

## CU 600 V PE/PVC Insulation

Single Conductor 600 Volt Copper Conductors, Polyethylene and Polyvinyl Chloride (PE/PVC) Insulation. Silicone Free

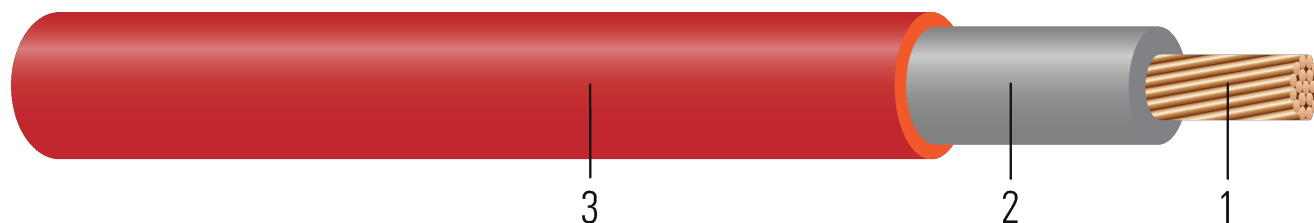


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed bare copper per ASTM B3 and ASTM B8
2. **Insulation:** 30 mils Polyethylene (PE)
3. **Jacket:** 15 mils Polyvinyl Chloride (PVC)

### APPLICATIONS AND FEATURES:

Southwire's 600 Volt control cables are suited for use in wet and dry areas, conduits, ducts, 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
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

### SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE 12 AWG CU PE/PVC 600V 75(D)C SUN. RES.



Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Color | Insul. Thickness | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance | Min Bending Radius | Allowable Ampacity At 60°C | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|--------------|------------|--------------|---------------|-------|------------------|------------------|------------|---------------|----------------|----------------------|----------------------|---------------------|--------------------|----------------------------|-------------------------|-------------------------|
|              | AWG        | No.          | strands       |       | mil              | mil              | inch       | lb / 1000ft   | lb / 1000ft    | Ω /1000ft            | Ω /1000ft            | Ω/1000ft            | inch               | Amp                        | Amp                     | Amp                     |
| 12 AWG       |            |              |               |       |                  |                  |            |               |                |                      |                      |                     |                    |                            |                         |                         |
| 621324       | 12         | 1            | 7             | RD    | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621323       | 12         | 1            | 7             | GN    | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621322       | 12         | 1            | 7             | WE    | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621320       | 12         | 1            | 7             | RD/BK | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621317       | 12         | 1            | 7             | GN/BK | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621325       | 12         | 1            | 7             | BK    | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621321       | 12         | 1            | 7             | BE    | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |
| 621319       | 12         | 1            | 7             | WE/BK | 30               | 15               | 0.188      | 20            | 30             | 1.662                | 2.002                | 0.054               | 0.8                | 20                         | 25                      | 30                      |

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 310.15 and 110.14(C) for additional requirements.

