Armorlite® Type MC THHN/THWN Copper Conductor Feeder Cable

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

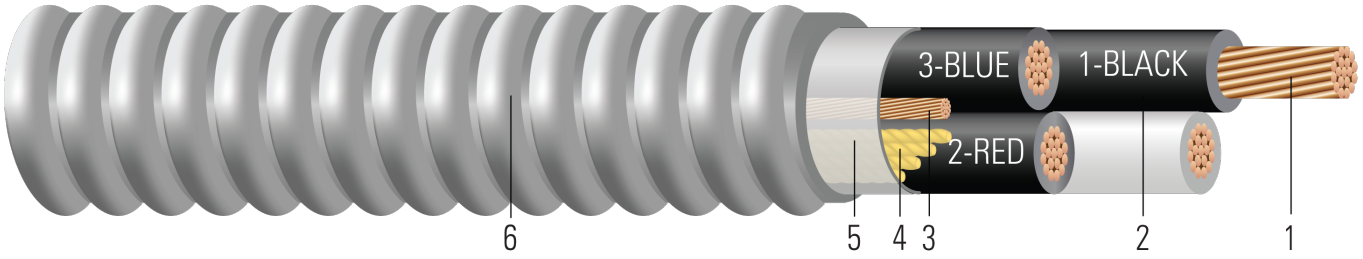

Image not to scale. See Table 1 for dimensions.

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:** 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 90ºC Dry.

Southwire Armorlite® Type MC 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 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

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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
- 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	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
890347◊	1	3	0.322	19	60	1x6 GG	1.275	864	1147
890348◊	1/0	3	0.361	19	60	1x6	1.241	1069	1349
890349◊	2/0	3	0.405	19	60	1x6	1.339	1326	1637
458398◊	2/0	4	0.405	19	60	1x6GG	1.578	1742	2250
890394◊	3/0	3	0.456	19	60	1x4	1.447	1699	2039
890351◊	4/0	3	0.512	19	60	1x4	1.639	2109	2536
890352◊	250	3	0.558	37	70	1x4	1.817	2469	2975
555146◊	350	3	0.661	37	70	1x1/0	2.039	3603	4205
890353◊	350	3	0.661	37	70	1x3	2.039	3438	4039
564192◊	350	3	0.661	37	70	1x3/0	2.242	3797	4433
561375◊	500	3	0.789	37	70	1x250	2.322	5457	6178
890354◊	500	3	0.789	37	70	1x2	2.260	4884	5518
555147◊	750	3	0.968	61	80	1x4/0	2.590	7678	8472
890355◊	1	4	0.322	19	60	1x6 GG	1.351	1125	1490
890356◊	1/0	4	0.361	19	60	1x6	1.371	1399	1760
890357◊	2/0	4	0.405	19	60	1x6	1.573	1742	2218
561032◊	3/0	4	0.456	19	60	1x3	1.694	2257	2783
890395◊	3/0	4	0.456	19	60	1x4	1.694	2223	2749
890359◊	4/0	4	0.512	19	60	1x4	1.795	2769	3322
552552◊	4/0	4	0.512	19	60	1x3	1.795	2803	3356
890360◊	250	4	0.558	37	70	1x4	1.954	3248	3885
581852◊	250	4	0.558	37	70	1x2 GG	1.954	3325	3994
890361◊	350	4	0.661	37	70	1x3	2.251	4530	5323
568710◊	350	4	0.661	37	70	1x3/0	2.387	4889	5705
890362◊	500	4	0.789	37	70	1x2	2.499	6444	7289
564202◊	500	4	0.789	37	70	1x1/0	2.495	6566	7408
564196◊	500	4	0.789	37	70	1x250	2.633	7016	7806
552088◊	600	4	0.865	61	80	1x2	2.611	7691	8691
567671◊	600	4	0.865	61	80	1x3/0	2.798	8007	9041
550453◊	750	4	0.968	61	80	1x1/0	2.864	9684	10653

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	9.4	3194	0.081	0.097	0.043	175	195
2/0	4	11.1	3407	0.081	0.097	0.043	140	156
3/0	3	10.1	4027	0.064	0.078	0.042	200	225
4/0	3	11.5	5078	0.051	0.062	0.041	230	260
250	3	12.7	6000	0.043	0.053	0.041	255	290
350	3	14.3	8400	0.031	0.039	0.040	310	350
350	3	14.3	8400	0.031	0.039	0.040	310	350
350	3	15.7	8400	0.031	0.039	0.040	310	350
500	3	16.3	12000	0.022	0.029	0.039	380	430
500	3	15.8	12000	0.022	0.029	0.039	380	430
750	3	18.1	18000	0.014	0.022	0.038	475	535
1	4	9.5	2142	0.128	0.154	0.046	104	116
1/0	4	9.6	2703	0.102	0.122	0.044	120	136
2/0	4	11.0	3407	0.081	0.097	0.043	140	156
3/0	4	11.9	4295	0.064	0.078	0.042	160	180
3/0	4	11.9	4295	0.064	0.078	0.042	160	180
4/0	4	12.6	5416	0.051	0.062	0.041	184	208
4/0	4	12.6	5416	0.051	0.062	0.041	184	208
250	4	13.7	6400	0.043	0.053	0.041	204	232
250	4	13.7	6400	0.043	0.053	0.041	204	232
350	4	15.8	8960	0.031	0.039	0.040	248	280
350	4	16.7	8960	0.031	0.039	0.040	248	280
500	4	17.5	12800	0.022	0.029	0.039	304	344
500	4	17.5	12800	0.022	0.029	0.039	304	344
500	4	18.4	12800	0.022	0.029	0.039	304	344
600	4	18.3	15360	0.018	0.025	0.039	336	380
600	4	19.6	15360	0.018	0.025	0.039	336	380
750	4	20.0	19200	0.014	0.022	0.038	380	428

***** 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.