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**Compression Dead-End Single Pad Connector for ACSS**

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**Version History**

Version	Date	Revision
01	Oct. 16, 2025	Initial release for Items 002-87763, 002-80774, and 002-87761.



## Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-87763	87763	1	10/16/2025
002-80774	80774	1	10/16/2025
002-87761	87761	1	10/16/2025

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## 1. Introduction

This is a general specification that covers the minimum requirements for compression dead-end single pad connectors 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:
- a. ANSI C119.4: Testing and performance requirements for electrical connectors to be used on aluminum-to-aluminum and aluminum-to-copper conductors.
  - b. ASTM B958: For extra-high-strength and ultra-high-strength Class A zinc-5% aluminum-mischmetal alloy-coated steel core wire for use in overhead electrical conductors.
  - c. NEMA: Dimensional requirements for holes spacing in connector terminal pads.
- 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. Compression dead-end single pad connectors used in overhead transmission power line constructions and maintenance for connecting ACSS.
- 9.2. Shall be compatible with ACSS (ultra-high strength). The conductors' strength is shown in Table 1, in the same column as the size and strands.
- 9.3. Shall be designed for full tension, Class 1, for 95% of the conductor rated strength as per ANSI C119.4.
- 9.4. Shall be designed for operating temperatures up to 250°C (482°F).
- 9.5. Shall be furnished as a complete assembly composed of a body, eye, terminal, and hardware. For compatible conductor's code word and size see Table 1.
- 9.6. The required die set for the crimps must be compatible with the standard Y-60 crimper tool.
- 9.7. Body:
- a. Shall be made of high-strength aluminum alloy.
  - b. Shall be permanently marked with the manufacturer's name, model, conductor size, overlapping crimping areas, and the required die set for the crimps.
  - c. Shall have a hole with plug for inhibitor compound fill.

- d. Shall have a single 15° NEMA-Hole spacing pad welded on one end for the tap connection (see Table 1 for hole's quantity).
- e. Approximate dimensions as per Table 2.

9.8. Eye:

- a. Shall be made of galvanized steel. The coating shall be the same or compatible with the one used for the ACSS ultra-high strength core, ruled by the ASTM B958 standard.
- b. Shall be permanently marked with the manufacturer's name, model, and overlapping crimping area.
- c. Shall have an eye welded to one end for dead-end applications.
- d. Shall include a rubber gasket in the eye end to avoid abrasion between the eye and the body once installed one with each other.
- e. Shall have a threaded area so it can be bonded with the body through the external crimps.
- f. Approximate dimensions as per Table 2.

9.9. Terminal:

- a. Shall be made of high-strength aluminum alloy.
- b. Shall be permanently marked with the manufacturer's name, model, conductor size, overlapping crimping area, and the required die set for the crimps.
- c. Shall have a single 15° NEMA-Hole spacing pad on one end for the tap connection (see Table 1 for hole's quantity).
- d. Approximate dimensions as per Table 2.

9.10. Hardware:

- a. Shall be made of stainless steel 304 or 316.
- b. Shall include 1/2"-13 TPI hex head bolts, 1/2" flat washers, 1/2" spring lock washers, and 1/2" hex nuts. Shall be one (1) of each one for each hole (see Table 1 for hole's quantity).

## 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

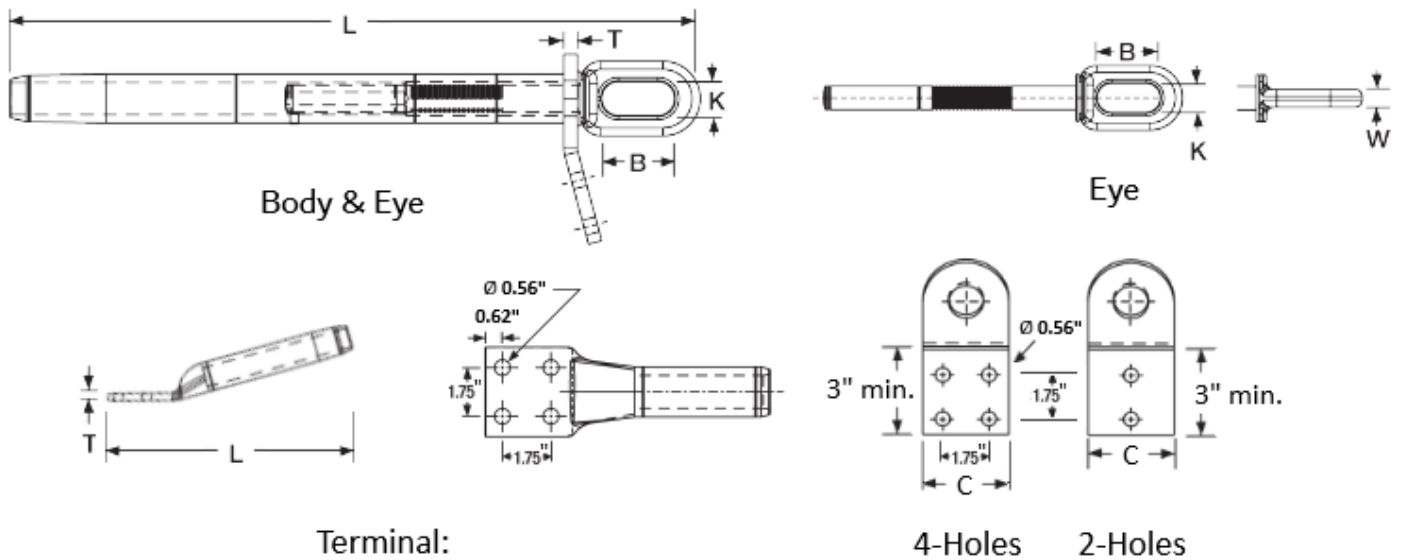
- 11.1. Submitted proposals must include:
- a. Technical information, drawings, and tests.
  - b. Table of Compliance completed by the bidder with reference (see Appendix 1).

## 12. Table 1: Warehouse and Asset Suite Identification Number

Warehouse Catalog #	Asset Suite #	Conductor Size (Strands) (Strength)	Code Word	Conductor OD	Body & Terminal Holes	Die Index	Compatible Manufacturer & Model
002-87763	87763	266.8 (26/7) (11,400 lbs)	Partridge ACSS	0.642" (1.63 cm)	2	Body & Terminal: (76AH) Eye: (10SH)	Hubbell (SEDA1109SSACSS)
002-80774	80774	556.5 (24/7) (19,100 lbs)	Parakeet ACSS	0.914" (2.32 cm)	4	Body & Terminal: (722 & 24AH) Eye: (723 & 12SH)	Burndy (YTW39R43REKHTSS)
002-87761	87761	795 (26/7) (32,600 lbs)	Drake ACSS	1.01" (2.81 cm)	4	Body & Terminal: (725 & 30AH) Eye: (726 & 16SH)	Burndy (YTW451R48REKHTSS) Hubbell (SEDA3309SSACSS)

**13. Table 2: Approximate Dimensions and Drawings**

Conductor Size (Strands)	Body & Eye					Terminal		
	L	T	B	K	W	L	T	C
266.8 ACSS (26/7)	19.3" (49.0 cm)	0.5" (1.27 cm)	2.5" (6.35 cm)	1" (2.54 cm)	0.49" (1.24 cm)	9.2" (23.4 cm)	0.5" (1.27 cm)	1.5" min. (3.81 cm)
556.5 ACSS (24/7)	23.66" (60.1 cm)	0.5" (1.27 cm)	2.5" (6.35 cm)	0.88" (2.24 cm)	0.69" (1.75 cm)	16.89" (42.9 cm)	0.75" (1.9 cm)	3" min. (7.62 cm)
795 ACSS (26/7)	29.41" (74.7 cm)	0.5" (1.27 cm)	2.69" (6.83 cm)	1.25" (3.18 cm)	0.75" (1.9 cm)	15.1" (38.35 cm)	0.45" (1.14 cm)	3" min. (7.62 cm)



**Figure 1**

- End of Specification -

## Appendix

## Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	Compliance with the document 4751.50.001		
2	Industry standards: ANSI C119.4, ASTM B958, NEMA. If different ones are used, information showing compatibility is required.		
3	Tech. info. and drawings provided.		
4	Compression Dead-End Single Pad		
5	For ACSS Ultra-High Strength. Conductors' code word and size as per Table 1.		
6	Full Tension (95% of the rated conductor strength).		
7	Operating Temperature: 250°C		
8	Complete Assembly (Body, Eye, Terminal, and Hardware).		
9	Dimensions as per Table 2.		
10	High-Strength Aluminum Alloy		
11	Body	Permanently marked with the manufacturer's name, model, conductor size, overlapping crimping areas, and die set.	
12		Hole with plug for inhibitor compound fill.	
13		Single 15° NEMA-Holes spacing pad. Hole's quantity as per Table 1.	
14		Galvanized steel as per ASTM B958.	
15	Eye	Permanently marked with the manufacturer's name, model, and overlapping crimping area.	
16		Rubber gasket in the eye end.	
17		Threaded area so it can be bonded with the body.	
18	Terminal	High-Strength Aluminum Alloy	
19		Permanently marked with the manufacturer's name, model, conductor size, overlapping crimping area, and the required die set for the crimps.	
20		Single 15° NEMA-Holes spacing pad. Hole's quantity as per Table 1.	
21	Hardware	Stainless Steel	
22		1/2"-13 TPI hex head bolts, 1/2" flat washers, 1/2" spring lock washers, and 1/2" hex nuts. One (1) of each one for each hole (See Table 1 for hole's qty).	

**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.**











# 4751.50.001 Compression DE Single Pad Connector for ACSS (10-16-25)

Final Audit Report

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