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Version History

Version	Date	Revision
01	June 09, 2025	Initial release

Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
072-87563	87563	01	06/09/2025
072-87564	87564	01	06/09/2025



1. Introduction

This is a general specification that covers the minimum requirements for the Line Covers to be 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 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 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 2 on page 7. 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. 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 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.
- 6.2. A list of all parts included in the container and/or package must be provided at the time of delivery so that 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 unit per box 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. ASTM D638: covers the determination of the tensile properties of unreinforced and reinforced plastics in the form of standard dumbbell-shaped test specimens when tested under defined conditions of pretreatment, temperature, humidity, and testing machine speed.

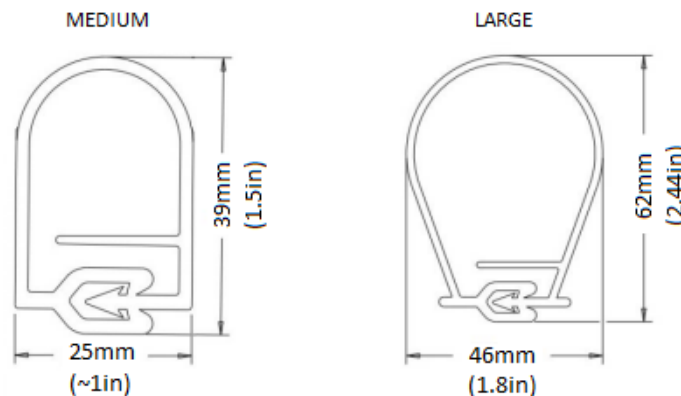
- b. ASTM D149: determines the dielectric breakdown voltage through the thickness of a test specimen (puncture). Also determines dielectric breakdown voltage along the interface between a solid specimen and a gaseous or liquid surrounding medium (flashover).
- c. ASTM D2303: covers solid electrical insulating materials based on their resistance to the action of voltage stresses along the surface of the solid when wet with an ionizable, electrically conductive liquid contaminant.

9. Description

- 9.1. The Line Cover (see figure below) provides insulation to help prevent electrical outages caused by trees or wildlife coming into contact with distribution lines. The covers shall come in medium and large sizes.



- 9.2. Line covers approximate dimensions:



Note: The line covers do not require the exact measurements indicated above; these values are merely guidelines. However, it is necessary that the covers bear similar dimensions and/or proportional equivalencies.

- 9.3. The covers shall be made of HDPE copolymer or an equivalent material.
- 9.4. The covers shall be capable of being used on conductors with a diameter of up to 0.75 inches for medium covers, and up to 1.5 inches for large covers.

- 9.5. The covers shall be UV stable.
- 9.6. The covers shall be tracking and erosion resistant.
- 9.7. The covers shall be compatible with specialized tools (i.e., hand tool and mechanical tool) that ensure fast and reliable installation.
- 9.8. Line covers approximate weight:
- a. 072-87563 (Medium): 0.27 lbs/ft (0.40 kg/m)
 - b. 072-87564 (Large): 0.35 lbs/ft (0.52 kg/m)
- 9.9. Table 1: Electrical Characteristics

Voltage Class	25 kV
AC Dry Withstand / 1 min.	15 kV min / 25 kV min
AC Wet Withstand / 1 min	15 kV min / 25 kV min
AC Dry Long Term Withstand 4 hrs.	8.6 kV min / 14.4 kV min
Dielectric Strength	217 kV/cm at 1.27 mm (550 V/mil min at 0.050")

10. Inspection

- 10.1. Upon inspection of incoming equipment/material, the purchaser reserves the right to refuse product 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 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, drawings, and tests.
 - b. Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 2: Warehouse and Asset Suite Identification Number

Item	Warehouse Catalog #	Asset Suite #	Standard Package	Compatible Manufacturer & Model
Line Cover (Medium Size)	072-87563	87563	Approx. 75-150 ft per spool	TE Connectivity MVLC-18-A/241
Line Cover (Large Size)	072-87564	87564	Approx. 50-100 ft per spool	TE Connectivity MVLC-38R-A/241

—End of Specification —

Appendix

Appendix 1: Table of Compliance

Criteria	Description		Pass/Fail	Comments
Item	Line Cover			
Industry Standards	ASTM D638, ASTM D149 & ASTM D2303			
Material	HDPE copolymer or equivalent material			
Features	UV stable			
	Tracking and erosion resistant			
	Compatible with specialized tools that ensures fast and easy installation			
Electrical Characteristics	Voltage Class	25 kV		
	AC Dry Withstand / 1 min	15 kV min / 25 kV min		
	AC Wet Withstand / 1 min	15 kV min / 25 kV min		
	AC Dry Long term Withstand 4 hrs	8.6 kV min / 14.4 kV min		
	Dielectric Strength	217 kV/cm at 1.27 mm (550 V/mil min at 0.050")		
Medium Cover (072-87563)	Conductor Diameter Maximum	0.75 in. (18 mm)		
	Approximate Weight	0.27 lbs/ft (0.40 kg/m)		
Large Cover (072-87564)	Conductor Diameter Maximum	1.5 in. (38 mm)		
	Approximate Weight	0.35 lbs/ft (0.52 kg/m)		
Conclusion	Complies with Specification (Doc. No. 4350.358)			

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.












4350.358 Line Covers

Final Audit Report

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