



# Heavy Duty Stage Lighting Cu 600V Cable

105°C. 60°C Oil Resistant. 600 Volts. Flexible Stranded Bare Copper. CPE Insulation. -40C cold bend. Outdoor Rated.

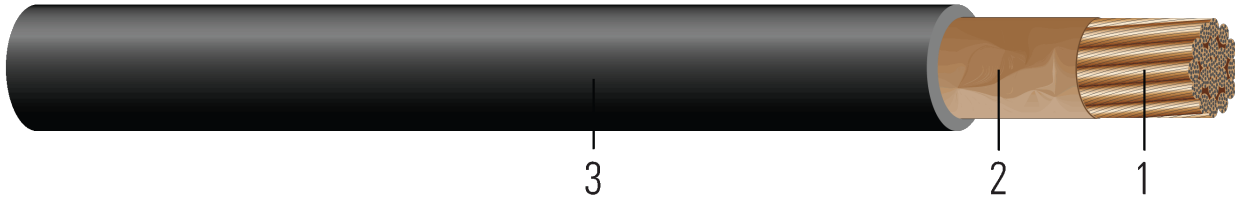


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

- Conductor:** Class K, Flexible stranded bare copper per ASTM B172
- Separator:** Paper
- Insulation:** Chlorinated Polyethylene (CPE)

## APPLICATIONS AND FEATURES:

Portable power and lighting applications in the entertainment industry including activities such as theatre, television, night clubs, motion pictures, mobile communication vans, spotlights, sound systems and other applications that would require temporary power. Southwire standard Type SC cables are rated for 600 volts and provide excellent flexibility, resistance to oil, solvents, ozone, aging, abrasion. SC cables are designed to withstand exposure to oil, acids, alkalines, moisture, chemicals and may be submerged in water.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 1680 Outline of Investigation for Stage Lighting Cables

## SAMPLE PRINT LEGEND:

SOUTHWIRE(R) E308665 XX AWG SC MAX AMPS NEC TABLE 400.5 FOR 90C (UL) 105C 600V OIL RES 60C OUTDOOR -40C

**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size<br>AWG/Kcmil | Cond. Strands<br>No. | Diameter Over Conductor<br>inch | Insul. Thickness<br>mil | Approx. OD<br>inch | Approx. Weight<br>lb/1000ft |
|--------------|-------------------------|----------------------|---------------------------------|-------------------------|--------------------|-----------------------------|
| 577396       | 6                       | 266                  | 0.179                           | 115                     | 0.413              | 153                         |
| 577397*      | 6                       | 266                  | 0.179                           | 115                     | 0.413              | 153                         |
| 577398       | 4                       | 420                  | 0.220                           | 120                     | 0.470              | 204                         |
| 577399       | 2                       | 665                  | 0.301                           | 120                     | 0.549              | 308                         |
| 577400       | 1                       | 826                  | 0.330                           | 110                     | 0.560              | 359                         |
| 577402       | 2/0                     | 1330                 | 0.420                           | 115                     | 0.660              | 541                         |
| 577405       | 4/0                     | 2109                 | 0.540                           | 115                     | 0.777              | 813                         |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item





\* Green CPE Insulation

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.

**Table 2 – Electrical and Engineering Data**

| Cond. Size    | DC Resistance @ 25°C | AC Resistance @ 90°C | Max Pull Tension | Max Pull Tension | Min Bending Radius | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|---------------|----------------------|----------------------|------------------|------------------|--------------------|----------------------------|----------------------------|
| AWG/<br>Kcmil | Ω/1000ft             | Ω/1000ft             | lb               | lb               | inch               | Amp                        | Amp                        |
| 6             | 0.449                | 0.585                | 210              | 210              | 1.7                | 95                         | 105                        |
| 6             | 0.449                | 0.585                | 210              | 210              | 1.7                | 95                         | 105                        |
| 4             | 0.283                | 0.368                | 334              | 334              | 1.9                | 125                        | 140                        |
| 2             | 0.179                | 0.234                | 670              | 670              | 2.2                | 170                        | 190                        |
| 1             | 0.143                | 0.186                | 670              | 670              | 2.7                | 195                        | 220                        |
| 2/0           | 0.090                | 0.118                | 1065             | 1065             | 2.6                | 265                        | 300                        |
| 4/0           | 0.057                | 0.074                | 1693             | 1693             | 3.1                | 360                        | 405                        |

\* Ampacities based upon 2023 NEC Table 310.16. Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

