



## Red Alert® Type MC-FPLP Fire Alarm Composite

Copper THHN/THWN or Type TFN Insulated Copper Singles. UL Listed as Type MC and Type FPLP. 600 Volt Type MC and 300 Volt Type FPLP. Rated VW-1. Red Lightweight Aluminum Interlocked Armor.

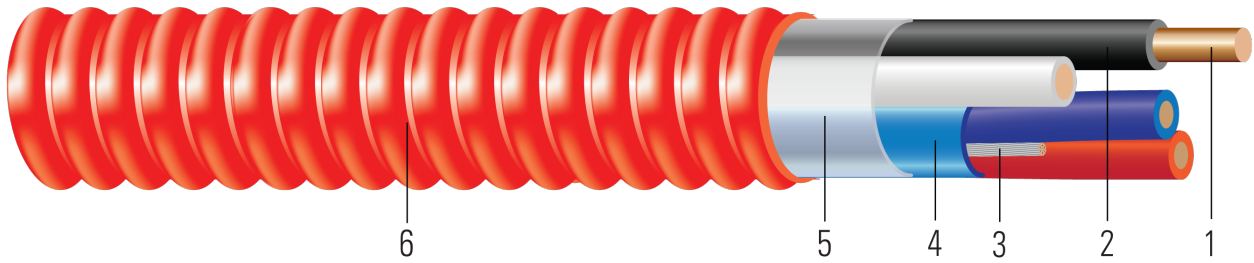


Image not to scale. See Table 1 for dimensions.

### 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 conductors
4. **Shield:** Aluminum foil with blue laminate
5. **Binder:** Mylar
6. **Armor:** Red Aluminum Interlocked Armor

### APPLICATIONS AND FEATURES:

**Southwire Red Alert® Type MC-FPLP 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.
- Approved for the State of Rhode Island Fire Systems.
- Rated at 600V, 90°C dry as Type MC or 300V, 105°C dry as Type FPLP.
- Anti-short bushings are not required for use with MC cable per NEC and UL.

**Southwire Red Alert® Type MC-FPLP Cable - meets or exceeds the following requirements:**

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://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:**

- 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 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- RoHS Compliant Lead-Free, Silicone-Free, Halogen Free
- 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 FPLP {UL} 105°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





**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

