

INSULATOR, MEDIUM-VOLTAGE, PORCELAIN, PIN-TYPE



1. Scope

This standard covers the requirements for porcelain medium-voltage pin-type insulators.

This standard applies to Seattle City Light Stock Number 690005.

2. Application

Porcelain medium-voltage pin-type insulators are installed on wood cross arms to support lines rated up to 2.6 kV, phase-to-ground.

3. Industry Standards

Porcelain pin-type insulators shall meet the requirements of the following national standard:

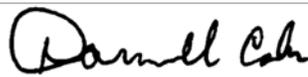
ANSI C29.5-1984 - American National Standard for Wet-Process Porcelain Insulators Low- and Medium-Voltage Types

4. Requirements

Porcelain pin-type insulators shall meet the following requirements:

| | |
|--------------------------------------|--------------------|
| ANSI C29.5 Class | 55-2 (Radio Freed) |
| 60 Hz dry flashover, kV rms, nominal | 45 |

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| 60 Hz wet flashover, kV rms, nominal | 25 |
| Positive critical impulse flashover, kV crest, nominal | 70 |
| Leakage distance, in, nominal | 5 |
| Strike/dry arc distance, in, nominal | 3-3/8 |
| Pin height, in, minimum | 4 |
| Pin diameter, in, nominal | 1 |
| Cantilever strength, ultimate, lbs | 2500 |
| Porcelain color | gray, according to ANSI C29.5, Section 5.2 |
| Semi-conductive glaze | required |
| Top and side wire grooves | according to ANSI C29.5, Figure 2 |
| Neck type | "C" |

| | | |
|--|--|---|
| <i>standards coordinator</i> | <i>standards supervisor</i> | <i>unit director</i> |
|  Aida Diop |  John Shipek |  Darnell Cola |

Material Standard

Insulator, Medium-Voltage, Porcelain, Pin-Type

5. Testing

Test data that establishes compliance with the requirements of ANSI C29.5, Section 8 shall be provided upon request.

6. Marking

Porcelain, pin-type insulators shall be clearly and indelibly marked in accordance with ANSI C29.5-Section 7.

Marking shall include but not be limited to:

- Manufacturer's name or symbol
- Year of manufacture
- Product Identification Number

7. Packaging

Porcelain pin-type insulators shall be packaged in a way that prevents damage during shipping, handling, and long-term outside storage.

Crates shall be secured to pallets for handling by forklifts. Pallets shall not exceed 4 feet in height or 1,000 pounds in weight.

Individual packages shall be legibly marked with:

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

Shipping containers shall be legibly marked with:

- Seattle City Light's Purchase Order Number
- Seattle City Light's Stock Number

8. Issuance

Stock Unit: EA

9. Approved Manufacturers

| Manufacturers and Catalog Numbers | | | | |
|-----------------------------------|----------------------------------|-------------|-----------------------|-------------------------|
| Stock No | Gamma Insulators (formerly Lapp) | PPC (Seves) | Santa Terezinha (CST) | Victor Insulators, Inc. |
| 690005 | 6188R-70 | 253-S | 1112 | 8R |

10. References

Diop, Aida; SCL Standards Engineer, subject matter expert and originator of 6900.10 (aida.diop@seattle.gov)

Shipek, John; SCL Standards Engineer, subject matter expert for 6900.10 (john.shipek@seattle.gov)