



Document Title:  
**5/8" Oval-Eye Bolt, Stainless-Steel and Thermal Diffusion Galvanized (TDG)**

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**Author**

Rodolfo A. Flores Ortiz, PE  
 General Engineer, Distribution Standards & Materials

Signature and Date

Jun 19, 2024

**Reviewer**

Miguel J. Rios López, PE  
 General Engineer, Distribution Standards & Materials

Signature and Date

Jun 19, 2024

**Approver**

Ricardo Castro Gómez, PE  
 Manager, Distribution Standards & Materials

Signature and Date

Jun 19, 2024

**Management Approval (If apply)**

**Approver**

Name  
 Position

Signature and Date

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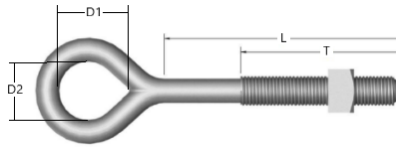
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1	Sep. 28, 2021	Initial release.
2	Feb. 23, 2022	Format corrections
3	Jun. 19, 2024	Format corrections, TOC added. Section 4 modified and sections order rearranged.



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and Thermal Diffusion Galvanized (TDG)  
Document No.: 4350.075  
Department: Distribution

## Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-13611	57695	3	06/19/2024
002-13652	57699	3	06/19/2024
002-13629	57696	3	06/19/2024



## 1. Introduction

This is a general specification that covers the minimum requirements for a stainless-steel and thermal diffusion galvanized (TDG) oval-eye bolt 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 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 and 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. 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. Twenty-five (25) units per box or as requested by LUMA Energy.
- 7.2. Shall be shipped in carton boxes not to exceed 50 pounds (22.68 kg) gross weight.

## **8. Acceptance Criteria**

- 8.1. Test required: certified by external laboratories.
- 8.2. Latest applicable codes, standards, and other regulations:
  - a. ASME B1.1: Standard for the thread form, series, class, allowance, tolerance, and designation for unified screw threads.
  - b. ASME B18.2.2: Standard for the complete general and dimensional data for the various types of inch series square and hex nuts, including machine screw nuts and coupling nuts
  - c. ASTM F593: Standard specification for stainless steel bolts, hex cap screws, and studs.
  - d. ASTM F594: Standard Specification for Stainless Steel Nuts
  - e. ISO 3506-1: Mechanical properties of corrosion-resistant stainless steel fasteners
  - f. ASTM A380/A380M: Standard practice for cleaning, descaling, and passivation of stainless-steel parts, equipment, and systems.
    - a. ASTM A307: Standard specification for carbon steel Bolts, studs, and threaded rod 60 000 PSI tensile strength
    - b. ANSI C135.4: American national standard for zinc-coated ferrous eyebolts and nuts for overhead line construction.
    - c. ANSI C135.5: Zinc-coated ferrous eyenuts and eyebolts for overhead line construction.
    - d. ASTM A1059: Standard specification for zinc alloy thermo-diffusion coatings (TDC) on steel fasteners, hardware, and other products.

## **9. Description**

- 9.1. These 5/8" (15.875 mm) oval-eye bolts are used in construction and maintenance of transmission and distribution lines.
- 9.2. The oval-eye bolt must have a semi-cone point on threaded end. The dimension of semi-cone point for a 5/8"  $\phi$  bolt shall have a length of point of 1/4" beyond the last thread and an approximate angle of 60°.
- 9.3. Each unit shall be furnished with one (1) oval-eye bolt and one (1) square nut.
- 9.4. Tops of nuts shall be one (1) flat and one (1) chamfered.



- 9.5. Shall be accepted in stainless steel or TDG with the following characteristics:
- a. **Material for stainless steel:** stainless-steel (304 or 316) conforming with ASTM F593.
  - b. **Material for TDG steel:** Thermal diffusion galvanized low carbon steel, conforming with ASTM A307.
  - c. Tensile strength: 12,400 lbf (55.2 kN) minimum.

## 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
  - b. Table of Compliance completed by the bidder with reference (see Appendix 1).

## 12. Warehouse and Asset Suite Identification Number

12.1. Table 1 – Stainless Steel Oval-Eye Bolts:

Warehouse Catalog #	Asset Suite #	BOLT LENGTH (L)	THREADED SHANK LENGTH (T)	Oval-Eye Dimensions (D1 x D2)	Compatible Manufacturer & Model
002-13611	57695	10" (25.4 cm)	6" (15.2 cm)	2" x 1-1/2" (5.1 x 3.8 cm)	Coastal Line Products (60616100)
002-13652	57699	12" (30.5 cm)	6" (15.2 cm)	2" x 1-1/2" (5.1 x 3.8 cm)	Coastal Line Products (60616120)
002-13629	57696	14" (35.6 cm)	6" (15.2 cm)	2" x 1-1/2" (5.1 x 3.8 cm)	Coastal Line Products (60616140)

12.2. Table 2 – Thermal Diffusion Galvanized Oval-Eye Bolts:

Warehouse Catalog #	Asset Suite #	BOLT LENGTH (L)	THREADED SHANK LENGTH (T)	Oval-Eye Dimensions (D1 x D2)	Compatible Manufacturer & Model
002-13611	57695	10" (25.4 cm)	6" (15.2 cm)	1 5/8" x 1-1/4" (4.13 x 3.18 cm)	MacLean Power Systems – J9410T
002-13652	57699	12" (30.5 cm)	6" (15.2 cm)	1 5/8" x 1-1/4" (4.13 x 3.18 cm)	MacLean Power Systems – J9412T
002-13629	57696	14" (35.6 cm)	6" (15.2 cm)	1 5/8" x 1-1/4" (4.13 x 3.18 cm)	MacLean Power Systems – J9414T

— End of Specification —



## Appendix



### Appendix 1: Table of Compliance

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the specification document 4350.075		
2	Industry Standards	The Proponent complies with the industry standards stablished in this document.		
3	Material	SS 304 or 316 or TDG		
4	Bolt Construction	Bolt must have a semi-cone point on threaded end. The dimension of semi-cone point for a 5/8" $\phi$ bolt shall have a length of point of 1/4" beyond the last thread and an approximate angle of 60°.		
5	Nut Construction	Tops of nuts shall be one (1) flat and one (1) chamfered.		
6	Set	One (1) oval-eye bolt and one (1) square nut.		
7	Tensile Strength	12,400 lbf (55.2 kN) minimum.		











# 4350.075 Eyebolt 5-8 SS and TDG (6-19-2024)

Final Audit Report

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