Red Alert® Type MC-FPL Fire Alarm Composite

Copper THHN/THWN or Type TFN Insulated Copper Singles. UL Listed as Type MC and Type FPL. 600 Volt Type MC and 300 Volt Type FPL. Red Lightweight Aluminum Interlocked Armor.

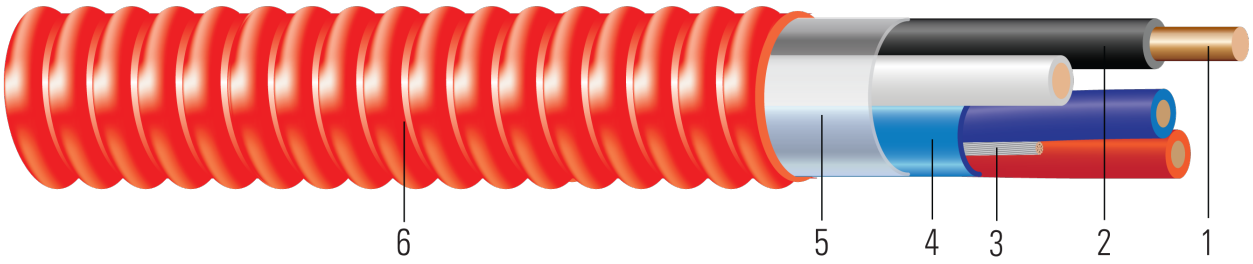


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath, Colors: See Table 1.
3. **Drain Wire:** Tinned drain wire the same size as the pair condutors
4. **Shield:** Aluminum foil with blue laminate
5. **Binder:** Mylar
6. **Armor:** Red Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire Red Alert® Type MC-FPL Cable is suitable for use as follows:

- Wiring in Plenums, Ducts or Other Spaces Used for Environmental Air-Handling Purposes per NEC 300.22(C) & 760.135(C).
- Power-Limited and Non-Power Limited fire alarm circuits, including smoke detectors, bells, horns, fire alarm control panel equipment, and initiation and signaling devices.
- Class 1, Class 2, and Class 3 remote control, signaling, and power-limited circuits.
- 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.
- Installation in cable tray and approved raceways.
- 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.
- Binder tape with print legend wrapped around assembly.
- Rated at 600V, 90°C dry as Type MC or 300V, 90°C dry as Type FPL.
- Anti-short bushings are not required for use with MC cable per NEC and UL.

Southwire Red Alert® Type MC-FPL 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:

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- UL 1424 Cables for Power-Limited Fire-Alarm Circuits
- ASTM B3 Soft or Annealed Copper Wire
- UL 66 Fixture Wire
- UL 83 Thermoplastic Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1479 Standard for Safety Fire Tests of Penetration Firestops
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- 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:

SOUTHWIRE E96627 XX AWG MC 600V {UL} TYPE (THHN OR TFN) INSULATED CONDUCTORS OR TYPE FPL {UL} 90°C DRY-FOR USE IN CABLE TRAYS

Table 1 – Weights and Measurements

Stock Number	Composite Number and Size	Cond. Size	Conductor Number	Insulation Thickness	Shielded	Color	Cond. Size	Conductor Number	Insulation Thickness	Shielded	Color	Diameter over Armor	Overall Weight
		AWG/ Kcmil		mils			AWG/ Kcmil		mils			inch	lbs/ 1000ft
554542	2/C #14 and 2/C #16	14	2	20	NO	Blk/ Wht	16	2	20	YES	Blk/ Wht	0.665	155
554545	2/C #14 and 2/C #16	14	2	20	NO	Blk/ Wht	16	2	20	NO	Red/ Blu	0.632	138
671536	2/C #14 and 2/C #16	14	2	20	NO	Blk/ Red	16	2	20	NO	Blk/ Red	0.665	146
671730	2/C #14 and 2/C #16	14	2	20	NO	Blk/ Red	16	2	20	NO	Blk/ Red	0.688	152
554547	2/C #14 and 2/C #16	14	2	20	NO	Brn/ Org	16	2	20	YES	Red/ Blu	0.654	153
554548	2/C #14 and 2/C #18	14	2	20	YES	Blk/ Wht	18	2	20	YES	Red/ Blu	0.636	139
679360	2/C #14 and 2/C #18	14	2	20	YES	Blk/ Wht/ Grn	18	2	20	YES	Red/ Blu	0.636	139
555576	2/C #12 and 2/C #16	12	2	20	NO	Blk/ Red	16	2	20	YES	Blk/ Wht	0.703	183

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Table 2 – Electrical and Engineering Data

Stock Number	Composite Number and Size	Conductor Size	DC Resistance @ 25°	AC Resistance @ 75°C	Capacitance	Cond. Size	DC Resistance @ 25°	AC Resistance @ 75°C	Capacitance	Min Bend Radius	Allowable Ampacity Raceway 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
		14	Ohms/ 1000ft	Ohms/ 1000ft	pf/ft	AWG/ Kcmil	ohms/ 1000ft	Ohms/ 1000ft	pf/ft	inch	amps	amps	amps
554542	2/C #14 and 2/C #16	14	2.63	3.17	57	16	4.18	5.03	49	4.6	15	20	25
554545	2/C #14 and 2/C #16	14	2.63	3.17	57	16	4.18	5.03	49	4.4	15	20	25
671536	2/C #14 and 2/C #16	14	2.63	3.17	57	16	4.18	5.03	49	4.6	15	20	25
671730	2/C #14 and 2/C #16	14	2.63	3.17	57	16	4.18	5.03	49	4.8	15	20	25
554547	2/C #14 and 2/C #16	14	2.63	3.17	57	16	4.18	5.03	49	4.5	15	20	25
554548	2/C #14 and 2/C #18	14	2.63	3.17	57	18	6.66	8.03	45	4.4	15	20	25
679360	2/C #14 and 2/C #18	14	2.63	3.17	57	18	6.66	8.03	45	4.4	15	20	25
555576	2/C #12 and 2/C #16	12	1.66	2.00	71	16	4.18	5.03	49	4.9	20	25	30

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