



CU 600/1000V XLPE Insulation ARMOR-X[®] Thermoplastic LSZH-TP Jacket XHHW-2. CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC-HL Power Cable 600 or 1000 Volt Four Copper Conductors, Cross Linked Polyethylene (XLPE) Insulation Type XHHW-2, Continuous Corrugated Welded Armor - ARMOR-X[®], Thermoplastic SOLONON[®] Low Smoke Zero Halogen (LSZH-TP) Jacket with 1 Bare Copper Ground

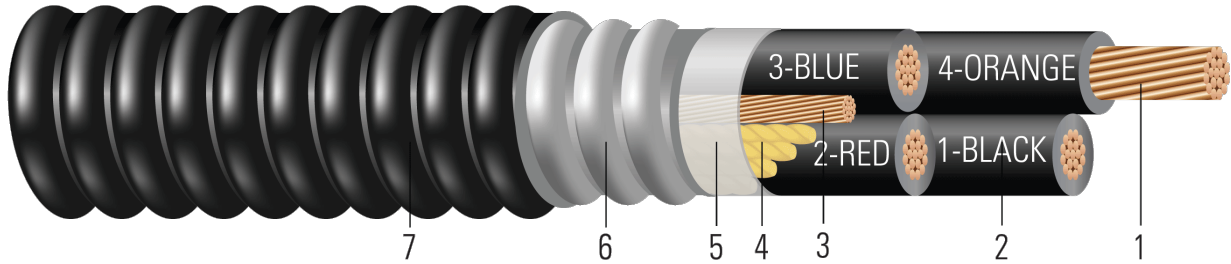


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and B8
4. **Filler:** Paper filler (cable size 8 & 6 uses polypropylene filler)
5. **Binder:** Polypropylene tape
6. **Armor:** ARMOR-X[®] Continuous Corrugated Welded armor
7. **Overall Jacket:** Thermoplastic SOLONON[®] Low Smoke Zero Halogen (LSZH-TP)

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL ARMOR-X[®] 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, 250°C for short circuit conditions, and -40°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503.

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
- UL 2225 Cables and Cable-Fittings For Use In Hazardous (Classified) Locations
- ICEA S-58-679 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 Flame Test (70,000) BTU/hr Vertical Tray Test
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE® {UL} ARMOR-X TYPE MC-HL 4/C XX AWG or KCMIL (XX.X{MM2}) CU XHHW-2 GW 1 X XX AWG 90°C SOLONON® JACKET -40°C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V/1kV IEEE1202/FT4 -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

Table 1 – Weights and Measurements

| Stock Number | 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 | |
| TBA | 8 | 4 | 7 | 0.141 | 45 | 1 x 10 | 0.790 | 50 | 0.890 | 237 | 504 | Black |
| TBA | 6 | 4 | 7 | 0.177 | 45 | 1 x 8 | 0.920 | 50 | 1.020 | 378 | 691 | Black |
| 641520 | 4 | 4 | 7 | 0.225 | 45 | 1 x 8 | 1.020 | 50 | 1.120 | 569 | 914 | Black |
| TBA | 2 | 4 | 7 | 0.282 | 45 | 1 x 6 | 1.220 | 50 | 1.320 | 907 | 1358 | Black |
| TBA | 1/0 | 4 | 19 | 0.361 | 55 | 1 x 6 | 1.480 | 50 | 1.580 | 1395 | 2030 | Black |
| 572421 | 2/0 | 4 | 19 | 0.405 | 55 | 1 x 4 | 1.540 | 60 | 1.660 | 1790 | 2444 | Black |
| 673147 | 3/0 | 4 | 19 | 0.405 | 60 | 1 x 4 | 1.670 | 55 | 1.796 | 2223 | 2961 | Black |
| 550856 | 4/0 | 4 | 19 | 0.512 | 55 | 1 x 4 | 1.845 | 60 | 1.965 | 2769 | 3541 | Black |
| TBA | 250 | 4 | 37 | 0.558 | 65 | 1 x 4 | 2.040 | 60 | 2.160 | 3245 | 4253 | Black |
| TBA | 350 | 4 | 37 | 0.661 | 65 | 1 x 3 | 2.290 | 75 | 2.440 | 4526 | 5787 | Black |
| 563069 | 500 | 4 | 37 | 0.789 | 65 | 1 x 2 | 2.670 | 75 | 2.820 | 6443 | 7756 | Black |
| TBA | 750 | 4 | 61 | 0.968 | 80 | 1 x 1 | 3.220 | 85 | 3.390 | 9607 | 11602 | 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

| Stock Number | 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 |
| TBA | 8 | 4 | 6.2 | 422 | 0.653 | 0.786 | 0.033 | 0.052 | 40 | 44 |
| TBA | 6 | 4 | 7.1 | 671 | 0.411 | 0.495 | 0.027 | 0.051 | 52 | 60 |
| 641520 | 4 | 4 | 7.8 | 1068 | 0.258 | 0.310 | 0.022 | 0.048 | 68 | 76 |
| TBA | 2 | 4 | 9.2 | 1698 | 0.162 | 0.195 | 0.018 | 0.045 | 92 | 104 |
| TBA | 1/0 | 4 | 11.1 | 2703 | 0.102 | 0.122 | 0.017 | 0.044 | 120 | 136 |
| 572421 | 2/0 | 4 | 11.6 | 3407 | 0.081 | 0.097 | 0.016 | 0.043 | 140 | 156 |
| 673147 | 3/0 | 4 | 12.3 | 4295 | 0.064 | 0.078 | 0.014 | 0.042 | 160 | 180 |
| 550856 | 4/0 | 4 | 13.8 | 5416 | 0.051 | 0.062 | 0.013 | 0.041 | 184 | 208 |
| TBA | 250 | 4 | 15.1 | 6400 | 0.043 | 0.053 | 0.014 | 0.041 | 204 | 232 |
| TBA | 350 | 4 | 17.1 | 8960 | 0.031 | 0.039 | 0.012 | 0.040 | 248 | 280 |
| 563069 | 500 | 4 | 19.7 | 12800 | 0.022 | 0.029 | 0.010 | 0.039 | 304 | 344 |
| TBA | 750 | 4 | 23.7 | 19200 | 0.014 | 0.022 | 0.010 | 0.038 | 380 | 428 |

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

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

