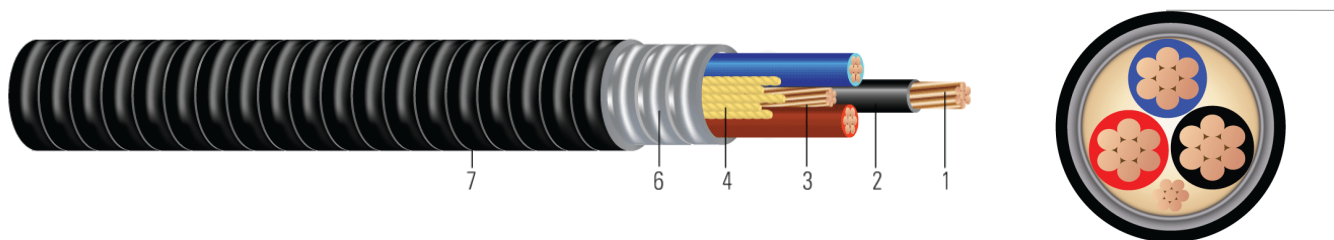


## CU 600V XLPE XHHW-2 AIA PVC Control Cable Type MC

Type MC Control Cable 600 Volt Copper Conductors, Cross Linked Polyethylene (XLPE) Insulation XHHW-2 Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare or Insulated Green 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:** Class B compressed bare stranded copper or with green insulation<sup>†</sup>
4. **Filler:** Polypropylene filler
5. **Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
6. **Armor:** Aluminum Interlocked Armor (AIA)
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

### APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC 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, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

### 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# (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC AIA 600V Type MC For CT USE SUN. RES. For DIRECT BURIAL FT4 YEAR (NESC) [SEQUENTIAL FEET MARKS]



**Southwire**<sup>®</sup>

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## Measurements and Electrical Data

### #16 AWG

Stock Code	ϕ Cond. Number	Dia. Over Cond. (1)	Ground No.xAWG	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight lbs./MFT	Approx. Weight lbs./MFT	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches		inches						inches	Ω/MFT	
TBA	2	0.056	1 x 16	0.461	50	0.561	24	143	3.9	4.180	5.226	10/10/10
TBA	3	0.056	1 x 16	0.491	50	0.591	32	163	4.1	4.180	5.226	10/10/10
TBA	4	0.056	1 x 16	0.524	50	0.624	40	184	4.4	4.180	5.226	10/10/10

## Measurements and Electrical Data

### #14 AWG

Stock Code	ϕ Cond. Number	Dia. Over Cond. (1)	Ground No.xAWG	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight lbs./MFT	Approx. Weight lbs./MFT	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches		inches						inches	Ω/MFT	
TBA	2	0.070	1 x 14	0.490	50	0.590	38	167	4.1	2.630	3.288	15/15/15
555413†	3	0.070	1 x 14	0.523	50	0.623	51	193	4.4	2.630	3.288	14/15/15
TBA	4	0.070	1 x 14	0.560	50	0.660	64	221	4.6	2.630	3.288	14/15/15

## Measurements and Electrical Data

### #12 AWG

Stock Code	ϕ Cond. Number	Dia. Over Cond. (1)	Ground No.xAWG	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight lbs./MFT	Approx. Weight lbs./MFT	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches		inches						inches	Ω/MFT	
578426	2	0.087	1 x 12	0.528	50	0.628	61	203	4.4	1.660	2.075	20/20/20
555149	3	0.087	1 x 12	0.565	50	0.665	81	239	4.7	1.660	2.075	16/20/20
573502	4	0.087	1 x 12	0.607	50	0.707	102	277	5.0	1.660	2.075	16/20/20

## Measurements and Electrical Data

### #10 AWG

Stock Code	ϕ Cond. Number	Dia. Over Cond. (1)	Ground No.xAWG	Dia. Over Armor	Jacket Thickness	Approx. OD (7)	Copper Weight lbs./MFT	Approx. Weight lbs./MFT	Min Bending Radius	DC Resis. @ 25°C	AC Resis @ 90°C	Allowable Ampacities* 60/75/90°C
		inches		inches						inches	Ω/MFT	
568457	2	0.111	1 x 10	0.579	50	0.679	97	257	4.8	1.040	1.300	30/30/30
568458^	3	0.111	1 x 10	0.622	50	0.722	130	308	5.1	1.040	1.300	24/28/30
573500	4	0.111	1 x 10	0.671	50	0.771	162	362	5.4	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 also carrying current.

‡ Green Insulated Ground

^All Black Phases with Numbers

