



# Lifeline® Power Cables: RHW-2 or RW90 Two-Hour Horizontal, One-Hour Vertical Fire Resistive Cables in EMT

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



## 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) installations and one-hour in vertical (V) installations
- Electrical Circuit Integrity System (FHIT) No. 25B of the UL Fire Resistance Directory
- Sunlight Resistant
- FT4 Rated
- ST1
- IEEE 1202
- NFPA 70, NFPA 101, NFPA 130, NFPA 502 compliant.

## 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:

Lifeline® Power Cables are marked as follows:  
DRAKA MA P/N G[#####] [X] [Y] LIFELINE us (UL) c E2268 RHW-2 OR RW90 600V FT4 ST1 VW1 FT1 (UL) R19359 FIRE-RESISTIVE CABLE FOR USE IN ELECTRIC CIRCUIT INTEGRITY SYSTEM FHIT.#25B AND SYSTEM FHIT.#25C (MONTH/YEAR) (SEQUENTIAL FOOTAGE)

Notes: [X] is the size of the cable in AWG or kcmil  
[Y] is the size of the cable in mm<sup>2</sup>  
[#] is cable part number

## Prysmian Group

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## Lifeline® Power Cables: RHW-2 or RW90 Two-Hour Fire Resistive Cables

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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 lbs./Mft (kg/km)	Ampacity <sup>1</sup> 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

<sup>1</sup> 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.

<sup>2</sup> Electrical Metallic Tubing (EMT) size is calculated without an equipment grounding conductor (EGC).

A larger size EMT may be required if an EGC is used.

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



## Lifeline® Power Cables: RHW-2 or RW90 Two-Hour Fire Resistive Cables

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

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<sup>2</sup> Electrical Metallic Tubing (EMT) size is calculated without an equipment grounding conductor (EGC).

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

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