

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. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** 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 as needed
- Binder:** Paper or Talc as needed
- Overall Jacket:** Black; Thermoplastic Elastomer (TPE) or Thermoset Chlorinated Polyethylene (CPE)

APPLICATIONS AND FEATURES:

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).

Voltage: 300V EVJE, EVJ; 600V or 1000V EVE or EV.

Temperature Range: -40°C to 105°C Dry, 60°C Wet

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B174 Standard Specification for Bunch-Stranded Copper
- UL 2263 Safety Electric Vehicle Cable
- RoHS-3 Complies with European Directive 2015/863

SAMPLE PRINT LEGEND:

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



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**CABLETECH
SUPPORT™**

Services

Types EVJE or EVJ, 300V

| Stock Code | Cond. Size | 2/Cond. Plus Grnd | No. of Strands | Insulation Average Thickness | Insulation Average Thickness | Jacket Average Thickness | Jacket Average Thickness | Nominal OD | Nominal OD | Nominal Weight | Nominal Weight | Ampacity† |
|------------|------------|-------------------|----------------|------------------------------|------------------------------|--------------------------|--------------------------|------------|------------|----------------|----------------|-----------|
| | (AWG) | | | (inches) | (mm) | (inches) | (mm) | (inches)†† | (mm) | (Lbs/Mft)†† | (kg/km)†† | amps |
| 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 | | | | | | | |



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Services

Types EVE or EV, 600V or 1000V

| Stock Code | Cond. Size | 2/Cond. Plus Grnd | No. of Strands | Insulation Average Thickness | Insulation Average Thickness | Jacket Average Thickness | Jacket Average Thickness | Nominal OD | Nominal OD | Nominal Weight | Nominal Weight | Ampacity† |
|------------|------------|-------------------|----------------|------------------------------|------------------------------|--------------------------|--------------------------|------------|------------|----------------|----------------|-----------|
| | (AWG) | | | (inches) | (mm) | (inches) | (mm) | (inches)†† | (mm) | (Lbs/Mft)†† | (kg/km)†† | amps |
| 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 | 15.6 | 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 | 15.6 | 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 | | | | | | | |

Footnotes

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.



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Services