



Lifeline® Power Cables: RHW-2 or RW90 Two-Hour Horizontal, Vertical Fire Resistive Cables in XW Breathsaver® Phenolic Conduit

UL 2196 Certified Fire Resistive Cable for Survivability in a Fire



Applications

Lifeline® fire resistive cables were designed to meet and have successfully passed the two hour fire rating certification test per UL 2196, *Standard for Tests for Fire Resistive Cables*.

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

Fire Pumps
 Emergency Feeder Cables
 Ventilating Fans
 Exit Lighting
 Elevators
 Tall Buildings
 Hospitals
 Transit
 Oil Refineries
 Drilling Platforms

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

Fire resistive cables are required per NFPA 70, Articles 517, 695, 700, 708 and 760 as well as NFPA 72, NFPA 101, NFPA 130 and NFPA 502



UL File E2268 Thermoset-Insulated Wire





Specifications and Ratings

- Listed to UL 44, *Thermoset Insulated Wires* and *Cables*, as the following type:
 - RHW-2, 600 Volt, Rated 90°C Dry/90°C Wet
 - RW90, 600 Volt, Rated 90°C Dry/ 90°C Wet
- Classified to UL 2196, Standard for Tests for Fire Resistive Cables, for two-hours in horizontal (H) and vertical (V) installations.
- Electrical Circuit Integrity System (FHIT)
 No. 25C of the UL Fire Resistance Directory
- Sunlight Resistant
- FT4 Rated
- ST1
- IEEE 1202
- NFPA 70, NFPA 101, NFPA 130. NFPA 502 (when approved by AHJ)

Design Parameters

CONDUCTORS: Bare stranded copper, 8 AWG through 750kcmil

INSULATION: High Temperature Mica Tapes layer. Ceramifiable silicone, Low Smoke Zero Halogen (LSZH)

JACKET: Cross-linked polyolefin (XLPO), Low Smoke Zero Halogen

IDENTIFICATION:

DRAKA MA P/N (XXXXXX) #(X) AWG (X[MM2])LIFELINE c(UL)us E2268 RHW-2 OR RW90 600V FT4 ST1 VW1 FT1 2 HR HORIZONTAL 1 HR VERTICAL FIRE-RESISTIVE CABLE FOR USE IN ELECTRIC CIRCUIT INTEGRITY SYSTEM NO. 25B. OR 2 HR FIRE-RESISTIVE CABLE FOR USE IN ELECTRIC CIRCUIT INTEGRITY SYSTEM NO. 25C. SEE UL FIRE RESISTANCE DIRECTORY R19359 ([MM]/[YR]) [3FT]

Notes: [X] is the size of the cable in AWG or kcmil

[Y] is the size of the cable in mm²

[#] is cable part number





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Lifeline® Power Cable

LIFELINE® Part Number	Conductor Size AWG /MCM	Number of Strands	Insulation Thickness in (mm)	Overall Diameter in (mm)	Approximate Weight Ibs./Mft (kg/km)	Ampacity¹ 90°C Amps
G30064	8	7	0.060 (1.5)	0.31 (7.8)	84 (125)	55
G30065	6	7	0.075 (1.9)	0.37 (9.5)	129 (192)	75
G30066	4	7	0.075 (1.9)	0.42 (10.7)	185 (275)	95
G30067	3	7	0.075 (1.9)	0.45 (11.4)	224 (333)	115
G30068	2	7	0.075 (1.9)	0.48 (12.2)	269 (400)	130
G30069	1	19	0.100 (2.5)	0.57 (14.5)	364 (542)	145
G30070	1/0	19	0.100 (2.5)	0.61 (15.5)	441 (656)	170
G30071	2/0	19	0.100 (2.5)	0.65 (16.6)	535 (796)	195
G30072	3/0	19	0.100 (2.5)	0.70 (17.9)	656 (976)	225
G30073	4/0	19	0.100 (2.5)	0.76 (19.2)	803 (1195)	260
G30074	250	37	0.130 (3.3)	0.86 (21.9)	987 (1469)	290
G30075	350	37	0.130 (3.3)	0.97 (24.7)	1306 (1943)	350
G30076	500	37	0.130 (3.3)	1.10 (27.9)	1820 (2708)	430
G30077	600	61	0.145 (3.7)	1.21 (30.6)	2199 (3272)	475
G30078	750	61	0.145 (3.7)	1.31 (33.3)	2699 (4016)	535

¹ Ampacities are based on Table 310.15(B)(16) (formerly table 310.16) of the National Electrical Code (NFPA 70) for 3 current carrying conductors at 30°C ambient.

The above dimensions are approximate and subject to normal manufacturing tolerances. Information subject to change without notice.

² With AHJ approval, a larger size conduit may be required if an EGC is used.



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Minimum Allowable XW BreathSaver® Conduit Size										
Conductor Size	Horizontal Installation - Number of Conductors				Vertical Installation - Number of Conductors					
	1	2	3	4	1	2	3	4		
8	3/4	3/4	1	1	3/4	1	1-1/4	1-1/4		
6	3/4	1	1-1/4	1-1/4	1	1-1/2	2-1/2	2-1/2		
4	3/4	1	1-1/4	1-1/2	1-1/4	2	2-1/2	3		
3	3/4	1-1/4	1-1/4	1-1/2	1-1/4	2	2-1/2	3		
2	3/4	1-1/4	1-1/2	1-1/2	1-1/4	2-1/2	3	3		
1	1	1-1/2	2	2-1/2	1-1/2	2-1/2	3-1/2	3-1/2		
1/0	1	1-1/2	2-1/2	2-1/2	2	3	3-1/2	4		
2/0	1-1/4	2	2-1/2	3	2	3	3-1/2	4		
3/0	1-1/4	2	2-1/2	3	2-1/2	3-1/2	4	5		
4/0	1-1/4	2-1/2	3	3	2-1/2	3-1/2	4	5		
250	1-1/4	2-1/2	3	3	2-1/2	3-1/2	4	5		
300	2	3	3-1/2	4	2-1/2	3-1/2	5	5		
350	2	3	3-1/2	4	3	3-1/2	5	6		
400	2	3	3-1/2	4	3	4	5	6		
500	2-1/2	3	4	5	2-1/2	3-1/2	5	5		
600	2-1/2	3-1/2	5	5	3	4	5	6		
750	2-1/2	3-1/2	5	5	3	4	5	6		

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