



Armorlite® Type MC THHN/THWN Aluminum Conductor Feeder Cable 120/208V Colors

Aluminum THHN/THWN-2 Insulated Singles with 8000 series Triple E™ Aluminum Alloy. Bare 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:** Bare 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 90°C Dry/ 75°C 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

Color Code - 3/C: Black, Red, White

- 4/C: Black, Red, Blue, White

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
- 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
558759◇	1/0	3	BK,RD,WE	0.336	10	60	1x4	1.240	618
557207◇	2/0	3	BK,RD,WE	0.376	12	60	1x4	1.276	705
558767◇	3/0	3	BK,RD,WE	0.422	16	60	1x4	1.427	845
557215◇	4/0	3	BK,RD,WE	0.474	19	60	1x2	1.590	1087
558056◇	250	3	BK,RD,WE	0.520	22	70	1x2	1.735	1273
559647◇	250	3	BK,RD,WE	0.520	22	70	1x1	1.735	1293
554278◇	300	3	BK,RD,WE	0.569	35	70	1x1	1.843	1475
560508◇	350	3	BK,RD,WE	0.615	35	70	1x1	1.942	1655
557773◇	400	3	BK,RD,WE	0.659	35	70	1x1	2.035	1831
563586◇	500	3	BK,RD,WE	0.735	35	70	1x3/0	2.201	2259
561253◇	500	3	BK,RD,WE	0.735	35	70	1x250	2.243	2412
557223◇	500	3	BK,RD,WE	0.735	35	70	1x1	2.201	2179
554847◇	500	3	BK,RD,WE	0.735	35	70	1x2/0	2.201	2226
600759◇	600	3	BK,RD,WE	0.812	58	80	1x1/0	2.415	2610
563608◇	600	3	BK,RD,WE	0.812	58	80	1x400	2.662	3014
557231◇	750	3	BK,RD,WE	0.908	58	80	1x1/0	2.620	3121
554849◇	750	3	BK,RD,WE	0.908	58	80	1x3/0	2.620	3180
605287◇	1/0	4	BK,RD,BE,WE	0.336	10	60	1x4	1.304	781
557256◇	2/0	4	BK,RD,BE,WE	0.376	19	60	1x4	1.400	918
605295◇	3/0	4	BK,RD,BE,WE	0.422	16	60	1x4	1.614	1168
557264◇	4/0	4	BK,RD,BE,WE	0.474	19	60	1x2	1.749	1418
607069◇	250	4	BK,RD,BE,WE	0.520	22	70	1x1	1.901	1678
584740◇	300	4	BK,RD,BE,WE	0.569	21	70	1x1/0	2.068	1903
607978◇	300	4	BK,RD,BE,WE	0.569	21	70	1x1	2.022	1932
647436◇	350	4	BK,RD,BE,WE	0.615	35	70	1x3/0	2.183	2266
607077◇	350	4	BK,RD,BE,WE	0.615	35	70	1x1/0	2.133	2183
597447◇	400	4	BK,WE,RD,BE	0.659	35	70	1x4/0	2.464	2571
555117◇	400	4	BK,RD,BE,WE	0.659	35	70	1x3/0	2.237	2491
556194◇	500	4	BK,RD,BE,WE	0.735	35	70	1x4/0	2.423	2989
552747◇	500	4	BK,RD,BE,WE	0.735	35	70	1x250	2.423	3025
607085◇	500	4	BK,RD,BE,WE	0.735	35	70	1x3/0	2.423	2947
607093◇	600	4	BK,RD,BE,WE	0.812	58	80	1x3/0	2.642	3496
552483◇	600	4	BK,RD,BE,WE	0.812	58	80	1x400	2.939	3767
607101◇	750	4	BK,RD,BE,WE	0.908	53	80	1x3/0	2.895	4229
561602◇	750	4	BK,RD,BE,WE	0.908	53	80	1x750	3.200	4832
552746◇	750	4	BK,RD,BE,WE	0.908	53	80	1x4/0	2.891	4266
559833◇	900	4	BK,RD,BE,WE	0.999	58	80	1x250	3.120	5046
677592◇	1000	4	BK,RD,BE,WE	1.060	61	80	1x600	3.563	5659

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

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	8.6	1900	0.168	0.201	0.044	120	135
2/0	3	8.9	2395	0.133	0.160	0.043	135	150
3/0	3	10.0	3020	0.105	0.126	0.042	155	175
4/0	3	11.1	3808	0.084	0.100	0.041	180	205
250	3	12.1	4500	0.071	0.086	0.041	205	230
250	3	12.1	4500	0.071	0.086	0.041	205	230
300	3	12.9	5400	0.059	0.071	0.041	230	260
350	3	13.6	6300	0.050	0.062	0.040	250	280
400	3	14.2	7200	0.044	0.054	0.040	270	305
500	3	15.4	9000	0.035	0.044	0.039	310	350
500	3	15.7	9000	0.035	0.044	0.039	310	350
500	3	15.4	9000	0.035	0.044	0.039	310	350
500	3	15.4	9000	0.035	0.044	0.039	310	350
600	3	16.9	10800	0.029	0.037	0.039	340	385
600	3	18.6	10800	0.029	0.037	0.039	340	385
750	3	18.3	13500	0.024	0.031	0.038	385	435
750	3	18.3	13500	0.024	0.031	0.038	385	435
1/0	4	9.1	2027	0.168	0.201	0.044	96	108
2/0	4	10.6	2555	0.133	0.160	0.043	108	120
3/0	4	11.3	3221	0.105	0.126	0.042	124	140
4/0	4	12.2	4062	0.084	0.100	0.041	144	164
250	4	13.3	4800	0.071	0.086	0.041	164	184
300	4	14.5	5760	0.059	0.071	0.041	184	208
300	4	14.2	5760	0.059	0.071	0.041	184	208
350	4	15.3	6720	0.050	0.062	0.040	200	224
350	4	14.9	6720	0.050	0.062	0.040	200	224
400	4	17.2	7680	0.044	0.054	0.040	216	244
400	4	15.7	7680	0.044	0.054	0.040	216	244
500	4	17.0	9600	0.035	0.044	0.039	248	280
500	4	17.0	9600	0.035	0.044	0.039	248	280
500	4	17.0	9600	0.035	0.044	0.039	248	280
600	4	18.5	11520	0.029	0.037	0.039	272	308
600	4	20.6	11520	0.029	0.037	0.039	272	308
750	4	20.3	14400	0.024	0.031	0.038	308	348
750	4	22.2	14400	0.024	0.031	0.038	308	348
750	4	20.2	14400	0.024	0.031	0.038	308	348
900	4	21.8	17280	0.020	0.027	0.037	340	384
1000	4	24.9	19200	0.018	0.025	0.037	356	400





- * 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.

