

Connectors, Underground, Multi-Tap, 600 Volt



1. Scope

This standard covers the material requirements for 600 V, multi-tap underground connectors.

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

Stock No.	Number Positions	Conductor Range
013661	4	#12 AWG to 350 kcmil
013662	6	#12 AWG to 350 kcmil
013694	4	#10 AWG to 500 kcmil
013695	6	#10 AWG to 500 kcmil

2. Application

Multi-tap underground connectors may be used for direct bury, handhole, overhead service, and pedestal applications.

Multi-tap underground connectors can be used to construct services, power streetlighting, or provide network vault lighting.

Copper or aluminum conductor can be used with 4- or 6-position underground connectors.

Install connectors using a 5/16-in Allen wrench and torque to 20 ft-lb.

3. Industry Standards

Multi-tap underground connectors shall meet the applicable requirements of the following industry standards:

ANSI C119.1; Sealed Insulated Underground Connector Systems Rated 600 Volts

ANSI C119.4; 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

UL 486D; UL file E125087

4. General Requirements

Multi-tap underground connectors shall be manufactured from high-strength 6061-T6 aluminum alloy.

Connectors shall have insulation encapsulated in Thermoplastic Elastomer (TPE) that meets the requirements of UL 486D.

Connectors shall be watertight and suitable for direct burial in earth or concrete.

Oxide-inhibiting grease shall be used in each port.

Connectors shall have resealable wire ports.

Connectors shall be UL Listed as detailed in Section 3.

Connectors shall have a minimum temperature rating of 90° C.

Connectors shall be rated 600 V.

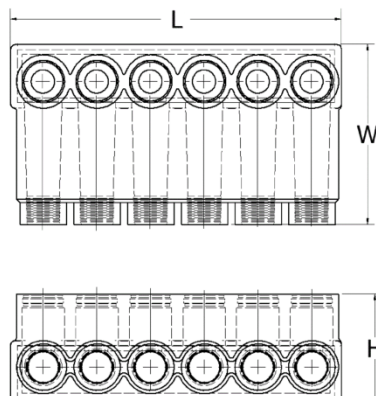
Cap and tether (if one is used) shall be of durable design and made from the same TPE material as the connector.

5. Detailed Requirements

Table 5. Requirements for Multi-tap Underground Connectors

Stock No.	Number Positions	Conductor Range	Length/Width/Height, Nominal (in)
013661	4	#12 AWG to 350 kcmil	5 x 5 x 3
013662	6	#12 AWG to 350 kcmil	7 x 5 x 3
013694	4	#10 AWG to 500 kcmil	6 x 5 x 3
013695	6	#10 AWG to 500 kcmil	9 x 5 x 3

Figure 5. Dimension Definitions for a Multi-tap Underground Connector



6. Packaging

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

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

Standard package shall consist of two connectors.

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

- Manufacturer identification
 - Product description
 - Seattle City Light purchase order number
 - Seattle City Light stock number
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7. Issuance

Stock Unit: EA

8. Approved Manufacturers

Stock No.	Number Positions	Conductor Range	Approved Manufacturer	Catalog No.
013661	4	#12 AWG to 350 kcmil	Burndy	BIBS-350-4DB
			CMC	SSBC-350-4SI
			Utilco	PED4-350-SS-P
013662	6	#12 AWG to 350 kcmil	Burndy	BIBS-350-6DB
			CMC	SSBC-350-6SI
			Utilco	PED6-350-SS-P
013694	4	#10 AWG to 500 kcmil	Burndy	BIBS-500-4DB
			CMC	SSBC-500-4SI
			Utilco	PED-4-500-SS-P
013695	6	#10 AWG to 500 kcmil	Burndy	BIBS-500-6DB
			CMC	SSBC-500-6SI
			Utilco	PED-6-500-SS-P

9. Sources

Chao, Yaochiem; SCL Standards Engineer and subject matter expert for 6780.46

Ilsco Product Literature; www.ilsco.com

Tilley, Kathy; SCL Electrical Engineering Support Specialist and originator of 6780.46