



Armorlite® Type MC THHN/THWN PVC Jacketed Aluminum Conductor Feeder Cable 120/208V Colors. Silicone Free

Aluminum THHN/THWN 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. Overall PVC Jacket. Sunlight Resistant.



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
7. **Jacket:** Polyvinyl Chloride (PVC) sunlight resistant, and corrosion resistant

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.
- Where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or of hydrochloric acids.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Suitable for Wet Location per NEC 330.10(A)(11)
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- 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(D)(2)
- 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:

SOUTHWIRE {UL} E96627 X/C XXX KCMIL COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 THHN OR THWN CDRS 600 VOLTS GW 1 X X AWG TYPE MC EZ-JKT FOR CT USE SUN. RES. 90 DEGREES C





Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Jacket Thickness	Approx. OD	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	mil	inch	lbs/ 1000ft
678282	1/0	2	BK,RD	0.336	10	60	1x2	1.118	50	1.218	587
679278	3/0	2	BK,RD	0.422	16	60	1x1/0	1.292	55	1.402	811
593086	4/0	2	BK,WE	0.474	19	60	1x1/0	1.396	55	1.506	934
675674	300	2	BK,RD	0.569	21	70	1x4/0	1.843	65	1.975	1468
679281	350	2	BK,RD	0.615	35	70	1x250	1.942	65	2.074	1639
552587	1/0	3	BK,RD,WE	0.336	10	60	1x4	1.190	50	1.290	723
552465	2/0	3	BK,RD,WE	0.376	12	60	1x4	1.276	55	1.386	846
552464	3/0	3	BK,RD,WE	0.422	16	60	1x4	1.377	50	1.477	968
552484	4/0	3	BK,RD,WE	0.474	19	60	1x2	1.590	65	1.722	1297
555667	250	3	BK,RD,WE	0.520	22	70	1x2	1.735	65	1.867	1492
563804	250	3	BK,RD,WE	0.520	22	70	1x1	1.735	65	1.867	1512
599377	250	3	BK,RD,WE,GN	0.520	22	70	1x1/0 GG	1.813	65	1.945	1608
561248	350	3	BK,RD,WE	0.615	35	70	1x1	1.942	65	2.074	1905
555809	500	3	BK,RD,WE	0.735	35	70	1x1	2.201	65	2.333	2466
563589	500	3	BK,RD,WE	0.735	35	70	1x3/0	2.201	65	2.333	2547
555812	750	3	BK,RD,WE	0.908	58	80	1x1/0	2.620	80	2.786	3553
554282	1/0	4	BK,RD,BE,WE	0.336	10	60	1x4	1.304	55	1.414	925
555807	2/0	4	BK,RD,BE,WE	0.376	12	60	1x4	1.400	55	1.510	1072
554283	4/0	4	BK,RD,BE,WE	0.474	19	60	1x2	1.749	65	1.881	1648
679730	250	4	BK,RD,BE,WE	0.520	22	70	1x2	1.901	65	2.033	1864
554284	250	4	BK,RD,BE,WE	0.520	22	70	1x1	1.901	65	2.033	1928
554935	300	4	BK,RD,BE,WE	0.569	21	70	1x1	2.022	65	2.154	2197
555808	350	4	BK,RD,BE,WE	0.615	35	70	1x1/0	2.133	65	2.265	2462
554932	500	4	BK,RD,BE,WE	0.735	35	70	1x3/0	2.423	80	2.589	3347
555811	600	4	BK,RD,BE,WE	0.812	58	80	1x3/0	2.662	75	2.812	3798
560782	600	4	BK,RD,BE,WE	0.812	58	80	1x400	2.919	80	3.085	4163
554933	750	4	BK,RD,BE,WE	0.908	53	80	1x3/0	2.895	80	3.061	4704
563603	750	4	BK,RD,BE,WE	0.908	53	80	1x750	3.200	90	3.388	5406

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	2	8.5	1267	0.168	0.201	0.044	120	135
3/0	2	9.8	2013	0.105	0.126	0.042	155	175
4/0	2	10.5	2539	0.084	0.100	0.041	180	205
300	2	13.8	3600	0.059	0.071	0.041	230	260
350	2	14.5	4200	0.050	0.062	0.040	250	280
1/0	3	9.0	1900	0.168	0.201	0.044	120	135
2/0	3	9.7	2395	0.133	0.160	0.043	135	150
3/0	3	10.3	3020	0.105	0.126	0.042	155	175
4/0	3	12.1	3808	0.084	0.100	0.041	180	205
250	3	13.1	4500	0.071	0.086	0.041	205	230
250	3	13.1	4500	0.071	0.086	0.041	205	230
250	3	13.6	4500	0.071	0.086	0.041	205	230
350	3	14.5	6300	0.050	0.062	0.040	250	280
500	3	16.3	9000	0.035	0.044	0.039	310	350
500	3	16.3	9000	0.035	0.044	0.039	310	350
750	3	19.5	13500	0.024	0.031	0.038	385	435
1/0	4	9.9	2027	0.168	0.201	0.044	96	108
2/0	4	10.6	2555	0.133	0.160	0.043	108	120
4/0	4	13.2	4062	0.084	0.100	0.041	144	164
250	4	14.2	4800	0.071	0.086	0.041	164	184
250	4	14.2	4800	0.071	0.086	0.041	164	184
300	4	15.1	5760	0.059	0.071	0.041	184	208
350	4	15.9	6720	0.050	0.062	0.040	200	224
500	4	18.1	9600	0.035	0.044	0.039	248	280
600	4	19.7	11520	0.029	0.037	0.039	272	308
600	4	21.6	11520	0.029	0.037	0.039	272	308
750	4	21.4	14400	0.024	0.031	0.038	308	348
750	4	23.7	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.

