



# Armorlite® Type MC THHN/THWN Copper Conductor Feeder Cable 277/480V Colors

Copper THHN/THWN-2 Insulated Singles. Green or Bare Copper Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor.

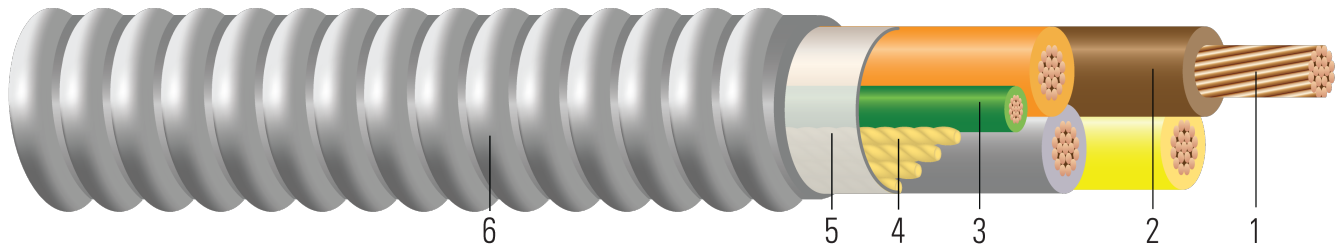


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Class B compressed copper per ASTM B3 and ASTM B8
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Ground:** Green Insulated or bare stranded copper 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.
- Environmental air-handling spaces per NEC 300.22 (C).
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Installation in cable tray and approved raceways.
- 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.
- Binder tape with print legend wrapped around assembly.
- 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 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

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper 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-2 (European Directive 2011/65/EU)
- 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	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft	lbs/1000ft
562658◇	1	3	BN,OE,YW	0.322	19	60	1x6 GG	1.270	864	1141
562656◇	1/0	3	BN,OE,YW	0.361	19	60	1x6 GG	1.241	1069	1360
640693	2/0	3	BN,OE,YW,GN	0.405	19	60	1x6	1.408	1326	1838
646706	3/0	4	BN,OE,YW,GY,GN	0.456	19	60	1x4	1.723	2223	2813
585747	3/0	3	BN,OE,YW,GN	0.456	19	60	1x3	1.573	1733	2407
578691	4/0	3	BN,OE,YW,GN	0.512	19	60	1x4	1.64	2109	2590
578528	4/0	3	BN,OE,YW,GN	0.512	19	60	1x2	1.67	2186	2679
580856	4/0	4	BN,OE,YW,GY,GN	0.512	19	60	1x4	1.816	2769	3377
649419	4/0	4	BN,OE,YW,GY,GN	0.512	19	60	1x2	1.846	2846	3466
678419	4/0	4	BN,OE,YW,GY,GN	0.512	19	60	1x1/0	1.893	2968	3614
580737	350	3	BN,OE,YW,GN	0.661	37	70	1x1	2.016	3535	4170
677973	350	3	BN,OE,YW,GN	0.661	37	70	1x1/0	2.034	3603	4246
560114	350	3	BN,OE,YW,GN	0.661	37	70	1x3/0	2.081	3797	4462
560107◇	400	3	BN,OE,YW	0.705	37	70	1x250 GG	2.278	4521	5305
576204	500	3	BN,OE,YW	0.789	37	70	1x4/0 GG	2.342	5337	6094
669316	500	3	BN,OE,YW	0.789	37	70	1x2/0 GG	2.307	5092	5790
579232◇	600	3	BN,OE,YW	0.865	61	80	1x350 GG	2.578	6704	7666
582062	600	3	BN,OE,YW,GN	0.865	61	80	1x2	2.461	5820	6621
677974	600	3	BN,OE,YW,GN	0.865	61	80	1x1/0	2.461	5942	6760
579943	600	3	BN,OE,YW,GN	0.865	61	80	1x4/0	2.527	6272	7115
646845	600	4	BN,OE,YW,GY,GN	0.865	61	80	1x300	2.871	8419	9510
582068◇	1	4	BN,OE,YW,GY	0.322	19	60	1x6 GG	1.331	1125	1482
562469◇	1/0	4	BN,OE,YW,GY	0.361	19	60	1x6	1.365	1447	1809
668615◇	4/0	4	BN,OE,YW,GY	0.512	19	60	1x3 GG	1.883	2803	3413
653131◇	250	4	PE,TN,PK,GY	0.558	37	70	1x4 GG	2.029	3248	3919
456838◇	350	4	BN,OE,YW,GY	0.661	37	70	1x2/0	2.28	4781	5559
553839◇	350	4	BN,OE,YW,GY	0.661	37	70	1x1	2.303	4627	5382
596449	400	4	BN,OE,YW,GY	0.705	37	70	1x250 GG	2.609	5769	6699
579949	400	4	BN,OE,YW,GY	0.705	37	70	1x2/0 GG	2.358	5404	6273
139624◇	600	4	PE,TN,PK,GY	0.865	61	80	1x2/0 GG	2.772	7899	8971
138231◇	600	4	BN,OE,YW,GY	0.865	61	80	1x2 GG	2.664	7691	8643

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

**Note:** Conductor number = number of phase conductors. Does not include ground

**Note:** GG = Green insulated ground

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	3	8.9	2008	0.128	0.154	0.046	130	145
1/0	3	8.7	2534	0.102	0.122	0.044	150	170
2/0	3	10.5	3194	0.081	0.097	0.043	175	195
3/0	4	12.1	4295	0.064	0.078	0.042	160	180
3/0	3	11.8	4027	0.064	0.078	0.042	200	225
4/0	3	11.5	5078	0.051	0.062	0.041	230	260
4/0	3	11.7	5078	0.051	0.062	0.041	230	260
4/0	4	12.7	5416	0.051	0.062	0.041	184	208
4/0	4	12.9	5416	0.051	0.062	0.041	184	208
4/0	4	13.3	5416	0.051	0.062	0.041	184	208
350	3	14.1	8400	0.031	0.039	0.04	310	350
350	3	14.2	8400	0.031	0.039	0.04	310	350
350	3	14.6	8400	0.031	0.039	0.04	310	350
400	3	15.9	9600	0.027	0.035	0.040	335	380
500	3	16.4	12000	0.022	0.029	0.039	380	430
500	3	16.1	12000	0.022	0.029	0.039	380	430
600	3	18.0	14400	0.018	0.025	0.039	420	475
600	3	17.2	14400	0.018	0.025	0.039	420	475
600	3	17.2	14400	0.018	0.025	0.039	420	475
600	3	17.7	14400	0.018	0.025	0.039	420	475
600	4	20.1	19200	0.018	0.025	0.039	336	380
1	4	9.3	2142	0.128	0.154	0.046	104	116
1/0	4	9.6	2703	0.102	0.122	0.044	120	136
4/0	4	9.6	5417	0.102	0.122	0.044	184	208
250	4	14.2	6400	0.043	0.053	0.041	204	232
350	4	16	8960	0.031	0.039	0.04	248	280
350	4	16.1	8960	0.031	0.039	0.040	248	280
400	4	18.3	10240	0.027	0.035	0.040	268	304
400	4	16.5	10240	0.027	0.035	0.040	268	304
600	4	19.4	15360	0.018	0.025	0.039	336	380
600	4	18.6	15360	0.018	0.025	0.039	336	380

\* 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.

