

CU 600V XLPE XHHW-2 ARMOR-X PVC Control Cable With Ground

Type MC-HL Control Cable 600Volt Copper Conductors, Cross Linked Polyethylene (XLPE) Insulation XHHW-2 Continuous Corrugated Welded Armor (Armor-X), Polyvinyl Chloride (PVC) Jacket with 1 Insulated Green CU Ground



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) XHHW-2, 30 Mils thick for all cable sizes
3. **Grounding Conductor:** Class B compressed stranded copper with green insulation
4. **Filler:** Polypropylene filler on cables with 5 or less conductors
5. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
6. **Armor:** Continuous Corrugated Welded Armor (Armor-X)
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL Armor-X® control 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 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables (Southwire's UL E96627 file)
- 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 Control Cable Conductor Identification Method 1 Table 2
- ICEA S-73-532 Standard for Control, Thermocouple Extension and Instrumentation Cables
- 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} SOUTHWIRE{R} {UL} E96627 ARMOR-X TYPE MC-HL XX/C XXAWG (X.XX{mm²}) CU XHHW-2 GW 1 X XX AWG 90 {D}C JACKET -40{D}C SUN.RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4

Stock No: 568912, 568760

SOUTHWIRE MASTER-DESIGN ARMOR-XTRA TYPE MC-HL IEEE1580, IEC60332-3-22, & 60092-350 {UL} 2/C 14 AWG (2.08 {mm²}) CU XHHW-2 GW 1 X 14 AWG 90{D}C JACKET -40{D}C SUN. RES. DIR. BUR. FOR CT USE 600V IEEE1202/FT4 -- {CSA} RA90-HL AG14 XLPE -40{D}C 600V FT4 SR 90{D}C -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 -- USA

Table 1 – Weights and Measurements

Stock Number	Cond. Size AWG/Kcmil	Cond. Number No.	Diameter Over Conductor inch	Insul. Thickness mil	Ground Size AWG	Jacket Thickness mil	Approx. OD inch	Approx. Weight lb/1000ft
568912^	14	2	0.070	30	14	50	0.580	160
554894	14	2	0.070	30	14	50	0.580	160
550607	14	6	0.070	30	14	50	0.710	260
550609	14	8	0.070	30	14	50	0.800	321
550614	14	11	0.070	30	14	50	0.890	398
890585	14	12	0.070	30	14	50	0.890	432
550615	14	18	0.070	30	14	50	1.020	555
550617	14	36	0.070	30	14	50	1.320	994
550810	12	2	0.087	30	12	50	0.630	197
568795^^	12	3	0.087	30	12	60	0.650	231
550610	12	5	0.087	30	12	60	0.820	324
550611	12	6	0.087	30	12	50	0.870	331
550618	12	8	0.087	30	12	50	0.890	420
550619	12	11	0.087	30	12	50	0.980	516
584189	12	12	0.087	30	12	50	1.020	523
550620	12	18	0.087	30	12	50	1.120	725
550621	12	36	0.087	30	12	50	1.450	1406
954321	10	2	0.111	30	10	50	0.710	256
550613	10	6	0.111	30	10	50	0.850	449
550622	10	8	0.111	30	10	50	0.940	557
550623	10	11	0.111	30	10	50	1.020	703

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.



Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C†	Allowable Ampacity At 75°C†	Allowable Ampacity At 90°C†
	AWG/ Kcmil	No.	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
568912^	14	2	2.630	3.288	4.1	15	15	15
554894	14	2	2.630	3.288	4.1	15	15	15
550607	14	6	2.630	3.288	5.0	12	15	15
550609	14	8	2.630	3.288	5.6	12	15	15
550614	14	11	2.630	3.288	6.2	9	11	12
890585	14	12	2.630	3.288	6.2	9	11	12
550615	14	18	2.630	3.288	7.1	9	11	12
550617	14	36	2.630	3.288	9.2	7	8	10
550810	12	2	1.660	2.075	4.4	20	20	20
568795^^	12	3	1.660	2.075	4.6	20	20	20
550610	12	5	1.660	2.075	4.9	14	17	20
550611	12	6	1.660	2.075	5.3	14	17	20
550618	12	8	1.660	2.075	6.2	14	17	20
550619	12	11	1.660	2.075	6.6	10	12	15
584189	12	12	1.660	2.075	7.1	10	12	15
550620	12	18	1.660	2.075	7.8	10	12	15
550621	12	36	1.660	2.075	10.2	8	10	12
954321	10	2	1.040	1.300	5.0	30	30	30
550613	10	6	1.040	1.300	6.0	21	24	28
550622	10	8	1.040	1.300	6.6	21	24	28
550623	10	11	1.040	1.300	7.1	15	17	20

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

^ 14-7 2/C CU XHHW-2 1X#14 GG ARMOR-XTRA MC-HL CSA RA90-HL IEC 600V BLACK PVC JACKET

^^ 12-7 3/C XHHW-2 1X#12 GG ARMOR-XTRA MC-HL CSA RA90-HL IEC 600V BLACK PVC JACKET

