# **SPECIFICATIONS**

# DuraLife® RHH/R90 Two-Hour Fire-Rated Power Cables

Certified to the harsh requirements of the UL 2196 Test for Fire Resistive Cables, DuraLife® RHH/R90 is a 600V two-hour fire-rated cable designed to provide an easy-to-install, cost effective means of protecting critical emergency systems when under fire conditions. DuraLife® RHH/R90 meets the code requirements for circuit survivability.







96 Interte

(14 AWG - 500 MCM)

Thermal/Fire

**Barrier Tape** 

Copper Conductor

Description: The only full-range product on the market, 14 AWG through 500 MCM two-hour UL 2196 rated in both vertical and horizontal configurations, EMT and Champion Flame Shield Phenolic Conduit Type XW, Low Smoke, Zero Halogen (LSZH) design

### STANDARDS:

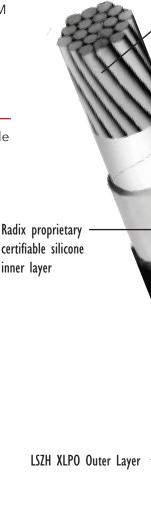
- Certified to UL 2196 / ULC S-139 Standard for Two-Hour Fire Resistive Cable
- Electrical Circuit Integrity System FHIT 28E & FHIT7 28E. Fire Resistive Directory R21213
- UL44 Listed for Thermoset Insulated Wires & Cables 600V/90°C RHH/R90
- Meets NFPA 70 Articles 517, 695, 700, 708 & 660
- Meets NFPA 130 and 502 with AHJ approval
- Meets IEEE 1202/FT4-ST1 10 AWG and larger
- Meets FT2 Horizontal Flame

## **FEATURES & BENEFITS:**

- The most comprehensive and versatile two-hour fire-rated solution for 600V power applications
  - Installs in EMT or phenolic conduit
  - Full range of constructions 14 AWG through 500 MCM
  - Two-Hour Certified for both vertical and horizontal installations
  - Certification includes ancillary components
  - Low Smoke, Zero Halogen
- Economic alternative to both MI and MC options
  - Easy to install no special tools or procedures required
  - Long length availability eliminates need for splice

## **APPLICATIONS:**

- Fire Pumps
- Emergency Generators
- Ventilating Fans
- Emergency Lighting
- Emergency Elevators
- High Rise Buildings
- Hospitals
- Places of Mass Assembly



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### HARDWARE & ACCESSORIES CERTIFIED: (Refer to DuraLife® II Installation Instructions for details)

- EMT/Conduit: Wheatland/Western Tube; Set-Screw Coupling & Fittings: Hubbell Raco
- Phenolic Conduit: Conduit & Couplings: Champion Fiberglass; Conduit clamps: Erico
- Pull Boxes NEMA 1: Eaton/Cooper; Type 4X: Nvent/Hoffman
- Pulling Lubricant Polywater LZ

#### 2020 NFPA 70® Table 310.16

Radix DuraLife® Power Cables								Horizontal / Vertical Installation – EMT Raceway		Horizontal Installation- Champion Flame Shield Phenolic Conduit Type XW		Vertical Installation– Champion Flame Shield Phenolic Conduit Type XW	
DuraLife Part Number	Conductor Size	Conductor Strands	Overall Diameter	Insulation System Thickness	Approx. Weight (lbs/1,000')	Ampacity 75°C (amps)	Ampacity 90°C (amps)	Number of Conductors		Number of Conductors		Number of Conductors	
								1 to 4	5	1 to 4	5	1 to 4	5
RH14A007	14 awg	7	.195″	45 mils	29	20	25	1"	1 1/4"	1"	1 1/4"	1"	1 1/4"
RH12A007	12 awg	7	.220"	45 mils	38	25	30	1 1⁄4"	1 1/4"	1 1⁄4"	1 1/4"	1"	1 1/4"
RH10A007	10 awg	7	.250"	45 mils	54	35	40	1 1/4"	1 ½"	1 1/4"	1 1/4"	1"	1 1/4"
RH08A007	8 awg	7	.310″	60 mils	84	50	55	1 1/4"	1 ½"	1 1⁄4"	1 ½"	1"	1 1/4"
RH06A007	6 awg	7	.380″	75 mils	131	65	75	1 ½"	2"	1 ½"	2"	1 1/4"	1 ½"
RH04A007	4 awg	7	.420"	75 mils	186	85	95	2"	2 ½"	2"	2 ½"	1 1/4"	1 ½"
RH03A007	3 awg	7	.450"	75 mils	225	100	115	2"	2 1/2"	2 ½"	2 1/2"	1 1/4"	2"
RH02A007	2 awg	7	.480"	75 mils	270	115	130	2"	2 ½"	2 1/2"	3"	1 ½"	2"
RH01A019	1 awg	19	.560"	100 mils	365	130	145	2 ½"	3"	2 ½"	3"	2 ½"	3"
RHX1A019	1/0	19	.600"	100 mils	443	150	170	2 ½"	3"	2 ½"	3"	2 ½"	3"
RHX2A019	2/0	19	.650"	100 mils	537	175	195	2 ½"	3"	2 ½"	3"	2 ½"	3"
RHX3A019	3/0	19	.700"	100 mils	658	200	225	3"	3 1/2"	3"	3 1/2"	3"	3 1/2"
RHX4A019	4/0	19	.760"	100 mils	806	230	260	3"	3 1/2"	3"	3 1/2"	3"	3 1/2"
RH250A037	250 MCM	37	.865"	130 mils	991	255	290	3 ½"	4"	3"	3 ½"	3"	4"
RH300A037*	300 MCM	37	.920"	130 mils	1165	285	320	4"	4"	3 ½"	4"	3 ½"	4"***
RH350A037	350 MCM	37	.970"	130 mils	1306	310	350	4"	4"	3 ½"	4"	3 ½"	4"***
RH400A037*	400 MCM	37	1.020"	130 mils	1672	335	380	4"	Х	4"	Х	4"	Х
RH500A037	500 MCM	37	1.105"	130 mils	1825	380	430	4"	Х	4"	Х	4"	Х

See manufacturer's instructions for additional options and detailed conduit fill by awg size, orientation, conduit type. Must follow UL Electrical Circuit Protective System (FHIT/7) #28E and all provisions of the National Electrical Code (NFPA 70). Ampacity based on three current carrying conductors in a conduit and a 30°C (88°F).



<sup>\* 300 &</sup>amp; 400 MCM sizes are available as a special order item.

<sup>\*\*</sup> See National Electrical Code (NFPA 70) section 240-3.

<sup>\*\*\*</sup> Max 4 x 300MCM + 1 x 2/0 ground; Max 4 x 350MCM + 1 x 1/0 ground