

## Compression Connectors, H-Tap, Aluminum



### 1. Scope

This standard covers the requirements for range-taking, aluminum, compression H-tap connectors.

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

Stock No.	Main (AWG)	Tap (AWG)
014320	#2-#6 ACSR, #2-#6 Str	#8-#14 Str
014321	#2-#6 ACSR, #1-#6 Str	#2-#6 ACSR, #1-#6 Str
014322	1/0-#2 ACSR, 2/0-#2 Str	#2-#6 ACSR, #1-#6 Str
014323	2/0-1/0 ACSR, 4/0-3/0 Str	#2-#6 ACSR, #1-#6 Str
014324	2/0-#1 ACSR, 4/0-2/0 Str	2/0-#1 ACSR, 3/0-1/0 Str
014325	4/0-3/0 ACSR, 4/0 Str	#2-#6 ACSR, 1/0-#6 Str
014326	4/0-3/0 ACSR, 4/0-3/0 Str	4/0-3/0 ACSR, 4/0-3/0 Str
014384	4/0-3/0 ACSR, 4/0-3/0 Str	2/0-#1 ACSR, 2/0-#1 Str

### 2. Application

Compression connectors are for service drop, secondary or primary tap and grounding installations on all combinations of aluminum-to-aluminum, or aluminum-to-copper conductors. Connections are reversible.

Compression connectors are not appropriate for making up copper-to-copper connections.

For more application information, see Section 1 or Table 4b.

### 3. Industry Standards

Compression connectors shall meet the applicable requirements of the latest revision of the following industry standard:

**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 deg. C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100 deg. C

### 4. Requirements

Compression connectors shall meet the requirements shown in tables 4a and 4b.

**Table 4a. General Requirements**

Attribute	Requirement
Material	1350 aluminum alloy
Current class per ANSI 119.4	B (medium duty)
Tension class per ANSI 119.4	3 (minimum tension)

Compression connectors shall be prefilled with oxide inhibitor held captive in the rib/connection area.

Compression connectors shall be of a fold-in tab design.

**Table 4b. Detailed Requirements**

Stock No.	Main (AWG)	Tap (AWG)	Die
014320	#2-#6 ACSR <sup>a</sup> , #2-#6 Str <sup>b</sup>	#8-#14 Str	5/8, BG
014321	#2-#6 ACSR, #1-#6 Str	#2-#6 ACSR, #1-#6 Str	O
014322	1/0-#2 ACSR, 2/0-#2 Str	#2-#6 ACSR, #1-#6 Str	O
014323	2/0-1/0 ACSR, 4/0-3/0 Str	#2-#6 ACSR, #1-#6 Str	D, D3
014324	2/0-#1 ACSR, 4/0-2/0 Str	2/0-#1 ACSR, 3/0-1/0 Str	D, D3
014325	4/0-3/0 ACSR, 4/0 Str	#2-#6 ACSR, 1/0-#6 Str	D, D3
014326	4/0-3/0 ACSR, 4/0-3/0 Str	4/0-3/0 ACSR, 4/0-3/0 Str	D, D3
014384	4/0-3/0 ACSR, 4/0-3/0 Str	2/0-#1 ACSR, 2/0-#1 Str	D, D3

<sup>a</sup> Aluminum conductor, steel-reinforced as defined by ASTM 232

<sup>b</sup> Stranded, Class B compressed as defined by ASTM B231

### 5. Testing

Compression connectors shall be tested according to the requirements of ANSI C119.4.

Test results shall be provided upon request.

### 6. Design Changes

Manufacturer shall inform SCL in writing of all design changes that could affect the understood or published capabilities of the product.

## 7. Marking

Each compression connector shall be permanently and legibly marked in raised or stamped letters. Marking shall include, but not be limited to, the following information:

- Manufacturer identification
- Manufacturer catalog number
- Main and tap wire sizes
- Required die

## 8. Packaging

Compression connectors shall be package 25 per box.

Each standard package shall include a set of installation instructions.

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

- Manufacturer identification
- Manufacturer catalog number
- Main and tap wire sizes
- Required die
- Seattle City Light stock number

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

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

## 9. Issuance

Stock Unit: EA

## 10. Approved Manufacturers

Stock No.	Blackburn (Div. of Thomas & Betts)	Homac (Div. of Thomas & Betts)	Burndy (Div. of Hubbell Power Systems)
014320	–	UB 214	–
014321	WR159	OB 44	YHO-100
014322	WR189	OB 101	YHO-150
014323	WR289	DB 202	YHD-200
014324	WR279	DB 2020	YHD-300
014325	WR379	DB 404	YHD-250
014326	WR419	DB 4040	YHD-400
014384	WR399	DB 4020	YHD-350

## 11. References

**ASTM B231**; Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors

**ASTM B232**; Standard Specification for Concentric-Lay-Stranded Aluminum Conductors, Coated-Steel Reinforced (ACSR)

## 12. Sources

**Shipek, John**; SCL Standards Supervisor, originator, and subject matter expert for 6774.15 (john.shipek@seattle.gov)