



Lifeline® MC LSZH: One-Hour and Two-Hour Fire Resistive Multiconductor Cables – UL 2196 Cables

Fire Resistive Cable for Survivability in a Fire



Applications

Lifeline® MC LSZH fire resistive 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*.

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

- Emergency Feeder Cables
- Ventilating Fans
- Exit Lighting
- Emergency lighting and ventilation for roadway and transit tunnels

Lifeline® MC LSZH Cables are economical options for several life safety fire resistive applications in roadway and tunnel environments with a LSZH jacket to protect against corrosion.

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



**RoHS
COMPLIANT**



Specifications and Ratings

- Listed to UL 1569, Metal Clad Cables, as the following type:
- Type MC 600 Volt, Rated 90°C
- For Wet Locations
- For Cable Tray Use IEEE 1202/ FT4 Rated, ST1 Limited Smoke
- Sunlight Resistance
- Direct Burial
- 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 for conductor sizes 2AWG and larger.
- Electrical Circuit Integrity System (FHIT) No. 50A of the UL Fire Resistance Directory with 1-hour FRR at 480 volts utilization, covers multi-conductor cable constructions 4 conductor 2AWG with segmented ground conductors and 3 conductor 14 AWG, and optional ceramic stand-off splice for conductor sizes 14AWG to 350MCM.
- Optional taped splice in Electrical Circuit Integrity System (FHIT) No. 50 of the UL Fire Resistance Directory with 2-hour FRR at 480 volts utilization.
- Optional ceramic stand-off splice for conductor sizes up to 350MCM in Electrical Circuit Integrity System (FHIT) No. 50A of the UL Fire Resistance Directory with 1-hour FRR at 480 volts utilization.
- NFPA 70, NFPA 101, NFPA 130, NFPA 502 compliant
- Corrugated Copper Armor meets Equipment Grounding Conductor requirements of NEC Table 250.122

Design Parameters

CONDUCTORS: Bare stranded copper, 14 AWG through 600 kcmil

INSULATION: Ceramifiable Silicone Zero Halogen (LSZH)

INNER BINDER JACKET: Ceramifiable Silicone Zero Halogen (LSZH)

ARMOR: Continuously Welded and Corrugated Copper

JACKET: Thermoplastic Flame Resistant LSZH Jacket

IDENTIFICATION:

DRAKA MA P/N [#####] [X]/C [Y] LIFELINE (UL) E66840T MC 600V 90C WET LOCS FOR CT USE IEEE 1202/FT4 ST1 SUN RES DIR BUR (UL) R19359 FRR 2HR FHIT#50¹ or FRR 1HR FHIT#50A² UL 2196 480V UTILIZATION (MONTH/YEAR) (SEQUENTIAL FOOTAGE)

Notes: [#] is cable part number

[X] is the number of conductors

[Y] is cable size in AWG or kcmil

¹FRR 2HR FHIT#50 includes taped splice for cables with conductor sizes 2AWG to 600MCM

²FRR 1HR FHIT#50A applies to optional ceramic stand-off splice for cables with 14AWG to 350MCM conductors



A brand of the



Lifeline® MC LSZH: One-Hour and Two-Hour Fire Resistive Multiconductor Cables – UL 2196

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Lifeline® MC LSZH Power Cable

LIFELINE® Part Number	Conductor Size AWG /MCM	Number of Cond	Nominal Core Diameter (in)	Nominal Armor Diameter (in)	Nominal Jacket Diameter (in)	Ampacity* 75°C Amps	Ampacity* 90°C Amps
LMCJ05014	14	5	0.66	0.97	1.07	20**	25**
LMCJ02012	12	2	0.56	0.85	0.95	25**	30**
LMCJ03012	12	3	0.59	0.91	1.01	25**	30**
LMCJ04012	12	4	0.64	0.97	1.07	25**	30**
LMCJ05012	12	5	0.70	0.97	1.07	25**	30**
LMCJ02010	10	2	0.61	0.85	0.95	35**	40**
LMCJ03010	10	3	0.64	0.97	1.07	35**	40**
LMCJ04010	10	4	0.70	0.97	1.07	35**	40**
LMCJ05010	10	5	0.77	1.08	1.18	35**	40**
LMCJ02008	8	2	0.70	0.97	1.07	50	55
LMCJ03008	8	3	0.75	1.08	1.18	50	55
LMCJ04008	8	4	0.82	1.18	1.28	50	55
LMCJ05008	8	5	0.90	1.26	1.36	50	55
LMCJ02006	6	2	0.78	1.08	1.18	65	75
LMCJ03006	6	3	0.83	1.18	1.28	65	75
LMCJ04006	6	4	0.91	1.26	1.36	65	75
LMCJ05006	6	5	1.00	1.35	1.45	65	75
LMCJ03004	4	3	0.95	1.35	1.45	85	95
LMCJ04004	4	4	1.04	1.35	1.45	85	95
LMCJ05004	4	5	1.15	1.58	1.70	85	95
LMCJ03003	3	3	1.00	1.35	1.45	100	115
LMCJ04003	3	4	1.11	1.40	1.50	100	115
LMCJ03002	2	3	1.07	1.40	1.50	115	130
LMCJ04002	2	4	1.18	1.58	1.70	115	130
LMCJ03001	1	3	1.24	1.73	1.85	130	145
LMCJ04001	1	4	1.37	1.73	1.85	130	145
LMCJ031/0	1/0	3	1.33	1.73	1.85	150	170
LMCJ041/0	1/0	4	1.47	1.85	1.97	150	170
LMCJ032/0	2/0	3	1.41	1.85	1.97	175	195
LMCJ042/0	2/0	4	1.56	1.97	2.09	175	195
LMCJ033/0	3/0	3	1.52	1.97	2.09	200	225
LMCJ043/0	3/0	4	1.69	2.15	2.27	200	225
LMCJ034/0	4/0	3	1.64	2.15	2.27	230	260
LMCJ044/0	4/0	4	1.82	2.28	2.43	230	260
LMCJ03250	250	3	1.81	2.28	2.43	255	290
LMCJ04250	250	4	2.00	2.52	2.67	255	290
LMCJ03350	350	3	2.04	2.52	2.67	310	350
LMCJ04350	350	4	2.26	2.72	2.87	310	350
LMCJ03400	400	3	2.13	2.72	2.87	335	380
LMCJ04400	400	4	2.37	2.83	2.98	335	380
LMCJ03500	500	3	2.31	2.83	2.98	380	430
LMCJ04500	500	4	2.57	3.11	3.28	380	430
LMCJ03600	600	3	2.54	3.11	3.28	420	475
LMCJ04600	600	4	2.83	3.41	3.58	420	475

*Ampacities are based on Table 310.15(B)(16) of the National Electrical Code (NEC) (NFPA 70-2017) for 3 current carrying conductors at 30°C ambient.

**Small overcurrent protection limitations per NEC Article 240.4(D): (3) 14AWG – 15amps, (5) 12AWG – 20amps, (7) 10AWG – 30amps

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

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