TYPE SINGLE CONDUCTOR - 1350 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 600V SINGLE-RATED: XLPE INSULATED 90°C

ENGINEERING SPECIFICATIONS
Standards
Underwriters Laboratories® Standards UL-854; ANSI/ICEA S-105-692-2011; IEEE 835-1994; Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, ASTM B836; ARRA 2009 Section 1605 “Buy American” Compliant; RoHS Compliant; RUS Accepted; ICEA S-81-570; UL Listing E-174428

CONSTRUCTION
Conductors
Compact Stranded Conductors, Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, and ASTM B836

Insulation
Cross-link polyethylene (XLPE) insulation per UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation.

APPLICATIONS
Single-conductor, XLPE insulated conductor for utility underground applications not exceeding 600 volts. For NEC applications when used as USE-2 per UL 854 and NEC 310.104(A) and non-NEC applications including direct burial, or for installation in electrical ducts or raceways. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads not to exceed 100 hours within 12 consecutive months.

FEATURES
One black XLPE insulated phase conductor. Superior weather, abrasion, crush, and sunlight-resistant XLPE insulation. Manufactured and tested according to ANSI/ICEA S-105-692: Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables. Also manufactured and tested according to UL-854 for single-rated USE-2 cables. Conductor is surface printed for identification. Excellent ruggedized and mechanical protection.

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Size (AWG)</th>
<th>No. of Strands</th>
<th>Compact Diameter of Aluminum Conductor (in)</th>
<th>Insulation Thickness (in)</th>
<th>Outside Diameter (in)</th>
<th>Approximate Net Weight (lbs/1000 ft)</th>
<th>Allowable Ampacities (Amps) for Direct Burial</th>
<th>Standard Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Princeton</td>
<td>6</td>
<td>7</td>
<td>0.169</td>
<td>0.060</td>
<td>0.289</td>
<td>44</td>
<td>108</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Mercer</td>
<td>4</td>
<td>7</td>
<td>0.213</td>
<td>0.060</td>
<td>0.333</td>
<td>62</td>
<td>140</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Clemson</td>
<td>2</td>
<td>7</td>
<td>0.268</td>
<td>0.060</td>
<td>0.388</td>
<td>90</td>
<td>180</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Kenyon</td>
<td>1</td>
<td>8</td>
<td>0.299</td>
<td>0.080</td>
<td>0.459</td>
<td>120</td>
<td>203</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Harvard</td>
<td>10</td>
<td>10</td>
<td>0.336</td>
<td>0.080</td>
<td>0.496</td>
<td>150</td>
<td>231</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Yale</td>
<td>2/0</td>
<td>12</td>
<td>0.376</td>
<td>0.080</td>
<td>0.536</td>
<td>176</td>
<td>263</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Tufts</td>
<td>30/0</td>
<td>15</td>
<td>0.423</td>
<td>0.080</td>
<td>0.583</td>
<td>216</td>
<td>299</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Beloit</td>
<td>40/0</td>
<td>19</td>
<td>0.475</td>
<td>0.080</td>
<td>0.635</td>
<td>262</td>
<td>338</td>
<td>500' 1000' 2500' 5000' Reels</td>
</tr>
<tr>
<td>Hofstra</td>
<td>250</td>
<td>22</td>
<td>0.520</td>
<td>0.095</td>
<td>0.710</td>
<td>320</td>
<td>368</td>
<td>500' 1000' 2500' 4000' Reels</td>
</tr>
<tr>
<td>Gonzaga</td>
<td>300</td>
<td>21</td>
<td>0.570</td>
<td>0.095</td>
<td>0.760</td>
<td>375</td>
<td>407</td>
<td>500' 1000' 3500' Reels</td>
</tr>
<tr>
<td>Rutgers</td>
<td>350</td>
<td>24</td>
<td>0.616</td>
<td>0.095</td>
<td>0.806</td>
<td>430</td>
<td>444</td>
<td>500' 1000' 3000' Reels</td>
</tr>
<tr>
<td>Dartmouth</td>
<td>400</td>
<td>27</td>
<td>0.659</td>
<td>0.095</td>
<td>0.840</td>
<td>484</td>
<td>475</td>
<td>500' 1000' 3000' Reels</td>
</tr>
<tr>
<td>Emory</td>
<td>500</td>
<td>34</td>
<td>0.736</td>
<td>0.095</td>
<td>0.926</td>
<td>583</td>
<td>540</td>
<td>500' 1000' 2500' Reels</td>
</tr>
<tr>
<td>Duke</td>
<td>600</td>
<td>41</td>
<td>0.813</td>
<td>0.110</td>
<td>1.033</td>
<td>710</td>
<td>595</td>
<td>500' 1000' 2000' Reels</td>
</tr>
<tr>
<td>Furman</td>
<td>700</td>
<td>45</td>
<td>0.877</td>
<td>0.110</td>
<td>1.091</td>
<td>810</td>
<td>645</td>
<td>500' 1000' 1500' Reels</td>
</tr>
<tr>
<td>Sewanne</td>
<td>750</td>
<td>47</td>
<td>0.938</td>
<td>0.110</td>
<td>1.186</td>
<td>965</td>
<td>667</td>
<td>500' 1000' 1500' Reels</td>
</tr>
<tr>
<td>Fordham</td>
<td>1000</td>
<td>61</td>
<td>1.060</td>
<td>0.110</td>
<td>1.340</td>
<td>1122</td>
<td>800</td>
<td>500' 1000' Reels</td>
</tr>
</tbody>
</table>

Footnotes:
1. Ampacities shown are for non-NEC applications and are based on current in phase conductors only:
   a) 90°C conductor temperature
   b) 20°C earth ambient
   c) 100% load factor
   d) (Rho) = 90°C-cm/volt earth thermal resistivity for three cable, 36” deep burial

2. IEEE 835, Standard Power Cable Ampacity Table
   For NEC applications, consult appropriate NEC ampacity section. The above data is approximate and subject to normal manufacturing tolerances.
   The above data is approximate and subject to manufacturing tolerances.

PRINT LEGEND: ENCORE WIRE CORP (SIZE) EC-1350 AL CDR TYPE USE-2 SUN-RES DR-BUR 600 VOLT XLPE (UL) DATE/TIME/OPER/QC
**ENGINEERING SPECIFICATIONS**

**Standards**
Underwriters Laboratories® Standards UL-854; ANSI/ICEA S-105-692; IEEE 835-1994; Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, ASTM B836; ARRA 2009 Section 1605 “Buy American” Compliant; RUS Accepted; RoHS Compliant; ICEA S-81-570; UL Listing E - 174428

**CONSTRUCTION**

**Conductors**
Compact Stranded Conductors, Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, and ASTM B836

**Insulation**
Cross-link polyethylene (XLPE) insulation per UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductor, yellow XLPE insulation on grounded (neutral) conductor.

**APPLICATIONS**
Duplex construction, single-rated USE-2 cables for underground service entrance applications not exceeding 600 volts. May be used as single-rated type USE-2 for NEC applications, as well as, non-NEC applications, including direct burial, or for installation in ducts or conduits. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads, and 250°C under short circuit conditions. All conductors may be used as UL single-rated as USE-2 per UL-854.

**FEATURES**
One black XLPE insulated phase conductor cabled together with one yellow XLPE insulated neutral conductor. Superior weather, abrasion, crush, and sunlight-resistant XLPE insulation. Manufactured and tested according to ANSI/ICEA S-105-692: Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables. Also manufactured and tested according to UL-854 for single-rated USE-2 cables. Conductors are surface printed for identification. Excellent ruggedized and mechanical protection.

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**PRINT LEGEND:** ENCORE WIRE CORP (SIZE) EC-1350 AL CDR TYPE USE-2 SUN-RES DIR-BUR 600 VOLT XLPE (UL) (DATE/TIMESTAMP/QC)

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### Table: Allowable Ampacities for Direct Burial

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Conductor Sizes (AWG)</th>
<th>Phase Conductors</th>
<th>Neutral Conductor</th>
<th>Finished Cable</th>
<th>Allowable Ampacities (Amps) for Direct Burial</th>
<th>Standard Packaging (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bard</td>
<td>8-6</td>
<td>8</td>
<td>7</td>
<td>0.060</td>
<td>0.254</td>
<td>64</td>
</tr>
<tr>
<td>Claffin</td>
<td>6-6</td>
<td>6</td>
<td>7</td>
<td>0.060</td>
<td>0.289</td>
<td>66</td>
</tr>
<tr>
<td>Delgado</td>
<td>4-4</td>
<td>4</td>
<td>7</td>
<td>0.060</td>
<td>0.333</td>
<td>124</td>
</tr>
</tbody>
</table>

1. Ampacities shown are for non-NEC applications and are based on current in phase conductors only per IEEE 835, Standard Power Cable Ampacity Table:
   a) 90°C conductor temperature
   b) 20°C earth ambient
   c) 100% load factor
   d) (Rho) = 90°C-cm/watt earth thermal resistivity for three cable, 36" deep burial

For NEC applications, consult appropriate NEC ampacity section. The above data is approximate and subject to normal manufacturing tolerances. The above data is approximate and subject to manufacturing tolerances.

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800.962.9473     www.encorewire.com
TYPE TRIPLEX - 1350 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 600V SINGLE-RATED: XLPE INSULATED 90°C

ENGINEERING SPECIFICATIONS

Standards
Underwriters Laboratories® Standards UL-854; ANSI/ICEA S-105-692; IEEE 835-1994; Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, ASTM B836; ARRA 2009 Section 1605 “Buy American” Compliant; RoHS Compliant; RUS Accepted; ICEA S-81-570; UL Listing #E - 174428

CONSTRUCTION

Conductors
Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, and ASTM B836

Insulation
Cross-link polyethylene (XLPE) insulation per UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductor.

APPLICATIONS

Triplex Construction, XLPE insulated conductor for utility underground applications not exceeding 600 volts. For NEC applications when used as USE-2 per UL 854 and NEC 310.104(A) and non-NEC applications including direct burial, or for installation in electrical ducts or raceways. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads not to exceed 100 hours within 12 consecutive months.

FEATURES

Two black XLPE insulated phase conductors cabled together with one yellow XLPE insulated neutral conductor. Superior weather, abrasion, crush, and sunlight-resistant XLPE insulation. Manufactured and tested according to ANSI/ICEA S-105-692: Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables. Also manufactured and tested according to UL-854 for single-rated USE-2 cables. Conductors are surface printed for identification. Excellent ruggedized and mechanical protection.

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Conductor Sizes (AWG)</th>
<th>Size (AWG)</th>
<th>No. of Strands</th>
<th>XLPE Thickness (in)</th>
<th>Outside Diameter (in)</th>
<th>Size (AWG)</th>
<th>No. of Strands</th>
<th>XLPE Thickness (in)</th>
<th>Outside Diameter (in)</th>
</tr>
</thead>
</table>

Ampacities shown are for non-NEC applications and are based on current in phase conductors only:

- **a)** 90°C conductor temperature
- **b)** 20°C earth ambient
- **c)** 100% load factor
- **d)** (Rho) = 90°C-cm²/watt earth thermal resistivity for three cable, 36” deep burial

IEEE 835, Standard Power Cable Ampacity Table

For NEC applications, consult appropriate NEC ampacity section. The above data is approximate and subject to normal manufacturing tolerances. The above data is approximate and subject to normal manufacturing tolerances.

PRINT LEGEND: ENCORE WIRE CORP (S20) EC-1350 AL CTR TYPE USE-2 SUN-RES DR-BUR 600 VOLT XLPE (L4) DATE/TIME/OPER/VOL
**TYPE QUADRUPLEX - 1350 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 600V**

**SINGLE-RATED: XLPE INSULATED 90°C**

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**ENGINEERING SPECIFICATIONS**

**Standards**

Underwriters Laboratories® Standards UL-854; ANSI/ICEA S-105-692; IEEE 835-1994; Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, ASTM B836; ARRA 2009 Section 1605 “Buy American” Compliant; RoHS Compliant; RUS Accepted; ICEA S-81-570; UL Listing E - 174428

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**CONSTRUCTION**

**Conductors**

Compact Stranded Aluminum Alloy 1350 Series per ASTM B230, ASTM B231, ASTM B609, and ASTM B836

**Insulation**

Cross-link polyethylene (XLPE) insulation per UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductor.

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**APPLICATIONS**

Quadripex Construction, XLPE insulated conductor for utility underground applications not exceeding 600 volts. For NEC applications when used as USE-2 per UL 854 and NEC 310.104(A) and non-NEC applications including direct burial, or for installation in electrical ducts or raceways. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads not to exceed 100 hours within 12 consecutive months.

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**FEATURES**

Three black XLPE insulated phase conductors cabled together with one yellow XLPE insulated neutral conductor. Superior weather, abrasion, crush, and sunlight-resistant XLPE insulation. Manufactured and tested according to ANSI/ICEA S-105-692: Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables. Also manufactured and tested according to UL-854 for single-rated USE-2 cables. Conductors are surface printed for identification. Excellent ruggedized and mechanical protection.

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**PRINT LEGEND:** ENCORE WIRE CORP (SIZE) EC-1350 AL CDR TYPE USE-2 SUN-RES DIR-BUR 600 VOLT XLPE (UL) DATE/TIME/OPER/QC

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