

## ENGINEERING SPECIFICATIONS:

**EmergMC™**  
Fire Alarm Cable

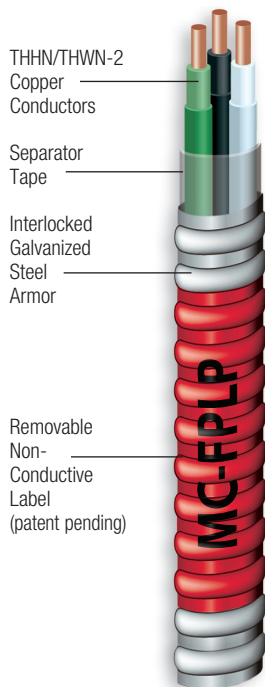
### Standards:

Underwriters Laboratories Standards UL-83, UL-1063, UL-1569 for Type MC, Federal Specification A-A59544, IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame Test, and the National Electrical Code (NEC).

 Listed E-301130

### Applications:

- Permitted use for Non-Power Limited Fire Alarm (NPLFA) and Power Limited Fire Alarm Circuits (PLFA) including alarms, horns, detecting devices, and overall signaling devices
- Acceptable for power, lighting, control, and signal circuits
- Utilized for indoor or outdoor applications
- Allowable in concealed or exposed systems
- Permitted use in dry locations and embedded in plaster finish on brick or other masonry except in damp or wet locations
- Utilized for environmental air-handling spaces NEC 300.22(B), 300.22 (C), and 760.71(D)
- Allowable in assembly occupancies (NEC 518.4)
- Permissible in Theaters, audience areas of motion pictures, television studios, and similar locations (NEC 520.5)
- Permitted as aerial cable on a messenger
- Allowable installations in approved raceways and cable trays (NEC 392)
- Suitable for installation under raised floors for IT equipment (NEC 645.5)
- Permitted in Class I, Class II, and Class III remote control signaling, and power limited circuits.
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems



SmartColorID™

## CONSTRUCTION:

Available in sizes 18 AWG through 14 AWG with two(2), four(4), six(6), and eight(8) conductors, plus an insulated ground. Encore's Fire Alarm and Control Cable is constructed with soft-drawn copper and classified as type TFN (Sizes 18 & 16 AWG) conductors. Sizes with 14 AWG through 12 AWG conductors are classified as type THHN/THWN-2 conductors. Each Fire Alarm and Control Cable contains a green, insulated grounding conductor. All conductors are cabled together with separator tape, containing the identification print legend, to form the cable core. Interlocked aluminum or galvanized steel armor is applied over the entire assembly. At regularly spaced increments are red colored Removable Non-Conductive Labels identifying the number of current carrying conductors and size.

Type MC-FPLP Plenum Rated Limited Power Type Fire Alarm and Control Cable

Conductors			Overall Diameter (inches)	Approximate Net Weight (lbs./1000 ft.)	Allowable Ampacity (amps)*		Standard Packaging	
AWG/No.	Type	Ground			90°C	Coil (ft.)	Reel (ft.)	
18/2	Solid	18	0.352	55	6	250'	1000'	
18/4	Solid	18	0.394	75	6	250'	1000'	
18/6	Solid	18	0.418	94	6	250'	1000'	
18/8	Solid	18	0.454	113	6	250'	1000'	
16/2	Solid	16	0.374	66	8	250'	1000'	
16/4	Solid	16	0.423	93	8	250'	1000'	
16/6	Solid	16	0.449	118	8	250'	1000'	
16/8	Solid	16	0.490	144	8	250'	1000'	
14/2	Solid	14	0.409	80	15	250'	1000'	
14/4	Solid	14	0.464	115	15	250'	1000'	
14/6	Solid	14	0.503	159	15	250'	1000'	
14/8	Solid	14	0.553	193	15	250'	1000'	
12/2	Solid	12	0.444	106	20	250'	1000'	
12/3	Solid	12	0.475	132	20	250'	1000'	
12/4	Solid	12	0.509	158	20	250'	1000'	

Note: Ampacities are based on Table 310.16 of the NEC. \*Ampacities shown are for general use as specified by the NEC, Section 310.15.

For equipment marked for use at higher temperatures, the conductor ampacity 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 size 14 AWG through 1 AWG conductor.

75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.

90°C for ampacity derating purposes.

When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(2)(a).

The above data is approximate and subject to normal manufacturing tolerances.

### Standard Conductor Color Coding

Number of Conductors	120/208Y
2	Black/White
3	Black/White/Red
4	Black/White/Red/Blue
6	Black/White/Red/Blue/Brown/Yellow
8	Black/White/Red/Blue/Brown/Yellow/Gray/Orange

