

Bushings, Insulated-Throat, Grounding and Non-Grounding, Metal



1. Scope

This standard covers the requirements for insulated-throat, grounding and non-grounding metallic bushings.

This standard applies to the Seattle City Light (SCL) stock numbers listed in Section 7.

2. Application

Malleable iron insulated bushings are used with locknuts to protect conductors inside threaded metal conduit entering an electric box or panel. The plastic metal liner prevents damage to wire insulation.

Split bushings are used in situations where the wires have already been pulled through metal conduit fittings and an insulated grounding bushing is required.

Insulated grounding bushings are used for quick installation of bonding jumper to multiple metal conduits. They are designed to bush conductors and prevent insulation damage.

3. Industry Standards

Bushings shall meet the applicable requirements of the latest revision of the following industry standards:

NEMA FB 1; "Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable"

UL 514B; "Conduit, Tubing, and Cable Fittings"

UL 647; "Grounding and Bonding Equipment"

4. Requirements

Product requirements shall be as defined in Section 7.

Products shall be UL listed.

5. Packaging

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

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

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

- SCL purchase order number
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6. Issuance

Stock Unit: EA

7. Approved Manufacturers

7.1 Insulated-Throat Bushing, Non-Grounding

Non-grounding insulated-throat bushings shall have the following attributes:

- Threaded
- Malleable iron, hot-dip galvanized or zinc electroplate construction
- 105-degree C-rated thermoplastic insulator

Figure 7.1 Insulated-Throat Bushing, Non-Grounding



Table 7.1. Approved Manufacturers

Stock No.	Trade Size (in)	Bridgeport Part No.	Eaton (Cooper, Crouse-Hinds) Part No.
731515	1/2	361	1031
731516	3/4	362	1032
731517	1	363	1033
731519	1-1/2	365	1035
731520	2	366	1036
731521	2-1/2	367	1037
731523	3-1/2	369	1039
731524	4	370	1040

7.2 Insulated-Throat Bushing, Grounding

Grounding insulated-throat bushings shall have the following attributes:

- Threaded
- Malleable iron, zinc electroplate construction
- Aluminum tin plated grounding lug
- 150-degree C-rated thermoplastic insulator
- Grounding wire range #14 to #4 AWG

Figure 7.2. Insulated-Throat Bushing, Grounding



Table 7.2. Approved Manufacturers

Stock No.	Trade Size (in)	Thomas & Betts Part No.	O-Z/Gedney Part No.
731530	1-1/2	3874	IBC-150L-4AC
731531	2	3875	IBC-200L-4AC
731532	2-1/2	3876	IBC-250L-4AC
013270	3	3877	IBC-300L-4AC
012857	4	3879	IBC-400L-4AC

7.3 Insulated-Throat Bushing, Grounding, Split-Type

Split-type, grounding insulated throat bushings shall have the following attributes:

- Non-threaded
- Zinc die cast or stainless steel construction
- Aluminum alloy 60610-T6, tin electroplate grounding lug
- 150-degree C-rated thermoplastic insulator
- Grounding wire range #6 AWG to 3/0

Figure 7.2 Insulated-Throat Bushing, Grounding, Split-Type



Table 7.3. Approved Manufacturers

Stock No.	Trade Size (in)	Bridgeport Part No.
013528	4	SGB-390CL

8. Sources

Shetab, Muneer; SCL Standards Engineer, originator, and subject matter expert for 7050.35 (muneer.shetab@seattle.gov)

Standard Bushings – Standard Locknuts, DB-4; O-Z/Gedney, Effective December 2007

Conduit & Fittings – T&B Rigid Fittings; www.tnb.com

SCL Stock Catalog Page 73-74; February 12, 2014