

Fittings, Socket Eye, Strain Insulator



1. Scope

This standard covers the requirements for forged steel, socket eye-style insulator fittings. The insulator fitting consists of the socket body and a cotter pin.

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

Stock No.	Description
696008	Socket eye, 18,000 lb
696017	Socket eye, 25,000 lb
696029	Socket eye, 30,000 lb
696020	Socket eye, 30,000 lb

2. Application

Socket eye-style insulator fittings are used in hot line work, primarily for connecting associated hardware to ball and socket type strain insulators.

Socket eye-style insulator fittings are for use with class 52-3 insulators per ANSI C-29.2.

Stock numbers 696008, 696017, and 696029 are for use with 5/8-in diameter clevis pins.

Stock number 696020 is for use with 3/4-in diameter clevis pins.

3. Industry Standards

Socket eye-style insulator fittings shall meet the applicable requirements of the following industry standards:

ANSI/NEMA C29.2B; American National Standard for Insulators—Wet Process Porcelain and Toughened Glass—Transmission Suspension Type, November 22, 2013

ASTM A47; Standard Specification for Ferritic Malleable Iron Castings, 2014 Edition

ASTM A153; Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware, 2005 Edition

ASTM A668; Standard Specification for Steel Forgings, Carbon and Alloy, for General Industrial Use, 2016 Edition

4. Requirements

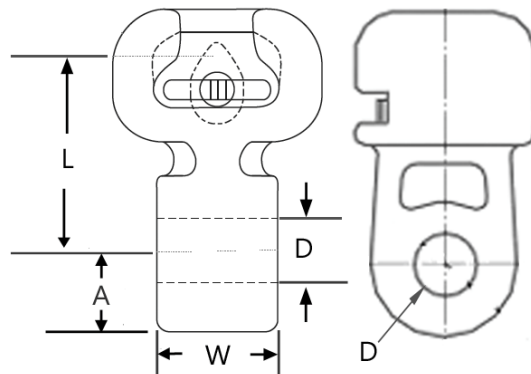
Socket eye-style insulator fittings shall:

- Be made of heat-treated, drop-forged steel or malleable iron.
- Be galvanized in accordance with ASTM specification A 153.
- Meet the requirements of ANSI/NEMA C29.2B as it applies to ball-and-socket gauge for Class 52-3 insulators.
- Be provided with cotter pins meeting the applicable requirements of SCL 5825.90.

Table 4. Socket Fitting Dimensions

Stock No.	Ultimate Strength, Minimum (lb)	Dimensions, Nominal (in)			
		W	D	L	A
696008	18,000	1/2	11/16	2-1/16	13/16
696017	25,000	3/4	11/16	2-1/16	13/16
696029	30,000	1	11/16	2-1/16	13/16
696020	30,000	1	13/16	2-1/16	13/16

Figure 4. Socket Eye Insulator Fitting



5. Marking

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

- Manufacturer name or symbol
- Manufacturer part number
- Ultimate strength rating

6. Packaging

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

Standard package quantity shall not exceed 50 per box.

Standard package weight shall not exceed 50 pounds.

Individual packages shall be legibly marked with:

- Manufacturer name
- Manufacturer catalog number
- Product description
- SCL stock number

Shipping containers shall be legibly marked with:

- SCL purchase order number

7. Issuance

Stock Unit: EA

8. Approved Manufacturers

Stock No.	Approved Manufacturers	
	Hubbell Power Systems/Anderson	MacLean Power Systems/Reliable
696008	SA-04	SI-500
696017	SA-06	SI-750
696029	SA-10	SI-1062
696020	SA-10-13	SE-1000-6

9. References

SCL Material Standard 5825.90; "Cotter Pin, Humpback, Stainless Steel"

10. Sources

Wang, Quan; SCL Standards Engineer, subject matter expert and originator of 6945.15 (quan.wang@seattle.gov)

SCL Material Standard 6960.2 (canceled); "Fittings, Socket Eye Strain Insulator"