

Southwire Electric Vehicle EVE/EVJE and EV/EVJ Cables

90° or 105°C Dry/60°C Wet. 300, 600/1000 Volts. Class K, Bare Copper Conductors. TPE or EPDM Insulation and TPE or CPE oil, sunlight and flame resistant jacket.



Image not to scale & for reference only. See Table 1 for Dimensions

CONSTRUCTION:

- Conductors:** Class K, Flexible stranded bare copper per ASTM B3 and ASTM B174
- Insulation:** Thermoplastic Elastomer (TPE) with Optional Nylon Covering or Ethylene Propylene Diene Monomer (EPDM)
- Filler:** Paper or Polypropylene filler
- Separator:** Paper or Talc
- Jacket:** Black; Thermoplastic Elastomer (TPE) or Thermoset Chlorinated Polyethylene (CPE)

APPLICATIONS:

EV Charging Cables, designed for residential or commercial charging applications. Flexible construction, cabled with fillers, with wet rated, oil resistant, crush and impact resistant, low temperature materials. These cables meet Underwriters Laboratories and the Canadian Standard Association requirements as well as the National Electrical Code articles 400 (Flexible Cords & Flexible Cables) and 625 (Electric Vehicle Power Transfer System).

SPECIFICATIONS:

- ASTM B3 and ASTM B174
- UL 62 - Type EVE/EVJE or EV/EVJ
- CSA C22.2 No. 49 - Type EVT(TPE)/EVJE(TPE) or EV/EVJ
- NFPA 70, NEC Articles: 400, 625
- RoHS-3 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the European Directive (EU) 2015/863

SAMPLE PRINT LEGEND: (Marker Tape)

SOUTHWIRE® 3/C XX AWG (X.XXmm²) & 1/C XX AWG (X.XXmm²) EVE E312819 c(UL)us 1000V 105C DRY 60C WET -- EVT(TPE) 1000V 105C DRY 60C WET FT2 WATER RESISTANT -- FOR USE WITH ELECTRIC VEHICLES

PROPERTIES:

Voltage: 300V EVJE, EVJ; 600V or 1000V EVE or EV.
Temperature Range: -40°C to 105°C Dry, 60°C Wet

Other EV Offerings:

Custom EV Cable Design/Engineered Solutions

- DC Fast Charging Cable
- DC Fast Liquid-Cooled Charging Cable
- Coiled EV Cable
- Portable Charger, Charging Cable
- Custom Designs & 3 Phase Cables are Available
- Shielded Options
- Sizes up to 500 kcmil for listed products
- Ultra Cold/Cold Weather Resistant Options
- Joint Development Programs on Request

EV Infrastructure

- Utility, Transmission & Distribution Cables
- Cable in Conduit (CIC)
- Armorlite Type MC Cable
- SimPull THHN/XHHW
- SimPull Medium Voltage Cable
- Low Smoke/Zero-Halogen Cable for confined space installations
- DLO Cable



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TABLE 1 - WEIGHTS & MEASUREMENTS

| Stock Code | Cond. Size (AWG) | 2/Cond. Plus Grnd | No. of Strands | Insulation Average Thickness (inches) | | Jacket Average Thickness (inches) | | Nominal OD (inches) ^{††} | Nominal OD (mm) | Nominal Weight (Lbs/Mft) ^{††} | Nominal Weight (kg/km) ^{††} | Ampacity [†] |
|---------------------------------------|------------------|-------------------|----------------|---------------------------------------|------|-----------------------------------|------|-----------------------------------|-----------------|--|--------------------------------------|-----------------------|
| Types EVJE or EVJ, 300V | | | | | | | | | | | | |
| EVJE14 | 14 | 3 | 41 | 0.030 | 0.76 | 0.030 | 0.76 | 0.374 | 9.50 | 88 | 130 | 18 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVJE12 | 12 | 3 | 65 | 0.030 | 0.76 | 0.045 | 1.14 | 0.463 | 11.76 | 133 | 198 | 25 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVJ14 | 14 | 3 | 41 | 0.030 | 0.76 | 0.030 | 0.76 | 0.374 | 9.50 | 94 | 139 | 18 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVJ12 | 12 | 3 | 65 | 0.030 | 0.76 | 0.045 | 1.14 | 0.463 | 11.76 | 145 | 216 | 25 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| Types EVE or EV, 600V or 1000V | | | | | | | | | | | | |
| EVE14 | 14 | 3 | 41 | 0.045 | 1.14 | 0.080 | 2.03 | 0.549 | 13.94 | 152 | 226 | 18 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE12 | 12 | 3 | 65 | 0.045 | 1.14 | 0.080 | 2.03 | 0.579 | 14.71 | 184 | 274 | 25 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE10 | 10 | 3 | 104 | 0.045 | 1.14 | 0.080 | 2.03 | 0.614 | 15.60 | 233 | 346 | 30 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE08 | 8 | 3 | 168 | 0.060 | 1.52 | 0.125 | 3.18 | 0.858 | 21.79 | 424 | 631 | 40 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE06 | 6 | 3 | 266 | 0.060 | 1.52 | 0.125 | 3.18 | 0.927 | 23.55 | 548 | 816 | 55 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE04 | 4 | 3 | 420 | 0.060 | 1.52 | 0.140 | 3.56 | 1.106 | 28.09 | 774 | 1152 | 70 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EVE02 | 2 | 3 | 665 | 0.060 | 1.52 | 0.140 | 3.56 | 1.205 | 30.61 | 1062 | 1580 | 95 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV14 | 14 | 3 | 41 | 0.045 | 1.14 | 0.080 | 2.03 | 0.549 | 13.94 | 172 | 256 | 18 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV12 | 12 | 3 | 65 | 0.045 | 1.14 | 0.080 | 2.03 | 0.579 | 14.71 | 207 | 308 | 25 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV10 | 10 | 3 | 104 | 0.045 | 1.14 | 0.080 | 2.03 | 0.614 | 15.60 | 258 | 383 | 30 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV08 | 8 | 3 | 168 | 0.060 | 1.52 | 0.125 | 3.18 | 0.858 | 21.79 | 469 | 697 | 40 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV06 | 6 | 3 | 266 | 0.060 | 1.52 | 0.125 | 3.18 | 0.927 | 23.55 | 602 | 896 | 55 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV04 | 4 | 3 | 420 | 0.060 | 1.52 | 0.140 | 3.56 | 1.106 | 28.09 | 852 | 1268 | 70 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |
| EV02 | 2 | 3 | 665 | 0.060 | 1.52 | 0.140 | 3.56 | 1.205 | 30.61 | 1147 | 1708 | 95 |
| | 18 | 1 | 16 | 0.030 | 0.76 | | | | | | | |

Additional sizes & Custom Designs are available.

All dimensions are nominal and subject to normal manufacturing tolerances

[†] Ampacities are based on Table 400.5(A)(1) of the NEC, 2020 Edition. Ampacities of insulated conductors based on ambient temperature of 30°C (86°F)

^{††} Cable OD's and Weights are subject to change.