### BARREL PACKS - THHN / MTW / THWN-2 / T90 OR TFFN / TFN / TEWN - COPPER CONDUCTOR

#### ENGINEERING SPECIFICATIONS

**Standards**
- Underwriters Laboratories Standards UL-83, UL-1063, UL-758
- AWM Spec 1316, 1317, 1318, 1319, 1320, 1321; ASTM Stranding Class B3, B8, B787; Federal Specification A-A-59544; Canadian Standards Association C22.2 No. 75
- NEMA WC70/IEC S-95-658; Institute of Electrical and Electronics Engineers ARRA 2009; Section 1605 “Buy American” Compliant

**CONSTRUCTION**

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

- **Insulation**
  - Color-coded Polyvinyl Chloride (PVC), heat and moisture-resistant, flame-retardant compound per UL-1063 and UL-83

- **Jacket**
  - A tough, polyamide, Nylon outer covering per UL-1063 and UL-83.

**APPLICATIONS**

- Type THHN/THWN-2 building wire is intended for general purpose applications as defined by the National Electrical Code (NEC).
- Type THHN/THWN-2 is permitted for new construction or rewiring for 600-volt applications. Applications requiring Type THHN or THWN-2: the conductor is appropriate for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C in oil or coolants. Applications requiring Type MTW: the conductor is appropriate for use in dry locations at 90°C, or not to exceed 60°C in wet locations or where exposed to oils or coolants. Applications requiring Type AWM: the conductor is appropriate for use at temperatures not to exceed 105°C in dry locations.

**FEATURES**

- Slick, outer, Nylon jacket for easy pulling. VW-1 rated 14 AWG - 8 AWG. All sizes are rated gasoline and oil-resistant II.

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<table>
<thead>
<tr>
<th>Size (AWG)</th>
<th>Type</th>
<th>No. of Strands</th>
<th>PVC Insulation Thickness</th>
<th>Outside Diameter</th>
<th>Allowable Ampacity (Amps)*</th>
<th>Approximate Net Weight (lbs/1000 ft)</th>
<th>Standard Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18</strong></td>
<td>TFN</td>
<td>Solid</td>
<td>0.760 (0.030)</td>
<td>0.130 (0.005)</td>
<td>6 (66)</td>
<td>8</td>
<td>20,000' 30,000'</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>TFN</td>
<td>Solid</td>
<td>1.020 (0.040)</td>
<td>0.150 (0.006)</td>
<td>8 (88)</td>
<td>11</td>
<td>20,000' 30,000'</td>
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<td>14</td>
<td>THHN</td>
<td>Solid</td>
<td>1.020 (0.040)</td>
<td>0.150 (0.006)</td>
<td>15 (1515)</td>
<td>15</td>
<td>20,000' 30,000'</td>
</tr>
<tr>
<td>12</td>
<td>THHN</td>
<td>Solid</td>
<td>1.020 (0.040)</td>
<td>0.150 (0.006)</td>
<td>20 (2020)</td>
<td>23</td>
<td>16,000' 24,000'</td>
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<tr>
<td>10</td>
<td>THHN</td>
<td>Solid</td>
<td>1.270 (0.050)</td>
<td>0.180 (0.007)</td>
<td>30 (3030)</td>
<td>37</td>
<td>10,000' 15,000'</td>
</tr>
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<td>1.270 (0.050)</td>
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<td>10</td>
<td>THHN</td>
<td>19</td>
<td>1.520 (0.060)</td>
<td>0.200 (0.008)</td>
<td>30 (3030)</td>
<td>38</td>
<td>10,000' 15,000'</td>
</tr>
<tr>
<td>8</td>
<td>THHN</td>
<td>19</td>
<td>1.524 (0.060)</td>
<td>0.203 (0.008)</td>
<td>40 (4040)</td>
<td>62</td>
<td>7,000' 10,000'</td>
</tr>
</tbody>
</table>

*Allowable ampacity shown above is per the National Electrical Code. The above data is approximate and subject to normal manufacturing tolerances.

Print Legend: Conductor Sizes 18 AWG through 16 AWG Solid: Encore Wire Corporation (size) AWG type TFN OR AWM OR GRII VW-1 600 VOLTS (UL).
Conductor Sizes 18 AWG through 16 AWG Stranded: Encore Wire Corporation (size) AWG type MTW OR TFFN OR AWM OR GRII VW-1 600 VOLTS (UL) OR AWM OR C (UL) TYPE TEWN FT1.
Conductor Sizes 14 AWG through 8 AWG: Encore Wire Corporation (size) AWG type THHN or THWN-2 GR II VW-1 600 VOLTS (UL) or AWM or C (UL) type T90 Nylon or THVN 75 FT1.

**Not Offered with SuperSlick Elite® outer jacket.**

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**800.962.9473  www.encorewire.com**