



Equipment Specification

Document No.: 4402.020

Item No.: 026-00674

Originating Department: Distribution Engineering

Breakaway support coupling for 30 to 40 ft. aluminum poles

1. Introduction

This is a general specification that covers breakaway support coupling 30 to 50 ft. aluminum poles 4.75 in. to be used for converting all lighting poles to breakaway type on the distribution system in Puerto Rico. Project information will be provided by LUMA Energy at time of order placement and will provide information on site specific conditions, quantity, and other requirements.

2. Special Requirements

2.1. Samples shall be furnished as requested by LUMA Energy.

3. Quantity

3.1. One system, factory sealed, properly labeled for testing and/or analysis. Vendors that have supplied this material to the PREPA or LUMA Energy on previous orders, will not have to furnish samples at bid opening. Descriptive and technical literature shall be supplied if requested by LUMA Energy. Products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time act for opening of bids, have been tested and/or approved by PREPA and/or LUMA Energy. Evidence of PREPA's or Luma Energy's approval of the equipment or material shall be supplied by vendor requested by LUMA Energy.

4. Markings

4.1. Containers shall be marked outside with LUMA Energy purchase order number, code number, net weight, manufacturer lot number and manufacturer name.

5. Equal or Approved Equal to

5.1. Transpo Safety, Inc. "pole - safe".

6. Packaging

6.1. Bidder shall indicate in proposal method of packaging unless instructions are included in the invitation to bid.

7. Number per package (Logistics)

7.1. One (1) system.

8. Acceptance criteria

8.1. Latest applicable codes, standards, and other regulations: ASHTO– ASTM – FHWA

8.2. Compliance with LUMA Standard STL-9A drawing enclosed.

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- 8.4. If there is any discrepancy between drawing and specification, the specification shall be followed.

9. Description

- 9.1. A 4.75 in. (12.07 cm) long breakaway support coupling for 30 to 50 ft. aluminum poles with luminaire support coupling to be used with anchor based equipped aluminum lighting poles installed in locations exposed to vehicular collisions. Each system shall consist of one (1) 4 ¾ in. (12.07 cm) long, longitudinally grooved die-cast aluminum coupling, one (1) 1 in. (2.54 cm) outer diameter, stainless steel threaded stud plus one (1) 3/8 x 2 ½ - 3 in. (0.95 x 6.35 – 7.62 cm) outer diameter, stainless steel bottom washer, one (1) 3/8 x 2 in. (0.95 x 5.08 cm)- outer diameter, stainless steel top washer and one (1) stainless steel hex nut, or torque limiting nut (torque limiting nuts preferred).
- 9.2. Requirement: “Standard specification for structural supports for highway signs, luminaires, and traffic signals”. Shall be approved, for F.H.W.A. federal – aid projects participation. Each coupling shall comply with the following minimum requirements:
- 9.2.1. Tensile strength: 25.0 Kips
- 9.2.2. Restrained shear: 3.0 Kips min – 6.5 kips max.
- 9.2.3. Nut torque: 175 ± 25 ft. – lb. or controlled by nut, all aluminum alloy parts shall comply with ASTM B85. All conversions to metric system shall be in accordance with ASTM E380.

10. Inspection

- 10.1. 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 would not prevent subsequent rejection if such materials are found later to be defective.

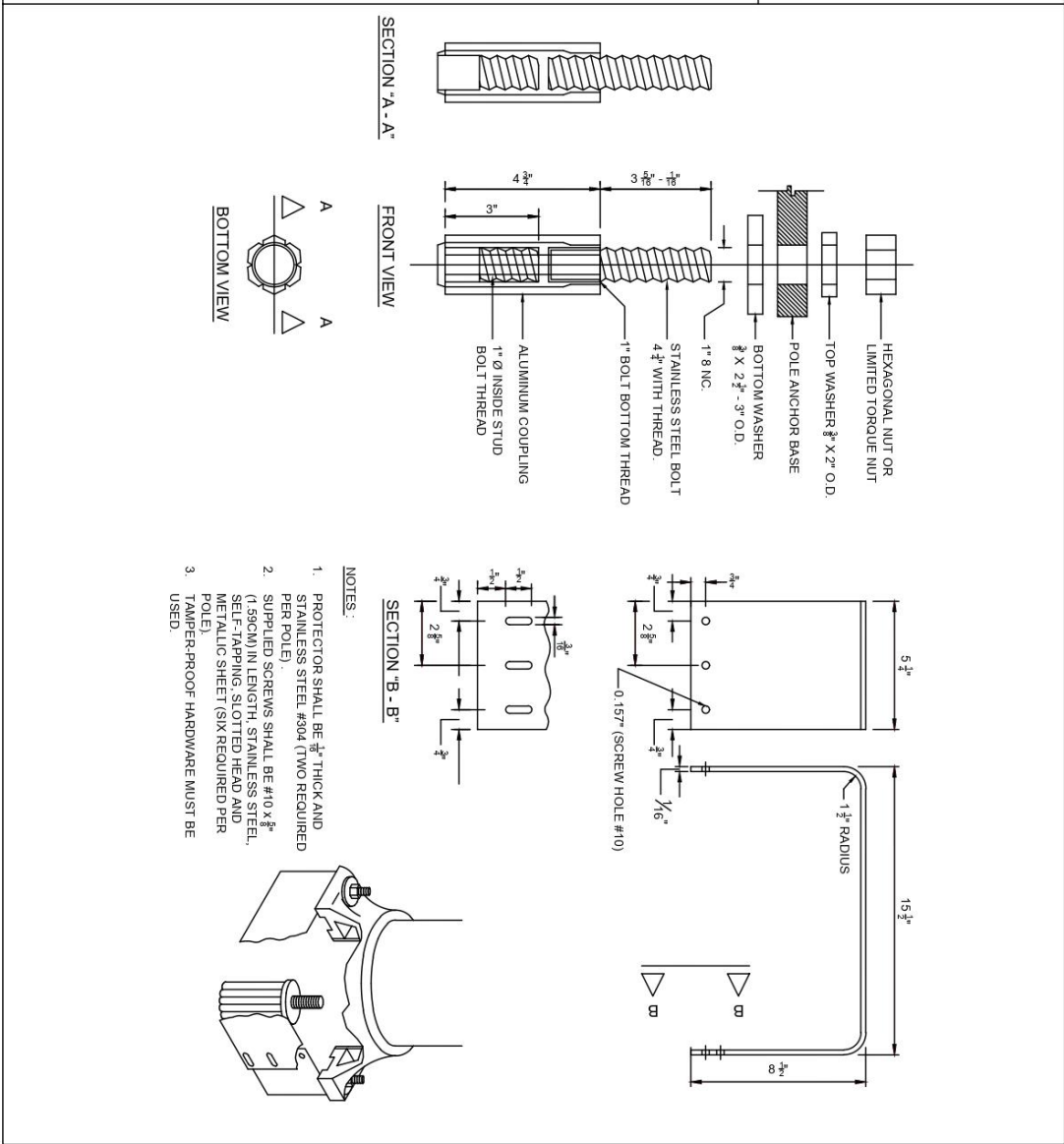
— End of Specification —

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DISTRIBUTION ENGINEERING STREETLIGHT STANDARDS

TITLE: SUPPORT BREAKAWAY COUPLING WITH PROTECTIVE RING FOR ALUMINUM POLE WITH SHOE BASE	STANDARD NO. <u>STL-9A</u> VERSION <u>2</u>
	DOCUMENT NO. <u>4401.018</u>
	PAGE <u>1</u> OF <u>1</u> DATE _____
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Document History

Version	Date	Author	Reviewer	Approver
2	8/13/2021	Marlene Ortiz Rivera	Alvin Rosario Osorio	Héctor R. Benero García