# Multi-Conductor CU 600 V Shielded PE/PVC Insulation PVC Jacket Control Cable Color Method 1 Table 1

Control Cable 600 Volt Copper Conductors, Polyethylene Polyvinyl Chloride (PE/PVC) Insulation Shielded Polyvinyl Chloride (PVC) Jacket, Control Cable Conductor Identification Method 1 Table 1. Silicone Free




Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Polyethylene (PE) and Polyvinyl Chloride (PVC)
3. **Filler:** Polypropylene filler on cables with 5 or less conductors
4. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
5. **Shielding:** 5 mil copper Helically-Applied Tape shield
6. **Rip Cord:** Rip cord for ease of jacket removal
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

## APPLICATIONS AND FEATURES:

Southwire's 600 Volt control cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 75°C for normal operation in wet and dry locations, 90°C for emergency overload, and 150°C for short circuit conditions.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA *CSA marking is available upon request*
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 1
- ICEA S-73-532 Control, Thermocouple Extension, and Instrumentation Cables (applicable to sizes 20-9 AWG conductors)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

## SAMPLE PRINT LEGEND:

SOUTHWIRE XX AWG X/C PE/PVC CDRS 600V SHIELDED PVC JKT SUN. RES. DIRECT BURIAL {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



Copyright © 2026 Southwire Company, LLC. All Rights Reserved

UPDATED: Dec. 31, 2024, 11:09 p.m.UTC REVISION: 1.000.002

## Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Cond. | Insul. Thickness | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Rectance | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C | Jacket Color |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | No. | strands | inch | mil | mil | inch | lb / 1000ft | lb / 1000ft | Ω /1000ft | Ω /1000ft | Ω/1000ft | inch | Amp | Amp | |
| 18 AWG | | | | | | | | | | | | | | | | |
| TBA | 18 | 2 | 7 | 0.046 | 25 | 45 | 0.288 | 44 | 69 | 6.669 | 8.277 | 0.036 | 2 | - | 14 | BK |
| 606785 | 18 | 3 | 7 | 0.046 | 15 | 45 | 0.314 | 15 | 53 | 6.669 | 8.277 | 0.036 | 2.2 | - | 14 | BK |
| 606789 | 18 | 7 | 7 | 0.046 | 15 | 45 | 0.418 | 58 | 116 | 6.669 | 8.277 | 0.036 | 2.9 | - | 10 | BK |
| 606790 | 18 | 12 | 7 | 0.046 | 15 | 60 | 0.566 | 92 | 194 | 6.669 | 8.277 | 0.036 | 4 | - | 7 | BK |
| 14 AWG | | | | | | | | | | | | | | | | |
| 606767 | 14 | 7 | 7 | 0.071 | 20 | 60 | 0.555 | 120 | 220 | 2.631 | 3.265 | 0.058 | 3.9 | 14 | 18 | BK |
| 618969 | 14 | 12 | 7 | 0.071 | 20 | 60 | 0.707 | 195 | 340 | 2.631 | 3.265 | 0.058 | 4.9 | 10 | 12 | BK |
| 12 AWG | | | | | | | | | | | | | | | | |
| 618721 | 12 | 2 | 7 | 0.089 | 20 | 45 | 0.421 | 64 | 115 | 1.662 | 2.063 | 0.054 | 2.9 | 25 | 30 | BK |
| 618722 | 12 | 3 | 7 | 0.089 | 20 | 45 | 0.446 | 86 | 147 | 1.662 | 2.063 | 0.054 | 3.1 | 25 | 30 | BK |
| 618723 | 12 | 4 | 7 | 0.089 | 20 | 45 | 0.484 | 109 | 182 | 1.662 | 2.063 | 0.054 | 3.4 | 20 | 24 | BK |
| 618724 | 12 | 7 | 7 | 0.089 | 20 | 60 | 0.609 | 177 | 291 | 1.662 | 2.063 | 0.054 | 4.3 | 18 | 21 | BK |
| 617106 | 12 | 12 | 7 | 0.089 | 20 | 60 | 0.777 | 296 | 453 | 1.662 | 2.063 | 0.054 | 5.4 | 12 | 15 | BK |
| 10 AWG | | | | | | | | | | | | | | | | |
| 606768 | 10 | 2 | 7 | 0.113 | 20 | 45 | 0.472 | 92 | 159 | 1.04 | 1.291 | 0.05 | 3.3 | 35 | 40 | BK |
| 619162 | 10 | 3 | 7 | 0.113 | 20 | 45 | 0.501 | 126 | 201 | 1.04 | 1.291 | 0.05 | 3.5 | 35 | 40 | BK |
| 617105 | 10 | 4 | 7 | 0.113 | 20 | 60 | 0.573 | 161 | 253 | 1.04 | 1.291 | 0.05 | 4 | 28 | 32 | BK |
| 620881 | 10 | 4 | 7 | 0.113 | 20 | 60 | 0.578 | 162 | 259 | 1.04 | 1.291 | 0.05 | 4 | 28 | 32 | BK |
| 606769 | 10 | 5 | 7 | 0.113 | 20 | 60 | 0.628 | 198 | 309 | 1.04 | 1.291 | 0.05 | 4.4 | 28 | 32 | BK |
| 618968 | 10 | 7 | 7 | 0.113 | 20 | 60 | 0.677 | 271 | 403 | 1.04 | 1.291 | 0.05 | 4.7 | 24 | 28 | BK |
| 622296 | 10 | 7 | 7 | 0.113 | 20 | 60 | 0.681 | 265 | 398 | 1.04 | 1.291 | 0.05 | 4.8 | 24 | 28 | BK |
| 606770 | 10 | 9 | 7 | 0.113 | 20 | 60 | 0.789 | 345 | 506 | 1.04 | 1.291 | 0.05 | 5.5 | 24 | 28 | BK |
| 606771 | 10 | 12 | 7 | 0.113 | 20 | 80 | 0.929 | 448 | 683 | 1.04 | 1.291 | 0.05 | 6.5 | 18 | 20 | BK |
| 8 AWG | | | | | | | | | | | | | | | | |
| 606773 | 8 | 2 | 7 | 0.142 | 45 | 60 | 0.686 | 142 | 275 | 0.653 | 0.81 | 0.052 | 4.8 | 50 | 55 | BK |
| 620301 | 8 | 3 | 7 | 0.142 | 45 | 60 | 0.729 | 196 | 353 | 0.653 | 0.81 | 0.052 | 5.1 | 50 | 55 | BK |
| 607397 | 8 | 5 | 7 | 0.142 | 45 | 80 | 0.916 | 315 | 559 | 0.653 | 0.81 | 0.052 | 6.4 | 40 | 44 | BK |
| 6 AWG | | | | | | | | | | | | | | | | |
| 606774 | 6 | 2 | 7 | 0.178 | 45 | 60 | 0.798 | 210 | 368 | 0.411 | 0.51 | 0.051 | 5.6 | 65 | 75 | BK |
| TBA | 6 | 3 | 7 | 0.178 | 70 | 60 | 0.813 | 349 | 521 | 0.411 | 0.51 | 0.051 | 5.7 | 65 | 75 | BK |
| 626304 | 6 | 4 | 7 | 0.178 | 45 | 80 | 0.974 | 382 | 664 | 0.411 | 0.51 | 0.051 | 6.8 | 52 | 60 | BK |
| 600899 | 6 | 5 | 7 | 0.178 | 45 | 80 | 1.051 | 476 | 784 | 0.411 | 0.51 | 0.051 | 7.4 | 52 | 60 | BK |
| 2 AWG | | | | | | | | | | | | | | | | |
| 662238 | 2 | 2 | 7 | 0.283 | 45 | 80 | 1.038 | 480 | 747 | 0.162 | 0.201 | 0.045 | 7.3 | 115 | 130 | BK |
| TBA | 2 | 3 | 7 | 0.283 | 70 | 80 | 1.08 | 756 | 1028 | 0.162 | 0.201 | 0.045 | 7.6 | 115 | 130 | BK |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections



Copyright © 2026 Southwire Company, LLC. All Rights Reserved

310.15 and 110.14(C) for additional requirements. Ampacities have been adjusted for stock numbers containing more than Three Current-Carrying Conductors.
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.


Copyright © 2026 Southwire Company, LLC. All Rights Reserved