Connectors, Multiple-Port, Non-Submersible, 600 V

1. Scope

This standard covers the requirements for 600 V, non-submersible multiple-port connectors.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Description
014377	2-port connector
014378	4-port connector
014379	6-port connector

Submersible multiple-port connectors are outside the scope of this standard. See SCL 6780.05 and SCL 6780.46.

2. Application

Non-submersible multiple-port connectors are designed for use in dry or damp locations inside pedestals, vaults, and handholes.

Connectors are appropriate for copper or aluminum conductors.

These connectors are NOT rated for direct burial.

Install connectors using a 1/8-in Allen wrench and torque to 45 in-lb.

3. Industry Standards

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

ANSI/UL 486A-486B; “Wire Connectors”

ANSI/UL 486D; “Sealed Wire Connector Systems”

ANSI C119.4; "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"

4. Requirements

Multiple-port connectors shall have the following attributes:

- Connector body and set screws manufactured from high-strength 6061-T6 aluminum alloy
- AL9CU rated for use with both copper and aluminum conductor that meets the requirement of UL 486A-486B
- Accepts #14–#4 AWG copper or aluminum conductors
- Re-usable with Allen wrench
- Encapsulated in insulating material for use in damp/wet locations or for above-grade applications meeting the requirements of UL 486D
- Oxide-inhibiting grease pre-installed in each port
- Resealable wire ports with end caps
- Resealable set screw ports end caps
- Rated for 600 V, 90° C (194° F)
- UV rated or sunlight resistant body

Multiple-port connector sizes shall be comparable to the nominal dimensions listed in Table 4 and shown in Figure 4a.

Table 4. Dimensions for Multiple-Port Connectors, Non-Submersible

Stock No.	Number of Ports	Dimensions (L x W x H), Nominal (in)
014377	2	1.08 x 1.25 x 1.25
014378	4	1.95 x 1.25 x 1.25
014379	6	2.83 x 1.25 x 1.25

Figure 4a. Components, Multiple-Port Connector, Non-Submersible, Top View

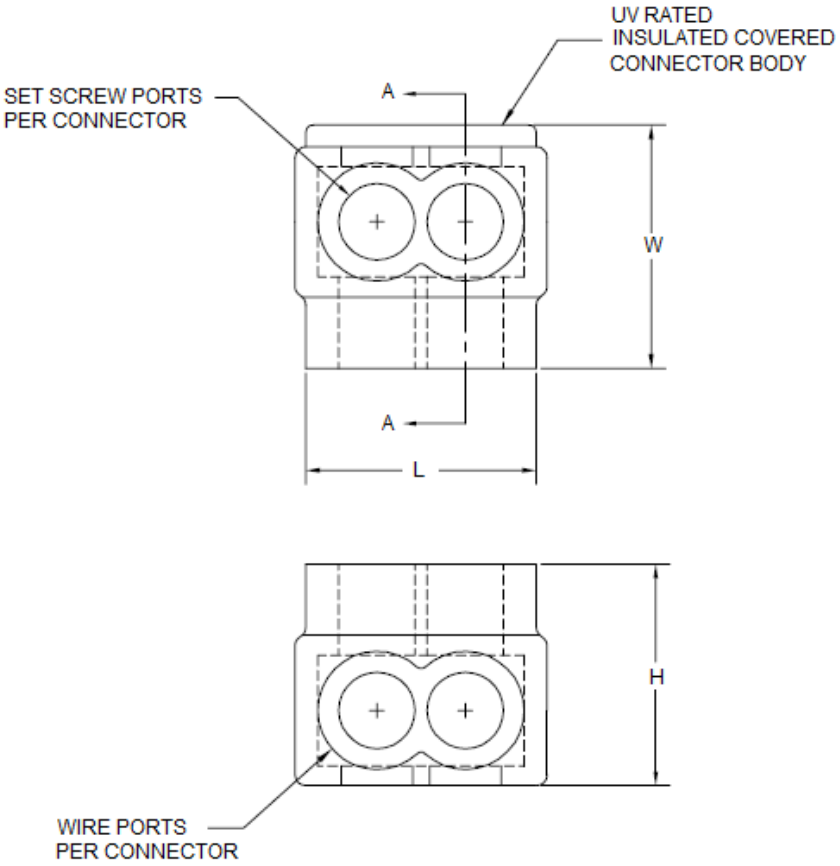
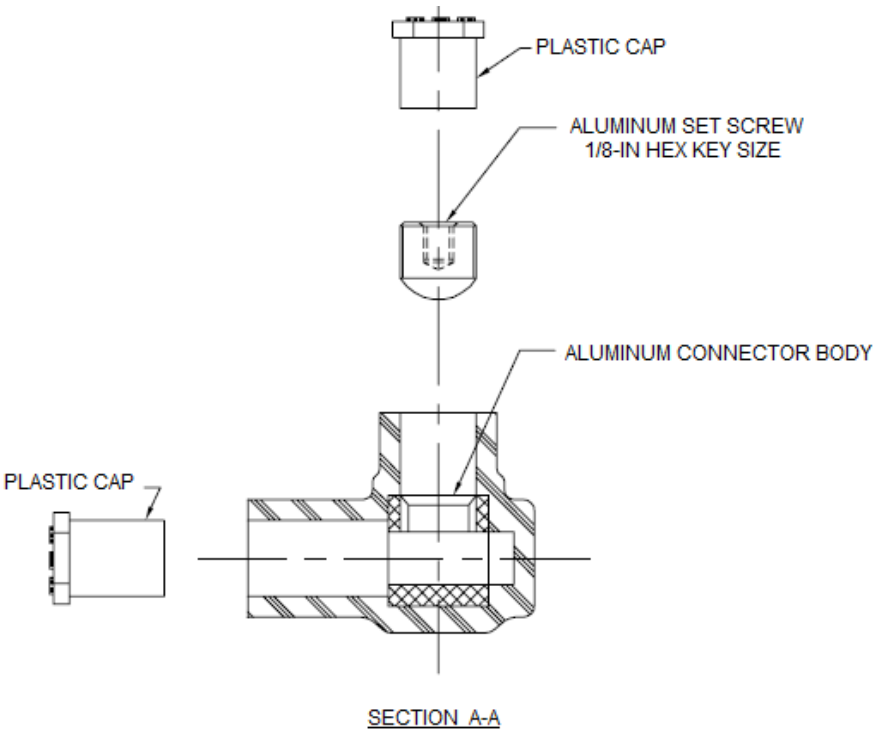


Figure 4b. Components, Multiple-Port Connector, Non-Submersible, Side View



5. Testing

Test data that establishes compliance with the requirements of ANSI/UL 486A-486B and this material standard shall be provided upon request.

6. Marking

Each multiple-port connector shall be legibly and permanently marked with:

- Manufacturer name or symbol
- Catalog number
- Wire size range
- Wire material: copper or aluminum (AL9CU)
- Underwriters Laboratories (UL) and/or Canadian Standards Association (CSA) mark

7. Packaging

Multiple-port connectors shall be packaged to prevent damage during shipping, handling, and inside storage.

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

- Manufacturer identification
- Product description
- Seattle City Light stock number
- Quantity contained

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

- Manufacturer identification
- Product description
- Seattle City Light purchase order number

8. Issuance

Stock Unit: EA

9. Approved Manufacturers

Stock No.	Description	Burndy LLC
014377	2-port connector	1PL42
014378	4-port connector	1PL44
014379	6-port connector	1PL46

10. References

SCL Material Standard 6780.05; “Connectors, Multiple, Insulated Submersible, 1000 A and Accessories”

SCL Material Standard 6780.46; “Connectors, Underground, Multi-Tap, 600 Volt”

11. Sources

Neuansourinh, Ponet; SCL Standards subject matter expert and originator of 6780.52 (ponet.neuansourinh@seattle.gov)

Rice, Morgan; SCL Network Crew Chief and subject matter expert for 6780.52 (morgan.rice@seattle.gov)

www.ecat.burndy.com