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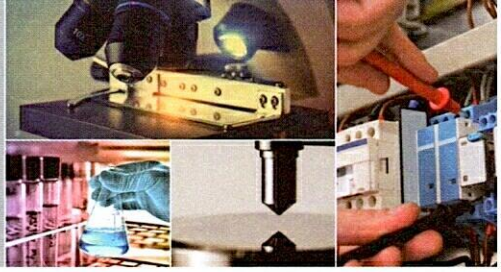


TEST REPORT

for Ingress Protection (IP67) Test carried out on DOUBLE COMPRESSION CABLE GLAND E1W-20L

Customer:

AKSHAR BRASS INDUSTRIES

Plot No 46,47,50, 51,

Survey No. 246,245,

at Naghedi Industrial Area,

Jamnagar - 361006, Gujarat, India.

Test Report No: E-3194-M

Discipline: Electrical Testing

Group: Environmental Test Facility

Sample Received Date: 13.08.2021

ULR No.: TC574321000016411F

Description of the Product:

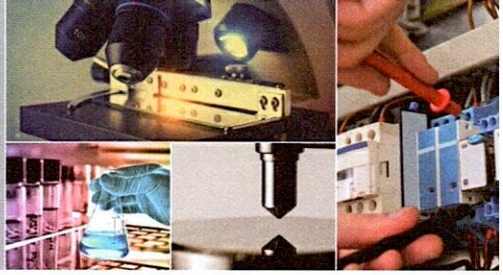
Product	Size
Double Compression Cable Gland	E1W-20L

Date: 30th August 2021

For ELCA LABORATORIES

Reviewed & Authorised by
Authorised Signatory
Kartik Iyer / Hemant Ghare
C.E.O. / Senior Engineer

Harshali Chaudhari
Checked by



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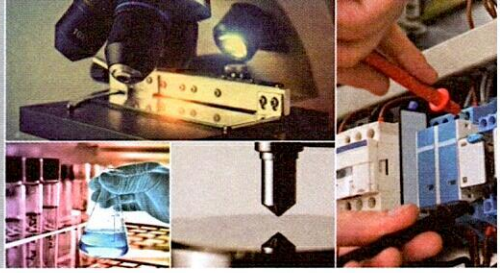
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1.0 GENERAL TEST DESCRIPTION

This Report presents the result of the Ingress Protection Test performed on Double Compression Cable Gland E1W-20L sample submitted by M/s. Akshar Brass Industries Sample is identified as **E-3194-M.**

Customer Challan No.: Nil **dated** 11.08.2021

Our Quotation / offer no.: ELCA/QUO/21-22/394 **dated** 14.08.2021

Description of the Product:

Product	Size
Double Compression Cable Gland	E1W-20L

All tests were carried out as per customer's requirements derived from the following standards.

APPLIED STANDARD: -

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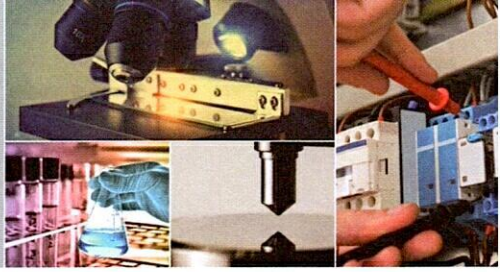
1. **IEC 60529:2013** **Degrees of Protection provided by enclosures (IP Code)**
   a) Tests for protection of person against access to hazardous parts (First Numeral: 6) as per Table No. 6 and Clause No. 12.2
   b) Tests for protection against solid foreign object (First Numeral: 6) as per Table No. 7 and Clause No. 13.4
   c) Tests for protection against Water (Second Numeral: 8) as per Table No. 8 and clause No. 14.2.7

   Acceptance conditions:
   a) Tests for protection of person against access to hazardous parts as per Clause No. 12.3
   b) Tests for protection against solid foreign object as per Clause No. 13.6.2
   c) Tests for protection against Water as per Clause No. 14.3



2.0 TEST DATA

Test Laboratory	ELCA LABORATORIES: Plot No. - Gen-62, TTC Industrial Area, MIDC, Mahape, Navi Mumbai – 400710.
Test Date	a) Test for protection of person against access to hazardous parts on 24th August 2021. b) Test for protection against solid foreign object 24th August 2021. C) Test for protection against Water on 25th August 2021.
Tested By	Mr. Hemant Ghare
ELCA ID No.	E-3194-M

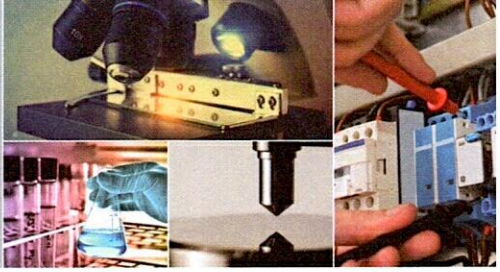
3.0 ENVIRONMENT CONDITIONS

Tests have been performed in a controlled laboratory environment, where the environmental conditions are maintained within the applicable ranges as follows.

Ambient Temperature	15°C - 35°C
Relative Humidity air	25% - 75%
Air pressure	86 kPa to 106 kPa (860 mbar to 1 060 mbar)

4.0 EQUIPMENT USED

TEST	Equipment Used	ELCA ID	Calibration Due on
Ingress Protection Test (IP6X)	Rigid Steel Rod of 1.0 mm dia. Object Probe	IPD/04	24.7.2022
	Dust Chamber	ENV/026	--
	Digital Timer (Dust Chamber)	ENV/026/01	16.03.2022
	Pressure Gauge (Dust Chamber)	ENV/026/02	19.03.2022
	Vacuum Gauge (Dust Chamber)	ENV/026/03	19.03.2022
Ingress Protection Test (IPX7)	Water Tank	--	--



5.0 TEST CONDITIONS

Degrees of protection of person against Access to Hazardous parts as per Table 6

The sample was tested for protection against Access

Equipment Used	Rigid Steel Rod of 1.0 mm dia. Object Probe
Equipment ID	IPD/04
IP code	First Characteristic numeral: 6

Degree of protection against solid foreign object as per Table 7

The sample was placed in the Dust Chamber at room temperature. The test conditions are as follows: -

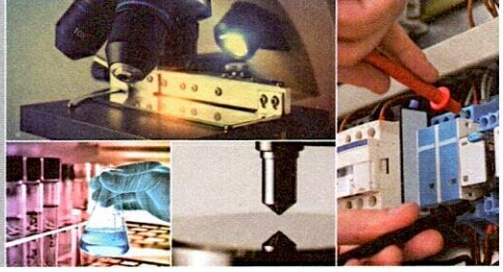
Exposure Period	8 Hours at 20 mbar
Start time	10.00 AM on 24.08.2021
End time	06.00 PM on 24.08.2021
IP code	First Characteristic numeral: 6 Category: 1

Type of dust used	Talcum powder
Size of dust	Passed through square meshed sieve of wire diameter 50µm and nominal width of a gap between wires 75 µm
Weight of dust used	2 kg. (2kg.per cubic meter of test chamber)
Chamber volume	1.0 cubic meter

Degrees of protection against water as per Table 8

The sample was tested for water test as per following conditions:

Equipment used	Water Tank
Location of the samples	Lowest point of enclosure is located at 1.5 meter below the surface of the water
Start time	11.00 AM dated 25.08.2021
End time	11.30 AM dated 25.08.2021
Duration of test	30 Minutes
IP code	Second Characteristic numeral: 7



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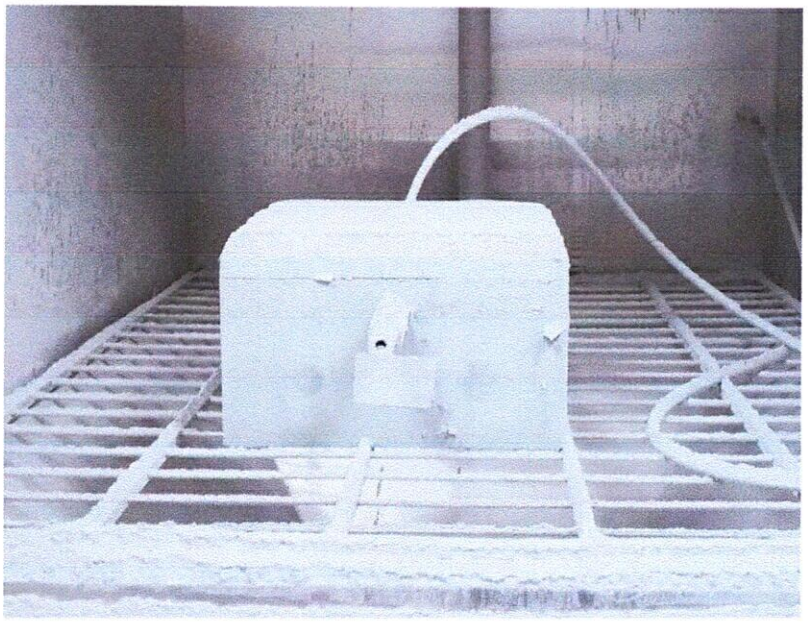
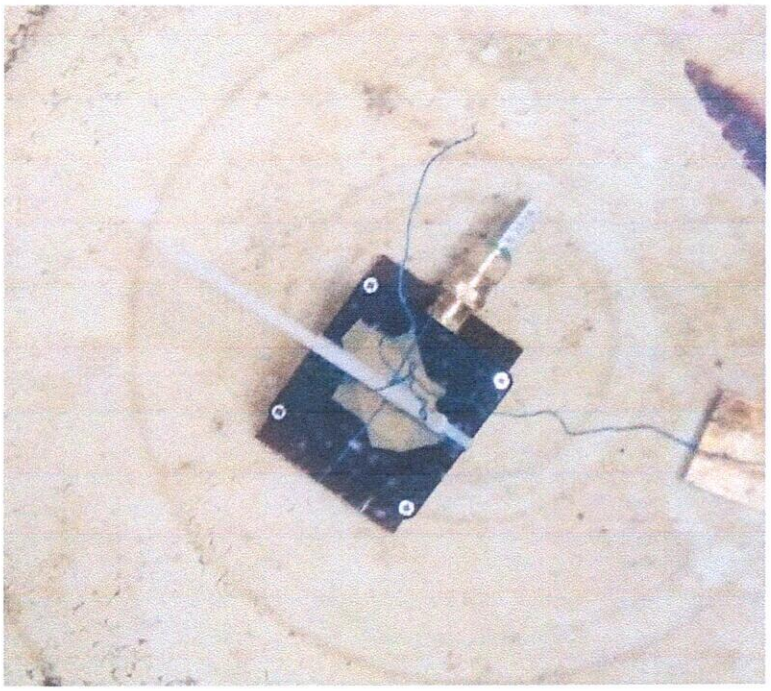
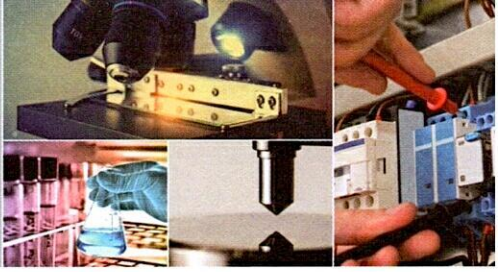
The sample inside the chamber after protection against solid foreign object (dust test) was seen as follows:



The sample during water test was seen as follows:





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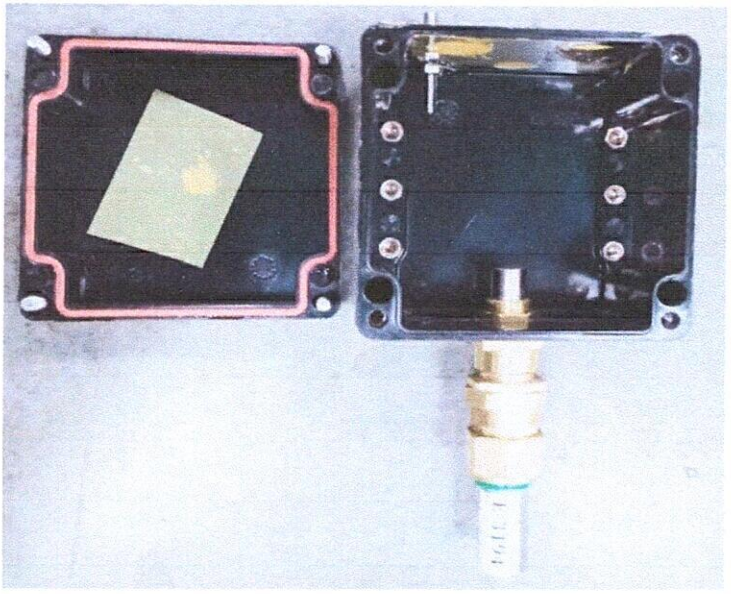
The sample after dust test and water was seen as follows:



The IP test procedure is based on IEC 60529 (Degrees of Protection provided by enclosures (IP Code). After the completion of each test sample was visually inspect.

5.0 TEST RESULT: -

Name of test	Observations after test
Tests for protection of person against access to hazardous parts (Probe Test)	Full diameter of probe did not pass through any opening.
Tests for protection against solid foreign object (Dust Test)	No dust was observed inside the sample.
Tests for protection against Water	No water observed inside the sample.
Result: Sample complies with test requirements of IP67 as per IEC 60529:2013.	

----------END----------OF----------REPORT----------

For ELCA LABORATORIES

Reviewed & Authorised by
Authorised Signatory
Kartik Iyer / Hemant Ghare
C.E.O. / Senior Engineer

Harshali Chaudhari
Checked by