Document Title:
Serrated Collar Stud Bolts for Line Post Insulators

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Related/Referenced Documents

N/A

Version History

Version	Date	Revision Comments
01	Feb. 18, 2025	Items 014-83737, 014-83738, 014-83740, and 014-83741 created on 11/15/2022 and Item 014-84297 created on 2/17/2023 were revised previously under document 4350.065. The Items under document 4350.065 were split out into new ones. Line Post Insulators remains on 4350.065 whereas the Base Adapter was moved to 4350.349.

Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
014-84297	84297	6	02/18/2025
014-83737	83737	7	02/18/2025
014-83738	83738	7	02/18/2025
014-83740	83740	7	02/18/2025
014-83741	83741	7	02/18/2025

1. Introduction

This is a general specification that covers the minimum requirements for Serrated Collar Stud Bolts 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 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 in 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 manufacturer and model see Table 2. 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 as per Table 2 or as required 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 A153: For hot dip galvanizing steel components.

8.4. If any other standard different from the ones indicated in this document is used, the supplier must provide information showing compatibility with the required ones.

9. Description

9.1. The serrated collar stud bolts are used for mechanical support of line post insulators when attached to a base adapter or directly to poles in the distribution system to avoid accidental disassembly.

9.2. Serrated Collar Stud Bolts of different lengths shall be required as per Table 2.

9.3. Material: Hot Dip Galvanized Steel for bolts, nuts, and washers in compliance with ASTM A153.

9.4. All bolts shall have a plain surface below the serrated collar for easy installation with a shoulder wrench.

a. For the short shank bolt, it shall be not less than 1/4" (6.35 mm) long.

b. For the long shank bolts, it shall be not less than 1/2" 12.70 mm) long.

9.5. Serrated collar stud bolts dimensions shall be as per Table 1.

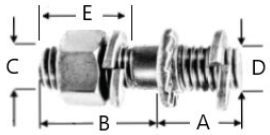
9.6. The short shank bolt shall include two lock washers and one hex nut.

9.7. The long shank bolts shall include one concave locknut, one square nut, one 2" or 2-1/4" (5.08 or 5.72 cm) square washer, and one spring lock washer as minimum.

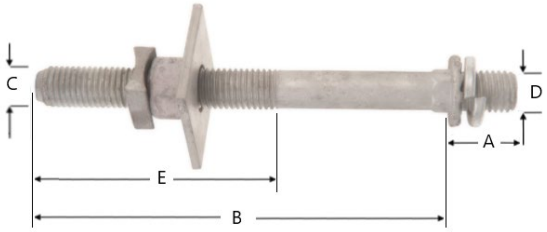
9.8. Table 1: Serrated Collar Stud Bolts Dimensions

Serrated Collar Stud Bolt	A (Full Thread)	B	C	D	E (Min. Thread)
Short Shank	1-1/8” (2.86 cm)	1-3/4” (4.44 cm)	3/4" (1.90 cm)	3/4" (1.90 cm)	1-3/8” (3.49 cm)
Long Shank 7”	1-1/8” (2.86 cm)	7” (17.78 cm)	5/8” (1.58 cm)	3/4" (1.90 cm)	4” (10.16 cm)
Long Shank 10”	1-1/8” (2.86 cm)	10” (25.40”)	5/8” (1.58 cm)	3/4" (1.90 cm)	4” (10.16 cm)
Long Shank 12”	1-1/8” (2.86 cm)	12” (30.48 cm)	5/8” (1.58 cm)	3/4" (1.90 cm)	4” (10.16 cm)
Long Shank 14”	1-1/8” (2.86 cm)	14” (35.56 cm)	5/8” (1.58 cm)	3/4" (1.90 cm)	4” (10.16 cm)

Short Shank Stud Bolt



Long Shank Stud Bolt



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

Serrated Collar Stud Bolt	Warehouse Catalog #	Asset Suite #	Standard Package	Compatible Manufacturer & Model
Short Shank	014-84297	84297	100 pcs.	Hubbell (DF19M3) MacLean (J25249.1)
Long Shank 7”	014-83737	83737	50 pcs.	Hubbell (DF19M2) MacLean (J25248.1)
Long Shank 10”	014-83738	83738	25 pcs.	Hubbell (DF19M19) MacLean (J25248.9)
Long Shank 12”	014-83740	83740	25 pcs.	Hubbell (DF19M20) MacLean (J25248.10)
Long Shank 14”	014-83741	83741	20 pcs.	MacLean (J25248.11)

— End of Specification —

Appendix

Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	Complies with document 4350.350.		
2	Industry Standards: ASTM A153		
3	Tech. info., drawings, and tests provided.		
4	Serrated Collar Stud Bolt		
5	HDG as per ASTM A153.		
6	Dimensions as per Table 1.		
7	Plain surface below the serrated collar for easy installation with a shoulder wrench. • Short Shank: 1/4" long • Long Shank: 1/2" long		
8	Short Shank with 2 lock washers and 1 hex nut.		
9	Long Shank with 1 concave locknut, 1 square nut, 1 square washer of 2” or 2-1/4” Ø, and 1 spring lock washer as minimum.		

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.

4350.350 Serrated Collar Bolts for Line Post Insulators (2-18-25)

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