

Connectors, Terminal, Bolted, Aluminum



1. Scope

This standard covers the requirements for aluminum, bolted, terminal connectors.
This standard applies to Seattle City Light (SCL) Stock No. 651214.

2. Application

Bolted connectors are used to connect 795 or 954 kcmil All Aluminum Conductor (AAC) or Aluminum Conductor Steel Reinforced (ACSR) to a flat, NEMA two-hole pad.

Bolted connectors may be used on lines or equipment up to 230 kV.

Torque hardware to 40 ft-lb.

3. Industry Standards

Bolted connectors shall meet the applicable requirements of the latest revision of the following industry standards:

ANSI C119.4; American National Standard for Electric Connectors— Connectors for Use between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operation at or Below 93°C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100°C

ANSI/NEMA CC1; Electric Power Connection for Substations

4. Requirements

Bolted connectors shall have the following attributes:

- Aluminum body
- Physical design and dimensions as shown in Table 4 and Figure 4.
- Two-hole NEMA pad
- Aluminum hardware, (captured U-bolts, split lock washers, and nuts)

Figure 4. Bolted Connector

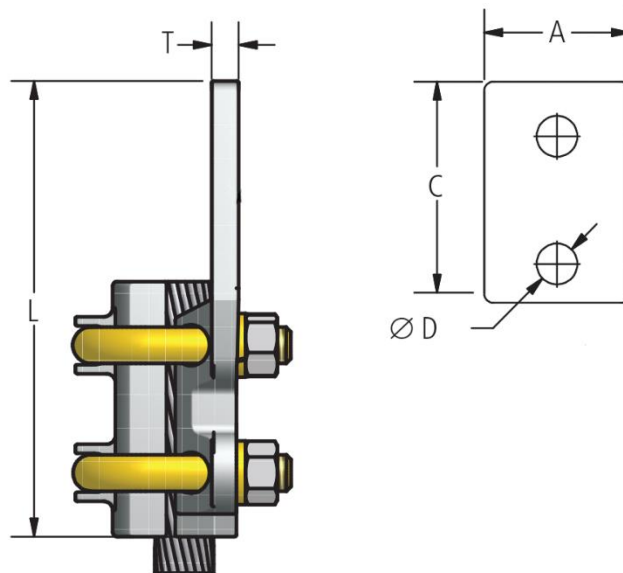


Table 4. Bolted Connector Dimensions

Conductor Range (Dia.)	Connector Dimensions (in)					U-Bolt Dia.	Number of U-Bolts
	Connector Length (L)	Pad Width (A)	Pad Length, Min. (C)	Pad Thickness (T)	Pad Hole Dia. (D)		
0.89 to 1.30	6.75	2	3	0.563	0.563	0.5	2

5. Marking

Bolted connectors shall be legibly marked with the following:

- Manufacturer name or trademark
- Catalog number
- Conductor size

6. Packaging

Bolted connectors shall be packaged to prevent damage during shipping, handling, and storage.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product catalog part number
- Product description
- SCL stock number

Each shipping container shall be legibly marked with the following information:

- Seattle City Light purchase order number
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7. Issuance

EA

8. Approved Manufacturers

Manufacturer	Catalog No.
AFL (Formerly DOSSERT)	UL127-2N-AA

9. Sources

AFL, 230 kV Aluminum Bolted Terminal Connectors, Drawing# PP-3-00502, Revision 5, 1.30.19

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www.aflglobal.com

www.powerlineequipment.com.au

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