

**Laboratory Test Report  
Cable glands for electrical installations**

Test Report No. ....	ITC/TEST/N/2107/20-A
ULR No.....	TC660121000000166F
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.....	<b>AKSHAR BRASS INDUSTRIES</b> 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.....	M16
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"><li>• 10.1 Equipotential bonding to electrical equipment</li><li>• 10.2 Equipotential bonding to metallic layer(s) of cable</li><li>• 10.3 Protective connection to earth</li></ul>

**Overall verdict**

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Pass   
Fail

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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

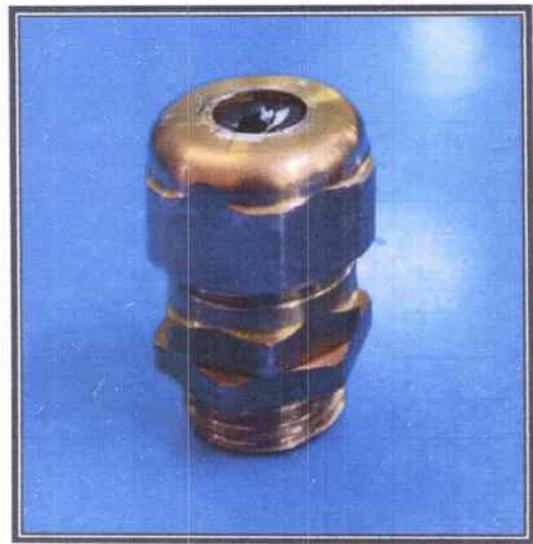
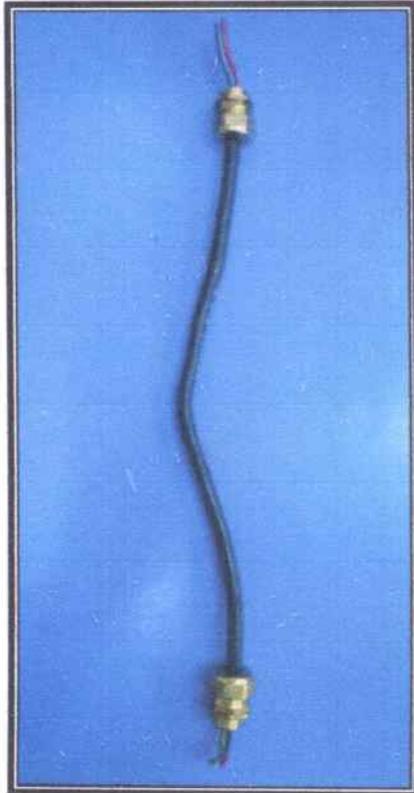
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**General Product Information:**

CABTEK IP68 CABLE GLAND

**Model:** M16

**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
<b>10</b>	<b>Electrical properties</b>		
<b>10.1</b>	<b>Equipotential bonding to electrical equipment</b>		
-	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 $\Omega$	<b>Refer Table: A</b>	P
<b>10.2</b>	<b>Equipotential bonding to metallic layer(s) of cable</b>		
-	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 $\Omega$	<b>Refer Table: B</b>	P
<b>10.3</b>	<b>Protective connection to earth</b>		
<b>10.3.1</b>	<b>General</b>		
-	Cable glands declared in accordance with 6.3.1.3 shall be capable of passing an earth fault current.		
<b>10.3.2</b>	<b>Electrical current test</b>		
	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 $\Omega$ ;	Measured resistance value: 50m $\Omega$	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**

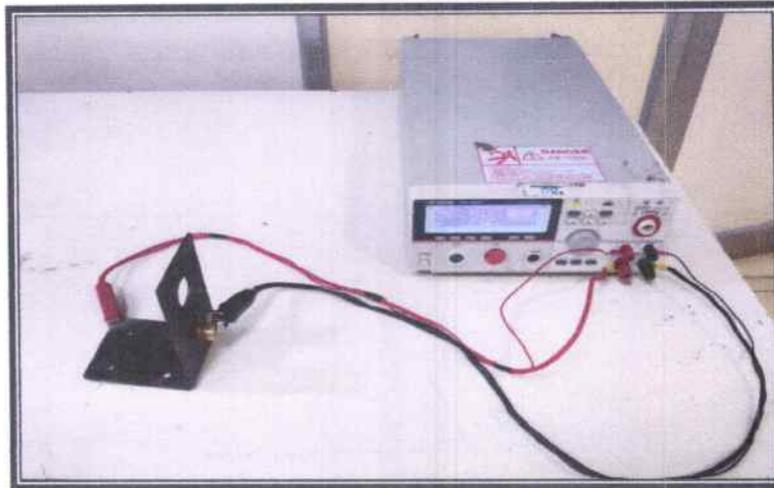
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IEC-62444			
Clause no.	Requirement - Test	Results - Remarks	Verdict

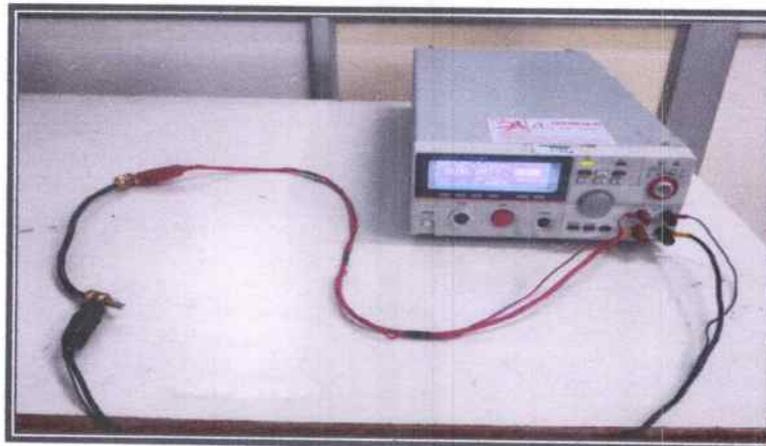
**Table A**

10.1 Equipotential bonding to electrical equipment				
Test Current (A)	Test Duration (Seconds)	Maximum allowed resistance ( $\Omega$ )	Measured Resistance ( $\Omega$ )	Result
10	60 sec	0.1	11 m $\Omega$	P



**Table B**

10.2 Equipotential bonding to metallic layer(s) of cable				
Test Current (A)	Test Duration (Seconds)	Maximum allowed resistance ( $\Omega$ )	Measured Resistance ( $\Omega$ )	Result
10 A	60 sec	0.1 $\Omega$	47.7 m $\Omega$	P



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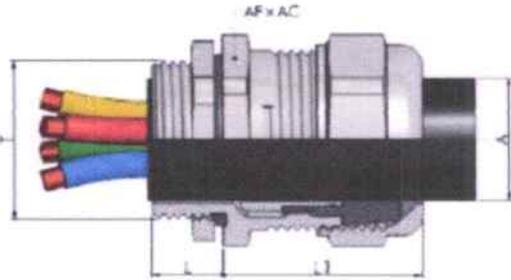
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IEC-62444			
Clause no.	Requirement - Test	Results - Remarks	Verdict

### General Assembly Diagram

IP 68 Cable Gland

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



Gland Selection Chart								
Item Code	Size T	Cable Dia. A		A/F	A/C	Thread Length L	Uncompressed Length L1	Pack Pcs
		Min.	Max.					
CIP68-16-80	M16x1.5	6.0	8.0	18.0	-	10.0	23.0	50
CIP68-16-10	M16x1.5	8.0	10.0	18.0	-	10.0	25.0	50

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