

3-Layer 25kV AAAC Tree Wire/Spacer Cable

An Alternative and Robust Design to Bare AAAC Conductors to Harden the Electrical Grids.

3-Layer 25kV AAAC Tree Wire Concentrically Stranded AAAC Track-Resistant Crosslinked Polyethylene.

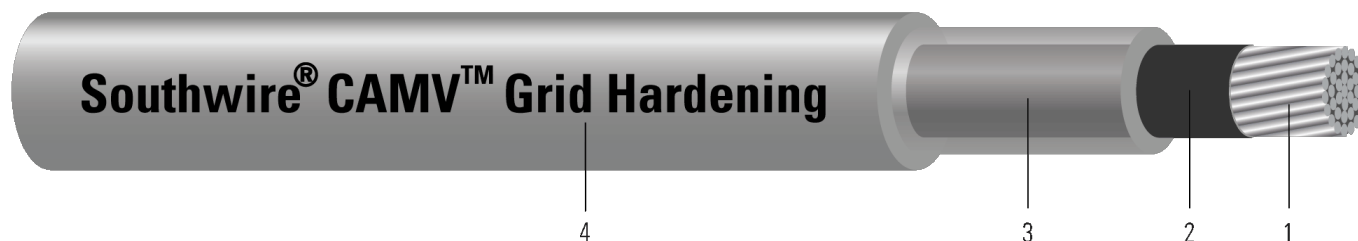


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Concentrically stranded AAAC
2. **Strand Shield:** Semi-conducting cross linked polymer
3. **Inner Layer:** Low-Density Crosslinked Polyethylene (LDXLPE)
4. **Outer Layer:** High-Density Track-Resistant Crosslinked Polyethylene

APPLICATIONS AND FEATURES:

Used for primary and secondary overhead distribution where limited space is available or desired for rights-of-way. Installed the same as bare conductors, however, covering is effective in preventing direct shorts and instantaneous flashovers should tree limbs or other objects contact conductors in such close proximity.

- Tree Wire - Used for spans where trees crowd the right-of-way, such as in wooded residential areas, when a minimum of interference with the environment is desired. Covering minimizes power outages due to conductor contact with tree limbs, reducing the need for frequent or severe trimming.
- Covered Aerial MV Cable (CAMV)/Spacer Cable - Installed with other Covered Aerial MV cables and a supporting messenger through a series of space-maintaining devices (spacers). The resulting close-proximity configuration minimizes the amount of space and hardware required for line installation, particularly useful in congested areas.
- Covering Rated 90°C Normal and 130°C Emergency Operation. Unless adequate knowledge of the thermal characteristics of the environment is known, the permissible conductor temperature should be reduced by 10°C or in accordance with available data.

SPECIFICATIONS:

- ASTM B398 Standard Specification for Aluminum-Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors
- ICEA S-121-733 Tree Wire and Messenger Supported Spacer Cable



Table 1 – Weights and Measurements

| Cond. Size | Cond. Strands | Diameter Over Conductor | Conductor Shield Thickness | Inner Layer Thickness | Outer Layer Thickness | Approx. OD | Approx. Weight | Rated Strength |
|---------------|---------------|-------------------------|----------------------------|-----------------------|-----------------------|------------|----------------|----------------|
| AWG/ Kcmil | # | inch | mil | mil | mil | inch | lb/1000ft | lb |
| 48.69 | 7 | 0.250 | 15 | 125 | 125 | 0.78 | 225 | 1584 |
| 77.47 | 7 | 0.316 | 15 | 125 | 125 | 0.846 | 275 | 2520 |
| 123.3 | 7 | 0.398 | 15 | 125 | 125 | 0.928 | 348 | 4014 |
| 155.4 | 7 | 0.447 | 15 | 125 | 125 | 0.977 | 396 | 4851 |
| 195.7 | 7 | 0.502 | 15 | 125 | 125 | 1.032 | 454 | 6111 |
| 246.9 | 7 | 0.563 | 15 | 125 | 125 | 1.093 | 525 | 7704 |

All dimensions are nominal and subject to normal manufacturing tolerances

