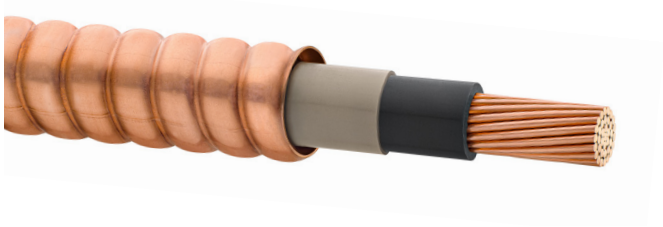
Lifeline® MC: One-Hour and Two-Hour Fire Resistive Single Conductor Cables – UL 2196

Fire Resistive Cable for Survivability in a Fire



APPLICATIONS

Lifeline® MC fire-resistive single conductor cables were designed to meet and have successfully passed one-hour and two-hour fire rating certification tests per UL 2196, *Standard for Tests for Fire-Resistive Cables* and are classified in Electrical Circuit Integrity Systems (FHIT) No. 50 and No. 50A.

Lifeline® MC Single Conductor Cables can be used in the following applications to provide survivability during a fire:

- Tall Buildings
- Emergency Feeder Cables
- Stairwell Pressurization
- Elevators / OEO
- Fire Pumps
- Ventilating Fans
- Exit Lighting
- Emergency lighting for roadway and transit tunnels when cables include optional LSZH jacket over armor

Lifeline® MC Single Conductor Cables are preferred over Mineral Insulated (MI) cables, concrete encasement or the construction of fire rated assemblies based on the facts that Lifeline® MC Cables are less costly and easier to install for many applications.

Fire resistive cables are required per NFPA 70/NEC, Articles 517, 695, 700, 708, 728 and 760 as well as NFPA 72 and NFPA 101.

CLASSIFIED UL

UL LISTED

RoHS COMPLIANT

SPECIFICATIONS & RATINGS

- Listed to UL 1569, *Metal Clad Cables*, as the following type:
  - Type MC 600 Volt, Rated 90°C
- For Cable Tray Use IEEE 1202/ FT4 Rated, ST1 Limited Smoke
- Classified to UL 2196, *Standard for Tests for Fire Resistive Cables*, with one-hour and two-hour Fire Resistive Rating (FRR)
- Electrical Circuit Integrity System (FHIT) No. 50 of the UL Fire Resistance Directory with 2-hour FRR at 480 volts utilization covers cable constructions in table below and optional taped splice.
- Electrical Circuit Integrity System (FHIT) No. 50A of the UL Fire Resistance Directory with 1-hour FRR at 480 volts utilization, covers cable constructions in the table below and optional ceramic stand-off splice for conductor sizes up to 350MCM.
- NFPA 70, NFPA 72, NFPA 101 compliant
- Corrugated Copper Armor meets Equipment Grounding Conductor requirements of NEC Table 250.122

DESIGN PARAMETERS

CONDUCTORS: Bare stranded copper, 1/0 AWG through 750 kcmil

INSULATION: Ceramifiable Silicone Zero Halogen (LSZH)

INNER BINDER JACKET: Ceramifiable Silicone Zero Halogen (LSZH)

ARMOR: Continuously Welded and Corrugated Copper

IDENTIFICATION:
ORIGIN USA PRYSMIAN MA P/N [#########] [X]AWG [Y] mm² LIFELINE® (UL) MC-ST1 600V 90C FOR CT USE IEEE 1202/FT4 ST1 (UL) 2196 FRR 2HR FHIT 50[1] 480V UTILIZATION or FRR 1HR FHIT 50A[2] 480V UTILIZATION ([mm]/[yr]) (SEQUENTIAL FOOTAGE)

Notes: [#] is cable part number
[X] is cable size in AWG or kcmil
[Y] is cable size in mm²
[1] FRR 2HR FHIT#50 includes taped splice for cables with conductor sizes 1/0AWG to 750MCM
[2] FRR 1HR FHIT#50A applies ceramic stand-off splice for cables with 1/0AWG to 350MCM conductors

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TIS 400-Jun 2024

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LIFELINE® Part Number	Conductor Size AWG /MCM	Number of Conductors	Nominal Core Diameter (in)	Nominal Armor Diameter (in)	Ampacity* 75°C Amps	Ampacity* 90°C Amps
LMC011/0	1/0AWG	1	0.65	0.90	230	260
LMC012/0	2/0AWG	1	0.69	0.96	265	300
LMC013/0	3/0AWG	1	0.74	1.08	310	350
LMC014/0	4/0AWG	1	0.80	1.20	360	405
LMC01250	250MCM	1	0.87	1.27	405	455
LMC01300	300MCM	1	0.93	1.27	445	500
LMC01350	350MCM	1	0.98	1.35	505	570
LMC01400	400MCM	1	1.03	1.40	545	615
LMC01500	500MCM	1	1.11	1.57	620	700
LMC01600	600MCM	1	1.22	1.77	690	780
LMC01750	750MCM	1	1.32	1.77	785	885

* Ampacities are based on Table 310.17 of the National Electric Code (NEC) NFPA 70-2023 for single insulated conductors in free air at 30°C

The above dimensions are approximate and subject to normal manufacturing tolerances. Information subject to change

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