Date
NLCS-S-103	Test needle	AGP13	2023/5/20
NLCS-S-101	Spatter/rush showering equipment	BL	2023/3/24
NLCS-S-074	Digital hygrometer thermometer	HTC-1	2023/5/20



Test Item:

Acceptance conditions for first characteristic numerals 4

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 20°C to 30°C

Relative humidity: 25 %RH to 75 %RH

Test samples:

Clean and new sample were be tested.

Test Method:

The protection is satisfactory if the full diameter of the probe specified in table 6 does not pass through any opening.

Acceptance Conditions:

Not pass through any opening

Test Result:

Pass Fail

Table 6 – Access probes for the tests for protection of persons against access to hazardous parts

4, 5, 6	D	<p style="text-align: center;">Test wire 1,0 mm diameter, 100 mm long</p> <p style="text-align: right;">IEC 276/01</p>	1 N ± 10 %
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**Test Item:**

Test for second characteristic numeral 4 with oscillating tube or spray nozzle

Atmospheric conditions for water or dust tests:

Air pressure: 86 kPa to 106 kPa

Temperature range: 15°C to 35°C

Relative humidity: 25 %RH to 75 %RH

Test samples:

Clean and new sample were be tested

Test Method:

The test is made using the test device described in figure 4 in accordance with the relevant product standard.

a) Conditions when using the test device as in figure 4 (oscillating tube): The oscillating tube has spray holes over the whole 180° of the semicircle. The total flow rate is adjusted as specified in table 9 and is measured with a flow meter. The tube is caused to oscillate through an angle of almost 360°, 180° on either side of the vertical, the time for one complete oscillation (2 × 360°) being about 12 s. The duration of the test is 10 min.

If not specified otherwise in the relevant product standard, the support for the enclosure under test is perforated so as to avoid acting as a baffle and the enclosure is sprayed from every direction by oscillating the tube to the limit of its travel in each direction.

b) Conditions when using the test device as in figure 5 (spray nozzle):

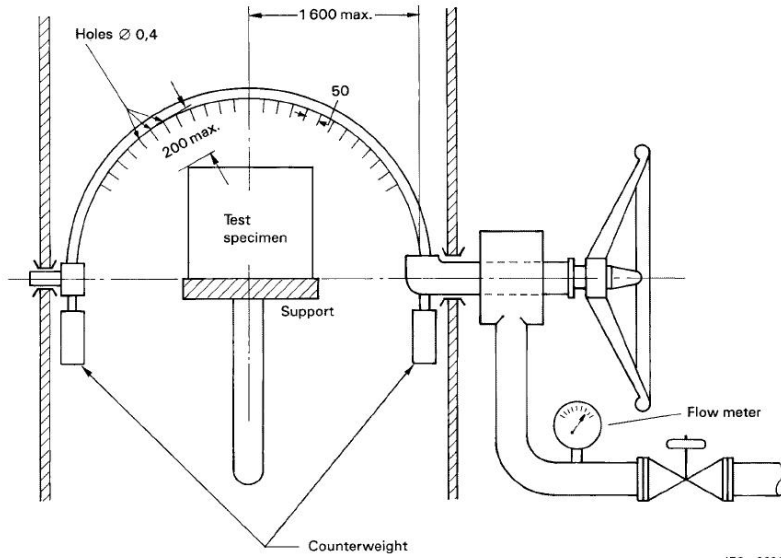
The counterbalanced shield is removed from the spray nozzle and the enclosure is sprayed from all practicable directions.

The rate of water flow and the spraying time per unit area are as specified in 14.2.3(table 9).

Test Result:

Pass Fail





Dimensions in millimetres

NOTE The range of holes is shown as for second characteristic numeral 3 (see 14.2.3 a).

Figure 4 – Test device to verify protection against spraying and splashing water; second characteristic numerals 3 and 4 (oscillating tube)

Table 9 – Total water flow rate q_v under IPX3 and IPX4 test conditions – Mean flow rate per hole $q_{vI} = 0,07$ l/min

Tube radius <i>R</i> mm	Degree IPX3		Degree IPX4	
	Number of open holes <i>N</i> ¹⁾	Total water flow q_v l/min	Number of open holes <i>N</i> ¹⁾	Total water flow q_v l/min
200	8	0,56	12	0,84
400	16	1,1	25	1,8
600	25	1,8	37	2,6
800	33	2,3	50	3,5
1 000	41	2,9	62	4,3
1 200	50	3,5	75	5,3
1 400	58	4,1	87	6,1
1 600	67	4,7	100	7,0

¹⁾ Depending on the actual arrangement of the hole centres at the specified distance, the number of open holes *N* may be increased by 1.



Photo Documentation:

Photo 1: Overall view of model SOP-2ZNC

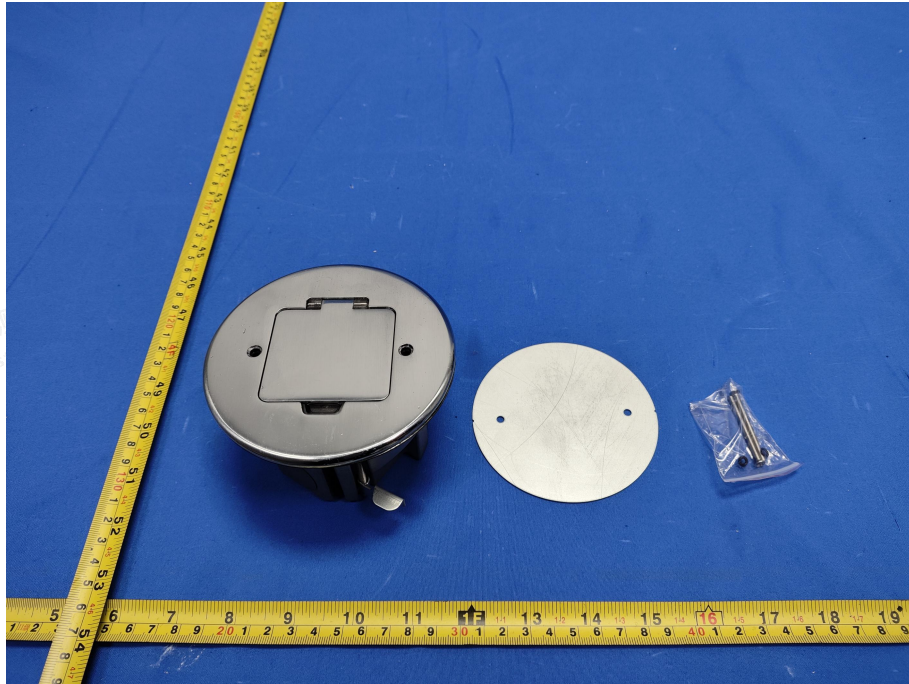


Photo 2: Overall view of model SOP-2ZNC



Photo Documentation:

Photo 3: Overall view of model SOP-2ZNC



Photo 4: Overall view of model SOP-2ZNC



Photo Documentation:

Photo 5: Overall view of model SOP-2ZNC

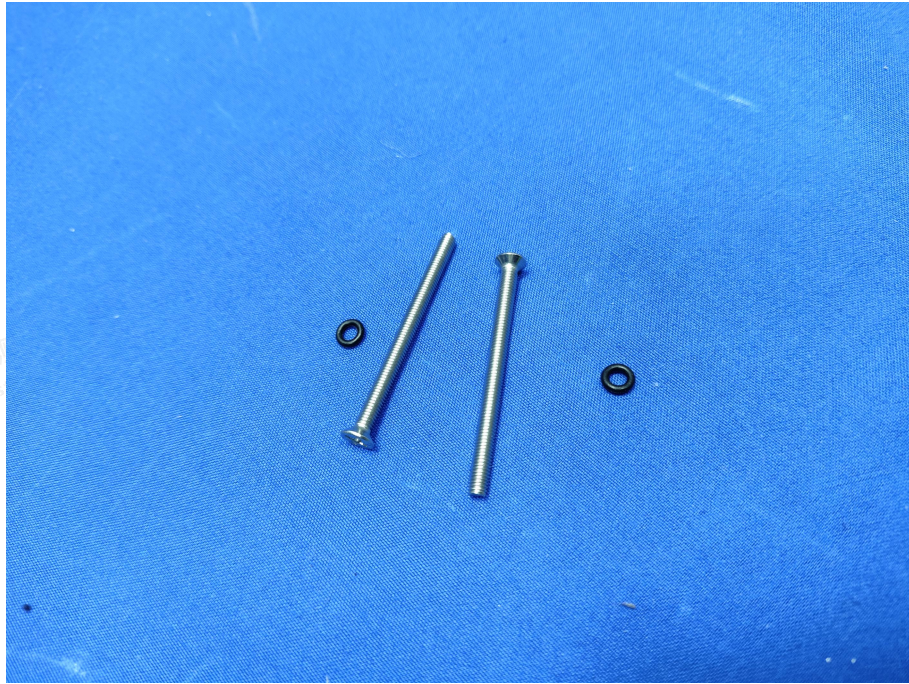


Photo 6: Front plane view after fixed of model SOP-2ZNC



Photo Documentation:

Photo 7: Overall view of model SOP-2ZNC

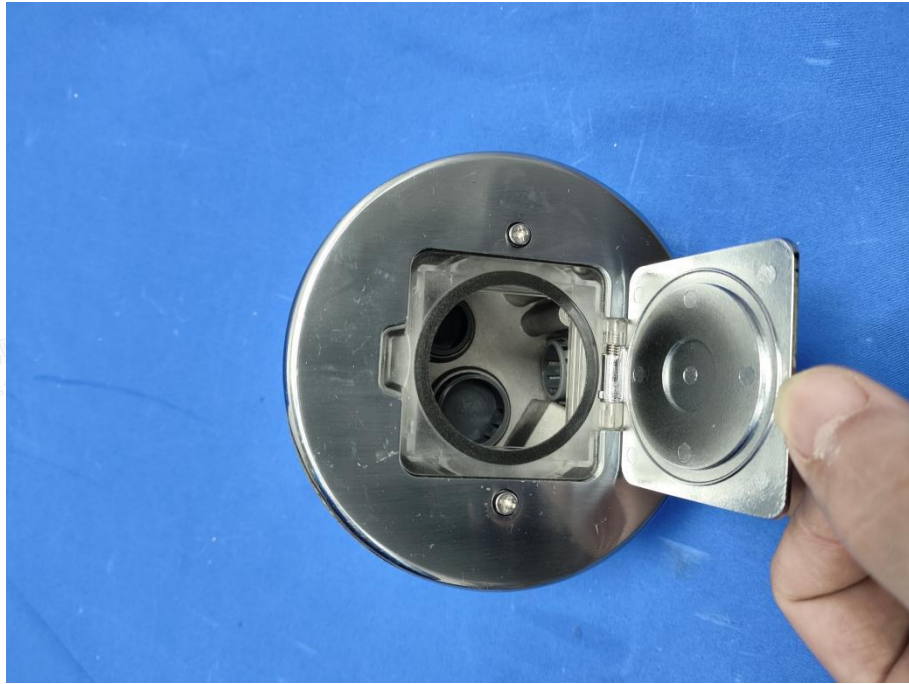


Photo 8: IP4X test of model SOP-2ZNC

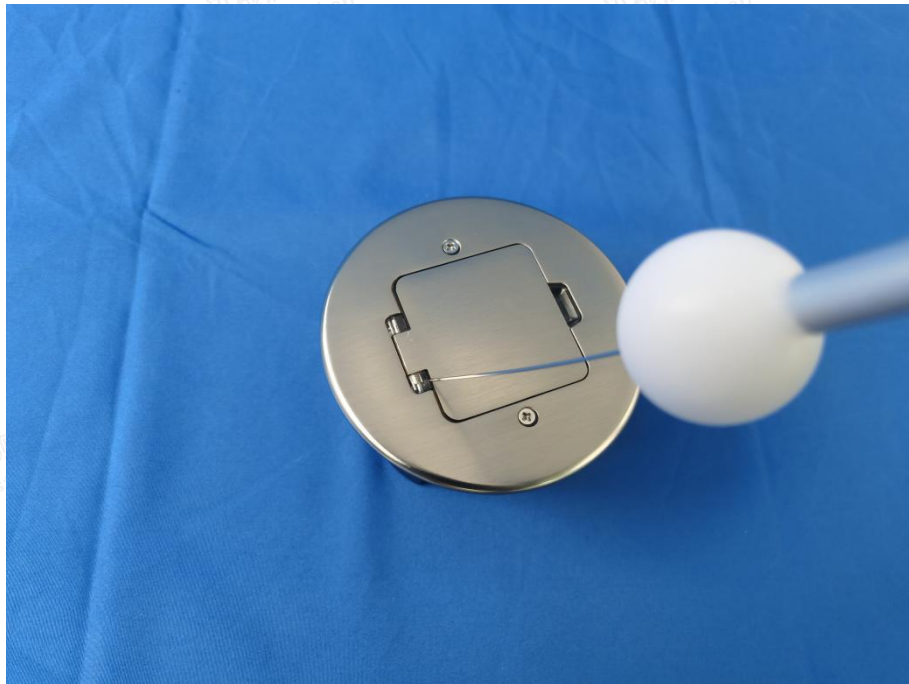




Photo Documentation:

Photo 9: IPX4 test of model SOP-2ZNC



----- End of Test Report-----

