



Document Title:
Dead-End Grips for Spacer Cables

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Related/Referenced Documents

N/A.

Version History

Version	Date	Revision
01	Dec. 16, 2021	Initial release.
02	Apr. 13, 2022	Format revision. Table of compliance added.
03	Oct. 21, 2022	Added item 002-83572.
04	May 16, 2024	Added items: 002-86046, 002-86047, 002-86048, 002-86049, 002-86050, 002-86051
05	Jul. 18, 2024	Format corrections, TOC update, Section 4 modified, and sections order rearranged.
06	Sep. 11, 2024	002-82341, 002-82342, 002-82343, and 002-83572 removed. Description regarding these codes was removed. TOC updated. General format revised. Change of document title.



Item Version History

Warehouse Catalog #	Asset Suite	Version	Date
002-86046	86046	3	09/11/2024
002-86047	86047	3	09/11/2024
002-86048	86048	3	09/11/2024
002-86049	86049	3	09/11/2024
002-86050	86050	3	09/11/2024
002-86051	86051	3	09/11/2024



1. Introduction

This specification describes the minimum requirements for conductor dead-end grips for dead ending for spacer cables used in the distribution 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 electrical and mechanical characteristics of the equipment/material.

2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this equipment/material to LUMA on previous orders will not have to furnish samples at bid opening. The equipment/material will be received at the LUMA's general warehouse (011) 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 manufacturers and models see Table 1. These models are examples 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.

5. Markings

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

6. Packaging

All equipment/material 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.

7. Number Per Package (Logistics)

- 7.1. For bare conductor, see Table #1 or as requested by LUMA.
- 7.2. For spacer cable, proponents shall indicate at the time of bidding, or as requested by LUMA.

8. Acceptance Criteria

- 8.1. Test required: certified by external 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/ASTM
 - b. IEEE
 - c. UL
- 8.4. If any other standard 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. The conductor dead-end grips are factory preformed twisted loops manufactured of aluminized steel designed for standard distribution construction on spacer cable.
- 9.2. Must be designed to grip the conductor uniformly to prevent distortion of the conductor. Lay direction of both the dead-end and the conductor should be the same. Most conductors are right-hand lay.
- 9.3. Shall eliminates the needs of bolts, nuts, washers, and other component parts that may become lost or damaged during installation or in service.
- 9.4. Shall have cross-over marks to indicate starting points.
- 9.5. Must have different sizes legs to help identifying rods belonging to each leg after application.
- 9.6. Must have gritted surface in the contact area with the conductor.



9.7. Dead end grips for spacer cable:

- a. Shall be compatible with spacer cable and able to be applied over the covering without the need for stripping the cable.
- b. Material and coating of the grip shall be compatible with the polyethylene cover of the cable and not affect the spacer cable cover.

10. Inspection

The acceptance of any equipment/material 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 equipment/materials were found later to be defective.

11. Proposal Information

11.1. Submitted proposals must include:

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

12. Table 1: Warehouse and Asset Suite Identification Number

Dead End Grips for Spacer Cable							
For use with		Cable OD Range (inches)	Compatible Model	Approx. Length (inches)	Approximate Weight (lb)	LUMA Warehouse #	Asset Suite #
ACSR	AAAC						
2 AWG (6/1)	N/A	0.646	Hendrix CG-0114 PLP DG-2100	33	1.0	002-86046	86046
3/0 AWG (6/1)	195.7 MCM (7)	0.832	Hendrix CG-0118 PLP DG-2102	38	1.4	002-86047	86047
4/0 AWG (6/1) 266.8 MCM (18/1)	N/A	0.893 - 0.939	Hendrix CG-120 PLP DG-2103	42	1.8	002-86048	86048
336.4 MCM (18/1)	394.5 MCM (19)	1.014 – 1.050	Hendrix CG-0122 PLP DG-2104	45	2.4	002-86049	86049
556.5 MCM (24/7)	652.4 MCM (19)	1.254 – 1.267	Hendrix CG-125	49	3.0	002-86050	86050
795 MCM (26/7)	927.2 MCM (37)	1.468	Hendrix CG-128	56	4.0	002-86051	86051

— 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 4350.028.		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document. (ANSI, ASTM, UL)		
3	Material	Aluminized or Galvanized Steel, as required for the type of cable.		
4	Identification	Conductor dead end grip have cross-over marks to indicate starting points		
5	Construction	Preformed twisted loop have gritted surface in the contact area with the cable		
6		Preformed twisted loop have different sizes legs to help identifying rods belonging to each leg after application		
9	For Spacer Cable	Shall be compatible with spacer cable and able to be applied over the covering without the need for stripping the cable.		
10		Material and coating of the grip shall be compatible with the polyethylene cover of the cable and not affect the spacer cable cover.		
11	Conductor Compatibility	Shall be compatible with the size and type of cable as specified in Table #1		

NOTE: This table is only a check list for reference. The compliance shall be with the complete document. Marking a PASS in the table won't be accepted as a compliance without the technical information required to certify it.












4350.028 Dead End Grips (09-11-2024)

Final Audit Report

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