

CU 600/1000V XLPE Insulation GSIA PVC Jacket XHHW-2. CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Galvanized Steel Interlocked Armor (GSIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare CU Ground. Silicone Free.

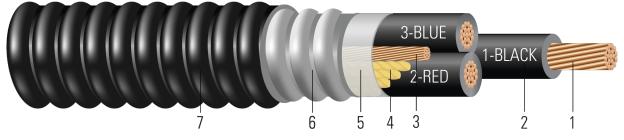


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- 1. Conductor: Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- 3. Grounding Conductor: Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 4. Filler: Paper filler (cable size 8 & 6 uses Polypropylene filler)
- 5. Binder: Polypropylene tape
- 6. Armor: Galvanized Steel Interlocked Armor (GSIA)
- 7. Overall Jacket: Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC 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 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr)

SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC GSIA 600V Type MC For CT USE SUN. RES. For DIRECT BURIAL FT4 YEAR (NESC) [SEQUENTIAL FEET MARKS]





Table 1 – Weights and Measurements

| Cond. Size | Cond. Number | Strand Count | Diameter Over Conductor | Insul. Thickness | Ground | Dia. Over Armor | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | Jacket Color |
|---------------|-----------------|-------------------|----------------------------|---------------------|--------------|--------------------|---------------------|---------------|------------------|-------------------|-----------------|
| AWG/ Kcmil | | No. of Strands | inch | mil | No. x AWG | inch | mil | inch | lb/1000ft | lb/1000ft | |
| 8 | 3 | 7 | 0.141 | 45 | 1 x 10 | 0.711 | 50 | 0.811 | 186 | 559 | Black |
| 1 | 3 | 19 | 0.322 | 55 | 1 x 6 | 1.145 | 50 | 1.245 | 863 | 1584 | Black |
| 1/0 | 3 | 19 | 0.361 | 55 | 1 x 6 | 1.229 | 50 | 1.329 | 1067 | 1856 | Black |
| 3/0 | 3 | 19 | 0.456 | 55 | 1 x 4 | 1.435 | 50 | 1.535 | 1697 | 2657 | Black |
| 250 | 3 | 37 | 0.558 | 65 | 1 x 4 | 1.798 | 60 | 1.918 | 2465 | 3831 | Black |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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 | Cond. Number | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Capacitive Reactance @ 60Hz | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|---------------|-----------------|--------------------------|---------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| AWG/ Kcmil | | inch | lb | Ω/1000ft | Ω/1000ft | MΩ*1000ft | Ω/1000ft | Amp | Amp |
| 8 | 3 | 5.7 | 396 | 0.653 | 0.786 | 0.033 | 0.052 | 50 | 55 |
| 1 | 3 | 8.7 | 2008 | 0.128 | 0.154 | 0.019 | 0.046 | 130 | 145 |
| 1/0 | 3 | 9.3 | 2534 | 0.102 | 0.122 | 0.017 | 0.044 | 150 | 170 |
| 3/0 | 3 | 10.7 | 4027 | 0.064 | 0.078 | 0.014 | 0.042 | 200 | 225 |
| 250 | 3 | 13.4 | 6000 | 0.043 | 0.053 | 0.014 | 0.041 | 255 | 290 |

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

