### Applications

Suitable for use as follows:

- Southwire Type THHN or THWN-2* conductors are primarily used in conduit and cable trays for services, feeders and branch circuits in commercial or industrial applications as specified in the National Electrical Code®.
- When used as Type THHN, conductor is suitable for use in dry locations at temperatures not to exceed 90°C.
- When used as Type THWN-2*, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C when exposed to oil or coolant.
- When used as Type MTW, conductor is suitable for use in wet locations or when exposed to oil or coolant at temperatures not to exceed 60°C or dry locations at temperatures not to exceed 90°C (with ampacity limited to that for 75°C conductor temperature per NFPA 79).
- Conductor temperatures not to exceed 105°C in dry locations when rated AWM and used as appliance wiring material. Voltage for all applications is 600 volts.

### Standards & References

Southwire Type THHN or THWN-2* or MTW (also AWM) meets or exceeds all applicable ASTM specifications, UL Standard 83, UL Standard 1063 (MTW), Federal Specification A-A-59544 and requirements of the National Electrical Code®. RoHS Compliant.

### Construction

- Southwire Type THHN or THWN-2* or MTW copper conductors are annealed (soft) copper, insulated with a tough heat and moisture resistant polyvinyl chloride (PVC), over which a nylon (polyamide) or UL-listed equal jacket is applied.
- Available in black, white, red, blue, green, yellow, brown, orange and grey; some colors standard, some subject to economic order quantity.

### Specifications

- **MTW or THHN or THWN-2:**
  Conductor shall be UL-listed Type MTW or THHN or THWN-2* gasoline and oil resistant II, suitable for operations at 600 volts as specified in the National Electrical Code®. Sizes 14 through 6 AWG shall be rated VW-1. Conductor shall be annealed copper, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline and oil resistant nylon or listed equivalent, as manufactured by Southwire Company or approved equal.

- **AWM:**
  Conductor shall be UL-listed Type THHN or THWN-2* or MTW or AWM, suitable for operation at 600 volts at conductor temperatures not to exceed 105°C.

*rated -2 for 8 AWG and larger only

1 Oil and gasoline resistant II as defined by Underwriters Laboratories

2 2005 Edition
## Weights, Measurements, and Packaging

<table>
<thead>
<tr>
<th>SIZE (AWG or kcmil)</th>
<th>NUMBER OF STRANDS</th>
<th>INSULATION THICKNESS (mils)</th>
<th>JACKET THICKNESS (mils)</th>
<th>NOMINAL O.D. (mils)</th>
<th>APPROX. NET WEIGHT (lbs/1000 ft)</th>
<th>ALLOWABLE AMPACITIES*</th>
<th>STANDARD PACKAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>19</td>
<td>15</td>
<td>4</td>
<td>102 109</td>
<td>15 16</td>
<td>15 15 15</td>
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<td>5</td>
<td>- 249</td>
<td>- 95</td>
<td>55 65 75</td>
<td>EP</td>
</tr>
</tbody>
</table>

Solid construction available in sizes 14 through 10 AWG as Types THHN or THWN or AWM only. Sizes 14 through 6 AWG also suitable for 105°C appliance wiring material (AWM). Sizes 14 and 12 AWG contain four 500 ft. spools per carton. Size 10 AWG contains two 500' spools per carton.

*Allowable ampacities shown are for general use as specified by the National Electrical Code®, 2005 Edition, section 310.15 unless the equipment is marked for use at higher temperatures the conductor ampacity shall be limited to the following:

- **60°C** - When terminated to equipment for circuits rated 100 amperes or less or marked for size 14 through 6 AWG conductors. MTW wet locations or when exposed to oil or coolant.
- **90°C** - THHN dry locations. THWN-2 wet or dry locations. For ampacity derating purpose.

### Standard Package Codes
- B – 1000 ft. reel
- C – 500 ft. reel
- D – 2500 ft. spool
- E – 1000 ft. spool
- F – 500 ft. spool
- N – 2000 ft. carton
- Q – 350 ft. carton
- P – Drum