



**Through Bolt Diam. 5/8 in.
Length 18, 20, 22, 24, 26 in.**

Equipment Specification

Document No.: 4752.258

Item No.: N/A

Originating Dept: Transmission Eng.

	Document Title: Through Bolt Diam. 5/8 in. Length 18, 20, 22, 24, 26 in.		
	Document Type: Equipment Specification	Document No.: 4752.258	
Department: Transmission Engineering	Version: 01	Issue Date: 5/18/2022	Effective Date: 5/18/2022

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Management Approval

<p>Heriberto González Section Manager, Standards</p> <p>Darrel Wilvers Director, Asset Management</p>	Signature and Date Heriberto Gonzalez (Jun 10, 2022 09:37 EDT)
	Signature and Date N/A

Version History

Version	Date	Revision Comments	Author	Reviewers	Approver
00	Dec 28, 2021		Rene Maldonado	Heriberto Gonzalez	Walter Carrasquillo
01	May 18, 2022	General revision for final approval	Emmanuel E. Rivera	Rene Maldonado Oscar Venegas	Walter Carrasquillo



1. General

- 1.1. This is a general specification that covers the minimum requirements for the bolt (5/8 in.) square head machine galvanized with square nut to be used in the distribution and transmission system in Puerto Rico.
- 1.2. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site conditions, quantity, and other requirements.
- 1.3. This document includes the general electrical and mechanical characteristics of the material.

2. Specific Name

- 2.1. Through Bolt Diam. 5/8 in.

3. Basic Use

- 3.1. For general mechanical support to attach the electrical and distribution hardware on the distribution and 38 kV transmission system assemblies.

4. Special Requirements

- 4.1. Samples shall be furnished if requested by LUMA.
- 4.2. LUMA may require one (1) unit properly labeled for testing and analysis.
- 4.3. Descriptive and technical literature shall be supplied if requested by LUMA.

5. Marking and Packaging

- 5.1. All material and equipment 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. Equal or approved equal to:

7. Hubbell Power Systems - see Table 1 for specific catalog number.

8. Number per package:

- 8.1. As approved by LUMA.

9. Acceptance Criteria

- 8.1. Latest applicable codes, standards, and other regulations: ASTM (A307, A153)-IEEE (C135.1)-ASTM (E380).



10. Description

10.1. Table 1: Dimensions

LUMA Warehouse Number	Diameter Inches	Length Inches ("L")	Min. Thread Length Inches ("T")	Catalog Number
002-82912	5/8	18	6	8818
002-82913	5/8	20	6	8820
002-82914	5/8	22	6	8820
002-82915	5/8	24	6	8824
002-82916	5/8	26	6	8826

- 10.2. The dimensions of semicone point for the bolt shall have a length of point of approximate 1/4-inch (0.635 cm) beyond the last thread and approximate angle of 60 degrees.
- 10.3. The thread end of bolts not requiring semicone points, shall be chamfered or rounded bolts and nuts conform with IEEE standard C135.1 – 1999.
- 10.4. Shall be provided with corresponding square nut of the same material.
- 10.5. The top of nuts shall be flat and chamfered. It shall also be equal to the maximum width across flat, within a tolerance of 15%.
- 10.6. The nut and bolt shall be made so that the nut can run the entire length of the thread without the use of tools in accordance with IEEE standard C135.1 – 1999.
- 10.7. The bolts should be Grade A, according to its tensile strength as per ANSI/ASTM A-307.
- 10.8. Material: Hot-Dip galvanized structural steel in accordance with ANSI/ASTM A-307 and A-153.
- 10.9. Minimum tensile strength: 12,400 lbf.
- 10.10. Metric conversion as per latest ASTM.

11. Inspection

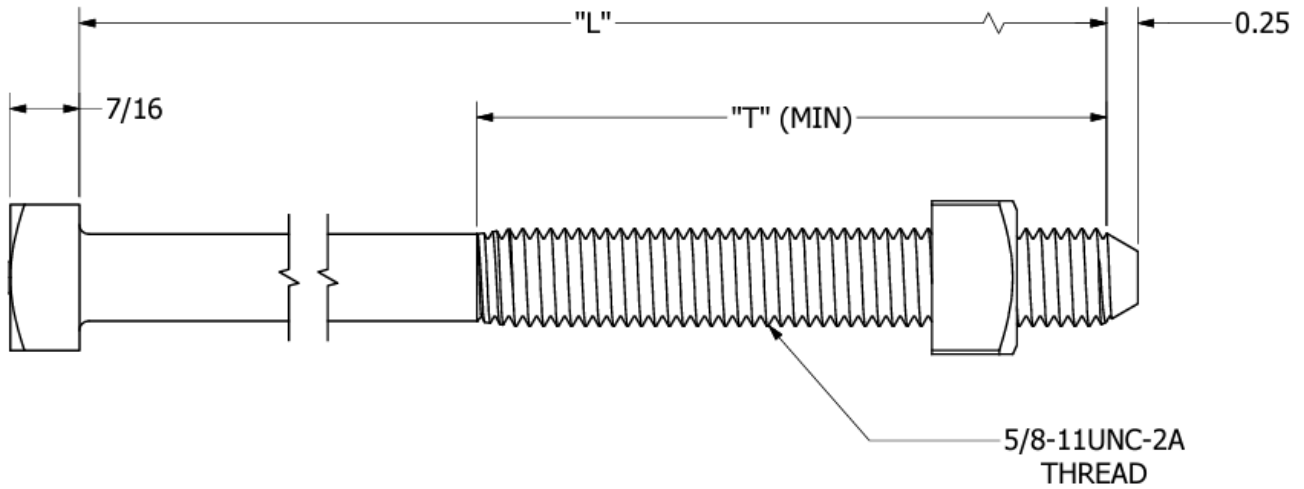
- 11.1. The acceptance of any material or equipment shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it shall not prevent subsequent rejection if such material is found to be defective later.



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12. Drawing



— End of Specification —











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Final Audit Report

2022-06-10


Created:	2022-06-02
By:	Emmanuel E Rivera Cruz (emmanuel.riveracruz@lumapr.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAHAU_dEDIXdApsjttMWCF_W8O2xK3IbaJ

"4752.258 Through Bolt Diam. 5-8 in. Length 18, 20, 22, 24, 26 in." History


-  Document created by Emmanuel E Rivera Cruz (emmanuel.riveracruz@lumapr.com)
2022-06-02 - 6:39:31 PM GMT
-  Document e-signed by Emmanuel E Rivera Cruz (emmanuel.riveracruz@lumapr.com)
Signature Date: 2022-06-02 - 6:43:26 PM GMT - Time Source: server
-  Document emailed to Rene Maldonado (rene.maldonado@lumapr.com) for signature
2022-06-02 - 6:43:28 PM GMT
-  Email viewed by Rene Maldonado (rene.maldonado@lumapr.com)
2022-06-02 - 6:43:33 PM GMT
-  Document e-signed by Rene Maldonado (rene.maldonado@lumapr.com)
Signature Date: 2022-06-03 - 2:06:29 PM GMT - Time Source: server
-  Document emailed to Oscar E Venegas (oscar.venegas@lumapr.com) for signature
2022-06-03 - 2:06:31 PM GMT
-  Email viewed by Oscar E Venegas (oscar.venegas@lumapr.com)
2022-06-03 - 2:06:38 PM GMT
-  Email viewed by Oscar E Venegas (oscar.venegas@lumapr.com)
2022-06-09 - 2:25:13 PM GMT
-  Document e-signed by Oscar E Venegas (oscar.venegas@lumapr.com)
Signature Date: 2022-06-09 - 2:27:10 PM GMT - Time Source: server- Signature captured from device with phone number XXXXXXXX2079
-  Document emailed to Walter Carrasquillo (walter.carrasquillo@lumapr.com) for signature
2022-06-09 - 2:27:12 PM GMT

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Signature Date: 2022-06-10 - 12:31:51 PM GMT - Time Source: server

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