

# Armorlite® Type MC THHN/THWN PVC Jacketed Copper Conductor Feeder Cable. Silicone Free

Copper THHN/THWN Insulated Singles. Bare Copper Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor. PVC Jacketed, Sunlight Resistant.



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: Bare copper 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

## **SPECIFICATIONS:**

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors



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- 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 {YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

#### Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Overall Weight
	AWG/ Kcmil		inch		mils	No. x AWG	inch	mil	inch	lbs/1000ft	lbs/1000ft
554293◊	1	3	0.322	19	60	1x6 GG	1.268	55	1.378	864	1286
554288◊	2/0	3	0.405	19	60	1x6	1.339	55	1.449	1326	1783
555161◊	3/0	3	0.456	19	60	1x4	1.447	50	1.547	1699	2187
553989◊	4/0	3	0.512	19	60	1x4	1.639	65	1.771	2109	2752
564193◊	350	3	0.661	37	70	1x3/0	2.242	65	2.374	3797	4727
555668◊	500	3	0.789	37	70	1x2	2.260	80	2.426	4884	5876
554290◊	1/0	4	0.361	19	60	1x6	1.362	50	1.460	1399	1864
554384◊	2/0	4	0.405	19	60	1x6	1.573	60	1.693	1742	2371
554291◊	3/0	4	0.456	19	60	1x4	1.694	60	1.975	2223	2957
554331◊	4/0	4	0.512	19	60	1x4	1.795	65	1.927	2769	3548
554948◊	350	4	0.661	37	70	1x3	2.242	75	2.362	4530	5514
555766◊	500	4	0.789	37	70	1x2	2.499	75	2.649	6444	7568
564204◊	500	4	0.789	37	70	1x1/0	2.495	80	2.661	6566	7802

All dimensions are nominal and subject to normal manufacturing tolerances

 $\ensuremath{\diamond}$  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.



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# **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	9.6	2008	0.128	0.154	0.046	130	145
2/0	3	10.1	3194	0.081	0.097	0.043	175	195
3/0	3	10.8	4027	0.064	0.078	0.042	200	225
4/0	3	12.4	5078	0.051	0.062	0.041	230	260
350	3	16.6	8400	0.031	0.039	0.040	310	350
500	3	17.0	12000	0.022	0.029	0.039	380	430
1/0	4	10.2	2703	0.102	0.122	0.044	120	136
2/0	4	11.9	3407	0.081	0.097	0.043	140	156
3/0	4	13.8	4295	0.064	0.078	0.042	160	180
4/0	4	13.5	5416	0.051	0.062	0.041	184	208
350	4	16.5	8960	0.031	0.039	0.040	248	280
500	4	18.5	12800	0.022	0.029	0.039	304	344
500	4	18.6	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.

