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°
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>Part Number</th>
<th>Description</th>
<th>CSA</th>
<th>AWG</th>
<th>Reel Length (m)</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECW0.2</td>
<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>ECW0.224</td>
<td>Wire, Copper Enamelled, 34 SWG</td>
<td>0.0428mm²</td>
<td>31AWG</td>
<td>1,430</td>
<td>ECW0.224</td>
</tr>
<tr>
<td>ECW0.25</td>
<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>ECW0.315</td>
<td>Wire, Copper Enamelled, 32 SWG</td>
<td>0.0779mm²</td>
<td>28AWG</td>
<td>720</td>
<td>ECW0.315</td>
</tr>
<tr>
<td>ECW0.4</td>
<td>Wire, Copper Enamelled, 30 SWG</td>
<td>0.136mm²</td>
<td>26AWG</td>
<td>450</td>
<td>ECW0.4</td>
</tr>
<tr>
<td>ECW0.5</td>
<td>Wire, Copper Enamelled, 29 SWG</td>
<td>0.203mm²</td>
<td>24AWG</td>
<td>290</td>
<td>ECW0.5</td>
</tr>
<tr>
<td>ECW0.56</td>
<td>Wire, Copper Enamelled, 28 SWG</td>
<td>0.246mm²</td>
<td>23AWG</td>
<td>230</td>
<td>ECW0.56</td>
</tr>
<tr>
<td>ECW0.71</td>
<td>Wire, Copper Enamelled, 27 SWG</td>
<td>0.396mm²</td>
<td>21AWG</td>
<td>140</td>
<td>ECW0.71</td>
</tr>
<tr>
<td>ECW0.80</td>
<td>Wire, Copper Enamelled, 26 SWG</td>
<td>0.515mm²</td>
<td>20AWG</td>
<td>125</td>
<td>ECW0.80</td>
</tr>
<tr>
<td>ECW1.0</td>
<td>Wire, Copper Enamelled, 24 SWG</td>
<td>0.815mm²</td>
<td>18AWG</td>
<td>70</td>
<td>ECW1.0</td>
</tr>
<tr>
<td>ECW1.25</td>
<td>Wire, Copper Enamelled, 23 SWG</td>
<td>1.17mm²</td>
<td>16AWG</td>
<td>47</td>
<td>ECW1.25</td>
</tr>
<tr>
<td>ECW1.5</td>
<td>Wire, Copper Enamelled, 22 SWG</td>
<td>2.08mm²</td>
<td>15AWG</td>
<td>32</td>
<td>ECW1.5</td>
</tr>
</tbody>
</table>

**Important Notice:** This data sheet and its contents (the "Information") belong to the members of the Avnet group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

04/12/20 V1.0