

# CU 600/1000V XLPE Insulation ARMOR-X<sup>®</sup> PVC 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>, Polyvinyl Chloride (PVC) Jacket with One Bare CU Ground

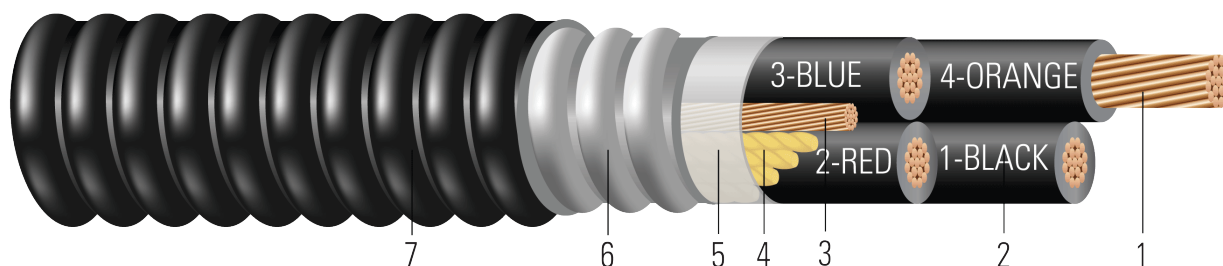


Image not to scale. See Table 1 for dimensions.

## 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:** Polyvinyl Chloride (PVC) 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 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)



**SAMPLE PRINT LEGEND:**

{SQFTG\_DUAL} SOUTHWIRE ARMOR-X® {UL} TYPE MC-HL 4/C XXX KCMIL (XXX{mm2}) CU XHHW-2 GW 1 X X AWG 90°C JACKET -40°C SUN. RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {CSA} RA90-HL AG14 XLPE -40°C 600V FT4 SR 90°C -- CWCMM -- {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 |
|--------------|------------|--------------|----------------|-------------------------|------------------|-----------|-----------------|------------------|------------|---------------|----------------|
|              | AWG/Kcmil  |              | No. of Strands | inch                    | mil              | No. x AWG | inch            | mil              | inch       | lb/1000ft     | lb/1000ft      |
| 890527       | 8          | 4            | 7              | 0.141                   | 45               | 1 x 10    | 0.840           | 50               | 0.946      | 238           | 476            |
| 890528       | 6          | 4            | 7              | 0.177                   | 45               | 1 x 8     | 0.920           | 50               | 1.026      | 378           | 649            |
| 890529       | 4          | 4            | 7              | 0.225                   | 45               | 1 x 8     | 1.060           | 50               | 1.166      | 569           | 918            |
| 890530       | 2          | 4            | 7              | 0.282                   | 45               | 1 x 6     | 1.220           | 60               | 1.326      | 909           | 1295           |
| 890531       | 1/0        | 4            | 19             | 0.361                   | 55               | 1 x 6     | 1.470           | 60               | 1.576      | 1399          | 1948           |
| 890532       | 2/0        | 4            | 19             | 0.405                   | 55               | 1 x 6     | 1.540           | 60               | 1.666      | 1790          | 2436           |
| 582265       | 3/0        | 4            | 19             | 0.456                   | 55               | 1 x 4     | 1.760           | 60               | 1.886      | 2223          | 2954           |
| 890533       | 4/0        | 4            | 19             | 0.512                   | 55               | 1 x 4     | 1.845           | 60               | 1.971      | 2769          | 3536           |
| 890534       | 250        | 4            | 37             | 0.558                   | 65               | 1 x 4     | 2.040           | 60               | 2.166      | 3248          | 4278           |
| 890535       | 350        | 4            | 37             | 0.661                   | 65               | 1 x 3     | 2.290           | 75               | 2.448      | 4530          | 5741           |
| 890536       | 500        | 4            | 37             | 0.789                   | 65               | 1 x 2     | 2.670           | 75               | 2.828      | 6443          | 7980           |
| 890537       | 750        | 4            | 61             | 0.968                   | 80               | 1 x 1     | 3.220           | 85               | 3.398      | 9616          | 12254          |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

**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                        |
| 890527       | 8          | 4            | 6.6                | 422              | 0.653                | 0.786                | 0.033                       | 0.052                      | 40                         | 44                         |
| 890528       | 6          | 4            | 7.2                | 671              | 0.411                | 0.495                | 0.027                       | 0.051                      | 52                         | 60                         |
| 890529       | 4          | 4            | 8.2                | 1068             | 0.258                | 0.310                | 0.022                       | 0.048                      | 68                         | 76                         |
| 890530       | 2          | 4            | 9.3                | 1698             | 0.162                | 0.195                | 0.018                       | 0.045                      | 92                         | 104                        |
| 890531       | 1/0        | 4            | 11.0               | 2703             | 0.102                | 0.122                | 0.017                       | 0.044                      | 120                        | 136                        |
| 890532       | 2/0        | 4            | 11.7               | 3407             | 0.081                | 0.097                | 0.016                       | 0.043                      | 140                        | 156                        |
| 582265       | 3/0        | 4            | 13.2               | 4295             | 0.064                | 0.078                | 0.014                       | 0.042                      | 160                        | 180                        |
| 890533       | 4/0        | 4            | 13.8               | 5416             | 0.051                | 0.062                | 0.013                       | 0.041                      | 184                        | 208                        |
| 890534       | 250        | 4            | 15.2               | 6400             | 0.043                | 0.053                | 0.014                       | 0.041                      | 204                        | 232                        |
| 890535       | 350        | 4            | 17.1               | 8960             | 0.031                | 0.039                | 0.012                       | 0.040                      | 248                        | 280                        |
| 890536       | 500        | 4            | 19.8               | 12800            | 0.022                | 0.029                | 0.010                       | 0.039                      | 304                        | 344                        |
| 890537       | 750        | 4            | 23.8               | 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.

