

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

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

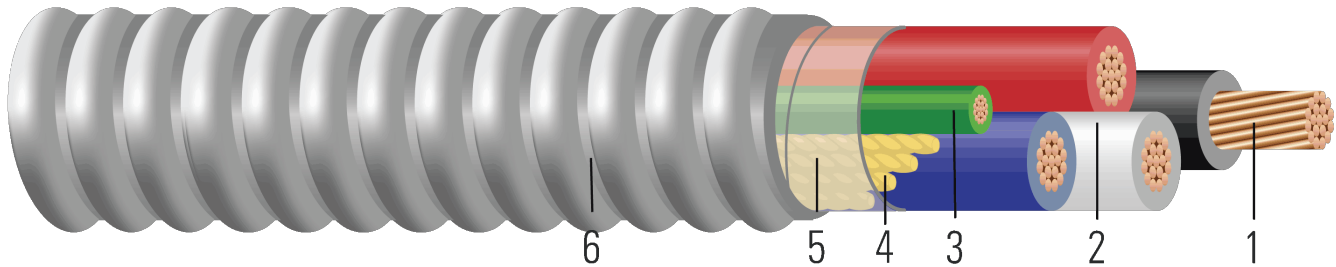


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded 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 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.
- 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

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
- 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 AWG XXX CU THHN OR THWN CDRS 600 VOLTS GW 1 X AWG X TYPE MC EZ-JKT FOR CT USE SUN. RES. 90 DEGREES C {YYYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

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
139393	1/0	3	1-BK,2-RD,WE,GN	0.361	19	60	1x6	1.320	1069	1398
646835	1/0	4	BK,RD,BE,WE,GN,GN/ YW	0.361	19	60	2x3	1.677	1810	2377
458340	2/0	3	1-BK,2-RD,WE,GN	0.395	19	60	1x6	1.405	1326	1672
458338	3/0	4	1-BK,2-RD,3- BE,WE,GN	0.454	19	60	1x4	1.719	2223	2807
458336	4/0	4	1-BK,2-RD,3- BE,WE,GN	0.512	19	60	1x4	1.816	2769	3370
561034	4/0	4	1-BK,2-RD,3-BE,WE	0.512	19	60	1x2	1.797	2846	3424
677338	4/0	5	BK,RD,BE,WE,WE/ BK,GN	0.512	19	60	1x4	1.961	3429	4126
457767	250	3	1-BK,2-RD,WE,GN	0.558	37	70	1x4	1.769	2469	3013
457769	250	3	1-BK,2-RD,3-WE,GN	0.558	37	70	1x2/0	1.866	2753	3346
565545	250	5	BK,RD,BE,WE,WE,GN	0.558	37	70	1x4	2.136	4028	4798
597897	350	4	BK,BK,RD,RD	0.661	37	70	1x2/0	2.264	4781	5606
599144	350	4	BK,BK,RD,RD,GN	0.661	37	70	1x2/0	2.324	4781	5673
643257	350	4	BK,BK,RD,RD,GN	0.661	37	70	1x1	2.283	4627	5500
457821	500	3	1-BK,2-RD,WE,GN	0.789	37	70	1x2	2.253	4884	5589
457819	500	3	BN,OE,YW,GN	0.789	37	70	1x2	2.253	4884	5595
578817	600	4	BK,RD,BE,WE,GN	0.865	61	80	1x2	2.716	7691	8702
678447	600	4	BK,RD,BE,WE,GN	0.865	61	80	1x600	3.003	9355	11034
643537◇	250	4	BK,RD,BE,WE	0.558	37	70	1x2	1.954	3325	3994
456840	350	4	1-BK,2-RD,3- BE,WE,GN	0.661	37	70	1x3	2.194	4530	5321
457839	500	4	BK,RD,BE,WE,GN	0.789	37	70	1x4/0	2.601	6896	7831
457837	500	4	BK,RD,BE,WE,GN	0.789	37	70	1x2/0	2.556	6652	7572
457835	500	4	1-BK,2-RD,3- BE,WE,GN	0.789	37	70	1x2	2.486	6444	7324

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 green ground.





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	9.2	2534	0.102	0.122	0.044	150	170
1/0	4	11.7	2703	0.102	0.122	0.044	120	136
2/0	3	9.8	3194	0.081	0.101	0.043	175	195
3/0	4	12.0	4296	0.064	0.080	0.035	160	180
4/0	4	12.7	5416	0.051	0.062	0.041	184	208
4/0	4	12.6	5416	0.051	0.062	0.041	184	208
4/0	5	13.7	6771	0.051	0.062	0.041	184	182
250	3	12.4	6000	0.043	0.053	0.041	255	290
250	3	13.1	6000	0.043	0.053	0.041	255	290
250	5	15	8000	0.043	0.053	0.041	204	203
350	4	15.8	11200	0.031	0.039	0.04	248	280
350	4	16.3	11200	0.031	0.039	0.04	248	280
350	4	16	11200	0.031	0.039	0.04	248	280
500	3	15.8	12000	0.022	0.029	0.039	380	430
500	3	15.8	12000	0.022	0.029	0.039	380	430
600	4	19	19200	0.018	0.025	0.039	336	380
600	4	22.2	19200	0.018	0.025	0.039	336	380
250	4	13.7	6400	0.043	0.053	0.041	204	232
350	4	15.4	8960	0.031	0.039	0.04	248	280
500	4	18.2	12800	0.022	0.029	0.039	304	344
500	4	17.9	12800	0.022	0.029	0.039	304	344
500	4	17.4	12800	0.022	0.029	0.039	304	344

* 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.

