

Socket Sealing Rings, Electric Meters



1. Scope

This standard covers the requirements for electric meter socket sealing rings. This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Sealing Type	Security Level	Material
400209	Snap	Low	Stainless Steel
400210	Barrel Lock	High	Stainless Steel

2. Application

Socket sealing rings are used to overlap the socket rim and the detachable kilowatt-hour meter cover ring to hold and provide means for sealing a detachable kilowatt-hour meter in place.

Table 2. Applications

Stock No.	Sealing Type	Application
400209	Snap	For residential use to secure electric meters to meter sockets
400210	Barrel lock	For commercial and industrial use in locations where tampering is suspected or possible

3. Industry Standards

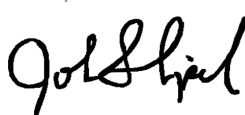
Socket sealing rings shall meet the requirements of the latest revision of the following industry standard:

ANSI C12.7; Requirements for Watt-hour Meter Sockets

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4. Requirements

4.1 General Requirements

Socket sealing rings shall conform to minimum and maximum values provided in Table 4.1 and Figure 4.1.

Socket sealing rings shall be constructed of high strength stainless steel for enhanced durability and corrosion resistance

Socket sealing rings shall be a one-piece design.

The sealing ring housing shall be round.

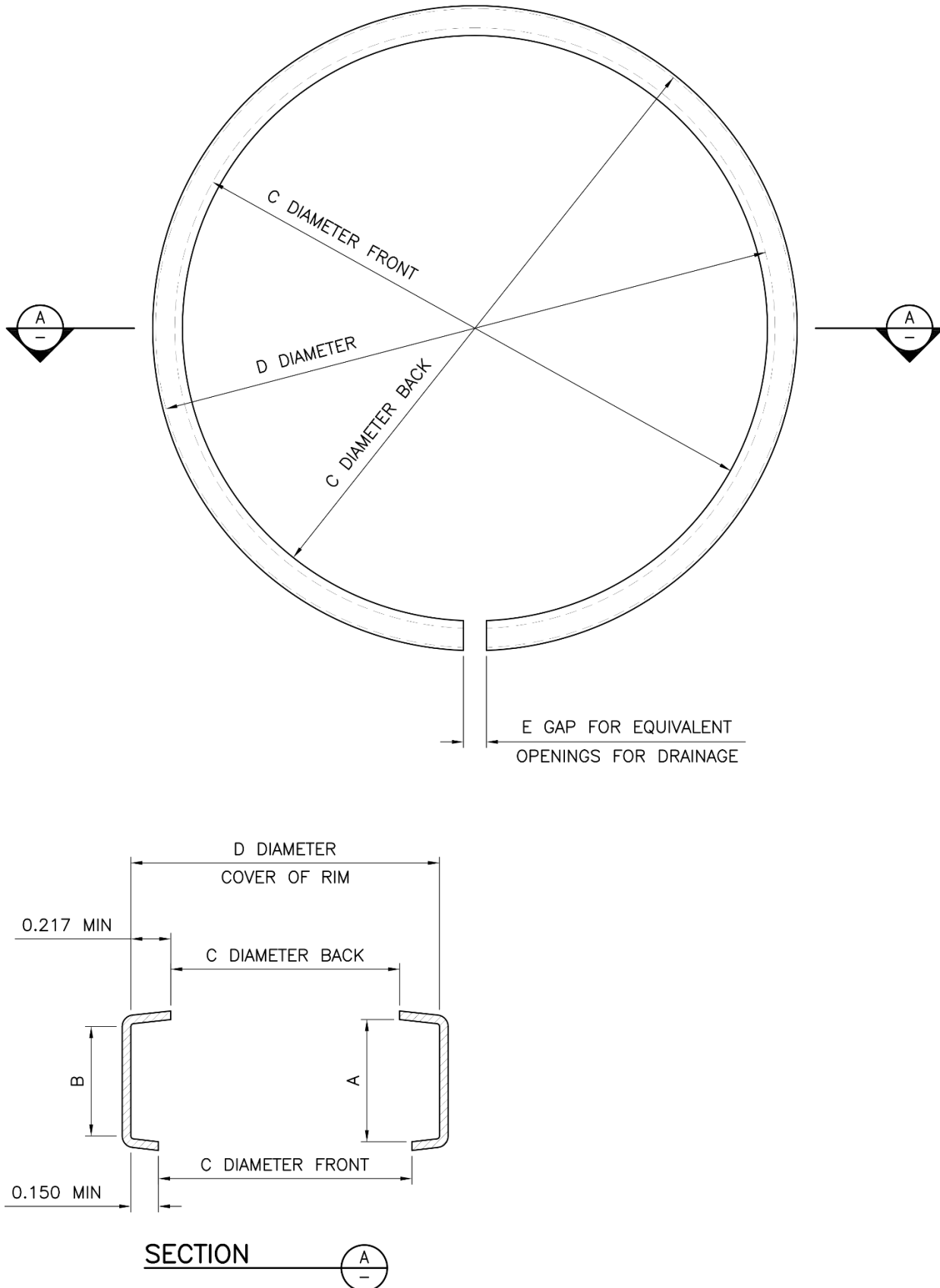
Socket sealing rings shall have a universal fit.

Table 4.1. Socket Sealing Ring Dimensions

Note: For adjustable rings, all measurements should be taken with D set at the minimum shown in the table below.

Section	Dimensions (in)	
	Minimum	Maximum
A	0.630	0.670
B	0.620	0.630
C, front	6.527	6.660
C, back	6.360	6.526
D	6.960	–
E, adjustable	0.250	–
E, non-adjustable	0.062	–

Figure 4.1. Socket Sealing Ring Dimensions



4.2 Detailed Requirements

4.2.1. Snap Sealing Type Socket Ring

No key or tools shall be required for installation.

Figure 4.2.1. Snap Sealing Socket Ring



4.2.2. Barrel Lock Sealing Socket Ring

Barrel lock shall be a high security Agbay type with anti-rotation ears, constructed with a weather seal and preload sleeve.

Agbay key shall be cut specifically for SCL.

Agbay locks and keys shall be available in six security levels.

Installation shall be front entry.

Figure 4.2.2. Barrel Lock Sealing Socket Ring



5. Product Approval

Manufacturers interested in having their electric meter socket sealing rings approved for purchase by SCL must participate in the stepped process summarized below. Contact Standards Engineering or Technical Metering for the details.

- Manufacturer reviews SCL's technical requirements.
- Manufacturer provides product literature for proposed model and catalog numbers clearly identifying corresponding stock numbers.
- SCL reviews and evaluates submittals.
- Manufacturer provides sample electric meter socket sealing rings for laboratory testing and evaluation.
- Technical Metering evaluates submitted sample electric meter socket sealing rings' capability to meet the requirements of ANSI C12.7.
- Technical Metering determines adequacy of proposal and informs Standards Engineering and manufacturer of their decision.
- If satisfactory, Standards Engineering revises material standard to include new electric meter socket sealing ring.

6. Design Changes

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

7. Marking

Socket sealing rings shall be marked with the manufacturer name or symbol.

8. Packaging

Each individual box shall contain the following information at minimum:

- Manufacturer name or symbol
- Catalog number
- Name of item

Outer containers shall contain the following information at minimum:

- Manufacturer name or symbol
- Catalog number(s)
- Name of item(s)
- Quantity contained
- SCL stock number
- SCL purchase order (PO) number

A packing slip shall be included with each shipment.

Socket sealing rings shall be packaged to prevent damage during shipping, handling, and inside storage.

Socket sealing rings shall be packaged up to fifty (50) per box.

9. Issuance

Stock Unit: EA

10. Approved Manufacturers

Table 10. Approved Manufacturers

Stock No.	Sealing Type	Manufacturer	Part No.
400209	Snap	B-Line (Circle AW) Products Brooks Utility Products	25016B 10-9001
400210	Barrel lock (locking ring with Agbay lock)	Inner-Tite	E-S6900H

11. References

ANSI C12.7-2005; Requirements for Watthour Meter Sockets

ANSI C12.10-2011; Physical Aspects of Watthour Meters—Safety Standard

ANSI/UL 414-2009; Safety Standard for Meter Sockets

12. Sources

Gilmore, Dan; SCL Meter Technician and subject matter expert for 4960.05

Hanson, Brett; SCL Standards Engineer, subject matter expert, and originator of 4960.05