



Document Title:
Galvanized Steel Carriage Bolt

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Department
Street Light Program

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N/A

Related/Referenced Documents

N/A

Document History

Version	Date	Revision Comments
1	February 22, 2024	Initial Release, PREPA to LUMA format.
2	July 11, 2024	General format and threaded length modifications.



Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-01814	55347	4	7/11/2024



1. Introduction

This is a general specification that covers the minimum requirements for the galvanized steel carriage bolt used on 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 (O11) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

Descriptive and technical literature must be supplied by the vendor at time of bidding. This literature may include, but is not limited to details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification.

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 models 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. 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)

Fifty (50) per carton or as required by LUMA Energy.

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. ASTM A-153: For zinc coatings applied through hot-drip process on iron and steel hardware.
 - b. ANSI C135.1: For the carriage bolts, machine bolts, double-arming bolts, double end bolts and nuts used in overhead line construction.
- 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. This bolt is for attaching pole line hardware to crossarms. The square neck of the round head carriage bolt makes the bolt self-locking during tightening, when mated with a square hole.
- 9.2. The carriage bolt shall be furnished with one (1) square nut.
- 9.3. Material: Hot Dip Galvanized as per ASTM A153.
- 9.4. Dimensions
 - a. Diameter: 3/8 in
 - b. Bolt Length: 7 in.
 - c. Minimum Thread Length: 4 in.
- 9.5. The minimum tensile strength shall be 4,250 lbf.

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

Warehouse Catalog #	Asset Suite #	Diameter (in.)	Length (in.)	Minimum Thread Length (in.)	Approx. Weight (pounds)	Compatible Manufacturer & Model
002-01814	55347	3/8	7.0	4	0.24	Maclean (J8637)

— 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. (4402.038)		
2	Industry Standards	Latest applicable codes, standards, and other regulations: Galvanized per ASTM A-153 and ANSI C135.1.		
3	Dimensions	Diameter: 3/8 in.		
		Bolt Length: 7 in.		
		Minimum Thread Length: 4 in.		
4	Material	Hot Dip Galvanized Steel Bolt and Nut		
5	Minimum Rated Tensile Strength	4,250 lbf.		
6	Approx. Weight	0.24 pounds		

NOTE: This table is only a checklist 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.











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Final Audit Report

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