



## Armorlite® Type MC THHN/THWN Aluminum Conductor Feeder Cable with Green Insulated Ground 277/480V 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 or ASTM B836
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.
- Suitable for power and lighting circuits.
- 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
- Anti-short bushings are not required for use with MC cable per NEC and UL

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

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://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: Brown, Orange, Yellow

- 4/C: Brown, Orange, Yellow, Gray





**SPECIFICATIONS:**

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- 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
- RoHS Compliant Lead-Free, Silicone-Free
- 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
671715	1/0	3	BN,OE,YW,GN	0.336	19	60	1x4	1.250	645
643340	4/0	3	BN,OE,YW,GN	0.474	19	60	1x2	1.630	1130
640731	250	3	BN,OE,YW,GN	0.520	22	70	1x1	1.740	1340
672216	400	3	BN,OE,YW,GN	0.659	35	70	1x3/0	2.190	1988
641832	500	3	BN,OE,YW,GN	0.735	35	70	1x1	2.210	2225
586227	500	3	BN,OE,YW,GN	0.735	35	70	1x2/0	2.208	2299
675737	500	3	BN,OE,YW,GN	0.735	34	70	1x350	2.568	2596
668399	500	3	BN,OE,YW,GN	0.735	34	70	1x3/0	2.253	2316
586488	600	3	BN,OE,YW,GN	0.812	41	80	1x400	2.526	3124
674843	600	3	BN,OE,YW,GN	0.812	41	80	1x3/0	2.448	2753
586489	600	3	BN,OE,YW,GN	0.812	41	80	1x350	2.538	3046
674893	1/0	4	BN,OE,YW,GY,GN	0.336	19	60	1x4	1.370	795
593602	250	4	BN,OE,YW,GY,GN	0.520	22	70	1x1	1.990	1755
139015	250	4	BN,OE,YW,GY,GN	0.520	22	70	1x2	1.916	1713
674647	350	4	BN,OE,YW,GY,GN	0.616	35	70	1x2	2.163	2180
457823	500	4	BN,OE,YW,GY,GN	0.735	35	70	1x250	2.560	2541
590100	500	4	BN,OE,YW,GY,GN	0.735	34	70	1x2/0	2.552	2984

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

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.





**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	8.8	1900	0.168	0.201	0.044	120	135
4/0	3	8.8	1900	0.084	0.100	0.041	180	205
250	3	12.2	4500	0.071	0.086	0.041	205	230
400	3	15.3	7200	0.044	0.054	0.040	270	305
500	3	15.5	9000	0.035	0.044	0.039	310	350
500	3	15.5	9000	0.035	0.044	0.039	310	350
500	3	18.0	9000	0.035	0.044	0.039	310	350
500	3	15.8	9000	0.035	0.044	0.039	310	350
600	3	17.7	10800	0.029	0.037	0.039	340	385
600	3	17.1	10800	0.029	0.037	0.039	340	385
600	3	17.8	10800	0.029	0.037	0.039	340	385
1/0	4	9.6	2027	0.168	0.201	0.044	96	108
250	4	13.9	4800	0.071	0.086	0.041	164	184
250	4	13.4	4800	0.071	0.097	0.027	164	184
350	4	15.1	6720	0.051	0.069	0.026	200	224
500	4	17.9	9600	0.035	0.044	0.039	248	280
500	4	17.8	9600	0.035	0.044	0.039	248	280

\* 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.

