

SER Service Entrance Cable (Aluminum Alloy AA-8000, 600V)

Farwalk's SER (Service Entrance Round) cables are the versatile solution for secondary voltage distribution. Specifically engineered with high-conductivity AA-8000 series aluminum alloy, these cables are designed for use as service entrance conductors and interior branch circuits, providing a cost-effective alternative to copper without compromising on safety or building code compliance.



Applications

Primarily used as a service entrance conductor from the meter base to the main distribution panel, and as a sub-feeder from the main panel to sub-panels. It is rated for use in residential, commercial, and industrial buildings as defined by the National Electrical Code (NEC). Approved for indoor use and outdoor installations where sunlight resistance is required.

Description

Manufactured in accordance with UL Standard 83. The conductor consists of plain annealed stranded copper. The insulation is a heavy-duty, heat and moisture-resistant PVC. THW is rated for 75°C, while THW-2 is upgraded to a 90°C rating in both dry and wet locations. Unlike THHN, THW relies on its thicker insulation wall rather than a separate Nylon jacket for protection.

Specifications

- **Voltage Rating: 600V**
- **Conductor: AA-8000 Series Aluminum Alloy**
- **Insulation: XLPE (Type XHHW-2)**
- **Outer Jacket: Sunlight-Resistant PVC**
- **Temp. Rating: 90° C Dry/Wet**
- **Standard Compliance: UL 854**

Farwalk Cable — SER Service Entrance Cable

Complete Technical Tables

SER Service Entrance Cable (Aluminum)

Size (AWG / kcmil)	No. of Conductors	Insulation Thick. (mils/mm)	Approx. Overall Dia. (mils/mm)	Approx. Weight (lb/kft)	Allowable Ampacity @ 90° C (Amps)
Aluminum Alloy AA-8000 SER - 600V					
8 AWG	3C + Ground	45 / 1.14	638 / 16.21	165	45
6 AWG	3C + Ground	45 / 1.14	735 / 18.67	235	60
4 AWG	3C + Ground	45 / 1.14	848 / 21.54	330	75
2 AWG	3C + Ground	45 / 1.14	1015 / 25.78	495	100
1 AWG	3C + Ground	55 / 1.40	1165 / 29.59	620	115
1/0 AWG	3C + Ground	55 / 1.40	1255 / 31.88	740	135
2/0 AWG	3C + Ground	55 / 1.40	1375 / 34.93	895	150
4/0 AWG	3C + Ground	55 / 1.40	1655 / 42.04	1325	205
250 kcmil	3C + Ground	65 / 1.65	1825 / 46.36	1550	230