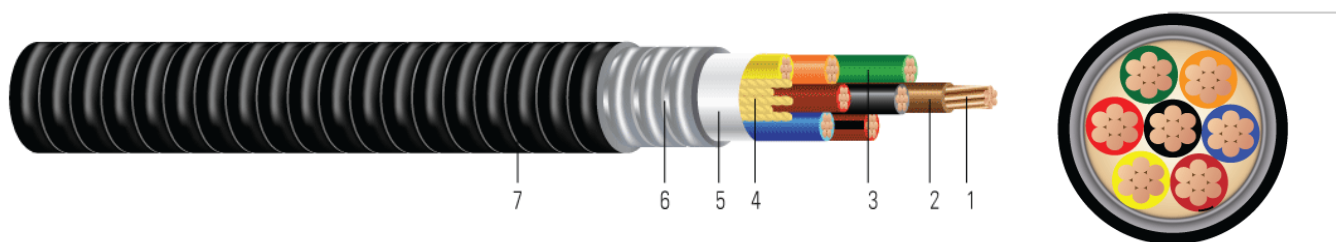


CU 600V XLPE XHHW-2 ARMOR-X PVC Control Cable Type MC-HL

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 1 Insulated Green CU Ground



Images not to scale. See Table for Dimensions

CONSTRUCTION:

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



Southwire®

Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com

Measurements and Electrical Data

#16 AWG

Stock Code	Cond. Number W/O Ground	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*
		inches		No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT
TBA	2	0.056	1 x 16	0.480	50	0.580	24	142	4.1	4.180	5.226	10/10/10
TBA	3	0.056	1 x 16	0.480	50	0.580	32	156	4.1	4.180	5.226	10/10/10
TBA	4	0.056	1 x 16	0.530	50	0.630	40	179	4.4	4.180	5.226	10/10/10
TBA	5	0.056	1 x 16	0.570	50	0.670	48	202	4.7	4.180	5.226	10/10/10
TBA	6	0.056	1 x 16	0.570	50	0.670	56	212	4.7	4.180	5.226	9/10/10
TBA	7	0.056	1 x 16	0.610	50	0.710	64	236	5.0	4.180	5.226	9/10/10
TBA	8	0.056	1 x 16	0.650	50	0.750	72	259	5.3	4.180	5.226	9/10/10
TBA	9	0.056	1 x 16	0.700	50	0.800	81	287	5.6	4.180	5.226	6/7/9
TBA	11	0.056	1 x 16	0.700	50	0.800	97	311	5.6	4.180	5.226	6/7/9
TBA	14	0.056	1 x 16	0.790	50	0.890	121	372	6.2	4.180	5.226	6/7/9
TBA	18	0.056	1 x 16	0.840	50	0.940	153	430	6.6	4.180	5.226	6/7/9
TBA	19	0.056	1 x 16	0.880	50	0.980	161	457	6.9	4.180	5.226	6/7/9
TBA	24	0.056	1 x 16	0.920	50	1.020	201	536	7.1	4.180	5.226	6/7/8
TBA	29	0.056	1 x 16	1.020	50	1.120	242	627	7.8	4.180	5.226	6/7/8
TBA	36	0.056	1 x 16	1.060	50	1.160	298	727	8.1	4.180	5.226	5/6/7

Measurements and Electrical Data

#14 AWG

Stock Code	Cond. Number W/O Ground	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*
		inches		No.xAWG	inches	mils	inches	lbs./MFT	lbs./MFT	inches	Ω/MFT	Ω/MFT
554894	2	0.070	1 x 14	0.480	50	0.580	38	160	4.1	2.630	3.288	15/15/15
TBA	3	0.070	1 x 14	0.530	50	0.630	51	188	4.4	2.630	3.288	14/15/15
TBA	4	0.070	1 x 14	0.570	50	0.670	64	216	4.7	2.630	3.288	14/15/15
TBA	5	0.070	1 x 14	0.610	50	0.710	77	245	5.0	2.630	3.288	14/15/15
550607	6	0.070	1 x 14	0.610	50	0.710	90	260	5.0	2.630	3.288	12/15/15
TBA	7	0.070	1 x 14	0.650	50	0.750	102	290	5.3	2.630	3.288	12/15/15
550609	8	0.070	1 x 14	0.700	50	0.800	115	321	5.6	2.630	3.288	12/15/15
TBA	9	0.070	1 x 14	0.750	50	0.850	128	355	6.0	2.630	3.288	9/11/12
550614	11	0.070	1 x 14	0.790	50	0.890	154	398	6.2	2.630	3.288	9/11/12
890585	12	0.070	1 x 14	0.790	50	0.890	178	434	6.2	2.630	3.288	9/11/12
TBA	14	0.070	1 x 14	0.840	50	0.940	192	468	6.6	2.630	3.288	9/11/12
550615	18	0.070	1 x 14	0.920	50	1.020	243	555	7.1	2.630	3.288	9/11/12
TBA	19	0.070	1 x 14	0.920	50	1.020	256	580	7.1	2.630	3.288	9/11/12
TBA	24	0.070	1 x 14	1.020	50	1.120	320	707	7.8	2.630	3.288	8/9/11
TBA	29	0.070	1 x 14	1.060	50	1.160	384	806	8.1	2.630	3.288	8/9/11
550617	36	0.070	1 x 14	1.220	50	1.320	474	994	9.2	2.630	3.288	7/8/10

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.



Measurements and Electrical Data

#12 AWG

Stock Code	Cond. Number W/O Ground	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	
570809	1	0.087	1 x 12	0.530	50	0.630	40	177	4.4	1.660	2.075	20/20/20
550810	2	0.087	1 x 12	0.530	50	0.630	61	197	4.4	1.660	2.075	20/20/20
TBA	3	0.087	1 x 12	0.570	50	0.670	81	233	4.7	1.660	2.075	16/20/20
TBA	4	0.087	1 x 12	0.610	50	0.710	102	269	5.0	1.660	2.075	16/20/20
TBA	5	0.087	1 x 12	0.650	50	0.750	122	307	5.3	1.660	2.075	16/20/20
550611	6	0.087	1 x 12	0.650	50	0.750	143	331	5.3	1.660	2.075	14/17/20
TBA	7	0.087	1 x 12	0.700	50	0.800	163	371	5.6	1.660	2.075	14/17/20
550618	8	0.087	1 x 12	0.790	50	0.890	183	420	6.2	1.660	2.075	14/17/20
TBA	9	0.087	1 x 12	0.840	50	0.940	204	464	6.6	1.660	2.075	10/12/15
550619	11	0.087	1 x 12	0.840	50	0.940	244	516	6.6	1.660	2.075	10/12/15
584189	12	0.087	1 x 12	0.920	50	1.020	264	523	7.1	1.660	2.075	10/12/15
TBA	14	0.087	1 x 12	0.920	50	1.020	305	621	7.1	1.660	2.075	10/12/15
550620	18	0.087	1 x 12	0.920	50	1.020	387	725	7.1	1.660	2.075	10/12/15
TBA	19	0.087	1 x 12	1.020	50	1.120	407	786	7.8	1.660	2.075	10/12/15
TBA	24	0.087	1 x 12	1.220	50	1.320	509	995	9.2	1.660	2.075	9/11/13
TBA	29	0.087	1 x 12	1.220	50	1.320	611	1131	9.2	1.660	2.075	9/11/13
550621	36	0.087	1 x 12	1.350	50	1.450	753	1406	10.2	1.660	2.075	8/10/12

Measurements and Electrical Data

#10 AWG

Stock Code	Cond. Number W/O Ground	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	
954321	2	0.111	1 x 10	0.610	50	0.710	97	256	5.0	1.040	1.300	30/30/30
TBA	3	0.111	1 x 10	0.650	50	0.750	130	306	5.3	1.040	1.300	24/28/30
TBA	4	0.111	1 x 10	0.700	50	0.800	162	359	5.6	1.040	1.300	24/28/30
TBA	5	0.111	1 x 10	0.750	50	0.850	194	413	6.0	1.040	1.300	24/28/30
550613	6	0.111	1 x 10	0.750	50	0.850	227	449	6.0	1.040	1.300	21/24/28
TBA	7	0.111	1 x 10	0.790	50	0.890	259	502	6.2	1.040	1.300	21/24/28
550622	8	0.111	1 x 10	0.840	50	0.940	291	557	6.6	1.040	1.300	21/24/28
TBA	9	0.111	1 x 10	0.920	50	1.020	324	625	7.1	1.040	1.300	15/17/20
550623	11	0.111	1 x 10	0.920	50	1.020	389	703	7.1	1.040	1.300	15/17/20
TBA	14	0.111	1 x 10	1.020	50	1.120	486	861	7.8	1.040	1.300	15/17/20
TBA	18	0.111	1 x 10	1.060	50	1.160	615	1025	8.1	1.040	1.300	15/17/20
TBA	19	0.111	1 x 10	1.220	50	1.320	648	1132	9.2	1.040	1.300	15/17/20
TBA	24	0.111	1 x 10	1.350	50	1.450	810	1432	10.2	1.040	1.300	13/15/18
TBA	29	0.111	1 x 10	1.430	50	1.530	971	1657	10.7	1.040	1.300	13/15/18
TBA	36	0.111	1 x 10	1.540	60	1.660	1198	2010	11.6	1.040	1.300	12/14/16

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.

