

## CU XLPE RVPVU90 2000V

Single Copper Conductors, 1000V/2000V, 90°C MAX - 40°C MIN, Sunlight Resistant

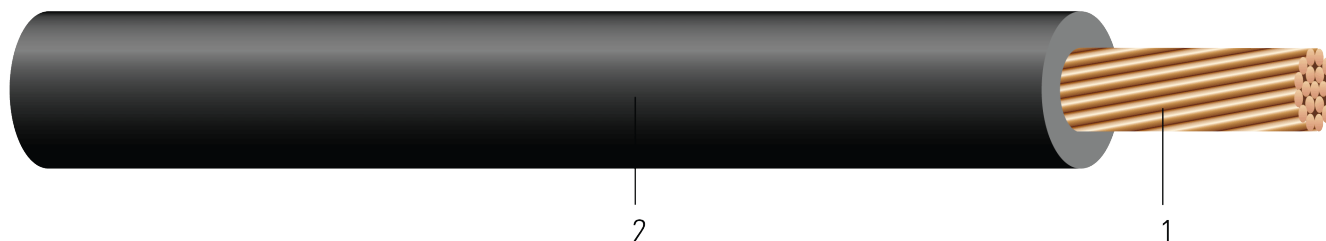


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE)

### APPLICATIONS AND FEATURES:

Single copper conductor with low temperature, moisture resisting XLPE (cross linked polyethylene) insulation. Sunlight Resistant. This product meets the current RoHS requirements. No lead is added or used in manufacturing.

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- RoHS Compliant Lead-Free, Silicone-Free
- CSA Standard C22.2 No. 271 Photovoltaic Cables

### SAMPLE PRINT LEGEND:

SOUTHWIRE LL90458 {CSA} AWG XX (XX.X{mm<sup>2</sup>}) CU XLPE RVPVU90 1000V/2000V -40°C SR DIRECT BURIAL --- {MM/DD/YYYY} --- RoHS {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Strand | Insul. Thickness | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C† |
|--------------|------------|--------|------------------|------------|----------------|--------------------|------------------|----------------------|----------------------|----------------------------|-------------------------------------|
|              | AWG/Kcmil  | No.    | mil              | inch       | lb/1000ft      | inch               | lb               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                                 |
| TBA          | 14         | 7      | 60               | 0.190      | 24             | 0.7                | 33               | 2.631                | 3.170                | 0.058                      | 25                                  |
| TBA          | 12         | 7      | 60               | 0.208      | 34             | 0.8                | 52               | 1.662                | 2.002                | 0.054                      | 30                                  |
| 583670       | 10         | 19     | 60               | 0.233      | 46             | 0.9                | 83               | 1.04                 | 1.253                | 0.050                      | 40                                  |
| 584430!      | 10         | 19     | 60               | 0.233      | 46             | 0.9                | 83               | 1.04                 | 1.253                | 0.050                      | 40                                  |
| TBA          | 8          | 7      | 80               | 0.301      | 78             | 1.2                | 132              | 0.653                | 0.786                | 0.052                      | 55                                  |
| 585502^      | 8          | 19     | 80               | 0.316      | 78             | 1.2                | 132              | 0.653                | 0.786                | 0.052                      | 55                                  |
| TBA          | 6          | 7      | 80               | 0.337      | 114            | 1.3                | 209              | 0.411                | 0.495                | 0.051                      | 75                                  |
| TBA          | 4          | 7      | 80               | 0.385      | 167            | 1.5                | 333              | 0.258                | 0.310                | 0.048                      | 95                                  |
| TBA          | 2          | 7      | 80               | 0.442      | 251            | 1.7                | 530              | 0.162                | 0.195                | 0.045                      | 130                                 |
| TBA          | 1          | 19     | 95               | 0.512      | 322            | 2.0                | 669              | 0.128                | 0.154                | 0.046                      | 145                                 |
| TBA          | 1/0        | 19     | 95               | 0.551      | 395            | 2.2                | 844              | 0.102                | 0.122                | 0.044                      | 170                                 |
| TBA          | 2/0        | 19     | 95               | 0.595      | 487            | 2.3                | 1064             | 0.081                | 0.097                | 0.043                      | 195                                 |
| TBA          | 3/0        | 19     | 95               | 0.646      | 603            | 2.5                | 1342             | 0.064                | 0.078                | 0.042                      | 225                                 |
| TBA          | 4/0        | 19     | 95               | 0.702      | 747            | 2.8                | 1692             | 0.051                | 0.062                | 0.041                      | 260                                 |
| TBA          | 250        | 37     | 110              | 0.778      | 891            | 3.1                | 2000             | 0.043                | 0.053                | 0.041                      | 290                                 |
| TBA          | 350        | 37     | 110              | 0.881      | 1219           | 3.5                | 2800             | 0.031                | 0.039                | 0.040                      | 350                                 |
| TBA          | 500        | 37     | 110              | 1.009      | 1705           | 5.0                | 4000             | 0.022                | 0.029                | 0.039                      | 430                                 |
| TBA          | 600        | 61     | 125              | 1.115      | 2055           | 5.5                | 4800             | 0.018                | 0.025                | 0.039                      | 475                                 |
| TBA          | 750        | 61     | 125              | 1.218      | 2539           | 6.0                | 6000             | 0.014                | 0.022                | 0.038                      | 535                                 |
| TBA          | 1000       | 61     | 125              | 1.367      | 3342           | 6.8                | 8000             | 0.011                | 0.018                | 0.037                      | 615                                 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Ampacities based on 2017 NEC Table 310.15(B)(16): Allowable Ampacities of Insulated Conductors Rated Up to and Including 2000 Volts, 60°C Through 90°C (140°F Through 194°F), Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30°C (86°F)

! Bunch unilay 19 strand tinned copper

^ Combination Unilay per ASTM B787



Table 2 – Weights and Measurements (Metric)

| Stock Number | Cond. Size | Strand | Insul. Thickness | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C |
|--------------|------------|--------|------------------|------------|----------------|--------------------|------------------|----------------------|----------------------|----------------------------|------------------------------------|
|              | AWG/Kcmil  | No.    | mm               | mm         | kg/km          | mm                 | newton           | Ω/km                 | Ω/km                 | Ω/km                       | Amp                                |
| TBA          | 14         | 7      | 1.52             | 4.83       | 36             | 17.78              | 147              | 8.63                 | 10.40                | 0.1903                     | 25                                 |
| TBA          | 12         | 7      | 1.52             | 5.28       | 51             | 20.32              | 231              | 5.45                 | 6.57                 | 0.1772                     | 30                                 |
| 583670       | 10         | 19     | 1.52             | 5.92       | 68             | 22.86              | 369              | 3.41                 | 4.11                 | 0.1640                     | 40                                 |
| 584430       | 10         | 19     | 1.52             | 5.92       | 68             | 22.86              | 369              | 3.41                 | 4.11                 | 0.1640                     | 40                                 |
| TBA          | 8          | 7      | 2.03             | 7.65       | 116            | 30.48              | 587              | 2.14                 | 2.58                 | 0.1706                     | 55                                 |
| 585502       | 8          | 19     | 2.03             | 8.03       | 116            | 30.48              | 587              | 2.14                 | 2.58                 | 0.1706                     | 55                                 |
| TBA          | 6          | 7      | 2.03             | 8.56       | 170            | 33.02              | 930              | 1.35                 | 1.62                 | 0.1673                     | 75                                 |
| TBA          | 4          | 7      | 2.03             | 9.78       | 249            | 38.10              | 1482             | 0.85                 | 1.02                 | 0.1575                     | 95                                 |
| TBA          | 2          | 7      | 2.03             | 11.23      | 374            | 43.18              | 2359             | 0.53                 | 0.64                 | 0.1476                     | 130                                |
| TBA          | 1          | 19     | 2.41             | 13.00      | 479            | 50.80              | 2977             | 0.42                 | 0.51                 | 0.1509                     | 145                                |
| TBA          | 1/0        | 19     | 2.41             | 14.00      | 588            | 55.88              | 3756             | 0.33                 | 0.40                 | 0.1444                     | 170                                |
| TBA          | 2/0        | 19     | 2.41             | 15.11      | 725            | 58.42              | 4735             | 0.27                 | 0.32                 | 0.1411                     | 195                                |
| TBA          | 3/0        | 19     | 2.41             | 16.41      | 897            | 63.50              | 5972             | 0.21                 | 0.26                 | 0.1378                     | 225                                |
| TBA          | 4/0        | 19     | 2.41             | 17.83      | 1112           | 71.12              | 7529             | 0.17                 | 0.20                 | 0.1345                     | 260                                |
| TBA          | 250        | 37     | 2.79             | 19.76      | 1326           | 78.74              | 8900             | 0.14                 | 0.17                 | 0.1345                     | 290                                |
| TBA          | 350        | 37     | 2.79             | 22.38      | 1814           | 88.90              | 12460            | 0.10                 | 0.13                 | 0.1312                     | 350                                |
| TBA          | 500        | 37     | 2.79             | 25.63      | 2537           | 127.00             | 17800            | 0.07                 | 0.10                 | 0.1280                     | 430                                |
| TBA          | 600        | 61     | 3.18             | 28.32      | 3058           | 139.70             | 21360            | 0.06                 | 0.08                 | 0.1280                     | 475                                |
| TBA          | 750        | 61     | 3.18             | 30.94      | 3778           | 152.40             | 26700            | 0.05                 | 0.07                 | 0.1247                     | 535                                |
| TBA          | 1000       | 61     | 3.18             | 34.72      | 4973           | 172.72             | 35600            | 0.04                 | 0.06                 | 0.1214                     | 615                                |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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^ Combination Unilay per ASTM B787

### Stock Code and Color (other than Black)

| Stock Code | Size AWG | Color |
|------------|----------|-------|
| 583671     | 10       | Red   |

