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Trunnion Clamps for ACSS

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Related/Referenced Documents

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Version History

Version	Date	Revision
01	Oct. 16, 2025	Initial release for Items 002-87779, 002-87780, and 002-87781.



Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-87779	87779	1	10/16/2025
002-87780	87780	1	10/16/2025
002-87781	87781	1	10/16/2025

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1. Introduction

This is a general specification that covers the minimum requirements for trunnion clamps to be used in the transmission system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general characteristics of the product.

2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this product to LUMA on previous orders will not have to furnish samples at bid opening. The product will be received at LUMA's general warehouse (017) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

3.1. Descriptive and technical literature must be supplied by the vendor at time of bidding. This literature must include, but is not limited to, details of material, drawings, documented testing, and instructions for use and installation. **The literature must be an official document from and certified by the manufacturer.** Failure to submit documents on time and duly certified by the manufacturer will cause bidder disqualification.

3.2. If required by LUMA, final drawings and documentation shall be submitted by the vendor before the manufacturing and shipping process for approval.

4. Compatible with

For compatible manufacturer and model see Table 1. These models are examples of the product described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event.

5. Markings

- 5.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 5.2. Individual package(s) shall be clearly marked with manufacturer name and item information (part number, serial number, quantity, etc.).
- 5.3. Packaging labels and tags shall be waterproof.

6. Packaging

- 6.1. All products shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.
- 6.2. A list of all parts included in the container and/or package must be provided at delivery time so the receiving personnel can verify that everything requested is present, avoiding any delay in the receiving process.

7. Number Per Package (Logistics)

Standard package: One (1) unit per package or as requested by LUMA.

8. Acceptance Criteria

- 8.1. Test required: certified by external qualified laboratories.
- 8.2. Product shall be manufactured in accordance with the latest issue below (section 8.3). When conflicts occur between purchaser's specifications and the latest issue below, the purchaser's specification shall prevail.
- 8.3. Latest applicable codes, standards, and other regulations (ANSI, ASTM, NEMA, etc.).
- 8.4. If any other standards different from the ones indicated in this document are used, the supplier must provide information showing compatibility with the required ones.

9. Description

- 9.1. Trunnion clamps for ACSS used as attachment points through a line post insulator in overhead transmission power line constructions and maintenance.
- 9.2. Shall be compatible with ACSS.
- 9.3. Shall be designed to reduce static and dynamic stress on the connector.
- 9.4. Shall be designed for operating temperatures up to 250°C (482°F).
- 9.5. Shall be rated for up to 230 kV.
- 9.6. Shall be designed for wear resistance where the trunnion clamp is attached to the top clamp of the line post insulator.
- 9.7. The body shall be made of high-strength aluminum.
- 9.8. The rated strength shall be as per Table 1.
- 9.9. The hardware shall be made of stainless steel 304 or 316.
- 9.10. The bolts shall be captive type, 1/2" - 13 UNC.
- 9.11. For conductor's size range see Table 1.
- 9.12. Dimensions as per Table 2.
- 9.13. The body shall be permanently marked with the manufacturer's name, model, conductor size range, and strength

10. Inspection

- 10.1. Upon inspection of incoming products, the purchaser reserves the right to refuse their shipments and to determine the acceptability or rejection of the product received. The supplier shall be liable for all costs incurred for a product that is rejected.

10.2. The acceptance of any product shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such products were found later to be defective or out of compliance.

11. Proposal Information

11.1. Submitted proposals must include:

- a. Technical information, drawings, and tests.
- b. Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 1: Warehouse and Asset Suite Identification Number

Warehouse Catalog #	Asset Suite #	Conductor Size (Strands)	Code Word	Conductor OD	Rated Vertical Strength	Compatible Manufacturer & Model
002-87779 *	87779	266.8 (26/7)	Partridge ACSS	1.006" (2.56 cm)	25,000 lbs.	AFL (HCTHT981)
002-87780	87780	556.5 (24/7)	Parakeet ACSS	0.914" (2.3 cm)	25,000 lbs.	AFL (HCTHT880)
002-87781	87781	795 (26/7)	Drake ACSS	1.108" (2.8 cm)	25,000 lbs.	AFL (HCTHT1073)

* The overall diameter indicated is the conductor's diameter plus armor rods.

13. Table 2: Approximate Dimensions and Drawings

Conductor Size + Armor Rod (Strands)	L	H	W
266.8 ACSS * (26/7)	9.5" (24.1 cm)	3" (7.6 cm)	3.8" (9.7 cm)
556.5 ACSS (24/7)	9.5" (24.1 cm)	2.6" (6.6 cm)	3.8" (9.7 cm)
795 ACSS (26/7)	9.5" (24.1 cm)	3" (7.6 cm)	3.8" (9.7 cm)

* Conductor 266.8 will be used with armor rods.

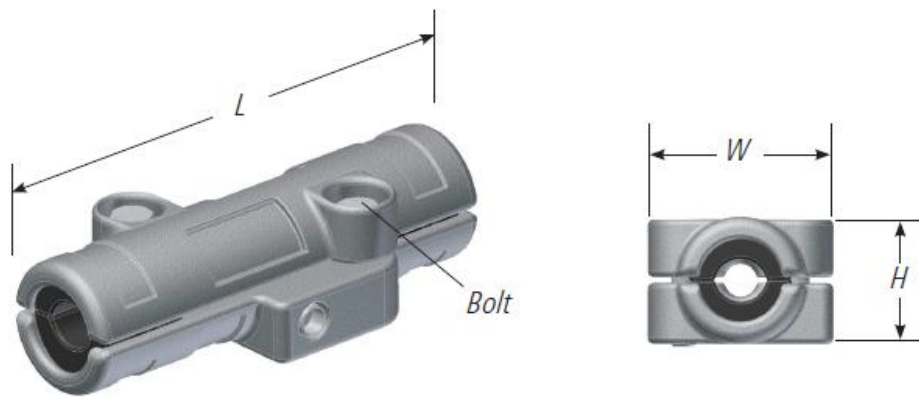


Figure 1

- End of Specification -

Appendix

Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	Compliance with the document 4751.50.005		
2	Industry standards: ANSI, ASTM, NEMA, etc. If different ones are used, information showing compatibility is required.		
3	Tech. info. and drawings provided.		
4	Trunnion Clamp		
5	For ACSS using armor rods. Conductors' code word and size as per Table 1.		
6	Size: as per Table 1.		
7	Designed to reduce static and dynamic stress.		
8	Operating Temperature: 250°C		
9	Rated for up to 230 kV.		
10	Wear resistant where the trunnion clamp is attached to the top clamp of the line post insulator.		
11	Body: High-Strength Aluminum Alloy		
12	Hardware: Stainless Steel		
13	Captive Style Bolts, 1/2" - 13 UNC.		
14	OD + Armor Rod: as per Table 1.		
15	Strength: as per Table 1.		
16	Dimensions: as per Table 2.		
17	Permanently marked with the manufacturer's name, model, conductor size, overlapping crimping areas, and die set.		

NOTE: This table is only a checklist for reference. The compliance must be with the complete document. Filling out the table with "PASS" won't be accepted as a compliance without the technical information required to certify it.











4751.50.005 Trunnion Clamps for ACSS (10-16-25)

Final Audit Report

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