

# DuraLife® II Dual Rated CI/CI Free Air

## UL 2196 2-Hour Fire Resistive Cable

### FPLR Shielded / Unshielded 105°C/300V

## SPECIFICATIONS

Certified to the harsh requirements of the UL2196 Test for Fire Resistive Cables, the DuraLife II Dual Rated CI /CI cables ensure two-hour operation of critical systems in the event of a fire. The dual rating design offers the most versatility in meeting code survivability requirements in both in-conduit and free air installation scenarios.

Description: Dual Rated CI/CIC Cable. UL/CAN (ULC) 2196 Certified/UL 1424 Listed. FHIT/FHIT7 (ULC) System No. 28C. Low smoke, zero halogen design (LSZH).

Sizes Available: 2 conductor, 18-12 AWG unshielded; 18-14 AWG shielded.



### CONSTRUCTION:

- **Conductor:** Oxygen-free bare copper (OFHC), solid and/or stranded
- **Insulation:** Proprietary ceramifiable silicone rubber
- **Assembly:** Color-coded black/red leads, 3 twists/foot
- **Jacket:** Red low smoke/zero halogen FRPE (black jacket available/special order)

### APPLICATIONS:

- Hospitals & Healthcare Facilities
- High Rise & Mix use buildings
- Universities & College Campuses
- Stadiums, Casinos, places of assembly
- Transit bridges, tunnels and subways
- Government Facilities

### CRITICAL SYSTEMS:

- Fire Alarm and EVAC Systems
- Smoke evacuation and control
- Fan & Pressurization systems
- Strobes & notification appliances
- Area of Refuge Systems
- Emergency lighting

### COMPLIANCE & PERFORMANCE FEATURES:

- UL 1424 Listed FPLR/FPLR-CI (dual-rated) for Power-Limited Fire Alarm Circuits. Riser Rated. 300V/105°C classified.
- UL/CAN (ULC) Certified to UL 2196 2-hour fire rating in FHIT/FHIT7 28C
- CSA Certified FAS90; CSA Std. C22.2 No. 208-14 FT4-ST1
- UL Certified 2-hour fire rating as FPLR-CI for Free Air installed per NEC code
- UL 444 Listed "CMR/CMR-CI" as Communications Cable
- Fire alarm circuit integrity, emergency systems, and healthcare facilities (NEC Articles 760, 700 & 517)
- Meets National Fire Protection Code (NFPA 70 & 72) fire alarm survivability circuit requirements
- Meets National Fire Protection Code (NFPA 130 & 502) fire alarm survivability circuit requirements
- Compliance tested to UL 1424 as suitable for use in applications requiring wet rating
- Tested for Sunlight Resistance in compliance with UL 2556 requirements
- Suitable for 2-hour certified fire-resistive applications in EMT, IMC, or Phenolic conduit systems
- UL Listed File No. E-241484. UL Fire Directory R-21213.
- Splice Allowance
- Performance testing of cables, cold bend test of complete cable per defined testing parameters and UL 1424



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# SPECIFICATIONS

## DuraLife® II Dual Rated CIC/CI Free Air UL 2196 2-Hour Fire Resistive Cable FPLR Shielded/Unshielded 105°C/300V

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

- **EMT/IMC Conduit:** Wheatland/Western Tube
- **EMT/IMC Conduit:** Allied/Columbia (EMT: E-Z Pull Brand)
- **Phenolic Conduit:** Champion Fiberglass
- **EMT/IMC Compression Couplings:** Hubbell/Raco
- **EMT/IMC Set-Screw Coupling:** Hubbell/Raco
- **Phenolic Coupling:** Champion Fiberglass
- **NEMA 1 Splice Enclosure/Pull Box:** Eaton/Cooper (system use only)
- Standard UL listed steel 4/S Utility Box (CI only)
- **Expansion Couplers:** Bridgeport fittings (EMT/IMC)
- **Box Fittings:** Compression - Cooper Crouse-Hinds (EMT); Hubbell/Raco (EMT/IMC)  
Set Screw - Hubbell/Raco (EMT/IMC)  
Phenolic - Champion Fiberglass
- **Conduit Clamps:** Erico (Phenolic conduit only)
- **Splice Connector:** 3M Butt-Type Crimp Terminals
- **Splice Tapes - 1":** 3M Silicone; St. Gobain Fiberglass Tape
- **Pulling Lubricant:** Polywater LZ

**NON-SHIELDED:** RADIX WIRE-II DURALIFE-II™ E241484 2/C #AWG FPLR/FPLR-CI/CMR 300V/105C / (UL) 2196 (ULC) 2-HR FIRE RESISTIVE CABLE FOR USE IN FHIT/FHIT7 ELECTRIC CIRCUIT INTEGRITY SYSTEM #28C. SEE UL FIRE RESISTANCE DIRECTORY R21213 // CSA LL13427 FAS90 300V FT4-ST1 Sun Res Wet (MONTH/YEAR) CI - NYC certified fire alarm cable (XXXX FT)

RADIX P/N	#COND	AWG	SOLID OR STRANDED	NOMINAL O.D. (INCH)	NET WEIGHT (LBS PER MFT)	RESISTANCE (OHMS/MFT)	NOMINAL CAPACITANCE (pF/FT)
CTU18A0102	2	18	Solid	.305	53	6.48	14.4
CTU16A0102	2	16	Solid	.335	62	3.99	15.3
CTU14A0102	2	14	Solid	.344	77	2.57	17.1
CTU14A0702	2	14	Stranded	.350	77	2.60	17.3
CTU12A0702	2	12	Stranded	.392	98	1.64	17.6

**SHIELDED:** RADIX WIRE-II DURALIFE-II™ E241484 2/C #AWG FPLR/FPLR-CI/CMR/SHLD 300V/105C / (UL) 2196 (ULC) 2-HR FIRE RESISTIVE CABLE FOR USE IN FHIT/FHIT7 ELECTRIC CIRCUIT INTEGRITY SYSTEM #28C. SEE UL FIRE RESISTANCE DIRECTORY R21213 // CSA LL13427 FAS90 300V FT4-ST1 Sun Res Wet (MONTH/YEAR) CI - NYC certified fire alarm cable (XXXX FT)

RADIX P/N	#COND	AWG	SOLID OR STRANDED	NOMINAL O.D. (INCH)	NET WEIGHT (LBS PER MFT)	RESISTANCE (OHMS/MFT)	NOMINAL CAPACITANCE (pF/FT)
CTS18A0102	2	18	Solid	.335	55	6.48	18.4
CTS16A0102	2	16	Solid	.360	65	3.99	19.1
CTS14A0102	2	14	Solid	.390	79	2.57	21.4
CTS14A0702	2	14	Stranded	.393	79	2.60	21.7

\*Min-Max Spec Range ± .020

### System Fill Allowances (EMT - ½" to 2"; IMC - ¾" to 2")

EMT/IMC	½"	¾"	1"	1 ¼"	1 ½"	2"
Part No.	No. of Cables Max Fill					
CTU18A0102	1	2	4	6	10	N/A
CTU16A0102	1	1	3	5	7	10
CTU14A0102	1	1	3	5	7	10
CTU12A0102	1	1	2	4	5	10V/9H
CTS18A0102	1	1	3	5	8	N/A
CTS16A0102	1	1	3	5	7	10
CTS14A0102	N/A	1	2	4	6	10

### System Fill Allowances (Phenolic Conduit - 1" to 2")

PHENOLIC	1"	1 ¼"	1 ½"	2"
Part No.	No. of Cables Max Fill			
CTU18A0102	3	6	9	N/A
CTU16A0102	2	4	6	10
CTU14A0102	3	5	7	10
CTU12A0102	2	4	5	10V/9H
CTS18A0102	3	5	7	N/A
CTS16A0102	2	4	6	10
CTS14A0102	2	4	6	10

**Radix**<sup>™</sup>

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