ENGINEERING SPECIFICATIONS

Standards
Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392; NEMA WC 57/ICEA S-73-532; UL 1685-FT4/EIEEE 1202 (70,000 Btu/hr) Flame Test; ICEA T-29-520 (210,000 Btu/hr) Flame Test; ARRA 2009 Section 1605 “Buy American” Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-179429

CONSTRUCTION

Conductors
Bare, soft-annealed stranded copper conductors per ASTM-B3, ASTM-B8 and ASTM-B787

Insulation
High dielectric strength, heat and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for continuous use at 90ºC dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire.

Assembly
The insulated conductors are cabled together without a ground and with or without fillers as required to form a round compact core. Nylon rip-cord is supplied for easy stripping.

Color Coding
Black insulation with ICEA Method 4 printed number

Overall Jacket
A flame retardant, sunlight-resistant black PVC jackets is applied over shielded core. Sunlight-resistant overall jacket available in all colors by request.

APPLICATIONS
Primarily used for connecting power devices in commercial and industrial environments. Suitable for installation in channels, ducts, wireways, cable trays, and raceways. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Cables sizes 8 AWG - 6 AWG are listed with TC-ER-JP rating. Approved for Class I Division II Hazardous Locations.

<table>
<thead>
<tr>
<th>Size (AWG)</th>
<th>No. of Conductors</th>
<th>Outside Jacket Thickness PVC (in)</th>
<th>Outside Diameter (in)</th>
<th>Approximate Net Weight (lbs/1000 ft)</th>
<th>Allowable Ampacity (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8²</td>
<td>3</td>
<td>0.060</td>
<td>0.610</td>
<td>282</td>
<td>50</td>
</tr>
<tr>
<td>6²</td>
<td>3</td>
<td>0.060</td>
<td>0.655</td>
<td>351</td>
<td>55</td>
</tr>
<tr>
<td>4²</td>
<td>3</td>
<td>0.060</td>
<td>0.700</td>
<td>400</td>
<td>65</td>
</tr>
<tr>
<td>2²</td>
<td>3</td>
<td>0.080</td>
<td>1.004</td>
<td>947</td>
<td>115</td>
</tr>
<tr>
<td>1²</td>
<td>3</td>
<td>0.080</td>
<td>1.140</td>
<td>1121</td>
<td>130</td>
</tr>
<tr>
<td>1/0²</td>
<td>3</td>
<td>0.080</td>
<td>1.225</td>
<td>1438</td>
<td>150</td>
</tr>
<tr>
<td>2/0²</td>
<td>3</td>
<td>0.080</td>
<td>1.325</td>
<td>1750</td>
<td>175</td>
</tr>
<tr>
<td>3/0²</td>
<td>3</td>
<td>0.080</td>
<td>1.435</td>
<td>2120</td>
<td>200</td>
</tr>
<tr>
<td>4/0²</td>
<td>3</td>
<td>0.080</td>
<td>1.555</td>
<td>2610</td>
<td>230</td>
</tr>
</tbody>
</table>

1 Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.
60°C when terminated to equipment for circuits rated 100 amperes or less or marked for size 14 AWG through 1 AWG conductor.
75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.
90°C for ampacity derating purposes.
When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(3)(a).
The above data is approximate and subject to normal manufacturing tolerances.
4/0 AWG THROUGH 4/0 AWG ARE RATED AS TYPE TC ONLY

8 AWG THROUGH 4/0 AWG ARE 19 STRANDS PER CONDUCTOR

PRINT LEGEND: ENCORE WIRE CORPORATION (size) TYPE TC - ER-JP CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/OPER/QC

PRINT LEGEND: ENCORE WIRE CORPORATION (size) TYPE TC CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR ([UL] DATE/TIME/OPER/QC
ENGINEERING SPECIFICATIONS

Standards
Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392; UL 1685 FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; NEMA WC 57/ICEA S-73-532; ICEA T-29-520 (210,000 Btu/hr) Flame Test; ARRA 2009 Section 1605 “Buy American” Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-179429

CONSTRUCTION

Conductors
Stranded, uncoated copper conductors per ASTM-B3, ASTM-B8 and ASTM-B787

Insulation
High dielectric strength, heat- and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for 90°C dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire.

Assembly
The insulated conductors are cabled together without a ground and with or without fillers as required to form a round compact core. Nylon rip-cord is supplied for easy stripping.

Color Coding
Black insulation with ICEA Method 4 printed number

Overall Jacket
A flame retardant, sunlight-resistant black PVC jackets is applied over shielded core. Sunlight-resistant overall jacket available in all colors by request.

APPLICATIONS
Primarily used for connecting power devices in commercial and industrial environments. Suitable for installation in channels, ducts, wireways, cable trays, and raceways. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Approved for Class I Division II Hazardous Locations.

---

<table>
<thead>
<tr>
<th>Size (AWG)</th>
<th>No. of Conductors</th>
<th>Outside Jacket Thickness PVC (in)</th>
<th>Allowable Ampacity (Amps)</th>
<th>Outside Diameter (in)</th>
<th>Approximate Net Weight (lbs/1000 ft)</th>
<th>Standard Packaging (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>3 4</td>
<td>0.080  0.080</td>
<td>255  290</td>
<td>1.792  1.981</td>
<td>3026  3865</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>300</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>285  320</td>
<td>1.977  2.160</td>
<td>3640  4703</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>350</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>310  350</td>
<td>2.091  2.308</td>
<td>4155  5400</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>400</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>335  380</td>
<td>2.197  2.432</td>
<td>4699  6062</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>500</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>380  430</td>
<td>2.392  2.650</td>
<td>5750  7382</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>600</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>420  475</td>
<td>2.752  3.053</td>
<td>6992  9171</td>
<td>1000' 1500' Reels</td>
</tr>
<tr>
<td>750</td>
<td>3 4</td>
<td>0.110  0.110</td>
<td>475  535</td>
<td>3.009  3.338</td>
<td>8491  11216</td>
<td>1000' 1500' Reels</td>
</tr>
</tbody>
</table>

1 Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.
75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.
90°C for ampacity derating purposes.
When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(3)(a).
The above data is approximate and subject to normal manufacturing tolerances.
250 KCMIL through 750 KCMIL is rated as Type TC Only.

PRINT LEGEND: ENCORE WIRE CORPORATION (size) TYPE TC CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/QC

---