Armorlite® Type MC THHN/THWN Aluminum Conductor Feeder Cable with Green Insulated Ground 120/208V Colors

Aluminum THHN/THWN-2 Insulated Singles with 8000 series Triple E™ Aluminum Alloy. Green Insulated AlumaFlex™ Aluminum Alloy Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor.

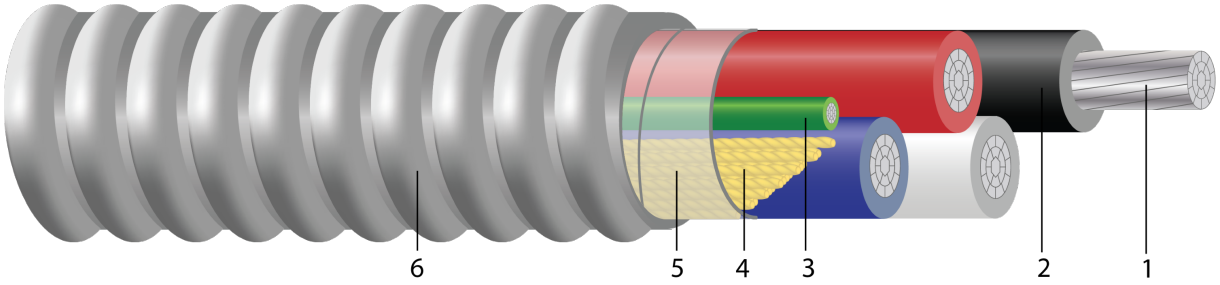

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B801
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Ground:** Green Insulated aluminum ground
4. **Filler:** Fillers as needed
5. **Binder:** Mylar tape
6. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire Armorlite® Type MC Feeder cable is suitable for use as follows:

- Feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Environmental air-handling spaces per NEC 300.22 (C).
- Installation in cable tray and approved raceways, or as aerial cable on a messenger.
- Under raised floors for information technology equipment conductors and cables per NEC 645.5(D) & 645.5(E)
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.
- Type THHN/THWN rated 90ºC Dry/ 75ºC Wet

Southwire Armorlite® Type MC Feeder Cable - meets or exceeds the following requirements:

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) (www.ul.com)
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 330
- Listed for use in UL 1, 2 and 3 Hour Through Penetration Firestop Systems

SPECIFICATIONS:

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- UL 83 Thermoplastic Insulated Wires and Cables
- UL 1569 Metal-Clad Cables

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- UL 1479 Standard for Safety Fire Tests of Penetration Firestops
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify "Made in the USA Only!" when ordering to ensure your project receives American made products.

SAMPLE PRINT LEGEND:

E96627 {UL} TYPE MC AWG XX THHN OR THWN CDRS FOR USE IN CABLE TRAYS 600 VOLTS

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft
457720	1/0	3	BK,RD,WE,GN	0.336	10	60	1x4	1.568	928
457715	1/0	3	BK,RD,WE,GN	0.336	10	60	1x2	1.329	698
457713	1/0	3	BK,RD,WE,GN	0.336	10	60	1x4	1.302	665
456938	2/0	3	BK,RD,WE,GN	0.376	12	60	1x4	1.379	769
457723	2/0	3	BK,RD,WE,GN	0.376	12	60	1x2	1.406	802
649600	2/0	3	BK,RD,WE,GN	0.376	12	60	1x4	1.318	704
458396	3/0	3	BK,RD,WE,GN	0.422	15	60	1x4	1.489	953
456829	3/0	3	BK,RD,WE,GN	0.422	16	60	1x2/0	1.58	1081
456827	3/0	3	BK,RD,WE,GN	0.422	16	60	1x3	1.502	969
583382	4/0	3	BK,RD,WE	0.474	19	60	1x1	1.584	1130
456818	4/0	3	BK,RD,WE,GN	0.474	19	60	1x2	1.616	1149
456816	4/0	3	BK,RD,WE,GN	0.474	19	60	1x1	1.642	1181
580893	4/0	4	BK,RD,BE,WE,GN	0.474	19	60	1x2	1.786	1429
457763	250	3	BK,RD,WE,GN	0.52	22	70	1x2	1.745	1335
457765	250	3	BK,RD,WE,GN	0.52	22	70	1x1	1.771	1366
592913	250	4	BK,RD,BE,WE,GN	0.52	22	70	1x1/0	1.978	1780
640733	250	4	BK,RD,BE,WE,GN	0.52	22	70	1x1	1.96	1731
556793	250	4	BK,RD,BE,WE	0.52	22	70	1x3/0	1.962	1791
457787	300	3	BK,RD,WE,GN	0.569	21	70	1x2	1.842	1521
457785	300	3	BK,RD,WE,GN	0.569	21	70	1x1	1.868	1552
457797	350	3	BK,RD,WE,GN	0.615	35	70	1x4/0	2.042	1886
457795	350	3	BK,RD,WE,GN	0.615	35	70	1x1/0	1.974	1755
457793	350	3	BK,RD,WE,GN	0.615	35	70	1x1	1.956	1727
561285	350	4	BK,RD,BE,WE	0.615	35	70	1x4/0	2.2	2319
598035	350	4	BK,RD,BE,WE,GN	0.615	35	70	1x1/0	2.19	2262
457799	400	3	BK,RD,WE,GN	0.659	35	70	1x1	2.039	1903
457801	400	3	BK,RD,WE,GN	0.659	35	70	1x3/0	2.1	2011
584023	400	3	BK,RD,WE	0.659	35	70	1x3/0	2.041	1943
457815	500	3	BK,RD,WE,GN	0.735	34	70	1x2/0	2.225	2313
457817	500	3	BK,RD,WE,GN	0.735	34	70	1x1	2.188	2250
457815	500	3	BK,RD,WE,GN	0.735	34	70	1x2/0	2.221	2300
564987	500	4	BK,RD,BE,WE	0.735	34	70	1x2/0	2.416	2926
457779	600	3	BK,RD,WE,GN	0.812	58	80	1x400	2.549	3096
456881	600	3	BK,RD,WE,GN	0.812	58	80	1x1/0	2.385	2683
552543	600	4	BK,RD,BE,WE	0.812	58	80	1x250	2.688	3634
456858	750	3	BK,RD,WE,GN	0.908	53	80	1x750	2.88	3980
561262	750	4	BK,RD,BE,WE,	0.908	53	80	1x600	3.059	4657
139021	1/0	4	BK,RD,BE,WE,GN	0.336	19	60	1x4	1.430	840
457725	2/0	4	BK,RD,WE,BE,GN	0.376	12	60	1x4	1.54	1035
456822	3/0	4	BK,RD,BE,WE	0.422	16	60	1x4	1.644	1196

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft
456820	3/0	4	BK,RD,BE,WE,GN	0.422	16	60	1x1/0	1.715	1290
457775	250	4	BK,RD,BE,WE,GN	0.52	22	70	1x2/0	1.998	1815
457773	250	4	BK,RD,BE,WE,GN	0.52	22	70	1x3/0	2.021	1859
457791	300	4	BK,RD,BE,WE,GN	0.569	21	70	1x1/0	2.089	1991
456844	350	4	BK,RD,BE,WE,GN	0.615	35	70	1x3/0	2.233	2340
456846	350	4	BK,RD,BE,WE,GN	0.615	35	70	1x4/0	2.259	2392
457807	400	4	BK,RD,BE,WE,GN	0.659	35	70	1x4/0	2.353	2625
457805	400	4	BK,RD,BE,WE,GN	0.659	35	70	1x350	2.434	2803
457803	400	4	BK,RD,BE,WE,GN	0.659	35	70	1x3/0	2.328	2573
457831	500	4	BK,RD,BE,WE,GN	0.735	34	70	1x350	2.604	3260
457813	500	4	BK,RD,BE,WE,GN	0.735	34	70	1x250	2.556	3142
457825	500	4	BK,RD,BE,WE,GN	0.735	34	70	1x2/0	2.475	2986
457829	500	4	BK,RD,BE,WE,GN	0.735	34	70	1x3/0	2.498	3030
456869	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x4/0	2.725	3621
456867	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x600	2.912	4106
456865	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x3/0	2.699	3569
456871	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x400	2.826	3858
456873	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x250	2.757	3681
456875	600	4	BK,RD,BE,WE,GN	0.812	58	80	1x350	2.805	3798
456854	750	4	BK,RD,BE,WE,GN	0.908	53	80	1x3/0	2.926	4279
456852	750	4	BK,RD,BE,WE,GN	0.908	53	80	1x350	3.032	4509
456850	750	4	BK,RD,BE,WE,GN	0.908	53	80	1x400	3.053	4568
456848	750	4	BK,RD,BE,WE,GN	0.908	53	80	1x600	3.14	4817

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM
Note: Conductor number = number of phase conductors. Does not include green ground.

Table 2 – Electrical and Engineering Data

Cond. Size	Conductor Number	Min. Bend Radius	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
1/0	3	11	1900	0.168	0.201	0.044	120	135
1/0	3	9.3	1900	0.168	0.201	0.044	120	135
1/0	3	9.1	1900	0.168	0.201	0.044	120	135
2/0	3	9.7	2395	0.133	0.16	0.043	135	150
2/0	3	9.8	2395	0.133	0.16	0.043	135	150
2/0	3	9.2	2395	0.133	0.16	0.043	135	150
3/0	3	10.4	3020	0.105	0.126	0.042	155	175
3/0	3	11.1	3020	0.105	0.126	0.042	155	175
3/0	3	10.5	3020	0.105	0.126	0.042	155	175
4/0	3	11.1	3808	0.084	0.1	0.041	180	164
4/0	3	11.3	3808	0.084	0.1	0.041	180	205
4/0	3	11.5	3808	0.084	0.1	0.041	180	205
4/0	4	12.5	4062	0.084	0.1	0.041	144	164
250	3	12.2	4500	0.071	0.086	0.041	205	230
250	3	12.4	4500	0.071	0.086	0.041	205	230
250	4	13.8	4800	0.071	0.086	0.041	164	184
250	4	13.7	4800	0.071	0.086	0.041	164	184
250	4	13.7	4800	0.071	0.086	0.041	164	184
300	3	12.9	5400	0.059	0.071	0.041	230	260
300	3	13.1	5400	0.059	0.071	0.041	230	260
350	3	14.3	6300	0.05	0.062	0.04	250	280
350	3	13.8	6300	0.05	0.062	0.04	250	280
350	3	13.7	6300	0.05	0.062	0.04	250	280
350	4	15.4	8400	0.05	0.062	0.04	200	224
350	4	15.3	8400	0.05	0.062	0.04	200	224
400	3	14.3	7200	0.044	0.054	0.04	270	305
400	3	14.7	7200	0.044	0.054	0.04	270	305
400	3	14.3	7200	0.044	0.054	0.04	270	305
500	3	15.6	9000	0.035	0.044	0.039	310	350
500	3	15.3	9000	0.035	0.044	0.039	310	350
500	3	15.5	9000	0.035	0.044	0.039	310	350
500	4	16.9	12000	0.035	0.044	0.039	248	280
600	3	17.8	10800	0.029	0.037	0.039	340	385
600	3	16.7	10800	0.029	0.037	0.039	340	385
600	4	18.8	14400	0.029	0.037	0.039	272	308
750	3	20.2	13500	0.024	0.031	0.038	385	435
750	4	21.4	18000	0.024	0.031	0.038	308	348
1/0	4	10.0	2027	0.168	0.201	0.044	96	108
2/0	4	10.8	2555	0.133	0.16	0.043	108	120
3/0	4	11.5	3221	0.105	0.126	0.042	124	140

Cond. Size	Conductor Number	Min. Bend Radius	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
3/0	4	12	3221	0.105	0.126	0.042	124	140
250	4	14	4800	0.071	0.086	0.041	164	184
250	4	14.1	4800	0.071	0.086	0.041	164	184
300	4	14.6	5760	0.059	0.071	0.041	184	208
350	4	15.6	6720	0.05	0.062	0.04	200	224
350	4	15.8	6720	0.05	0.062	0.04	200	224
400	4	16.5	7680	0.044	0.054	0.04	216	244
400	4	17	7680	0.044	0.054	0.04	216	244
400	4	16.3	7680	0.044	0.054	0.04	216	244
500	4	18.2	9600	0.035	0.044	0.039	248	280
500	4	17.9	9600	0.035	0.044	0.039	248	280
500	4	17.3	9600	0.035	0.044	0.039	248	280
500	4	17.5	9600	0.035	0.044	0.039	248	280
600	4	19.1	11520	0.029	0.037	0.039	272	308
600	4	20.4	11520	0.029	0.037	0.039	272	308
600	4	18.9	11520	0.029	0.037	0.039	272	308
600	4	19.8	11520	0.029	0.037	0.039	272	308
600	4	19.3	11520	0.029	0.037	0.039	272	308
600	4	19.6	11520	0.029	0.037	0.039	272	308
750	4	20.5	14400	0.024	0.031	0.038	308	348
750	4	21.2	14400	0.024	0.031	0.038	308	348
750	4	21.4	14400	0.024	0.031	0.038	308	348
750	4	22	14400	0.024	0.031	0.038	308	348

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.
* Ampacities have been adjusted for more than Three Current-Carrying Conductors.