



Document Title:
Quadrant Deadend High Strength Socket Clamp 1192.5 ACSR 35K

Document Type: **Specification** Engineering Type: **Equipment Specification** Document No.: **4752.326**

Department:

Version:
 01


Effective Date:
 Dec 19, 2024

Transmission Engineering

Shared document with: N/A


Author

Guillermo J. Nieves Díaz
 Technical Specialist 1, Transmission Lines Engineering Design & Standards


 Guillermo Nieves (Dec 6, 2024 16:29 AST)

Reviewer 1

Leonardo Montes Sánchez
 Engineer 2, Transmission Lines Engineering Design & Standards


 Leonardo Montes Sanchez (Dec 9, 2024 16:23 AST)

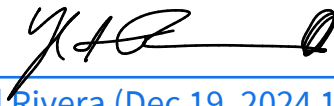
Reviewer 2

Oscar Venegas
 Supervisor, Transmission Lines Engineering Design & Standards


 Oscar E Venegas (Dec 19, 2024 13:29 AST)

Approver

Yamil I. Rivera Hernández
 Section Manager, Transmission Lines Engineering Design


 Yamil Rivera (Dec 19, 2024 13:35 AST)

Management Approval (If apply)

Approver

Name
 Position

Signature and Date

Related/Referenced Documents

Version	Date	Revision Comments
00	May 25, 2023	First Issue
01	Dec 19, 2024	Changed cover page and document to new format. Modified sections 4 and 7. Added a table of compliance and Proposal Information. Changed Equal or approved equal to Compatible with and was modified.

1. General

1.1. Overview

- 1.1.1. This is a general specification that covers the minimum requirements for a Quadrant Deadend Socket Clamp for 1192.5 ACSR 45/7 Bunting and 36/1 Puerto Rico Special, used in the transmission system in Puerto Rico.
- 1.1.2. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site conditions, quantity, and other requirements.
- 1.1.3. This document includes the general electrical and mechanical characteristics of the material.

2. Specific Name

- 2.1. Quadrant Deadend High Strength Socket Clamp 1192.5 ACSR 35K.

3. Basic Use

- 3.1. Aluminum bolted quadrant strain clamp is used for high capacity deadend conductor support assembly on overhead transmission lines that require heavy tensions.

4. Specific Requirements

- 4.1. Samples shall be furnished to LUMA.
- 4.2. LUMA requires One (1) unit properly labeled for testing and analysis.
- 4.3. Descriptive and technical literature shall be supplied to LUMA.
- 4.4. They shall be required to show evidence of LUMA's approval of the equipment.

5. Acceptance Criteria

- 5.1. Latest applicable codes, standards, and other regulations: ANSI/ASTM A153.

6. Description

- 6.1. Shall have socket connector at one end of clamp body and shall fit ball and socket insulators ANSI classes 52-8 and 52-11 per ANSI Spec. C-29.2-71.
- 6.2. Aluminum bolted quadrant strain clamps shall be made from drop-forged steel with an ultimate strength of 35,000 lbf minimum.
- 6.3. Shall be hot-dip galvanized in accordance with ANSI/ASTM A153.
- 6.4. Body and keeper: heat-treated, high strength, cast aluminum alloy.
- 6.5. Metric conversion as per latest ASTM.

7. Markings and Packaging

- 7.1. Containers/pallets or package shall be marked outside with LUMA'S purchase order number and code number.
- 7.2. Vendor shall prepare material and equipment for shipment in such manner as to facilitate handling and protection for damage.
- 7.3. All material should be packaged and marked in such a way that the receiving warehouse can readily identify and send in one (1) complete unit to a field location without opening crates or boxes to sort items and / or parts.
- 7.4. Pallet quantity: 48, or as requested by LUMA.

8. Compatible with

- 8.1. Hubbell. Catalog ID: SD155SA1550.
- 8.2. This model is an example of the equipment/material described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event.

9. Proposal Information

- 9.1. Submitted proposals must include:
 - a. Technical Information
 - b. Table of Compliance completed by the bidder with reference

10. Inspection

- 10.1. The acceptance of any material or equipment shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it shall not prevent subsequent rejection if such material is found to be defective later

11. Drawings

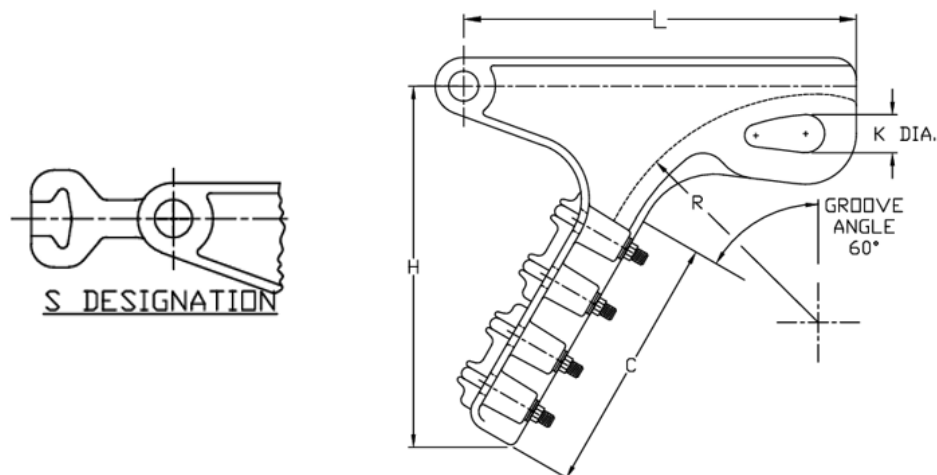


Table 1: Dimensions

Clamp Range	L Min.	H Min	C Min.	K Dia	R Min.	U Bolts	
						No.	Size
1.18" – 1.55"	15.5"	15.75"	12.38"	1.50"	6.5"	5	0.62"

Warehouse ID	002-84814
--------------	-----------

— End of Specification —

Appendix

Appendix 1. Table of Compliance

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the corresponding specification document (4752.326)		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document (ANSI, ASTM)		
3	Material	Quadrant Deadend High Strength Socket Clamp 1192.5 ACSR 35K <ul style="list-style-type: none"> • Aluminum bolted quadrant strain clamps shall be made from drop-forged steel with an ultimate strength of 35,000 lbf minimum. • Shall be hot-dip galvanized in accordance with ANSI/ASTM A153. • Body and keeper: heat-treated, high strength, cast aluminum alloy. 		
4	Dimensions	Complies with Table 1		
5	Requirements	<ul style="list-style-type: none"> • Samples shall be furnished to LUMA. • LUMA requires One (1) unit properly labeled for testing and analysis. • Descriptive and technical literature shall be supplied to LUMA. • They shall be required to show evidence of LUMA's approval of the equipment. • Required to be certified by external laboratories • Shall have socket connector at one end of clamp body and shall fit ball and socket insulators ANSI classes 52-8 and 52-11 per ANSI Spec. C-29.2-71. 		











4752.326 - Quadrant Deadend High Strength Socket Clamp 1192.5 ACSR 35K

Final Audit Report

2024-12-19

Created:	2024-12-06
By:	Guillermo Nieves (guillermoj.nievesdia@lumapr.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAAnO_gM7O7hy8wHhh8bpF-HQCN_8vKjilX

"4752.326 - Quadrant Deadend High Strength Socket Clamp 1192.5 ACSR 35K" History

-  Document created by Guillermo Nieves (guillermoj.nievesdia@lumapr.com)
2024-12-06 - 8:28:39 PM GMT
-  Document e-signed by Guillermo Nieves (guillermoj.nievesdia@lumapr.com)
Signature Date: 2024-12-06 - 8:29:23 PM GMT - Time Source: server
-  Document emailed to Leonardo Montes Sanchez (leonardo.montessanch@lumapr.com) for signature
2024-12-06 - 8:29:25 PM GMT
-  Document e-signed by Leonardo Montes Sanchez (leonardo.montessanch@lumapr.com)
Signature Date: 2024-12-09 - 8:23:56 PM GMT - Time Source: server- Signature captured from device with phone number XXXXXXXX5488
-  Document emailed to Oscar Venegas (oscar.venegas@lumapr.com) for signature
2024-12-09 - 8:23:58 PM GMT
-  Signer Oscar Venegas (oscar.venegas@lumapr.com) entered name at signing as Oscar E Venegas
2024-12-19 - 5:29:31 PM GMT
-  Document e-signed by Oscar E Venegas (oscar.venegas@lumapr.com)
Signature Date: 2024-12-19 - 5:29:33 PM GMT - Time Source: server- Signature captured from device with phone number XXXXXXXX2079
-  Document emailed to Yamil Rivera (yamil.rivera@lumapr.com) for signature
2024-12-19 - 5:29:34 PM GMT
-  Email viewed by Yamil Rivera (yamil.rivera@lumapr.com)
2024-12-19 - 5:35:13 PM GMT
-  Document e-signed by Yamil Rivera (yamil.rivera@lumapr.com)
Signature Date: 2024-12-19 - 5:35:44 PM GMT - Time Source: server

✔ Agreement completed.

2024-12-19 - 5:35:44 PM GMT