**PRODUCT HIGHLIGHTS**
Southwire’s Single Conductor 1kV Teck 90 is a CSA approved armoured cable for Industrial and Commercial applications. FT4, -40C, HL, AG14 and 90°C rated for use in harsh Canadian environments. Rated for installation in cable trays, duct banks, direct burial, troughs, hazardous locations, continuous rigid cable supports, and concrete encaseable. CSA AG14 Acid Gas compliance.

**CONSTRUCTION**

**Conductor:**
- Class B stranded copper
  - compressed or compact
  - in accordance with ASTM B3 and ASTM B8

**Insulation:**
- XLPE (Cross Linked Polyethylene)
- Minimum Average Thickness: 250 kcmil to 1000 kcmil
  - 0.090 inches (2.3 mm)
- 90°C rated

**Concentric Bonding Conductors:**
- Class B concentric bare copper wire serve
  See Table 1 for details

**Inner Jacket:**
- Black PVC
- Thickness - 250 kcmil to 1000 kcmil = 0.060” (1.5 mm)
- minimum average

**Armour:**
- Aluminum Interlocked Armour (AIA)

**Overall Jacket:**
- Black PVC (optional colours available)
- Minimum Thickness:
  - 250 kcmil to 400 kcmil = 0.050 inches (1.3 mm)
  - 500 kcmil to 1000 kcmil = 0.060 inches (1.5 mm)

**Sample Print Legend:**
- SOUTHWIRE #P# CSA LL90458 1/C
- [size]KCMIL CU
- TECK90 XLPE - 40(D)C FT4 SUN.RES.
- AG14 90(D)C
- 1000V HL YEAR --- PC2L1G#XAP SEQUENTIAL METER MARKS

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### TABLE 1 - WEIGHTS & MEASUREMENTS

<table>
<thead>
<tr>
<th>TECK 90 Product Code</th>
<th>AWG or Kcmil</th>
<th>Conductor Diameter</th>
<th>Diameter Over Insulation</th>
<th>Concentric Bonding Wire Serve (equiv. single cond)</th>
<th>Inner Jacket Diameter</th>
<th>Armour Diameter</th>
<th>Approx. Overall Diameter</th>
<th>Approx. Weight of Cable</th>
<th><strong>Max Reel Weight (reel &amp; cable)</strong></th>
<th><strong>Max Reel Diameter</strong></th>
<th><strong>Max Reel Width</strong></th>
<th><strong>Max. Length of Cable on Reel</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CU101U2-250</td>
<td>250 (37)</td>
<td>0.56</td>
<td>14.2</td>
<td>0.74 × 0.14 (2)</td>
<td>1.01</td>
<td>25.7</td>
<td>1.32 × 0.34 (36.1)</td>
<td>1.42 × 0.34 (1497)</td>
<td>22.28 lbs / 1000 ft.</td>
<td>9731 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-300</td>
<td>300 (37)</td>
<td>0.61</td>
<td>15.5</td>
<td>0.79 × 0.14 (2)</td>
<td>1.14</td>
<td>26.8</td>
<td>1.42 × 0.36 (36.1)</td>
<td>1.52 × 0.36 (1905)</td>
<td>28.35 lbs / 1000 ft.</td>
<td>11900 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-350</td>
<td>350 (37)</td>
<td>0.66</td>
<td>16.8</td>
<td>0.84 × 0.14 (1)</td>
<td>1.17</td>
<td>29.8</td>
<td>1.48 × 0.37 (36.1)</td>
<td>1.57 × 0.37 (2146)</td>
<td>31.94 lbs / 1000 ft.</td>
<td>11911 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-400</td>
<td>400 (37)</td>
<td>0.71</td>
<td>17.9</td>
<td>0.89 × 0.14 (1)</td>
<td>1.28</td>
<td>32.5</td>
<td>1.59 × 0.40 (36.1)</td>
<td>1.71 × 0.40 (2558)</td>
<td>38.07 lbs / 1000 ft.</td>
<td>12006 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-450</td>
<td>500 (37)</td>
<td>0.79</td>
<td>20.1</td>
<td>0.97 × 0.14 (1)</td>
<td>1.33</td>
<td>33.9</td>
<td>1.64 × 0.41 (36.1)</td>
<td>1.75 × 0.41 (2908)</td>
<td>43.28 lbs / 1000 ft.</td>
<td>12092 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-500</td>
<td>600 (37)</td>
<td>0.87</td>
<td>22.0</td>
<td>1.05 × 0.14 (1)</td>
<td>1.44</td>
<td>36.6</td>
<td>1.76 × 0.44 (36.1)</td>
<td>1.88 × 0.44 (3551)</td>
<td>52.84 lbs / 1000 ft.</td>
<td>12112 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-600</td>
<td>750 (61)</td>
<td>0.97</td>
<td>24.6</td>
<td>1.15 × 0.12 (2)</td>
<td>1.59</td>
<td>40.4</td>
<td>1.92 × 0.48 (36.1)</td>
<td>2.04 × 0.48 (4462)</td>
<td>66.41 lbs / 1000 ft.</td>
<td>11906 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
<tr>
<td>CU101U2-750</td>
<td>1000 (61)</td>
<td>1.12</td>
<td>28.4</td>
<td>1.30 × 0.12 (2)</td>
<td>1.63</td>
<td>43.2</td>
<td>2.07 × 0.51 (36.1)</td>
<td>2.15 × 0.51 (5312)</td>
<td>76.26 lbs / 1000 ft.</td>
<td>11912 kg / km</td>
<td>2.44 m</td>
<td>54.5 kg / m</td>
</tr>
</tbody>
</table>

**NOTE:** These are minimum dimensions as per CSA Standards.
**1** Other conductor sizes and outer jacket colours are available upon request. (#s in brackets represent # of strands / conductor. Number of strands may vary as per CSA standard.)
**2** Non-Standard sizes are available upon request. reel sizes are not guaranteed. The factory reserves the right to make changes as necessary to optimize manufacturing requirements.

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TECK 90 SPECIFICATIONS
CSA TECK 90 1/C CU 90XLP PVC AIA PVC 1KV NS

DESIGN
Qualification Standards:
• CSA C22.2 No. 131 - Type TEC K 90 Cable
• CSA C22.2 No. 174 - Cables in Hazardous Locations
• All Applicable ASTM Standards
• CSA AG14 - Acid Gas Compliance

Flame Test Ratings:
• FT1 - Flame Test (1,706 BTU/Hr nominal - Vertical Wire Flame Test)
• FT4 - Flame Test (70,000 BTU/Hr - Vertical Tray Flame Test)

Product Ratings:
• CSA C22.2 No. 2556 & No. 0.3. - Wire and Cable Test Methods
• CSA HL - for Hazardous Locations rating
• CSA FT4 - for Flame Retardancy rating
• CSA SUN RES - for Sunlight Resistant rating
• CSA AG14 - for Acid Gas compliance

Operating Temperatures:
• -40°C - CSA Cold Bend and Impact Temperature
• -25°C - Min. Installation Temperature
• 90°C - Max Continuous Operating Temperature

TABLE 2 - ENGINEERING SPECIFICATIONS

<table>
<thead>
<tr>
<th>TECK 90 Product Code</th>
<th>*Conductor Size</th>
<th>Minimum Bend Radius</th>
<th>Maximum Pulling Tension</th>
<th>DC Resistance Rdc @ 25°C</th>
<th>AC Resistance Rac Ratios @ 65°C &amp; 60Hz (each conductor)</th>
<th>***Allowable Ampacities in Free Air (30°C amb)†</th>
<th>****Allowable Ampacities Direct Buried (20°C amb)†</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU101U24-250</td>
<td>250 (37)</td>
<td>17.0</td>
<td>433</td>
<td>2000</td>
<td>0.0431 0.1414</td>
<td>455 499</td>
<td>509 550</td>
</tr>
<tr>
<td>CU101U24-300</td>
<td>300 (37)</td>
<td>17.3</td>
<td>440</td>
<td>2400</td>
<td>0.0360 0.1181</td>
<td>500 550</td>
<td>570 597</td>
</tr>
<tr>
<td>CU101U24-350</td>
<td>350 (37)</td>
<td>18.3</td>
<td>464</td>
<td>2800</td>
<td>0.0308 0.1011</td>
<td>570 597</td>
<td>615 642</td>
</tr>
<tr>
<td>CU101U24-400</td>
<td>400 (37)</td>
<td>18.9</td>
<td>479</td>
<td>3200</td>
<td>0.0269 0.0883</td>
<td>615 642</td>
<td>700 721</td>
</tr>
<tr>
<td>CU101U24-500</td>
<td>500 (37)</td>
<td>20.5</td>
<td>520</td>
<td>4000</td>
<td>0.0216 0.0709</td>
<td>700 721</td>
<td>800 850</td>
</tr>
<tr>
<td>CU101U24-600</td>
<td>600 (37)</td>
<td>21.0</td>
<td>534</td>
<td>4800</td>
<td>0.0180 0.0591</td>
<td>780 790</td>
<td>885 885</td>
</tr>
<tr>
<td>CU101U24-750</td>
<td>750 (61)</td>
<td>22.6</td>
<td>574</td>
<td>6000</td>
<td>0.0144 0.0472</td>
<td>885 885</td>
<td>955 970</td>
</tr>
<tr>
<td>CU101U24-1000</td>
<td>1000 (61)</td>
<td>24.5</td>
<td>622</td>
<td>8000</td>
<td>0.0108 0.0354</td>
<td>1055 1020</td>
<td>1135 1100</td>
</tr>
</tbody>
</table>

* Other conductor sizes and outer jacket colours are available upon request.
† Ampacities are based on Table 1 of the 2015 Canadian Electrical Code Part I
‡ Ampacities are based on Table D8A and Detail 1 of Diagram B4-1 of the 2015 Canadian Electrical Code Part I

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