

Connectors, Multiple, Insulated Submersible, 1000 A, Two-Sided



1. Scope

This standard covers the requirements for two-sided, 1000 A, insulated, submersible multiple connectors.

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

Stock No.	Description
678750	4-position connector
678752	12-position connector

2. Application

Connectors are designed for use in pedestals, vaults, handholes and direct-bury applications.

Ampacity of the connector cited is based on the nominal rating ampacity of the crossbar at 75 degrees C.

Ultimate ampacity can vary as a result of many factors, including loading of the cable, what the connector or bus is connected to, and the connection sequence of the cables.

Insulating sleeves ("rockets") for terminals are specified in SCL 6780.20.

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3. Industry Standards

Connectors shall meet the requirements of the latest revision of the following industry standards:

ANSI C119.4; American National Standard for Electric Connectors— Connectors for Use between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operation at or Below 93°C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100°C

ANSI/NEMA CC1; Electric Power Connection for Substations

4. Requirements

- Made of extruded, high conductive aluminum or copper
- Tin-plated
- Rated 600 V
- Crossbar shall be insulated with ethylene propylene diene monomer (EPDM) rubber.
- Physical design and dimensions in according Table 4 and Figure 4.
- Terminals have a two-hole NEMA pad as specified in NEMA CC1 figure C2.
- Each bus terminal shall be supplied with 1/2-13 UNC assembled hex head screws and a captive Belleville washer.
- Hardware shall be made of bronze or stainless steel.

Figure 4. Two-Sided, Multiple-Position Connector

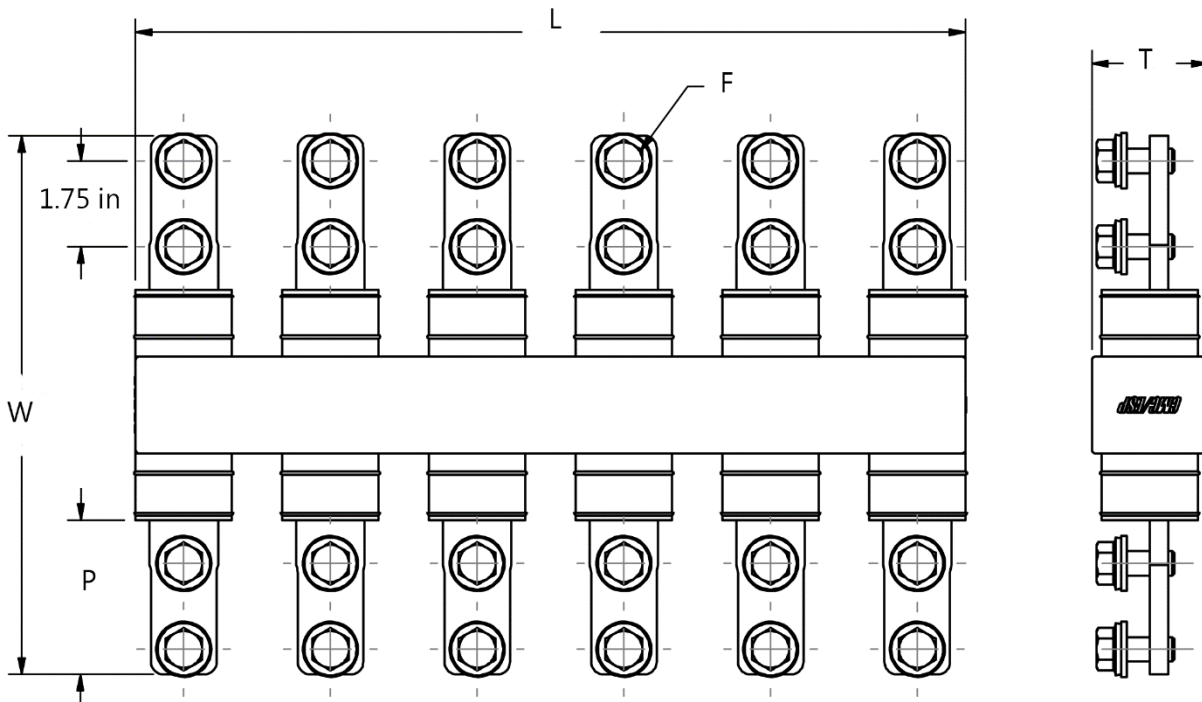


Table 4. Two-Sided, Multiple Connector Dimensions

Stock No.	Numbers of Positions	Connectors Nominal Dimensions (in)			Terminal Length (P), min	Number of Fasteners (F)
		Length (L)	Width (W)	Thickness (T)		
678750	4	6	12	2-1/4	3	8
678752	12	18	12	2-1/4	3	24

5. Marking

Connectors shall be legibly marked with the following:

- Manufacturer name or trademark
- Catalog number

6. Packaging

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

Package shall be legibly marked with the following information:

- Manufacturer identification
- Product catalog part number
- Product description
- SCL stock number

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

- SCL purchase order number

7. Issuance

Stock unit: EA

8. Approved Manufacturers

Stock No.	Description	ABB / Thomas & Betts/ Homac	Hubbell Power Systems (HPS) / Connector Manufacturing Company (CMC)	Hubbell Power Systems (HPS) / Connector Manufacturing Company (CMC)
678750	4-position connector	FS 22 – 175	UCD-22	UCC-D04
678752	12-position connector	FS 66 – 175	UCD-66	UCC-D12

9. Sources

SCL Material Standard 6780.05; “Connectors, Multiple, Insulated Submersible, 550 A and Accessories

SCL Material Standard 6780.20; “Connectors, Multiple, Insulated Submersible, 650 A and Accessories”

Stock Catalog Page 65-11; May 7, 2018

Wang, Quan; SCL Standards Engineering, subject matter expert and originator of 6780.30

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