



ENGINEERING SPECIFICATIONS:

Standards:

Underwriters Laboratories Standards UL-83, UL-1424, UL-1569 for Type MC, NEMA WC 70/ICEA 5-95-658; Federal Specification A-A59544, IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame Test, NFPA 262 Flame Test, and the National Electrical Code (NEC), and ARRA 2009; Section 1605 "Buy American" Compliant

Applications: Type FPLP cable shall be permitted as follows:

- 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
- 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)
- 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
- Available in colors per State of Rhode Island Fire Systems



SmartColorID®



CONSTRUCTION:

Available in sizes 18 AWG through 12 AWG. 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.

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NOTE: Available with aluminum shielding with tinned copper drain wire.

Type MC-FPLP Plenum Rated Limited Power Type Aluminum Fire Alarm and Control Cable 300V

Conductors			Overall Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps)*		Standard Packaging	
AWG/No.	Type	Ground	Aluminum	Steel	Aluminum	Steel	75°C	90°C	Coil (ft)	Reel (ft)
18/2	Solid	18 AWG	0.352	0.351	55	90	5.6	5.6	250'	1000'
18/4	Solid	18 AWG	0.394	0.393	75	116	5.6	5.6	250'	1000'
16/2	Solid	16 AWG	0.374	0.373	66	104	8	8	250'	1000'
16/4	Solid	16 AWG	0.423	0.421	93	137	8	8	250'	1000'
14/2	Solid	14 AWG	0.409	0.400	80	122	15	15	250'	1000'
14/4	Solid	14 AWG	0.464	0.454	115	165	15	15	250'	1000'
12/2	Solid	12 AWG	0.487	0.440	106	156	20	20	250'	1000'
12/3	Solid	12 AWG	0.495	0.471	132	186	20	20	250'	1000'
12/4	Solid	12 AWG	0.509	0.506	158	217	20	20	250'	1000'

Available with additional conductors on request.

Note: Ampacities are based on Table 310.15(B)(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.

Features:

Installation costs reduced up to 50% over conduit and wire. Weight of aluminum armor is as much as 45% less than steel. Insulating anti-short bushings are supplied with each reel or coil. SmartColorID® labels are spaced at regular intervals on the exterior of the metal sheathing and are removable. For ease of installation and pulling, cable is reverse wound on reels. Coils are designed to be pulled from the inside.

Standard Conductor Color Coding

Number of Conductors	120/208Y
2	Black/White
3	Black/White/Red
4	Black/White/Red/Blue

Rhode Island Color Coding

Number of Conductors	120/208Y
2	Blue/White OR Black/Red

SmartColorID® Legend:



See page 104 for complete legend