

Alumaflex™

Type MC - 1/0 AWG through 900 kcmil - with triple e™ Aluminum Alloy
Lightweight Aluminum Interlocked Armor. 600 Volts.
AlumaFlex™ with triple e™ Aluminum Alloy 8000 series (AA8176) Conductors .
THHN/THWN-2 Insulated Singles.
Bare AlumaFlex™ Aluminum Alloy Grounding Conductor

Low Voltage Colors



High Voltage Colors



APPLICATIONS

Suitable for use as follows:

- Feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Power, lighting circuits.
- 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(D)(2).
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.

STANDARDS & REFERENCES

Southwire AlumaFlex™ Type MC Cable with triple e™ Aluminum Alloy meets or exceeds the requirements

- UL 83
- UL 1569
- UL 1685
- Federal Specification A-A59544 (formerly J-C-30B)
- IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame Test
- National Electrical Code
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems

CONSTRUCTION

Southwire AlumaFlex™ Type MC Cable with triple e™ Aluminum Alloy is constructed with Type THHN/THWN-2 conductors rated 90 °C dry, and a bare equipment grounding conductor. Conductors are AlumaFlex™ AA-8000 series aluminum alloy compact stranded. A binder tape is wrapped over the conductors. Aluminum interlocking armor is applied over the assembly. Cable is also available in High Voltage Colors. Standard PVC Jacket will not meet "Limited Smoke or LS Rating". Optional Solonon Jacket can be provided for "LS" Rating.

AlumaFlex Type MC AL THHN/THWN-2 Conductors

Conductor Size/ Number of Conductors (AWG or kcmil)	Grounding Conductor* (AWG or kcmil)	Approximate Diameter Over Armor	Weight per 1000' (lbs)	Ampacity+	
				75° C	90° C
1/0-3	4 Bare	1.188	578	120	135
1/0-4	4 Bare	1.302	727	120	135
2/0-3	4 Bare	1.274	678	135	150
2/0-4	4 Bare	1.398	858	135	150
3/0-3	4 Bare	1.38	830	155	175
3/0-4	4 Bare	1.61	1135	155	175
4/0-3	2 Bare	1.59	1086	180	205
4/0-4	2 Bare	1.74	1370	180	205
250-3	2 Bare	1.73	1272	205	230
250-4	1 Bare	1.9	1630	205	230
300-3	1 Bare	1.84	1470	230	255
300-4	1 Bare	2.02	1870	230	255
350-3	1 Bare	1.94	1649	250	280
350-4	1/0 Bare	2.13	2120	250	280
400-3	1 Bare	2.04	1826	270	305
400-4	3/0 Bare	2.23	2410	270	305
500-3	1 Bare	2.2	2172	310	350
500-3	2/0 Bare	2.27	2151	310	350
500-3	250 Bare	2.27	2200	310	350
500-4	3/0 Bare	2.42	2870	310	350
500-4	250 Bare	2.95	2998	310	350
600-3	1/0 Bare	2.43	2540	340	385
600-4	3/0 Bare	2.66	3294	340	385
600-4	400 Bare	2.93	3667	340	385
750-3	1/0 Bare	2.63	3112	385	435
750-3	3/0 Bare	2.63	3171	385	435
750-4	3/0 Bare	2.9	4080	385	435
750-4	500 Bare Copper	3.2	5532	385	435
900-4	250 Bare	3.11	4827	425	480

* Available with oversize grounding conductor when used for parallel feeds on special orders.
 +Allowable ampacities shown are for general use as specified by the 2011 Edition of the National Electrical Code Section 310.15 and 240.4(D). Unless the equipment is marked for use at higher temperatures the conductor shall be limited to the following per NEC 110.14(C).
 60° C - When terminated to equipment for circuits rated 100 amperes or less or marked for 14 - 1 AWG conductors.
 75° C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.
 90° C - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.



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AlumaFlex Type MC AL THHN/THWN-2 Conductors

FEATURES

- Lightweight aluminum armor--as much as 45% lighter than steel MC Cable.
- 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

COLOR CODING Standard Products

Phase Conductors		
No. of Conductors	Color Sequence 120/208Y	Color Sequence 277/480Y
3	Black, Red, White	Brown, Orange, Grey
4	Black, Red, Blue White	Brown, Orange, Yellow, Grey
Grounding Conductor	Bare	Bare

Color sequence for other special colors are available subject to economic order quantity.

ONLINE CERTIFICATIONS & TOOLS

- UL Online Certification Directory (www.ul.com)
- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) (www.ul.com)