

AlumaFlex™

Type MC Feeder PVC Jacketed



1/0 AWG through 900 kcmil AlumaFlex™ THHN/THWN-2 Insulated Singles with 8000 series Triple E™ Aluminum Alloy. Bare AlumaFlex™ Aluminum Alloy Grounding Conductor. UL Listed. 600 Volts. Lightweight Aluminum Interlocked Armor. Overall PVC Jacket.

APPLICATIONS

Type MC Cable - "flame retardant sunlight resistant PVC Jacket" is suitable for use as follows:

- Suitable for Wet Location per NEC 330.10(11)
- Direct burial applications, installation in concrete and where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or of hydrochloric acids.
- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Power, lighting, control, and signal circuits.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- As aerial cable on a messenger.
- Installation in cable tray and approved raceways.
- 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.



STANDARDS & REFERENCES

Southwire AlumaFlex™ Type MC Cable - PVC Jacketed meets or exceeds the following requirements:

- UL 83
- UL 1569
- UL 1685
- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) (www.ul.com)
- Federal Specification A-A59544 (formerly J-C-30B)
- Jacketed & Non Jacketed will both pass " UL Test" & "FT4/IEEE 1202"(70,000 Btu/hr) Vertical Cable Tray Flame Test
- NFPA 70 (National Electrical Code), Article 330
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems
- REACH/RoHS-2 (Chemical Limit) Compliant

CONSTRUCTION

Southwire AlumaFlex™ Type MC Cable with Triple E™ Aluminum Alloy - PVC Jacketed is constructed with Aluminum Type THHN/THWN-2 conductors rated 90°C wet or dry, and a bare aluminum grounding conductor for sizes 1/0 AWG and larger. The conductors are cabled together and a binder tape is wrapped around the assembly. Aluminum interlocking armor is applied over the assembly. A black flame retardant sunlight resistant PVC jacket is applied over the armor. The jacket is available in other colors upon request, subject to economic order quantities.



AlumaFlex Type MC Jacketed AL THHN Conductors

CONDUCTOR SIZE AND COLORS	GROUNDING SIZE AND COLOR	STOCK NUMBER	WEIGHT (LBS/1000')	OVERALL DIAMETER (INCHES)
CONDUCTOR COLORS 120/208V				
1/0-3 AL THHN (BLACK/RED/WHITE)	4 ALUMINUM (BARE)	55-25-87-99	716	1.290
1/0-4 AL THHN (BLACK/RED/BLUE/WHITE)	4 ALUMINUM (BARE)	55-42-82-99	883	1.402
2/0-3 AL THHN (BLACK/RED/WHITE)	4 ALUMINUM (BARE)	55-24-65-99	827	1.375
2/0-4 AL THHN (BLACK/RED/BLUE/WHITE)	4 ALUMINUM (BARE)	55-58-07-99	1027	1.5
3/0-3 AL THHN (BLACK/RED/WHITE)	4 ALUMINUM (BARE)	55-24-64-99	964	1.477
3/0-4 AL THHN (BLACK/RED/BLUE/WHITE)	4 ALUMINUM (BARE)	55-49-34-99	1323	1.732
4/0-3 AL THHN (BLACK/RED/WHITE)	2 ALUMINUM (BARE)	55-24-84-99	1271	1.71
4/0-4 AL THHN (BLACK/RED/BLUE/WHITE)	2 ALUMINUM (BARE)	55-42-83-99	1573	1.859
250-3 AL THHN (BLACK/RED/WHITE)	2 ALUMINUM (BARE)	55-56-67-99	1474	1.855
250-3 AL THHN (BLACK/RED/WHITE)	1 ALUMINUM (BARE)	56-38-04-99	1490	1.855
250-4 AL THHN (BLACK/RED/BLUE/WHITE)	1 ALUMINUM (BARE)	55-42-84-99	1851	2.021
300-4 AL THHN (BLACK/RED/BLUE/WHITE)	1 ALUMINUM (BARE)	55-49-35-99	2013	2.14
350-3 AL THHN (BLACK/RED/WHITE)	1 ALUMINUM (BARE)	56-12-48-99	1874	2.062
350-4 AL THHN (BLACK/RED/BLUE/WHITE)	1/0 ALUMINUM (BARE)	55-58-08-99	2371	2.253
400-4 AL THHN (BLACK/RED/BLUE/WHITE)	3/0 ALUMINUM (BARE)	56-07-85-99	2674	2.357
500-3 AL THHN (BLACK/RED/WHITE)	1 ALUMINUM (BARE)	55-58-09-99	2426	2.321
500-3 AL THHN (BLACK/RED/WHITE)	3/0 ALUMINUM (BARE)	56-35-89-99	5809	2.075
500-3 AL THHN (BLACK/RED/WHITE)	250 ALUMINUM (BARE)	56-35-92-99	2718	2.573
500-4 AL THHN (BLACK/RED/BLUE/WHITE)	3/0 ALUMINUM (BARE)	55-49-32-99	3222	2.573
500-4 AL THHN (BLACK/RED/BLUE/WHITE)	250 ALUMINUM (BARE)	56-08-04-99	3300	2.573
600-3 AL THHN (BLACK/RED/WHITE)	1/0 ALUMINUM (BARE)	55-58-10-99	2951	2.565
600-3 AL THHN (BLACK/RED/WHITE)	400 ALUMINUM (BARE)	56-37-55-99	3308	2.812
600-4 AL THHN (BLACK/RED/BLUE/WHITE)	3/0 ALUMINUM (BARE)	55-58-11-99	3793	2.812
600-4 AL THHN (BLACK/RED/BLUE/WHITE)	400 ALUMINUM (BARE)	56-07-82-99	2674	3.10
750-3 AL THHN (BLACK/RED/WHITE)	1/0 ALUMINUM (BARE)	55-58-12-99	3490	2.77
750-3 AL THHN (BLACK/RED/WHITE)	3/0 ALUMINUM (BARE)	56-36-06-99	3549	2.77
750-4 AL THHN (BLACK/RED/BLUE/WHITE)	3/0 ALUMINUM (BARE)	55-49-33-99	4499	3.045
750-4 AL THHN (BLACK/RED/BLUE/WHITE)	750 ALUMINUM (BARE)	56-36-03-99	5210	3.37

The Power of Connections.™



AlumaFlex Type MC Jacketed AL THHN Conductors

900-4 AL THHN (BLACK/RED/BLUE/WHITE)	250 ALUMINUM (BARE)	56-07-88-99	5337	3.281
CONDUCTOR COLORS 277/480V				
3/0-3 AL THHN (BROWN/ORANGE/GRAY)	4 ALUMINUM (BARE)	56-07-53-99	964	1.477
3/0-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	4 ALUMINUM (BARE)	56-07-57-99	1323	1.734
4/0-3 AL THHN (BROWN/ORANGE/GRAY)	2 ALUMINUM (BARE)	56-07-54-99	1271	1.71
4/0-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	2 ALUMINUM (BARE)	56-07-58-99	1573	1.859
250-3 AL THHN (BROWN/ORANGE/GRAY)	2 ALUMINUM (BARE)	56-07-56-99	1474	1.855
250-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	1 ALUMINUM (BARE)	56-07-59-99	1851	2.021
300-3 AL THHN (BROWN/ORANGE/GRAY)	1 ALUMINUM (BARE)	58-75-18-99	1686	1.963
300-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	1 ALUMINUM (BARE)	56-07-60-99	2103	2.14
350-3 AL THHN (BROWN/ORANGE/GRAY)	1 ALUMINUM (BARE)	58-49-69-99	1876	2.062
350-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	1/0 ALUMINUM (BARE)	56-07-66-99	2371	2.253
400-3 AL THHN (BROWN/ORANGE/YELLOW)	3/0 ALUMINUM (BARE)	59-14-35-99	2158	2.216
400-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	3/0 ALUMINUM (BARE)	56-07-68-99	2674	2.357
500-3 AL THHN (BROWN/ORANGE/GRAY)	1 ALUMINUM (BARE)	58-49-70-99	2426	2.321
500-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	3/0 ALUMINUM (BARE)	56-07-67-99	3222	2.573
600-3 AL THHN (BROWN/ORANGE/YELLOW)	3/0 ALUMINUM (BARE)	59-14-38-99	3011	2.565
600-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	3/0 ALUMINUM (BARE)	56-07-70-99	3793	2.812
600-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	400 ALUMINUM (BARE)	56-07-83-99	4100	3.09
750-3 AL THHN (BROWN/ORANGE/YELLOW)	750 ALUMINUM (BARE)	56-33-05-99	4188	3.045
750-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	3/0 ALUMINUM (BARE)	56-07-84-99	4498	3.041
900-4 AL THHN (BROWN/ORANGE/YELLOW/GRAY)	250 ALUMINUM (BARE)	56-07-90-99	5337	3.281
For allowable ampacities, refer to NEC Section 310.15.				

FEATURES

- Available with Southwire pulling heads and on stacked reels
- Available in custom constructions and lengths
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.
- Anti-short bushings are not required for use with MC cable per the NEC and UL

AlumaFlex Type MC Jacketed AL THHN Conductors

NEC TABLE 310.15(B)(16)- ALLOWABLE AMPACITY FOR 600V CONDUCTORS

SIZE AWG OR KCMIL	TEMPERATURE RATING OF CONDUCTOR		
	60°C (140°F)	75°C (167°F)	90°C (194°F)
	Types: TW, UF	Types: RHW, THHW, THW, THWN, XHHW, USE, ZW	Types: TBS, SA, SIS, RHH, RHW-2, THHN, THHW, THW- 2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2
ALUMINUM or COPPER-CLAD ALUMINUM			
18	-	-	-
16	-	-	-
14	-	-	-
12	15	20	25
10	25	30	35
8	35	40	45
6	40	50	55
4	55	65	75
3	65	75	85
2	75	90	100
1	85	100	115
1/0	100	120	135
2/0	115	135	150
3/0	130	155	175
4/0	150	180	205
250	170	205	230
300	195	230	260
350	210	250	280
400	225	270	305
500	260	310	350
600	285	340	385
700	315	375	425
750	320	385	435
800	330	395	445
900	355	425	480
1000	375	445	500
1250	405	485	545
1500	435	520	585
1750	455	545	615
2000	470	560	630

Per NEC 310.15(B)(5), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor.

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