



Equipment Specification

Document No.: 4350.202

Originating Department: Distribution Engineering

## **Splice Compression Connector High Voltage, Tapered Ends, Seamless Barrel**

---



### **1. Introduction**

This is a general specification that covers the minimum requirements for high voltage splice compression connector with tapered ends 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 material.

### **2. Special Requirements**

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this material to PREPA / LUMA on previous orders, will not have to furnish samples at bid opening. The material will be received at the LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

### **3. Quantity/Literature**

Descriptive and technical literature must be supplied by 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. For products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time for opening of bids, had been tested and/or approved by LUMA. Evidence of LUMA Energy's approval of the equipment or material shall be supplied by vendor if requested by LUMA Energy.

### **4. Markings**

- 4.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 4.2. Packaging labels and tags shall be waterproof.

### **5. Equal or Approved Equal to**

- 5.1. For suggested manufacturers and models see Table 1.

## **Splice Compression Connector High Voltage, Tapered Ends, Seamless Barrel**

---

### **6. Packaging**

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.

### **7. Number Per Package (Logistics)**

- 7.1. Box quantity: one (1) unit per box.
- 7.2. Standard package: twenty-five (25) Boxes per package or as requested by LUMA Energy.

### **8. Acceptance Criteria**

- 8.1. Test required: certified by external laboratories.
- 8.2. Latest applicable codes, standards, and other regulations:
  - a. UL 486A-486B – Standard for single polarity connectors

### **9. Description**

- 9.1. Seamless barrel, tapered ends, high voltage compression connector splice used to splice aluminum or copper conductors up to 35 KV.
- 9.2. Connector must be made of electro tin plated copper or aluminum to reduce galvanic corrosion and resist corrosive elements. For specific connector material see Table 1.
- 9.3. Connector ends must be tapered to reduce corona emission and must have internal chamfer at the wire entry to ensure smooth insertion of wire.
- 9.4. Connector barrel must have center stop indentations to indicate when wire is fully inserted.
- 9.5. Connectors must be clearly marked with color coding to ensure proper die and installation tooling.
- 9.6. To be installed with standard tooling and dies. For die index see Table 1.
- 9.7. Must come with oxide inhibitor.
- 9.8. Conductor range as per Table 1.

**Splice Compression Connector High  
 Voltage, Tapered Ends, Seamless Barrel**

9.9. Table 1:



Warehouse Catalog #	Asset Suite #	Suggested Manufacturer	Model	Material	Sleeve Length	Die Index Y35 Die	Color Code	Conductor Size Range Both Ends
002-09270	54353	Burndy	YS2CT	Copper	2.34 in (5.94 cm)	10 U2CRT	brown	#2 AWG Stranded
002-09262	54352	Burndy	YS25T	Copper	2.35 in (5.97 cm)	12 U25RT	pink	1/0 AWG Stranded
002-09254	54351	Burndy	YS26T	Copper	2.47 in (6.27 cm)	13	black	2/0 AWG Stranded
002-09429	54365	Burndy	YS27T	Copper	2.6 in (6.60 cm)	14 U27RT	orange	3/0 AWG Stranded
002-09668	56682	Burndy	YS34T	Copper	3.86 in (9.80 cm)	20 U34RT	brown	500 MCM
002-09676	56683	Burndy	YS39T	Copper	4.60 in (11.68 cm)	24 U39RT	black	750 MCM

**10 Inspection**

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 were found later to be defective.

— End of Specification —

**Document History**

Date: 02/24/2022  
 Version: 1 (4), 2 (4), 3(4), 4(4), 5(4) & 6(4)  
 Author: Alex J. Rodriguez   
 Reviewer: Rafael Torres   
 Approver: Ricardo Castro 