



037214

भारत सरकार

1200

Form No : NTH (WR)/MUM-5

Government of India

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, उपभोक्ता मामले विभाग  
Ministry of Consumer Affairs, Food & Public Distribution, Department of Consumer Affairs

राष्ट्रीय परीक्षण शाला (पश्चिमी क्षेत्र)

NATIONAL TEST HOUSE (Western region)

प्लॉट सं. एफ-१०, एम.आई.डी.सी., मरोल, अंधेरी (पूर्व), मुंबई - 400 093

Plot No. F-10, M.I.D.C., Marol Andheri (E), Mumbai - 400 093

परीक्षण प्रमाण पत्र



सत्यमेव जयते

Number of Copies issued Single

TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र सं

Test Certificate No

NTH(WR)/EL(A)/2019/00483B

जारी होने की तिथि

Date of Issue

21/11/2019

कोड नं

Code No

1573195056765

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Page

1

पृष्ठों की संख्या

No of Pages

५

जिसे जारी करना है

Issued To

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Address

SIGMA INDUSTRIES

SPECIAL SHED No. 416/1, GIDC-1 SHANKER TEKRI,  
JAMNAGAR-361004 INDIA

ग्राहक का सन्दर्भ सं एवं दिनांक

Customer's Ref. No.

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Date: 08/11/2019

पंजिका सं एवं दिनांक

Register No &amp; Date

00483/NTH(WR)/EL(A)/08/11/2019

परीक्षण सामग्री का विवरण

Description of Test Item

Three sizes of Glands, each 3 in number stated to be of Double  
Compression Glands (Weather Proof) DC Type for Un-  
armoured Cables bearing Cat. No:- 19 UADC, 32 UADC, 82  
UADC of CGS make along with cables of

परीक्षण सामग्री का पहचान

Identification of Test Item

Three sizes of Glands, each 3 in number stated to be of Double  
Compression Glands (Weather Proof) DC Type for Un-  
armoured Cables bearing Cat. No:- 19 UADC, 32 UADC, 82  
UADC of CGS make along with cables of respective sizes.

नमूना का विशिष्टि (यदि हो)

Product Specification (if any)

BS:6121-1-1989

नमूना प्राप्ति की तिथि

Date of Receipt of the Test Item

08/11/2019

कार्य सम्पादन की तिथि

Date(s) of Performance of Tests

From: 11/11/2019

To: 21/11/2019

व्यावहृत प्रणाली का पहचान

Method(s) used for Test

BS:6121-1-1989

N/A

नमूना प्रक्रिया जहाँ प्रासंगिक हो

Sampling Procedure where relevant

Tested By

KISHALAY PAUL

SA(Electrical)

Checked By

Anil Kumar Pandey

Scientist- B (Electrical)

Approved By

Rane Narendra Dodhu

Scientist- D (Electrical)





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No. of page

2 of 4

**Three sizes of Glands, each 3 in number stated to be of Double Compression Glands (Weather Proof) DC Type for Un-armoured Cables bearing Cat. No:- 19 UADC, 32 UADC, 82 UADC of "CGS" make along with cables of respective sizes.**

The given Samples was subjected to following Test as per BS:6121-1-1989 with the results noted below:

**Marking:- 1) On the Glands following markings were Observed:**

- ▲ CGS 19 UADC
- ▲ CGS 32 UADC
- ▲ CGS 82 UADC

**Tests:-**

Sr. No.	Test Description	Standard Specification	Observations on sample	Remarks												
1.	<b><u>PROOF TORQUE TEST (Cl.8.2).</u></b> One Gland of each size is tightened by applying appropriate proof torque : <table border="1"> <thead> <tr> <th>Gland</th> <th>Cable Dia.</th> <th>Torque Nm</th> </tr> </thead> <tbody> <tr> <td>19 UADC</td> <td>10mm</td> <td>65</td> </tr> <tr> <td>32 UADC</td> <td>22mm</td> <td>110</td> </tr> <tr> <td>82 UADC</td> <td>65mm</td> <td>230</td> </tr> </tbody> </table>	Gland	Cable Dia.	Torque Nm	19 UADC	10mm	65	32 UADC	22mm	110	82 UADC	65mm	230	<u>Table-2 &amp; Appendix B of BS 6121-PT.1:1989</u>  There shall be no noticeable damage on dismantling after the test.	There was no noticeable damage on dismantling after the test.	---Satisfactory---
Gland	Cable Dia.	Torque Nm														
19 UADC	10mm	65														
32 UADC	22mm	110														
82 UADC	65mm	230														
2.	<b><u>Load Test (Cl.8.3).</u></b> One Gland of each size is assembled as per Appendix C and load as given below is maintained for 6 hours. <table border="1"> <thead> <tr> <th>Gland</th> <th>Cable Dia</th> <th>Load N</th> </tr> </thead> <tbody> <tr> <td>19 UADC</td> <td>10mm</td> <td>44.5</td> </tr> <tr> <td>32 UADC</td> <td>22mm</td> <td>71.2</td> </tr> <tr> <td>82 UADC</td> <td>65mm</td> <td>133</td> </tr> </tbody> </table>	Gland	Cable Dia	Load N	19 UADC	10mm	44.5	32 UADC	22mm	71.2	82 UADC	65mm	133	<u>Table-1 &amp; Appendix C of BS 6121-PT.1:1989</u> The distance through which the mandrel moves during the period of 6 hrs shall be 6 mm Max.	The distance through which the mandrel moved during the period of 6 hrs was Less than 6mm..	--Satisfactory--
Gland	Cable Dia	Load N														
19 UADC	10mm	44.5														
32 UADC	22mm	71.2														
82 UADC	65mm	133														

Tested By

Kishalay Paul  
SA (Electrical)

Checked By

Anil Kumar Pandey  
Scientist-B (Electrical)

Approved By

Rane Narendra Dodhu  
Scientist-D (Electrical)





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No. of page  
3 of 4

## Tests:-

Sr. No.	Test Description	Standard Specification	Observations on sample	Remarks
3.	<b>Seal Test (CI.8.6)</b> One Gland of each size was fitted to suitable enclosure and Tested for IP 66.	No Ingress of Dust or water shall be observed.	No Ingress of Dust or water was observed	---Satisfactory---
4.	<b>Dimensions : (CI.7)</b> The dimensions of glands of each size are checked for values given in Drawing/Catalogue No. 10UADC TO 100UADC Dated 01/11/2019(for 19UADC,32UADC,82UADC) as received.	The dimensions of glands of each size shall be as per Above Drawing.	The dimensions of the glands of each size are as per given Drawing .	---Satisfactory---

## Note:-

- The average ambient condition of laboratory during the period of above tests was:  
Temperature, °C : 29 Relative humidity, % : 66
- Certified copy of Drawing Report Ref Drawing/Catalogue No. 10UADC TO 100UADC Dated 01/11/2019 (for 19UADC,32UADC,82UADC) as received. is attached with this Report.
- Chemical Composition as declared by the manufacturer:-  
19UADC :: Copper 58.69% , Total Impurities: 4.6%, Remaining Zinc  
32UADC :: Copper 56.92% , Total Impurities: 4.1 % , Remaining Zinc  
82UADC :: Copper 56.27% , Total Impurities: 3.15%, Remaining Zinc

Remark: The sample complies with the requirement of the standard BS 6121-1-1989 in respect of the tests carried out.

Tested By

Kishalay Paul  
SA (Electrical)

Checked By

Anil Kumar Pandey  
Scientist-B (Electrical)

Approved By

Rane Narendra Dodhu  
Scientist-D (Electrical)

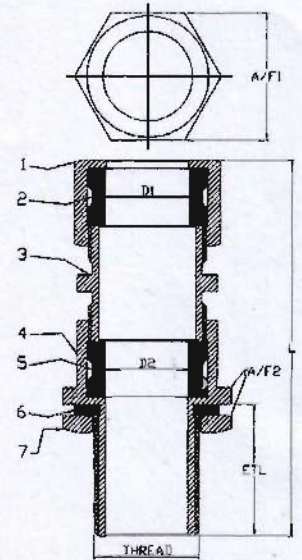


# CGS MAKE DOUBLE COMPRESSION WEATHERPROOF CABLE GLANDS FOR UN-ARMoured CABLES

037214

1206

TECHNICAL DATA		
No.	DESCRIPTION	MATERIAL
1	Compression Nut	BRASS / ALUMINIUM / S.S. 304/316
2	Outer Seal-1	NEOPRENE RUBBER
3	Gland Nut	BRASS / ALUMINIUM / S.S. 304/316
4	Gland Body	BRASS / ALUMINIUM / S.S. 304/316
5	Outer Seal-2	NEOPRENE RUBBER
6	Flat Washer	NEOPRENE RUBBER
7	Lock Nut	BRASS / ALUMINIUM / S.S. 304/316
Material		Brass as per IS-12943:1990 Aluminium / S.S. 304/316
Design Specification		BS 6121
Threads		BS Conduit (ET), BSP, NPT, METRIC & PG
Nickel Plating Thickness		Up to 10 Micron as per IS 12943:1990 (Brass Only)
IP Protection		IP-66




Cat. No.	GLAND SIZE	Crimping Range D1 & D2	NIPPLE THREAD	THREAD LENGTH (ETL)	A/F 1	A/F 2
10 UADC	3/8" (10 mm)	09 - 06	5/8" ET	25.00	18.00	20.00
12 UADC	1/2" (12 mm)	11 - 07	5/8" ET	25.00	18.00	20.00
16 UADC	5/8" (16 mm)	12 - 08	3/4" ET	25.00	20.00	23.00
19 UADC	3/4" (19 mm)	14 - 10	3/4" ET	25.00	23.00	23.00
22 UADC	7/8" (22 mm)	17 - 13	1" ET	25.00	24.00	31.50
25 UADC	1" (25 mm)	18 - 14	1" ET	25.00	25.50	31.50
28 UADC	1.1/8" (28 mm)	21 - 16	1.1/8" ET	25.00	31.00	33.00
32 UADC	1.1/4" (32 mm)	27 - 22	1.1/4" ET	25.00	36.00	39.00
35 UADC	1.3/8" (35 mm)	30 - 25	1.3/8" ET	25.00	39.50	42.00
38 UADC	1.1/2" (38 mm)	32 - 27	1.1/2" ET	25.00	42.50	46.00
45 UADC	1.3/4" (45 mm)	38 - 33	1.3/4" ET	25.00	50.00	54.00
50 UADC	2" (50 mm)	44 - 39	2" ET	25.00	56.50	59.00
57 UADC	2.1/4" (57 mm)	48 - 43	2.1/4" ET	25.00	61.00	66.00
63 UADC	2.1/2" (63 mm)	56 - 50	2.1/2" ET	25.00	67.00	74.50
70 UADC	2.3/4" (70 mm)	63 - 58	2.3/4" ET	25.00	74.50	82.50
75 UADC	3" (75 mm)	68 - 63	3" ET	25.00	82.50	92.50
82 UADC	3.1/4" (82 mm)	70 - 65	3.1/4" ET	25.00	84.00	94.00
88 UADC	3.1/2" (88 mm)	77 - 72	3.1/2" ET	25.00	92.50	102.00
100 UADC	4" (100 mm)	85 - 80	4" ET	25.00	102.00	115.00

All Dimensions except thread size are in mm.

*(Handwritten Signature)*

*(Handwritten Signature)*  
 एन. डी. राणे  
 N. D. RANE

बैज्ञानिक (एस.डी.) युवक

PROPERTY OF SIGMA INDUSTRIES	 <b>SIGMA INDUSTRIES</b> JAMNAGAR	Scientist Category No. 100 UADC TO 100 UADC
Date: 01/11/2019		Material: Brass, Aluminium, S.S. 304/316
Drawn by: Shailesh Moliya		
Approved by: Himanshu Joshi		Title: Cable Glands
Dimensional Tolerance: ± 1mm		Dr. Code: SI/UADC-Rev.0
Description: CGS make Double Compression Cable Glands (Weatherproof) for un-armoured cables.		

राष्ट्रीय परीक्षण शाखा (प.प.)  
 NATIONAL TEST HOUSE (P.P.)  
 अंधेरी (पूर्व), मुंबई - ४०० ०९३.  
 Andheri (E), Mumbai - 400 093.