CU 600V XLPE Insulation ARMOR-X® PVC Jacket XHHW-2 Control Cable. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

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

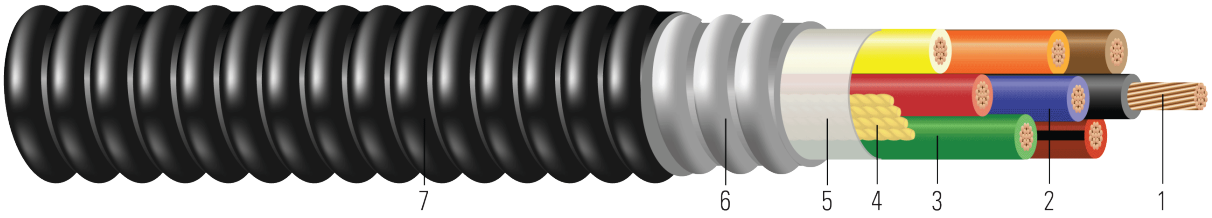

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed copper per ASTM B3 and B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) XHHW-2
3. **Grounding Conductor:** Class B compressed stranded copper with green insulation
4. **Filler:** Polypropylene filler as needed
5. **Binder:** Polyester flat thread binder tape as needed
6. **Armor:** ARMOR-X® Continuous Corrugated Aluminum Welded Armor
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 -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 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)

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SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE ARMOR-X {UL} TYPE MC-HL ARMOR-X® X/C XXAWG (X.XXmm2}) 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 AGXX XLPE -40°C 600V FT4 SR 90°C -- CWCMC -- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 -- USA

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Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Insul. Thickness	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Rectance	Min Bending Radius	Allowable Ampacity 75°C	Allowable Ampacity 90°C
	AWG	No.	strands	mil	No. x AWG	inch	mil	inch	lb / 1000ft	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	inch	Amp	Amp
14 AWG																
568912^	14	2	7	30	1 x 14	0.480	50	0.586	38	159	2.631	3.170	0.058	4.1	20	25
554894!	14	2	7	30	1 x 14	0.480	50	0.586	38	165	2.631	3.170	0.058	4.1	20	25
550614	14	11	7	30	1 x 14	0.480	50	0.586	153	322	2.631	3.170	0.058	4.1	10	12
550607	14	6	7	30	1 x 14	0.650	50	0.756	89	267	2.631	3.170	0.058	5.3	16	20
550609	14	8	7	30	1 x 14	0.700	50	0.806	114	318	2.631	3.170	0.058	5.6	14	17
890611!	14	9	7	30	1 x 14	0.790	50	0.896	127	352	2.631	3.170	0.058	6.3	14	17
890585!	14	12	7	30	1 x 14	0.790	50	0.896	153	387	2.631	3.170	0.058	6.3	10	12
550615	14	18	7	30	1 x 14	0.920	50	1.026	242	540	2.631	3.170	0.058	7.2	10	12
550617	14	36	7	30	1 x 14	0.943	50	1.043	472	793	2.631	3.170	0.058	4.1	8	10
12 AWG																
550810!	12	2	7	30	1 x 12	0.530	50	0.636	61	193	1.662	2.002	0.054	4.5	25	30
568795^	12	3	7	30	1 x 12	0.610	50	0.716	81	236	1.662	2.002	0.054	5.0	25	30
550610	12	5	7	30	1 x 12	0.700	50	0.806	121	313	1.662	2.002	0.054	5.6	20	24
550611	12	6	7	30	1 x 12	0.700	50	0.806	141	336	1.662	2.002	0.054	5.6	20	24
550618	12	8	7	30	1 x 12	0.790	50	0.896	182	409	1.662	2.002	0.054	6.3	17	21
550619	12	11	7	30	1 x 12	0.920	50	1.026	243	516	1.662	2.002	0.054	7.2	12	15
584189	12	12	7	30	1 x 12	0.920	50	1.026	263	543	1.662	2.002	0.054	7.2	12	15
550620	12	18	7	30	1 x 12	1.020	50	1.126	385	722	1.662	2.002	0.054	7.9	12	15
TBA	12	36	7	30	1 x 12	1.350	50	1.450	752	1407	1.662	2.002	0.054	10.2	10	12
10 AWG																
550622	10	8	7	30	1 x 10	0.480	50	0.586	289	472	1.040	1.253	0.050	4.1	24	28
954321!	10	2	7	30	1 x 10	0.650	50	0.756	97	268	1.040	1.253	0.050	5.3	35	40
550612	10	5	7	30	1 x 10	0.790	50	0.896	193	411	1.040	1.253	0.050	6.3	28	32
550613	10	6	7	30	1 x 10	0.790	50	0.896	225	450	1.040	1.253	0.050	6.3	28	32
550623!	10	11	7	30	1 x 10	1.020	50	1.126	386	699	1.040	1.253	0.050	7.9	17	20

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

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

! No CSA product Type RA90-HL

^ Tested as per IEC 60332-3-22 & 60092-350