

Laboratory Test Report
Cable glands for electrical installations

Test Report No.	ITC/TEST/N/2107/20-B
ULR No.....	TC660121000000167F
Discipline.....	Electrical
Group.....	Wiring and Accessories
Date of issue.....	04-08-2021
Sample date in.....	22-07-2021
Date of Performance.....	27-07-2021 to 30-07-2021
Applicant.....	SANJAY LIMBASIYA
Customer.....	AKSHAR BRASS INDUSTRIES Plot No 46,47,50,51, Naghedi Ind. Area, Jamnagar-361006, Gujarat, India
Sample description.....	CABTEK IP68 CABLE GLAND
Sample Condition.....	OK
Customer Reference.....	N/A
Trade mark / Manufacturer.....	
Model / Type / Reference.....	M20
Ratings.....	N/A
Test method(s).....	Following 3 test have been conducted as per customer specifications accordance with IEC 62444:2010 Clauses No: <ul style="list-style-type: none">• 10.1 Equipotential bonding to electrical equipment• 10.2 Equipotential bonding to metallic layer(s) of cable• 10.3 Protective connection to earth

Overall verdict

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Pass
Fail

Page 1 of 6

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Possible test case verdicts:

- Test case does not apply to the test object..... N/A
- Test object meets the requirement..... P (Pass)
- Test object does not meet the requirement..... F (Fail)

General remarks:

- "See enclosure##" refers to additional information related to this report in the annexes section.
- "See table ##" refers to a table appended to this report in the annexes section.
- "See figure ##" refers to an image, picture or drawing appended to this report in the annexes section
- "See *" highlights those clauses which are not in our NABL Scope.
- Throughout this report, a comma is used as decimal separator.
- Overall Verdict is applicable to the clauses against which Testing has been performed, not to the clauses where it is N/A (Not Applicable).
- The results of this report is against the sample received through the customer only.
- The laboratory is not responsible for the authenticity of the data / documents submitted by the customer.
- The laboratory will perform the testing at ambient temperature unless Environmental Conditions are not specified in the Testing Standard.
- Measurement uncertainty will be mentioned in the Table i.e Test Details.
- If Test Verdict has been given in this Report. The Decision Rule as per ILAC G8:2009 where guard Value ($W=1u$) will be made ($TL=AL+W$), whether Decision Rule will only be applied if the measured value is within the Guard Band. In such case Reference of this clause will be given by marking.
- The list of documents submitted by the customer is mentioned as under:

List of Documents	Remarks
Marking Plate of DUT	N/A
Rating of DUT	N/A
Instruction Manual	Provided
General Assembly Diagram	Provided
Bill of Material/ Critical Component List	N/A
Please specify, if any other	N/A

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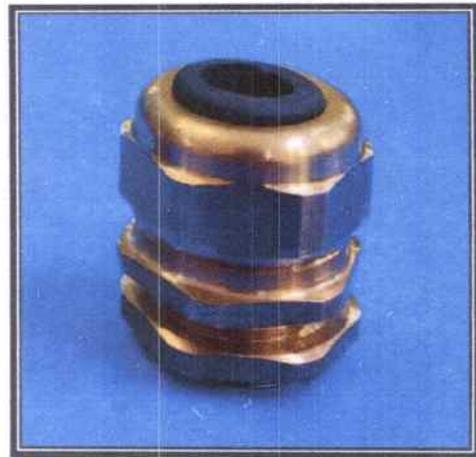
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General Product Information:

CABTEK IP68 CABLE GLAND

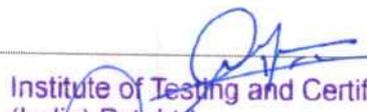
Model: M20

Pictures of Specimen received:



Testing Engineer
Vikesh Sharma

Asst. General Manager (Technical)
Naveen Chopra



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IEC-62444			
Clause no.	Requirement - Test	Results - Remarks	Verdict
10	Electrical properties		
10.1	Equipotential bonding to electrical equipment		
-	Cable glands declared in accordance with 6.3.1.1 shall have adequate conductivity to the electrical equipment.	In Compliance	P
-	The resistance shall not exceed 0.1 Ω	Refer Table: A	P
10.2	Equipotential bonding to metallic layer(s) of cable		
-	Cable glands declared in accordance with 6.3.1.2 shall ensure adequate electrical connection with the metallic layer(s) of the cable.	In Compliance	P
-	cable gland is loaded in accordance with the appropriate value given in Table 2. The load is maintained for 5 min and removed accordingly.	In Compliance	P
-	The resistance shall not exceed 0.1 Ω	Refer Table : B	P
10.3	Protective connection to earth		
10.3.1	General		
-	Cable glands declared in accordance with 6.3.1.3 shall be capable of passing an earth fault current.		
10.3.2	Electrical current test		
	This test is carried out after test in 9.4 and 10.2	In compliance	P
	The samples shall be deemed to have passed the tests if:		
	the contact resistance between the armour close to the samples and the earthing connections, measured with a source of at least 10 A, is equal to or less than 0,1 Ω ;	Measured resistance value: 18,2 m Ω	P
	they do not show any cracks to normal or corrected vision without magnification nor have any loose parts or deformations impairing normal use;	No crack found	P

Note: Test was conducted on Armoured gland

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IEC-62444			
Clause no.	Requirement - Test	Results - Remarks	Verdict

Table A

10.1 Equipotential bonding to electrical equipment				
Test Current (A)	Test Duration (Seconds)	Maximum allowed resistance (Ω)	Measured Resistance (Ω)	Result
10 A	60 sec	0.1 Ω	9.1 m Ω	P

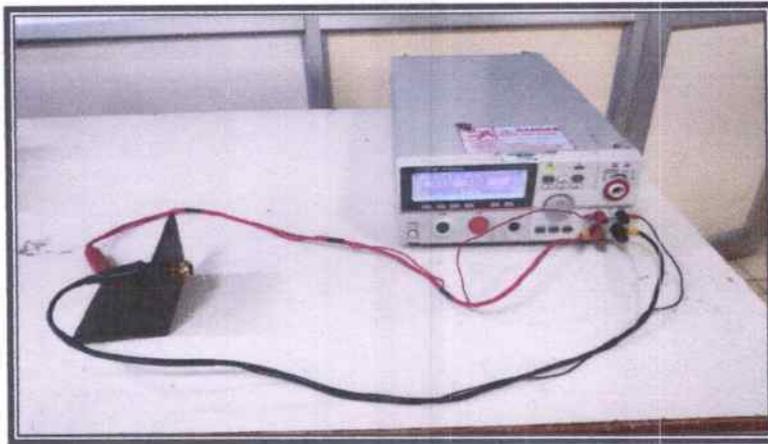
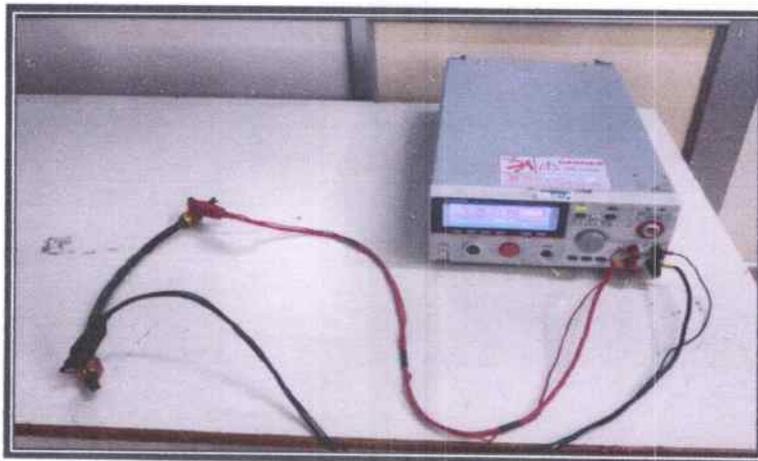


Table B

10.2 Equipotential bonding to metallic layer(s) of cable				
Test Current (A)	Test Duration (Seconds)	Maximum allowed resistance (Ω)	Measured Resistance (Ω)	Result
10 A	60 sec	0.1 Ω	14 m Ω	P



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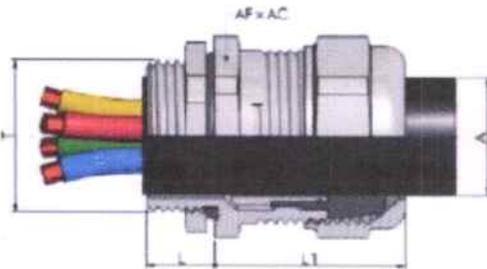
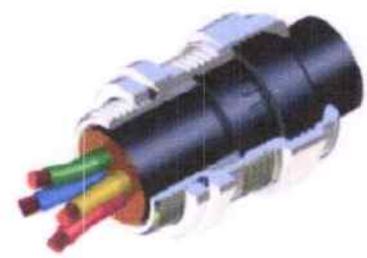
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IEC-62444			
Clause no.	Requirement - Test	Results - Remarks	Verdict

General Assembly Diagram

IP 68 Cable Gland

<p>Size : 8mm to 63mm</p> <p>Function : Excellent shield contact through the contact sleeve with the braided shield terminating in the screwed cable gland</p> <p>Ingress Protection : IP68 as per EN 60529.</p> <p>Operating Temp. : -35°C to +120°C</p>	<p>Material : Brass Nickel Plated</p> <p>Thread : Long Type Metric</p> <p>Features : Outer Displacement Seal</p> <p>Seal Material : Nitrile Black Rubber</p> <p>O-Ring Material : NBR</p>
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Gland Selection Chart

Item Code	Size T	Cable Dia. A		A/P	A/C	Thread Length L	Uncompressed Length L1	Pack Qty
		Min.	Max.					
CIP68-20-11	M20x1.5	8.0	11.0	24.0	26.2	10.0	25.0	50
CIP68-20-14	M20x1.5	11.0	14.0	24.0	26.2	10.0	27.0	50