Southwire®

Hazardous Location Cable Solutions

HAZARDOUS LOCATION CABLES

Southwire Company, LLC is committed to providing our customers with solutions for every type of industrial environment, including those rugged environments found in heavy industrial and offshore markets. Many of these locations are considered hazardous by the National Electric Code (NEC) which defines a hazardous location as an area where a fire or explosion hazard may exist due to flammable gases, vapors, liquids, or combustible dust.

Our hazardous location cable collection consists of cables that are both rugged and durable, including Halo-Flex™ cable, Armor-X® cable, and Aluminum Interlocked Armor (AIA).

WHAT IS A HAZARDOUS LOCATION?

Explosion or fire hazards exist due to the presence of flammable gases, combustible liquid-produced vapors, combustible dusts, or ignitable fibers or flyings.

HOW ARE HAZARDOUS AREAS CLASSIFIED?

Based on the **likelihood** of an ignitable concentration of combustible material being present

WHAT ARE THE CLASSIFICATION SYSTEMS?

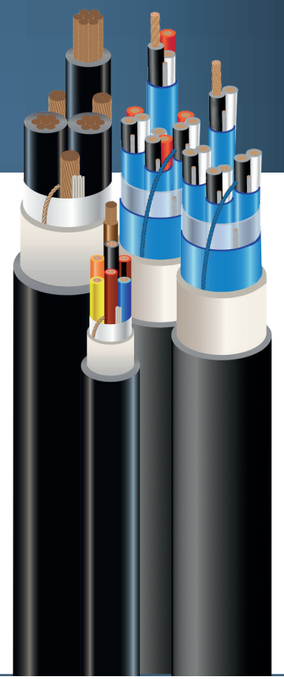
Two systems per NEC: The traditional **Division** system and the alternative **Zone** system

TYPICAL INDUSTRIAL APPLICATIONS WITH HAZARDOUS LOCATIONS:

1. Chemical industry for example fertilizer plants
2. Paint spraying booth or location for example for the automotive industry
3. Power generation plants
4. Gas manufacturing plants, gas turbines
5. Oil refineries, offshore drilling rigs, and oil extraction plants
6. Distilling
7. Pump station, sewerage or waste treatment plants, and recycling operations
8. Mining operation
9. Wood/pulp/paper mills
10. Pharmaceutical industry, food manufacturing, grain handling & storage

*For additional information on Hazardous Locations, see the Appendix

HALO-FLEX™ TC-ER-HL



Halo-Flex™ TC-ER-HL is an ideal, flexible power cabling solution

When installation deadlines are critical and superior electrical properties are desired, you need a **Class 1, Division 1 cable** product that is flexible and durable. Southwire has the solution – Halo-Flex™ TC-ER-HL, a new, innovative product for use in all hazardous locations. Available in power, instrumentation, and control 600 volt constructions, Halo-Flex™ TC-ER-HL features durable design properties. This makes the cable well-suited for the most demanding applications, including vertical installations. Halo-Flex™ TC-ER-HL may be installed in trays, duct, troughs, conduit, or direct burial applications.

Developed and tested at Southwire's D.B. Cofer Technology Center, one of the world's leading UL certified wire and cable research centers, Halo-Flex™ TC-ER-HL is an ideal, flexible power cabling solution for mining, oil and gas, and petrochemical applications.

Benefits of Halo-Flex™ Cable

Featuring many firsts in the market, Southwire's new Halo-Flex™ product line holds several advantages:

- This construction can be utilized in areas where armored products are typically used.
- Longer lengths can be achieved in production, as well as in installations where an armored construction may have restrictions depending on how they are installed.
- The use of flexible stranding gives our product increased flexibility.
- Our patented Southwire white binder layer formulation was developed to further increase flexibility.
- Halo-Flex™ Cable's thermoplastic jacket is made with patented SIM Technology for easier installation due to a lower coefficient of friction. Learn more at www.patentsw.com
- Passes -40°C cold impact and cold bend tests.
- UL approved product that is also MSHA, ABS, and RoHS-3 compliant.

600V PVC/NYLON SHIELDED PAIRS, CPE Jacket SPOS Halo-Flex™, TYPE TC-ER-HL

Stock Number	Cond. Size	Number of Pairs	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
	AWG/kcmil	pair	mil	mil	inch	lb/1000ft	inch	Ω/1000ft
679953◊†	16	1	20	45	0.409	120	5	4.18
679955◊	16	2	20	60	0.515	177	6	4.18
679957◊	16	4	20	60	0.655	306	8	4.18
679959◊	16	8	20	60	0.794	469	10	4.18
678168	16	12	20	80	0.98	671	12	4.18
678171	16	24	20	80	1.288	1135	15	4.18

All dimensions are nomial and subject to normal manufacturing tolerances
◊Cable marked with this symbol is a standard stock item
† 1 pair is TC Only

600V PVC/NYLON SHIELDED TRIADS, CPE JACKET STOS Halo-Flex™, TYPE TC-ER-HL

Stock Number	Cond. Size	Number of Pairs	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	DC Resistance @ 25°C
	AWG/kcmil	pair	mil	mil	inch	lb/1000ft	inch	Ω/1000ft
679991◊	16	1	20	45	0.424	140	5	4.18
679995◊	16	4	20	60	0.782	395	9	4.18

All dimensions are nomial and subject to normal manufacturing tolerances
◊Cable marked with this symbol is a standard stock item

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Multi-Conductor 600- or 1000-Volt Cu (FR- XLPE) XHHW-2 CPE Control Cable Halo-Flex™ Type TC-ER-HL

Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *	Allowable Ampacity 90°C *
	AWG	No.	strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
14 AWG																
679785	14	5	41	0.073	30	1 x 14	60	0.647	76	246	2.814	3.391	2.5	12	16	20
679789	14	6	41	0.073	30	1 x 14	60	0.647	89	257	2.814	3.391	2.5	12	16	20
679792	14	7	41	0.073	30	1 x 14	60	0.688	102	285	2.814	3.391	2.7	10	14	17
678159	14	8	41	0.073	30	1 x 14	60	0.728	115	311	2.814	3.391	2.9	10	14	17
12 AWG																
679804	12	5	65	0.094	30	1 x 12	60	0.71	121	312	1.774	2.137	2.8	16	20	24
679807	12	6	65	0.094	30	1 x 12	60	0.71	141	332	1.774	2.137	2.8	16	20	24
679810	12	7	65	0.094	30	1 x 12	60	0.757	162	371	1.774	2.137	3	14	17	21
678162	12	8	65	0.094	30	1 x 12	60	0.803	182	407	1.774	2.137	3.2	14	17	21
10 AWG																
679841	10	5	105	0.117	30	1 x 10	60	0.779	194	405	1.111	1.339	3.1	24	28	32
679844	10	6	105	0.117	30	1 x 10	60	0.779	226	442	1.111	1.339	3.1	24	28	32
679848	10	7	105	0.117	30	1 x 10	80	0.873	258	530	1.111	1.339	3.4	21	24	28

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
† Ampacities are based on Table 310.16 of the NEC, 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

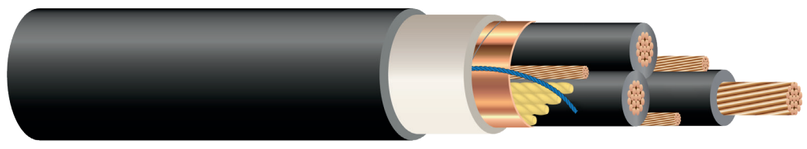
3/C or 4/C 600- or 1000-Volt Cu (FR- XLPE) XHHW-2 CPE Control Cable Halo-Flex™ Type TC-ER-HL

Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *	Allowable Ampacity 90°C *
	AWG	No.	strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
14 AWG																
679778◊	14	3	41	0.073	30	3 x 18	45	0.505	53	157	2.814	3.391	2	15	20	25
679782◊	14	4	41	0.073	30	3 x 18	60	0.569	66	206	2.814	3.391	2.2	12	16	20
12 AWG																
679800◊	12	4	65	0.094	30	3 x 16	60	0.619	105	261	1.774	2.137	2.4	16	20	24
679797◊	12	3	65	0.094	30	3 x 16	65	0.68	84	254	1.774	2.137	2.7	20	25	30
10 AWG																
679834◊	10	3	105	0.117	30	3 x 14	60	0.63	135	289	1.111	1.339	2.5	30	35	40
679838◊	10	4	105	0.117	30	3 x 14	60	0.675	167	338	1.111	1.339	2.7	24	28	32

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
† Ampacities are based on Table 310.16 of the NEC, 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

3/C 600 or 1000 Volt Cu (FR-XLPE) XHHW-2 Cu Tape Shield Thermoplastic CPE-TP Jacket Power Cable Halo-Flex™ Type TC-ER-HL



Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Diameter Over Insulation	Ground	Jacket Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *	Allowable Ampacity 90°C *
	AWG	No.	strands	inch	mil	inch	No. x AWG	mil	inch	lb/1000ft	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
669548◊	4	3	112	0.235	47	0.329	3 x 12	84	1.033	865	0.2743	0.3568	12.4	70	85	95
669554◊	2	3	168	0.315	47	0.409	3 x 10	84	1.162	1178	0.1366	0.1777	13.9	95	115	130
669560◊	1/0	3	259	0.385	58	0.501	3 x 10	84	1.404	1706	0.1091	0.142	16.8	125	150	170
669566◊	2/0	3	324	0.42	58	0.536	3 x 10	84	1.497	2010	0.0868	0.1129	18	145	175	195
669572	3/0	3	418	0.47	58	0.586	3 x 8	84	1.588	2452	0.0688	0.0895	19.1	165	200	225
669578◊	4/0	3	532	0.535	55	0.645	3 x 8	116	1.779	3042	0.0547	0.0711	21.3	195	230	260
669593	250	3	627	0.605	65	0.735	3 x 8	116	1.974	3527	0.0466	0.0606	23.7	215	255	290
669584◊	350	3	855	0.67	65	0.8	3 x 6	116	2.146	4631	0.0333	0.0434	25.8	260	310	350
669587◊	500	3	1221	0.858	65	0.988	3 x 6	116	2.52	6279	0.0234	0.0356	30.2	320	380	430
669590	750	3	1850	1.094	80	1.254	3 x 4	147	3.157	9703	0.0157	0.0239	37.9	400	475	535

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
† Ampacities are based on Table 310.16 of the NEC, 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

3/C 600 or 1000 Volt Cu (FR-XLPE) XHHW-2 TCu Braid Thermoplastic CPE-TP Jacket Power Cable Halo-Flex™ Type TC-ER-HL

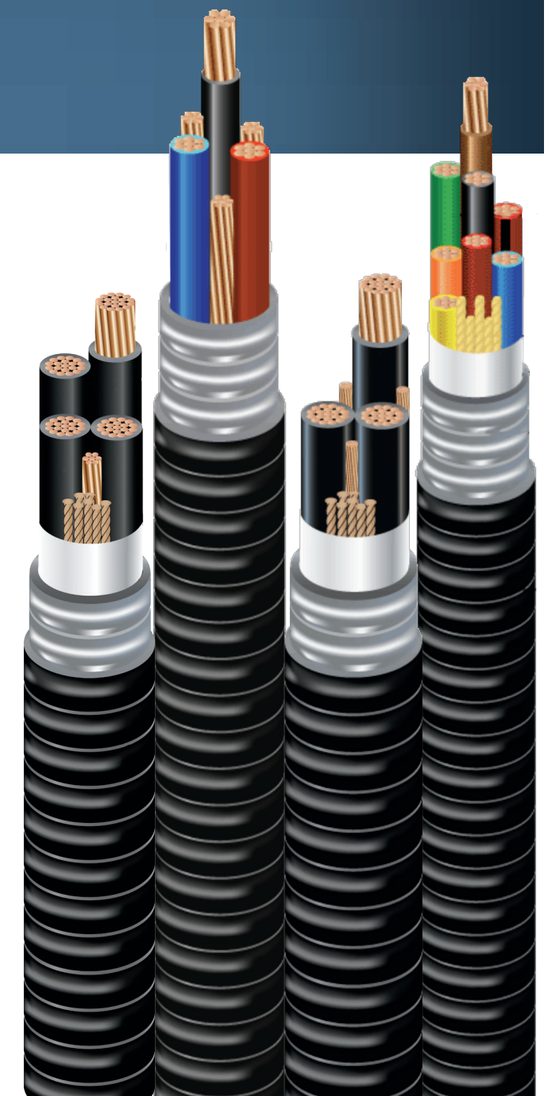
Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Insul. Thickness	Diameter Over Insulation	Ground	Jacket Thickness	Approx. OD	Approx. Weigh	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity At 60°C *	Allowable Ampacity 75°C *	Allowable Ampacity 90°C *
	AWG	No.	strands	inch	mil	inch	No. x AWG	mil	inch	lb /1000ft	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
669551	4	3	112	0.235	47	0.329	3 x 12	84	1.038	862	0.2743	0.3568	12.5	70	85	95
669557	2	3	168	0.315	47	0.409	3 x 10	84	1.167	1173	0.1366	0.1777	14	95	115	130
669563	1/0	3	259	0.385	58	0.501	3 x 10	84	1.409	1699	0.1091	0.142	16.9	125	150	170
669569	2/0	3	324	0.42	58	0.536	3 x 10	84	1.502	2003	0.0868	0.1129	18	145	175	195
669575	3/0	3	418	0.47	58	0.586	3 x 8	84	1.593	2444	0.0688	0.0895	19.1	165	200	225
669581	4/0	3	532	0.535	55	0.645	3 x 8	116	1.784	3034	0.0547	0.0711	21.4	195	230	260

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
† Ampacities are based on Table 310.16 of the NEC, 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

ARMOR-X® PRODUCTS

Continuous Corrugated Welded Armor

Armor-X products are popular wiring systems in Petro-Chem plants and other industrial markets where **Class I, II, and III, Division 1 and 2** hazardous locations per NEC Article 501, 502, and 503 are needed. The Armor-X product design makes it ideal for harsh environments where the weld provides a gas and vapor-tight continuous sheath followed by a sunlight and oil resistant polyvinyl chloride jacket on top of the armor. Armor-X products are also listed as Type MC per Article 330 of the NEC where they can be used in wet or dry locations, in tray, direct burial, and aerial applications.



3/C or 4/C CU 600V XLPE XHHW-2 ARMOR-X® PVC Cable with Three Grounds VFD Cable

Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Diameter Over Conductor	Insul. Thickness	Ground Size	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/kcmil	Conductors	inch	mil	AWG	mil	inch	lb/1000ft
550586◊	14	3	0.07	30	18	50	0.58	175
550587	14	4	0.07	30	18	50	0.63	204
550588◊	12	3	0.087	30	16	50	0.63	221
550589	12	4	0.087	30	16	50	0.67	257
550591◊	10	3	0.111	30	14	50	0.71	294
550592	10	4	0.111	30	14	50	0.75	344

All dimensions are nomial and subject to normal manufacturing tolerances
◊Cable marked with this symbol is a standard stock item

Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity In Raceway @ 60°C	Allowable Ampacity In Raceway @ 75°C	Allowable Ampacity In Raceway @ 90°C
	AWG/kcmil	Conductors	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
550586◊	14	3	2.63	3.288	4.1	15	15	15
550587	14	4	2.63	3.288	4.4	14	15	15
550588◊	12	3	1.66	2.075	4.4	20	20	20
550589	12	4	1.66	2.075	4.7	16	20	20
550591◊	10	3	1.04	1.3	5	30	30	30
550592	10	4	1.04	1.3	5.3	24	28	30

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

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CU 600V XLPE XHHW-2 ARMOR-X® PVC Control Cable with Ground

Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Diameter Over Conductor	Insul. Thickness	Ground Size	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/kcmil	Conductors	inch	mil	AWG	mil	inch	lb/1000ft
554894	14	2	0.07	30	14	50	0.58	160
550607	14	6	0.07	30	14	50	0.71	260
550609	14	8	0.07	30	14	50	0.8	321
550614	14	11	0.07	30	14	50	0.89	398
890585	14	12	0.07	30	14	50	0.89	432
550615	14	18	0.07	30	14	50	1.02	555
550617	14	36	0.07	30	14	50	1.32	994
550810	12	2	0.087	30	12	50	0.63	197
550611	12	6	0.087	30	12	50	0.75	331
550618	12	8	0.087	30	12	50	0.89	420
550619	12	11	0.087	30	12	50	0.98	516
584189	12	12	0.087	30	12	50	1.02	523
550620	12	18	0.087	30	12	50	1.12	725
550621	12	36	0.087	30	12	50	1.45	1406
954321	10	2	0.111	30	10	50	0.71	256
550613	10	6	0.111	30	10	50	0.85	449
550622	10	8	0.111	30	10	50	0.94	557
550623	10	11	0.111	30	10	50	1.02	703
550623	10	10	10	10	10	50	1.02	703

All dimensions are nomial and subject to normal manufacturing tolerances

CU 600V XLPE XHHW-2 ARMOR-X® PVC Control Cable with Ground

Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity In Raceway @ 60°C	Allowable Ampacity In Raceway @ 75°C	Allowable Ampacity In Raceway @ 90°C
	AWG/kcmil	Conductors	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
554894	14	2	2.63	3.288	4.1	15	15	15
550607	14	6	2.63	3.288	5	12	15	15
550609	14	8	2.63	3.288	5.6	12	15	15
550614	14	11	2.63	3.288	6.2	9	11	12
890585	14	12	2.63	3.288	6.2	9	11	12
550615	14	18	2.63	3.288	7.1	9	11	12
550617	14	36	2.63	3.288	9.2	7	8	10
550810	12	2	1.66	2.075	4.4	20	20	20
550611	12	6	1.66	2.075	5.3	14	17	20
550618	12	8	1.66	2.075	6.2	14	17	20
550619	12	11	1.66	2.075	6.6	10	12	15
584189	12	12	1.66	2.075	7.1	10	12	15
550620	12	18	1.66	2.075	7.8	10	12	15
550621	12	36	1.66	2.075	10.2	8	10	12
954321	10	2	1.04	1.3	5	30	30	30
550613	10	6	1.04	1.3	6	21	24	28
550622	10	8	1.04	1.3	6.6	21	24	28
550623	10	11	1.04	1.3	7.1	15	17	20

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

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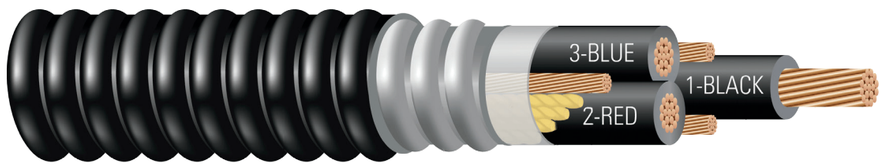
3/C CU 600V XLPE XHHW-2 ARMOR-X® PVC Power Cable with Ground VFD



Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ kcmil	No. of Strands	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
550593◊	8	7	0.139	45	0.229	3 x 14	0.7	50	0.8	193	399
890513◊	6	7	0.174	45	0.264	3 x 12	0.79	50	0.89	307	547
890514◊	4	7	0.221	45	0.311	3 x 12	0.92	50	1.02	452	740
890515◊	2	7	0.277	45	0.367	3 x 10	1.02	50	1.12	718	1062
890516◊	1/0	19	0.36	55	0.47	3 x 10	1.35	50	1.45	1084	1638
890517◊	2/0	19	0.404	55	0.514	3 x 10	1.47	50	1.57	1342	1955
890518	3/0	19	0.454	55	0.564	3 x 8	1.54	60	1.66	1724	2424
890519◊	4/0	19	0.51	55	0.62	3 x 8	1.67	60	1.79	2134	2910
890520◊	250	37	0.558	65	0.688	3 x 8	1.845	60	1.965	2493	3390
890521◊	350	37	0.661	65	0.791	3 x 6	2.2	60	2.32	3521	4600
890522◊	500	37	0.789	65	0.919	3 x 6	2.43	75	2.58	4924	6259
646751	600	61	0.866	80	1.026	3 x 6	2.67	75	2.82	5860	7423
890523◊	750	61	0.968	80	1.128	3 x 4	2.88	75	3.03	7408	9145

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

3/C CU 600V XLPE XHHW-2 ARMOR-X® PVC Power Cable with Ground VFD

Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity @ 60°C	Allowable Ampacity @ 75°C	Allowable Ampacity @ 90°C
	AWG/kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp	Amp
550593◊	8	5.6	396	0.652	0.815	0.033	3754	40	50	55
890513◊	6	6.2	630	0.411	0.514	0.031	5966	55	65	75
890514◊	4	7.1	1002	0.258	0.323	0.03	9491	70	85	95
890515◊	2	7.8	1593	0.162	0.203	0.028	15089	95	115	130
890516◊	1/0	10.2	2534	0.102	0.128	0.028	24011	125	150	170
890517◊	2/0	11	3194	0.081	0.102	0.027	30264	145	175	195
890518	3/0	11.6	4027	0.064	0.081	0.027	38154	165	200	225
890519◊	4/0	12.5	5078	0.051	0.064	0.026	48114	195	230	260
890520◊	250	13.8	6000	0.043	0.055	0.027	56845	215	255	290
890521◊	350	16.2	8400	0.031	0.04	0.026	79583	260	310	350
890522◊	500	18.1	12000	0.022	0.029	0.025	113690	320	380	430
646751	600	19.7	14400	0.018	0.024	0.026	136428	350	420	475
890523◊	750	21.2	18000	0.014	0.02	0.025	170535	400	475	535

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

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4/C CU 600V XLPE XHHW-2 ARMOR-X® PVC Power Cable with Ground

Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/kcmil	No. of Strands	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
890527	**8**	**7**	**0.139**	**45**	**0.229**	**1 x 10**	**0.79**	**50**	**0.89**	**244**	486
890528	**6**	**7**	**0.174**	**45**	**0.264**	**1 x 8**	**0.88**	**50**	**0.98**	**389**	668
890529	**4**	**7**	**0.221**	**45**	**0.311**	**1 x 8**	**1.02**	**50**	**1.12**	**582**	923
890530	**2**	**7**	**0.277**	**45**	**0.367**	**1 x 6**	**1.22**	**50**	**1.32**	**925**	1366
890531	**1/0**	**19**	**0.36**	**55**	**0.47**	**1 x 6**	**1.47**	**50**	**1.57**	**1413**	2049
890532	**2/0**	**19**	**0.404**	**55**	**0.514**	**1 x 6**	**1.54**	**60**	**1.66**	**1757**	2479
582265	**3/0**	**19**	**0.454**	**55**	**0.564**	**1 x 4**	**1.67**	**60**	**1.79**	**2223**	3024
890533	**4/0**	**19**	**0.51**	**55**	**0.62**	**1 x 4**	**1.845**	**60**	**1.965**	**2794**	3697
890534	**250**	**37**	**0.558**	**65**	**0.688**	**1 x 4**	**2.04**	**60**	**2.16**	**3273**	4310
890535	**350**	**37**	**0.661**	**65**	**0.791**	**1 x 3**	**2.29**	**75**	**2.44**	**4613**	5899
890536	**500**	**37**	**0.789**	**65**	**0.919**	**1 x 2**	**2.67**	**75**	**2.82**	**6483**	8024
890537	**750**	**61**	**0.968**	**80**	**1.128**	**1 x 1**	**3.22**	**85**	**3.39**	**9747**	11847

All dimensions are nominal and subject to normal manufacturing tolerances

Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity @ 60°C	Allowable Ampacity @ 75°C	Allowable Ampacity @ 90°C
	AWG/kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp	Amp
890527	**8**	**6.2**	**528**	**0.652**	**0.815**	**0.036**	**3754**	**32**	**40**	**44**
890528	**6**	**6.9**	**840**	**0.411**	**0.514**	**0.034**	**5966**	**44**	**52**	**60**
890529	**4**	**7.8**	**1336**	**0.258**	**0.323**	**0.033**	**9491**	**56**	**68**	**76**
890530	**2**	**9.2**	**2124**	**0.162**	**0.203**	**0.031**	**15089**	**76**	**92**	**104**
890531	**1/0**	**11**	**3379**	**0.102**	**0.128**	**0.031**	**24011**	**100**	**120**	**136**
890532	**2/0**	**11.6**	**4259**	**0.081**	**0.101**	**0.03**	**30264**	**116**	**140**	**156**
582265	**3/0**	**12.5**	**5370**	**0.064**	**0.08**	**0.03**	**38154**	**132**	**160**	**180**
890533	**4/0**	**13.8**	**6771**	**0.051**	**0.064**	**0.029**	**48114**	**156**	**184**	**208**
890534	**250**	**15.1**	**8000**	**0.043**	**0.054**	**0.03**	**56845**	**172**	**204**	**232**
890535	**350**	**17.1**	**11200**	**0.031**	**0.039**	**0.029**	**79583**	**208**	**248**	**280**
890536	**500**	**19.7**	**16000**	**0.022**	**0.027**	**0.028**	**113690**	**256**	**304**	**344**
890537	**750**	**23.7**	**24000**	**0.014**	**0.019**	**0.028**	**170535**	**320**	**380**	**428**

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

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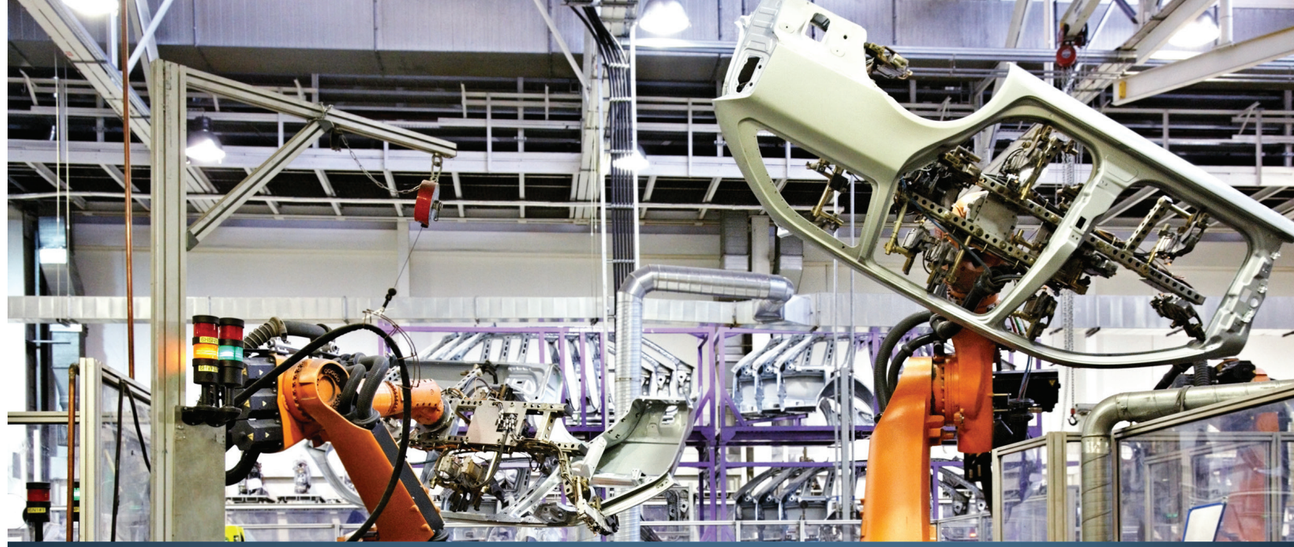
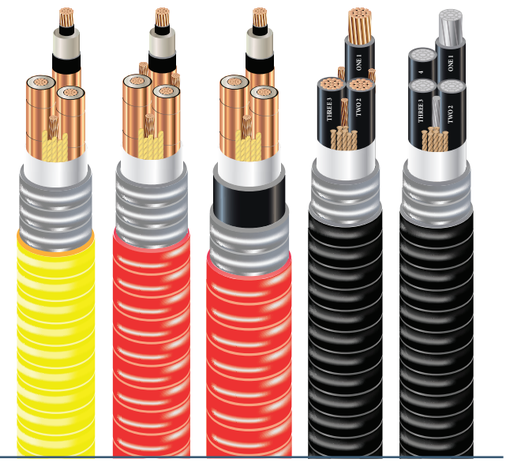


AIA (ALUMINUM INTERLOCKED ARMOR)

Armor the Power

Southwire's 600 Volt aluminum interlocked armor power cable is suited for use in wet or dry areas, conduits, ducts, troughs, trays, aerial, and virtually anywhere superior electrical properties are desired. This **Class I, Division II*** cable has a maximum continuous operating temperature for 600 Volt cables under normal conditions is 90°C wet or dry, and 105°C for medium voltage cables. Southwire's AIA rugged construction has a variety of possible applications such as, but not limited to: automotive plants, petro-chem plants, water treatment plants, pulp and paper plants, and virtually anywhere the ultimate cable protection is need for reliable power. The insulation for medium voltage AIA cables is made with an environmentally friendly No Lead Ethylene Propylene Rubber polymer.

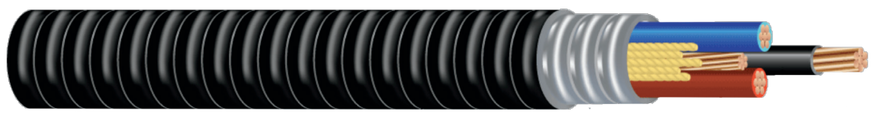


Options:

- Copper or Alumaflex® 8176 Series aluminum conductors
- Available in PVC, CPE, LSZH jackets
- Available in Galvanized Steel Interlocked Armor
- Oversized Grounds
- Teck Type
- **Class I, Division 2* Tray Cable**

***Class I, Division II for hazardous location per the NEC code**

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



Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Diameter Over Conductor	Insul. Thickness	Ground Size	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/kcmil	Conductors	inch	mil	AWG	mil	inch	lb/1000ft
555413	14	3	0.07	30	10	50	0.58	175
TBA	14	4	0.07	30	10	50	0.63	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

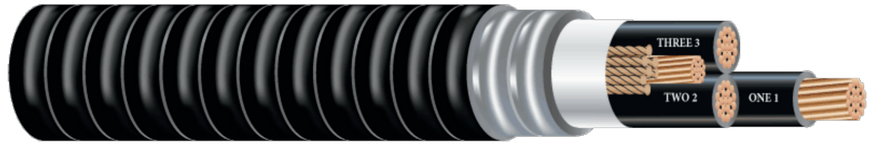
All dimensions are nomial and subject to normal manufacturing tolerances

Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	DC Resistance @ 25°C	AC Resistance @ 90°C	Min Bending Radius	Allowable Ampacity In Raceway At 60°C†	Allowable Ampacity In Raceway At 75°C†	Allowable Ampacity In Raceway At 90°C†
	AWG/kcmil	Conductors	Ω/1000ft	Ω/1000ft	inch	Amp	Amp	Amp
555413	14	3	2.63	3.288	4.1	15	15	15
TBA	14	4	2.63	3.288	4.4	14	15	15
578426	12	2	1.66	2.075	4.4	20	20	20
555149	12	3	1.66	2.075	4.7	16	20	20
573502	12	4	1.66	2.075	5	16	20	20
568457	10	2	1.04	1.3	4.8	30	30	30
568458	10	3	1.04	1.3	5.1	24	28	30
573500	10	4	1.04	1.3	5.4	24	28	30

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

3/C CU 600V XLPE XHHW-2 AIA PVC Power Cable with Ground



Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insulation Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/kcmil	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
606939	8	0.139	45	0.229	1 x 10	0.705	50	0.805	187	404
606947	6	0.174	45	0.264	1 x 8	0.781	50	0.881	297	547
606954 ◊	4	0.221	45	0.311	1 x 8	0.881	50	0.981	442	736
560466 ◊	2	0.277	45	0.367	1 x 6	1.003	50	1.103	703	1054
TBA	1	0.321	55	0.431	1 x 6	1.141	50	1.241	865	1288
560474 ◊	1/0	0.36	55	0.47	1 x 6	1.225	50	1.325	1069	1534
560482 ◊	2/0	0.404	55	0.514	1 x 6	1.32	50	1.42	1327	1841
890339 ◊	3/0	0.454	55	0.564	1 x 4	1.428	50	1.528	1700	2272
383679 ◊	4/0	0.51	55	0.62	1 x 4	1.549	60	1.669	2110	2779
601377	250	0.558	65	0.688	1 x 4	1.696	60	1.816	2469	3240
383646 ◊	350	0.661	65	0.791	1 x 3	2.019	60	2.139	3440	4442
380618 ◊	500	0.789	65	0.919	1 x 2	2.295	75	2.445	4885	6144
890391	600	0.866	80	1.026	1 x 4/0	2.526	75	2.676	6222	7573
890405	750	0.968	80	1.128	1 x 1	2.746	75	2.896	7278	8933

All dimensions are nomial and subject to normal manufacturing tolerances

Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25° C	AC Resistance @ 90° C	Inductive Reactance @ 60Hz	Short Circuit Current 6 Cycles	Allowable Ampacity @ 60° C	Allowable Ampacity @ 75° C	Allowable Ampacity @ 90° C
	AWG/kcmil	inch	lb.	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amps	Amps	Amps	Amps
606939	8	5.6	396	0.652	0.815	0.033	3754	40	50	55
606947	6	6.2	630	0.411	0.514	0.031	5966	55	65	75
606954	4	6.9	1002	0.258	0.323	0.03	9491	70	85	95
560466	2	7.7	1593	0.162	0.203	0.028	15089	95	115	130
TBA	1	8.7	2009	0.129	0.162	0.028	19029	110	130	145
560474	1/0	9.3	2534	0.102	0.128	0.028	24011	125	150	170
560482	2/0	9.9	3194	0.081	0.102	0.027	30264	145	175	195
890339	3/0	10.7	4027	0.064	0.081	0.027	38154	165	200	225
383679	4/0	11.7	5078	0.051	0.064	0.026	48114	195	230	260
601377	250	12.7	6000	0.043	0.055	0.027	56845	215	255	290
383646	350	15	8400	0.031	0.04	0.026	79583	260	310	350
380618	500	17.1	12000	0.022	0.029	0.025	113690	320	380	430
890391	600	18.7	14400	0.018	0.024	0.026	136428	350	420	475
890405	750	20.3	18000	0.014	0.02	0.025	170535	400	475	535

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

4/C CU 600V XLPE XHHW-2 AIA PVC Power Cable with Ground, Silicone Free

Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insulation Thickness	Diameter Over Insulation	Ground	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/kcmil	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
TBA	8	0.139	45	0.229	1 x 10	0.763	50	0.863	238	486
574460	6	0.174	45	0.264	1 x 8	0.848	50	0.948	379	665
TBA	4	0.221	45	0.311	1 x 8	0.96	50	1.06	572	911
TBA	2	0.277	45	0.367	1 x 6	1.097	50	1.197	910	1316
TBA	1	0.321	55	0.431	1 x 6	1.25	50	1.35	1126	1618
890229	1/0	0.36	55	0.47	1 x 6	1.345	50	1.445	1398	1940
TBA	2/0	0.404	55	0.514	1 x 6	1.451	50	1.551	1742	2341
TBA	3/0	0.454	55	0.564	1 x 4	1.571	60	1.691	2223	2922
TBA	4/0	0.51	55	0.62	1 x 4	1.707	60	1.827	2770	3550
TBA	250	0.558	65	0.688	1 x 4	1.971	60	2.091	3249	4242
551452	350	0.661	65	0.791	1 x 3	2.219	60	2.339	4531	5696
605410	500	0.789	65	0.919	1 x 2	2.528	75	2.678	6445	7903
563407	600	0.866	80	1.026	1 x 2	2.787	75	2.937	7693	9418
TBA	750	0.968	80	1.128	1 x 1	3.033	85	3.203	9618	11605

All dimensions are nomial and subject to normal manufacturing tolerances

Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25° C	AC Resistance @ 90° C	Inductive Reactance @ 60 Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity @ 60° C	Allowable Ampacity @ 75° C	Allowable Ampacity @ 90° C
	AWG/kcmil	inch	lb.	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amps	Amps	Amps	Amps
TBA	8	6	528	0.652	0.815	0.036	3754	32	40	44
574460	6	6.6	840	0.411	0.514	0.034	5966	44	52	60
TBA	4	7.4	1336	0.258	0.323	0.033	9491	56	68	76
TBA	2	8.4	2124	0.162	0.203	0.031	15089	76	92	104
TBA	1	9.5	2678	0.129	0.161	0.032	19029	88	104	116
890229	1/0	10.1	3379	0.102	0.128	0.031	24011	100	120	136
TBA	2/0	10.9	4259	0.081	0.101	0.03	30264	116	140	156
TBA	3/0	11.8	5370	0.064	0.08	0.03	38154	132	160	180
TBA	4/0	12.8	6771	0.051	0.064	0.029	48114	156	184	208
TBA	250	14.6	8000	0.043	0.054	0.03	56845	172	204	232
551452	350	16.4	11200	0.031	0.039	0.029	79583	208	248	280
605410	500	18.7	16000	0.022	0.027	0.028	113690	256	304	344
563407	600	20.6	19200	0.018	0.023	0.029	136428	282	336	380
TBA	750	22.4	24000	0.014	0.019	0.028	170535	320	380	428

All dimensions are nomial and subject to normal manufacturing tolerances
† 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)

Hazardous Location Definitions*

Hazardous Locations

Flammable gases, vapors produced from flammable liquid, vapors generated from combustible liquid, combustible dust, or easily ignitable fibers or flyings may be present in the air in quantities sufficient to produce fire or explosions under the below conditions:

Zone 0

1. Present continuously
2. Present for long periods of time

Class I, Zone 1

1. Are likely to exist under normal operating conditions
2. May exist frequently because of repair or maintenance operations or because of leakage
3. May exist due to equipment breakdown or faulty operation
4. Adjacent to a Zone 0 Location

Class I, Zone 2

1. Are NOT likely to exist under normal operating conditions
2. Are confined within closed containers of closed systems from which they can escape, only as a result of accidental rupture or breakdown of the containers or system, or as a result of the abnormal operation of the equipment with which the liquids or gases are handled, processed, or used
3. Are prevented by positive mechanical ventilation but which may become hazardous as a result of failure or abnormal operation of the ventilation equipment
4. Adjacent to a Zone 1 location

*** Per NEC NFPA 70 (2020) Article 505**

Location Classification

Hazardous Material	NEC Class	NEC Class	NEC Zone
Gas & Vapor	Class I	Division 1	Zone 0
			Zone 1
		Division 2	Zone 2
Dust	Class II	Division 1	Zone 0
			Zone 1
		Division 2	Zone 2
Fibers and Flyings	Class III	Division 1	Zone 0
			Zone 1
		Division 2	Zone 2

Ignitable Gas or Vapor Mixture	NEC Division System	NEC Zone System
Present CONTINUALLY or LASTS LONG PERIODS	Division 1	Zone 0
Present INTERMITTENTLY		Zone 1
NOT NORMALLY Present (Present ACCIDENTLY)	Division 2	Zone 2

Notes:

Southwire®

For information on these products
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06/2021