Product: **8049**

Magnet Wire, #18 Sol BC, PUR/NYL Ins

**Product Description**
Magnet Wire, 18AWG (Solid) Bare Copper, PUR/NYL Insulation, J-W-1177/9 MW 28-C

**Technical Specifications**

**Product Overview**
Suitable Applications: solderable magnet wire

**Physical Characteristics (Overall)**

<table>
<thead>
<tr>
<th>Conductor</th>
<th>AWG</th>
<th>Stranding</th>
<th>Material</th>
<th>No. of Conductors</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Solid</td>
<td>BC - Bare Copper</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Conductor Count: 1

<table>
<thead>
<tr>
<th>Insulation</th>
<th>Material</th>
<th>Nominal Diameter</th>
<th>Nominal Wall Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUR/Nylon</td>
<td>Polyurethane + Nylon</td>
<td>0.0424 in</td>
<td>0.001 in</td>
</tr>
</tbody>
</table>

**Outer Jacket Material**

Max. Diameter
0.0424 mm

**Construction and Dimensions**

Min Increase in OD: 0.001 in

**Electrical Characteristics**

**Conductor DCR**
Nominal Conductor DCR
6.4 Ohm/1000ft

**Current**
Max. Recommended Current [A]
Single conductor in free air @ 30ºC: 2.3 A

**Voltage**
Breakdown Voltage
2850 V Minimum (at Room Temperature)

**Temperature Range**
Non-UL Temp Rating: 130ºC

**Mechanical Characteristics**

Approximate Length: 100 ft
Turns Per Linear Inch: 23.9
Turns Per Square Inch: 571
Bulk Cable Weight: 5 lbs/1000ft
Min. Bend Radius/Minor Axis: 0.17 in

Standards

Military Compliance: J-W-1177/9
Other Specification: NEMA-MW28-C (Single)

Applicable Environmental and Other Programs

EU Directive 2003/96/EC (BFR): Yes
EU Directive 2011/65/EU (RoHS 2): Yes
EU Directive 2012/19/EU (WEEE): Yes
EU Directive 2015/863/EU (RoHS 2 amendment): Yes
EU CE Mark: Yes
CA Prop 65: Yes
MII Order #39 (China RoHS): Yes

Flammability, LS0H, Toxicity Testing

UL voltage rating: N/A

Plenum/Non-Plenum

Plenum (Y/N): No

Part Number

<table>
<thead>
<tr>
<th>Item #</th>
<th>Color</th>
<th>Put-Up Type</th>
<th>Length</th>
<th>UPC</th>
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</thead>
<tbody>
<tr>
<td>8049</td>
<td>None</td>
<td>Reel</td>
<td>1 ft</td>
<td>612825194453</td>
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History

Update and Revision: Revision Number: 0.372 Revision Date: 08-27-2021

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