

THHN/PVC

CONSTRUCTION AT A GLANCE

CONDUCTOR TYPE ①
16 - 10 AWG COPPER

INSULATION TYPE ②
PVC/NYLON

SHIELD TYPE
N/A

JACKET TYPE ③
PVC

APPLICATIONS

- Predominantly used in utility substations
- Can be installed indoors or outdoors, in cable trays, conduit, underground duct, or direct buried in wet or dry locations
- Conductor operating temperatures are not to exceed 75°C wet, 90°C dry
- Rated 600 Volts

CONSTRUCTION DETAILS

- **Conductors**
 - 16 AWG thru 10 AWG Annealed Class B Copper Unilay Compressed Stranded
- **Insulation**
 - Tough, Heat and Moisture Resistant Polyvinyl Chloride (PVC)
 - Color Coded per ICEA S-73-532, Method 1, Table E-2
- **Conductor Jacket**
 - Clear Nylon (polyamide)
- **Assembly**
 - Cabled with non-hygroscopic polyethylene fillers in order to give the cable a circular cross-section, when needed
 - Wrapped with a Mylar binder
- **Overall Jacket**
 - Heat, Moisture and Sunlight Resistant Black Polyvinyl Chloride (PVC)
- **Print**
 - SOUTHWIRE XXAWG XX/C THHN or THWN TYPE TC 600V SUN. RES. DIRECT BURIAL YEAR SEQUENTIAL FOOTAGE MARKS

SPECIFICATIONS

Southwire's Type TC Substation Control Cable meets or exceeds:

- All applicable ASTM standards
- ANSI/ICEA S-73-532
- UL 83 Type THHN
- UL 66 Type TFFN
- UL 1277
- UL 1581
- UL 1685
- RoHS Compliant

OPTIONS

- Stranding Classes – C, K
- Tin-Coated Copper Conductors
- Color Coding Methods per ICEA S-73-532
- Shielded Constructions - Longitudinal Corrugated CU Tape, Helical CU or AL Tape, or Longitudinal AL Tape with Mylar Bonding
- Rip Cord
- Ground Wire
- Jacket Materials – SOLONON® (LSZH), CPE
- UL Listed Construction
- Other Constructions Available upon Request



| Number of Conductors | Conductor Size (AWG) | Nominal Jacket Thickness (inches) | Nominal Overall Diameter | | Approximate Weight | |
|---------------------------------------|----------------------|-----------------------------------|--------------------------|------|--------------------|-------|
| | | | inches | mm | lbs/1000 ft. | kg/km |
| Unshielded AWG 16 (26 strands) | | | | | | |
| 2 | 16 | 0.045 | 0.288 | 7.3 | 43 | 64 |
| 3 | 16 | 0.045 | 0.303 | 7.7 | 53 | 79 |
| 4 | 16 | 0.045 | 0.329 | 8.4 | 66 | 98 |
| 5 | 16 | 0.045 | 0.357 | 9.1 | 81 | 120 |
| 7 | 16 | 0.045 | 0.386 | 9.8 | 103 | 153 |
| 9 | 16 | 0.045 | 0.447 | 11.4 | 134 | 199 |
| 12 | 16 | 0.045 | 0.501 | 12.7 | 165 | 245 |
| Unshielded AWG 14 (7 strands) | | | | | | |
| 2 | 14 | 0.045 | 0.305 | 7.8 | 56 | 83 |
| 3 | 14 | 0.045 | 0.322 | 8.2 | 74 | 110 |
| 4 | 14 | 0.045 | 0.350 | 8.9 | 93 | 139 |
| 5 | 14 | 0.045 | 0.381 | 9.7 | 109 | 162 |
| 6 | 14 | 0.045 | 0.413 | 10.5 | 129 | 192 |
| 7 | 14 | 0.045 | 0.413 | 10.5 | 145 | 215 |
| 8 | 14 | 0.045 | 0.446 | 11.3 | 164 | 243 |
| 9 | 14 | 0.045 | 0.478 | 12.2 | 182 | 271 |
| 10 | 14 | 0.060 | 0.550 | 14.0 | 217 | 322 |
| 12 | 14 | 0.060 | 0.568 | 14.4 | 251 | 373 |
| Unshielded AWG 12 (7 strands) | | | | | | |
| 2 | 12 | 0.045 | 0.340 | 8.6 | 75 | 112 |
| 3 | 12 | 0.045 | 0.360 | 9.2 | 105 | 156 |
| 4 | 12 | 0.045 | 0.392 | 10.1 | 128 | 190 |
| 5 | 12 | 0.045 | 0.428 | 10.9 | 154 | 229 |
| 6 | 12 | 0.045 | 0.466 | 11.8 | 183 | 272 |
| 7 | 12 | 0.045 | 0.466 | 11.8 | 207 | 308 |
| 8 | 12 | 0.045 | 0.504 | 12.8 | 234 | 349 |
| 9 | 12 | 0.060 | 0.572 | 14.5 | 277 | 412 |
| 10 | 12 | 0.060 | 0.621 | 15.8 | 307 | 457 |
| 12 | 12 | 0.060 | 0.641 | 16.3 | 358 | 532 |
| Unshielded AWG 10 (7 strands) | | | | | | |
| 2 | 10 | 0.045 | 0.407 | 10.3 | 111 | 166 |
| 3 | 10 | 0.045 | 0.433 | 11.0 | 155 | 230 |
| 4 | 10 | 0.045 | 0.473 | 12.0 | 198 | 294 |
| 5 | 10 | 0.060 | 0.549 | 13.9 | 250 | 371 |
| 6 | 10 | 0.060 | 0.596 | 15.1 | 294 | 437 |
| 7 | 10 | 0.060 | 0.596 | 15.1 | 333 | 495 |
| 8 | 10 | 0.060 | 0.645 | 16.4 | 377 | 561 |
| 9 | 10 | 0.060 | 0.693 | 17.6 | 421 | 626 |
| 10 | 10 | 0.060 | 0.755 | 19.2 | 467 | 694 |
| 12 | 10 | 0.060 | 0.780 | 19.8 | 547 | 814 |

Dimensions and weights shown above are nominal and subject to industry tolerances.



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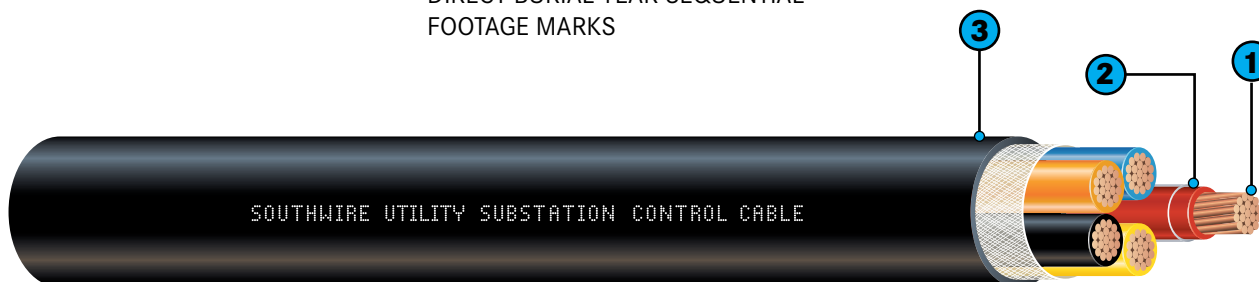
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