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

Power Cable 600 Volt Copper Conductors, Polyethylene and Polyvinyl Chloride (PE/PVC) Insulation 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. **Rip Cord:** Rip cord for ease of jacket removal
6. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

## APPLICATIONS AND FEATURES:

Southwire's 600 Volt power 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-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

## SAMPLE PRINT LEGEND:

Non UL Listed
SOUTHWIRE XX AWG X/C PE/PVC CDRS 75C PVC JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600V {MM/DD/YYYY}
{SEQUENTIAL FOOTAGE MARKS} SEQ FEET



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## 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 At 60°C | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG | No. | strands | inch | mil | mil | inch | lb / 1000ft | lb / 1000ft | Ω /1000ft | Ω /1000ft | Ω/1000ft | inch | Amp | Amp | Amp |
| 14 AWG | | | | | | | | | | | | | | | | |
| 620646 | 14 | 4 | 7 | 0.070 | 30 | 45 | 0.417 | 51 | 107 | 2.631 | 3.170 | 0.058 | 1.6 | 12 | 16 | 20 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

$ 19 strand combination unilay conductor per ASTM B787

* 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 310.15 and 110.14(C) for additional requirements. Ampacities have been adjusted for stock numbers containing more than Three Current-Carrying Conductors.