Enamelled Copper Wire

Applications
Suitable for automated soldering equipment used for production/manufacturing of small motors, transformers, relays and magnet coils.

Standard
IEC 60317-0-1:2014
IEC 60317-51
NEMA MW 82-C

Insulation Coatings: Polyurethane 180
Dimensions: 0.07mm to 1.6mm
Gr 2 (2L)

Mechanical Properties (For 0.3mm)
Elongation: >30%
Springiness: <50
Adherence – Flexibility: Excellent
Resistance to Abrasion: >67.75N

Electrical Properties
Breakdown Voltage: 7kV

Thermal Properties
Temperature Index: 180
Cut through: 2min ≥ 230°C
Heat Shock: 1d, 1/2 h ≥ 200°C

Chemical Properties
Solvent Test: 4H
Solderability: 390°C
Resistance to Refrigerants: -

Bare Conductor – Copper Characteristics (Annealed Condition)
Electrical Resistivity @ 20°C: 0.017241Ωmm²/m
Temperature Coefficient @ 20°C: 0.00694°C
Specific Weight: 8.89 Gr/cm³
Ultimate Tensile Strength: 22 – 30 kg/mm²
Primary Insulation Colour: Transparent / Natural
## Enamelled Copper Wire

### Part Number Table

<table>
<thead>
<tr>
<th>Description</th>
<th>CSA</th>
<th>AWG</th>
<th>Reel Length (m)</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire, Copper Enamelled, 35 SWG</td>
<td>0.0357mm²</td>
<td>32AWG</td>
<td>1.850</td>
<td>ECW0.2</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 34 SWG</td>
<td>0.0428mm²</td>
<td>31AWG</td>
<td>1.430</td>
<td>ECW0.224</td>
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<tr>
<td>Wire, Copper Enamelled, 33 SWG</td>
<td>0.0506mm²</td>
<td>30AWG</td>
<td>1.120</td>
<td>ECW0.25</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 32 SWG</td>
<td>0.0779mm²</td>
<td>28AWG</td>
<td>0.720</td>
<td>ECW0.315</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 27 SWG</td>
<td>0.136mm²</td>
<td>26AWG</td>
<td>0.450</td>
<td>ECW0.4</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 25 SWG</td>
<td>0.203mm²</td>
<td>24AWG</td>
<td>0.290</td>
<td>ECW0.5</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 24 SWG</td>
<td>0.246mm²</td>
<td>23AWG</td>
<td>0.230</td>
<td>ECW0.56</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 22 SWG</td>
<td>0.396mm²</td>
<td>21AWG</td>
<td>0.140</td>
<td>ECW0.71</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 21 SWG</td>
<td>0.515mm²</td>
<td>20AWG</td>
<td>0.125</td>
<td>ECW0.80</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 19 SWG</td>
<td>0.815mm²</td>
<td>18AWG</td>
<td>0.070</td>
<td>ECW1.0</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 18 SWG</td>
<td>1.17mm²</td>
<td>16AWG</td>
<td>0.047</td>
<td>ECW1.25</td>
</tr>
<tr>
<td>Wire, Copper Enamelled, 16 SWG</td>
<td>2.08mm²</td>
<td>15AWG</td>
<td>0.032</td>
<td>ECW1.5</td>
</tr>
</tbody>
</table>

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