

**CABLE BREAKOUT BOOTS, HEAT SHRINK TYPE**



**1. Scope**

This standard covers the requirements for heat shrink type cable breakout boots.

This standard applies to the following Seattle City Light Stock Numbers:

Stock Number	Number of Legs	Body Use Diameter, Maximum, in
737513	3	2.20
737517	3	2.90
010402	3	4.53
012479	4	8.50
737520	6	3.85

Sealing caps, and heavy, medium and thin wall heat shrink tubing are outside the scope of this standard.

**2. Application**

Cable breakout boots provide strain relief and mechanical and environmental protection for breakouts in three-, four-, and six-conductor cables. Cables of this type are exclusive to the Network system. Product is considered non-flame retardant.

Use only an approved propane torch, Stock Number 765897, to install heat shrink products.

**3. Attributes**

Break out boots shall have the following attributes:

Material	cross-linked polyolefin
Color	black or red
Leg length, minimum, in	1
Shrink temperature, minimum, degrees C	121
Operating temperature, continuous, degrees C	
minimum	-55
maximum	110
Shelf life, minimum	10 years

Breakout boot interiors shall be lined their full length with a smooth coating of thermoplastic (hot melt) adhesive.

Breakout boots shall be non-corrosive.

Breakout boots details shall be as specified in Section 7.

<i>standards coordinator</i>	<i>standards supervisor</i>	<i>unit director</i>
 John Shipek	 John Shipek	 Darnell Cola

**Material Standard**

Cable Breakout Boots, Heat Shrink Type

**4. Design Changes**

Manufacturer shall inform Seattle City Light in writing of all design changes that could affect the product's understood or published attributes.

**5. Packaging**

Breakout boots shall be packaged to prevent damage during shipping, handling, and inside storage.

Breakout boots shall be packaged and shipped in their natural round state. Product received bent, collapsed, creased, or otherwise deformed will not be accepted.

Individual packages shall be legibly marked with:

- Manufacturer's name
- Manufacturer's catalog number
- Product description
- Seattle City Light's Stock Number

Shipping containers shall be legibly marked with:

- Seattle City Light's Purchase Order Number

**6. Issuance**

Stock Unit: EA

**7. Approved Manufacturers**

Stock Number	Number of Legs	Body Use Diameter, in		Leg Use Diameter, in		Approved Manufacturer	Catalog Number
		Minimum	Maximum	Minimum	Maximum		
<b>737513</b>	3	0.85	2.20	0.35	0.90	TE Connectivity	CBR-3-2-A
<b>737517</b>	3	1.10	2.90	0.52	1.25	INERTIA-REPL	CB33A
						TE Connectivity	CBR-3-3-A
<b>010402</b>	3	1.77	4.53	0.87	2.05	INERTIA-REPL	CB34AOX
						TE Connectivity	402W248/S
<b>012479</b>	4	2.75	8.50	0.87	2.00	TE Connectivity	no quote
<b>737520</b>	6	1.45	3.85	0.60 ph 0.30 gr	1.50 ph 0.75 gr	TE Connectivity	CBR-6-1-A

note: TE Connectivity products have previously gone under the names of Tyco Electronics, Tyco, and Raychem

**8. References**

**Shipek, John**; SCL Standards Engineer, originator and subject matter expert for 7374.80 (john.shipek@seattle.gov)

**Tyco Electronics** catalog; 4-1773455-0 E361; 12/2009