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

Type MC-HL Power Cable 600Volt Four Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor - ARMOR-X<sup>®</sup>, Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket with 1 Bare CU Ground

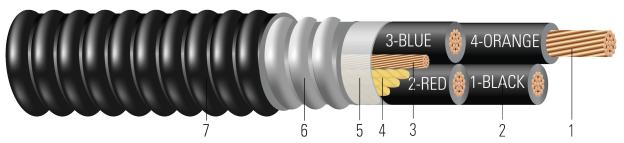


Image not to scale. See Table 1 for dimensions.

#### **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<sup>®</sup> Continuous Corrugated Welded Armor
- 7. Overall Jacket: Thermoplastic SOLONON® Low Smoke Zero Halogen (LSZH-TP) Jacket

### **APPLICATIONS AND FEATURES:**

Southwire's 600 Volt Type MC-HL ARMOR-X<sup>®</sup> 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 -50°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
- 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 Flame Test (70,000) BTU/hr Vertical Tray Test
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)







**SPEC 45354** Stock #: TBA

# **SAMPLE PRINT LEGEND:**

{SQFTG\_DUAL} SOUTHWIRE® {UL} ARMOR-X® TYPE MC-HL 4/C XXX AWG (XXX{mm2}) CU XHHW-2 GW 1 X X AWG 90°C SOLONON® JACKET -40°C ST1 SUN.RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

**Table 1 – Weights and Measurements** 

| Cond.<br>Size | Cond.<br>Number | Strand<br>Count   | Diameter Over<br>Conductor | Insul.<br>Thickness | Ground       | Dia. Over<br>Armor | Jacket<br>Thickness | Approx.<br>OD | Copper<br>Weight | Approx.<br>Weight |
|---------------|-----------------|-------------------|----------------------------|---------------------|--------------|--------------------|---------------------|---------------|------------------|-------------------|
| AWG/<br>Kcmil |                 | No. of<br>Strands | inch                       | mil                 | No. x<br>AWG | inch               | mil                 | inch          | lb/1000ft        | lb/1000ft         |
| 350           | 4               | 37                | 0.661                      | 65                  | 1 x 3        | 2.290              | 75                  | 2.440         | 4526             | 5787              |

All dimensions are nominal and subject to normal manufacturing tolerances

## **Table 2 – Electrical and Engineering Data**

| Cond.<br>Size | Cond.<br>Number | Min<br>Bending<br>Radius | Max Pull<br>Tension | DC Resistance<br>@ 25°C | AC Resistance<br>@ 75°C | Capacitive<br>Reactance @<br>60Hz | Inductive<br>Reactance @<br>60Hz | Allowable<br>Ampacity At<br>75°C | Allowable<br>Ampacity At<br>90°C |
|---------------|-----------------|--------------------------|---------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| AWG/<br>Kcmil |                 | inch                     | lb                  | Ω/1000ft                | Ω/1000ft                | MΩ*1000ft                         | Ω/1000ft                         | Amp                              | Amp                              |
| 350           | 4               | 17.1                     | 8960                | 0.031                   | 0.039                   | 0.012                             | 0.040                            | 248                              | 280                              |

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





<sup>♦</sup> Cable marked with this symbol is a standard stock item

<sup>\*</sup> Ampacities have been adjusted for more than Three Current-Carrying Conductors.