

2/C 3/C or 4/C CU 600V XLPE XHHW-2 Aluminum Interlocked Armor PVC Control Cable With Ground

Type MC Control Cable 600Volt Copper Conductors, Cross Linked Polyethylene (XLPE) Insulation XHHW-2 Aluminum Interlocked Armor (AIA), 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 tinned copper per ASTM B33 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:** 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 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1309 Marine Shipboard Cable
- 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 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:

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]

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Diameter Over Conductor	Insul. Thickness	Ground Size	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	inch	mil	AWG	mil	inch	lb/1000ft
555413	14	3	0.070	30	10	50	0.580	175
TBA	14	4	0.070	30	10	50	0.630	204
578426	12	2	0.087	30	12	50	0.628	203
555149	12	3	0.087	30	12	50	0.665	239
573502	12	4	0.087	30	12	50	0.707	277
568457	10	2	0.111	30	10	50	0.679	257
568458	10	3	0.111	30	10	50	0.722	308
573500	10	4	0.111	30	10	50	0.771	362

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	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
555413	14	3	2.630	3.288	4.1	15	15	15
TBA	14	4	2.630	3.288	4.4	14	15	15
578426	12	2	1.660	2.075	4.4	20	20	20
555149	12	3	1.660	2.075	4.7	16	20	20
573502	12	4	1.660	2.075	5.0	16	20	20
568457	10	2	1.040	1.300	4.8	30	30	30
568458	10	3	1.040	1.300	5.1	24	28	30
573500	10	4	1.040	1.300	5.4	24	28	30

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

