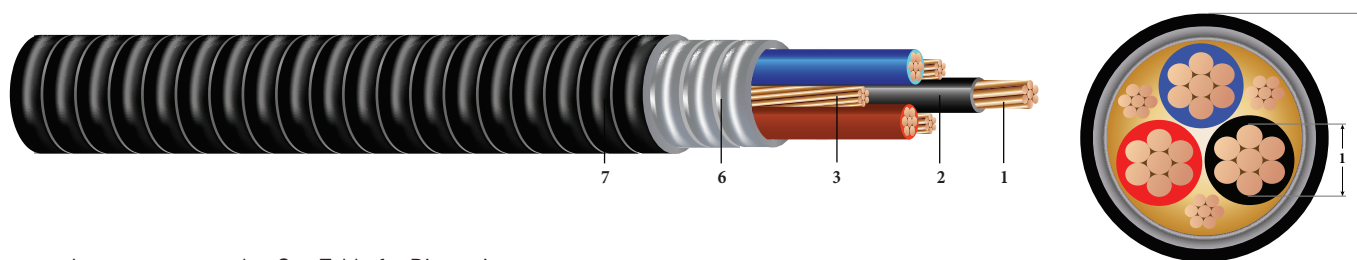


## CU 600V XLPE XHHW-2 ARMOR-X PVC Control Cable Type MC-HL

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 3 Bare CU Ground



Images not to scale. See Table for Dimensions

### CONSTRUCTION:

1. **Conductor:** 7 strands class B compressed bare 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:** 3 Class B compressed stranded bare copper ground per ASTM B3 and ASTM B8
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 - Soft or annealed copper
- ASTM B8 - Concentric-lay-standard copper
- UL 44 - Thermoset Insulated wires and cables
- UL 1569 - Metal-Clad Cables
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- UL 1309 - Listed as Marine Shipboard Cable
- ABS Listed as CWCMC
- IEEE 1202/FT4 - Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)
- ICEA S-73-532 - Standard for Control, Thermocouple Extension and Instrumentation Cables
- ICEA S-58-679 - Control Cable Conductor Identification Method 1 Table 2
- ICEA S-95-658 NEMA WC70 - Power cables rated 2000 volts or less for the distribution of electrical energy

### SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# ARMOR-X (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC 600V Type MC-HL For CT USE SUN. RES. For DIRECT BURIAL FT4 [-50°C] YEAR (NESC) [SEQUENTIAL FEET MARKS]



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## Measurements and Electrical Data

## #16 AWG

Stock Code	Cond. Number	Dia. Over Cond. (1)	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches	No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT	Amps
TBA	3	0.056	3 x 20	0.480	50	0.580	34	152	4.1	4.180	5.226	10/10/10
TBA	4	0.056	3 x 20	0.480	50	0.580	42	165	4.1	4.180	5.226	10/10/10

## Measurements and Electrical Data

## #14 AWG

Stock Code	Cond. Number	Dia. Over Cond. (1)	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches	No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT	Amps
550586 <sup>◇</sup>	3	0.070	3 x 18	0.480	50	0.580	54	175	4.1	2.630	3.288	15/15/15
550587	4	0.070	3 x 18	0.530	50	0.630	66	204	4.4	2.630	3.288	14/15/15

All dimensions are nominal and subject to normal manufacturing tolerance.

\* Ampacities are based on Table 310.15 (B)(16) of the NEC, 2014 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F) and assuming ground is not carrying current.

◇ Standard stock item



**Southwire®**

## Measurements and Electrical Data

## #12 AWG

Stock Code	Cond. Number	Dia. Over Cond. (1)	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches	No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT	Amps
550588 <sup>◇</sup>	3	0.087	3 x 16	0.530	50	0.630	85	221	4.4	1.660	2.075	20/20/20
550589	4	0.087	3 x 16	0.570	50	0.670	106	257	4.7	1.660	2.075	16/20/20

## Measurements and Electrical Data

## #10 AWG

Stock Code	Cond. Number	Dia. Over Cond. (1)	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches	No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT	Amps
550591 <sup>◇</sup>	3	0.111	3 x 14	0.610	50	0.710	136	294	5.0	1.040	1.300	30/30/30
550592	4	0.111	3 x 14	0.650	50	0.750	168	344	5.3	1.040	1.300	24/28/30

All dimensions are nominal and subject to normal manufacturing tolerance.

\* Ampacities are based on Table 310.15 (B)(16) of the NEC, 2014 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F) and assuming ground is not carrying current.

◇ Standard stock item

