Copper Riser MC™ Cable Type MC Cu Feeder THHN/THWN-2 Conductors

1 AWG through 750 kcmil Copper THHN/THWN-2 Insulated Singles. Bare or Insulated Copper Grounding Conductor. UL Listed. 600 Volts. Binder Jacket for Continuous Conductor Support. Lightweight Aluminum Interlocked Armor.

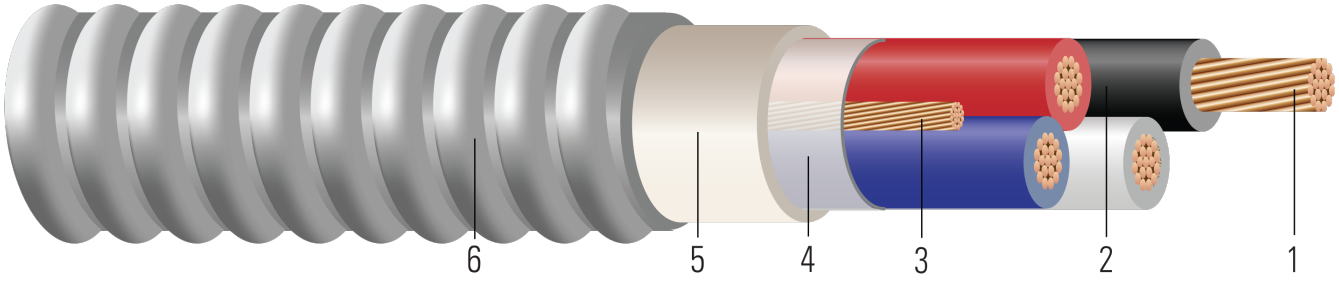

Image not to scale. See Table 1 for dimensions.

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-2
3. **Ground:** Bare copper ground
4. **Binder:** Mylar tape
5. **Polymeric Binder:** Polymeric binder sheath under armor for continuous conductor support
6. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire Armorlite® Type MC Riser Feeder cable is suitable for use as follows:

- Riser cable, vertical applications
- Branch, 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, 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.
- Conductors are Type THHN/THWN-2 rated 90ºC Wet and Dry. Unjacketed MC cables are not rated for wet locations.

Southwire Armorlite® Type MC Riser 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 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
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- 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:

{SQFTG} SOUTHWIRE {UL} X/C XX AWG COPPER THHN/THWN-2 CDRS 600V/1000V GW 1 X X AWG CU TYPE MC FOR CT USE.

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
587704◊	3/0	3	BK/RD/ WE	0.456	19	60	1x1/0	1.944	1899	2647
583932◊	4	4	BN/OE/ YW/GY	0.204	7	50	1x8	1.326	572	1008
587705◊	1	4	BK/RD/ BE/WE	0.289	19	60	1x3	1.818	1208	1932
646808◊	2/0	4	BN/OE/ YW/GY	0.364	19	60	1x3	1.863	1824	2579
678001◊	3/0	4	M4	0.409	19	60	1x4	2.101	2223	3081
672532	3/0	4	BK/RD/ BE/WE	0.456	19	60	1x4	1.953	2223	3035
587710◊	4/0	4	BK/RD/ BE/WE	0.460	19	60	1x4/0	2.318	3299	4236
583433◊	4/0	4	M3	0.460	19	60	1x4	2.220	2769	3713
677978◊	250	4	M4	0.558	37	70	1x1/0	2.268	3447	4416
674326◊	350	4	BN/OE/ YW/GY	0.661	37	70	1x1 GG	2.518	4627	5781
679715◊	400	4	M4	0.705	37	70	1x4/0 GG	2.743	5649	6985
586733◊	600	4	BK/RD/ BE/WE	0.865	61	80	1x2	2.991	7691	9193

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

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 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
3/0	3	13.6	4027	0.064	0.078	0.042	165	200	225
4	4	9.3	1068	0.258	0.310	0.048	56	68	76
1	4	12.7	2142	0.128	0.154	0.046	88	104	116
2/0	4	13.0	3407	0.081	0.097	0.043	116	140	156
3/0	4	14.7	4295	0.064	0.078	0.042	132	160	180
3/0	4	13.7	4295	0.064	0.078	0.042	132	160	180
4/0	4	16.2	5416	0.051	0.062	0.041	156	184	208
4/0	4	15.5	5416	0.051	0.062	0.041	156	184	208
250	4	14.9	6400	0.043	0.053	0.041	172	204	232
350	4	16.8	8960	0.031	0.039	0.040	208	248	280
400	4	17.6	10240	0.027	0.035	0.040	224	268	304
600	4	20.6	15360	0.018	0.025	0.039	280	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.