

SPECIFICATIONS

DuraLife™ FPL

UL 2-Hour Fire Certified FIRE RESISTIVE ALARM CABLES
FHIT.28A Electrical Circuit Integrity System



UL 2196 CERTIFIED / UL 1424 LISTED. FHIT SYSTEM NO. 28A. LOW SMOKE, ZERO HALOGEN DESIGN (LSOH)

Unshielded - 16AWG - 14AWG; 2-conductor; Circuit Integrity in Conduit (CIC)

NEC Type FPL; for use in protective electrical system (EMT)

California State Fire Marshals: LISTING No. 7162-2173:0100

DuraLife™ FPL - Fire Resistive Alarm Cables

CERTIFICATION LISTINGS:

16AWG solid OFHC; 2-conductor vertical straight-through w/ couplings in EMT conduit; 72" max. support spacing

16AWG solid OFHC; 2-conductor horizontal straight-through w/ couplings in EMT conduit; 60" max. support spacing

16AWG solid OFHC; 2-conductor horizontal straight-through w/ pull box in ¾" EMT conduit; 60" max. support spacing

16AWG solid OFHC; 2-conductor horizontal w/ mechanical splice in ¾" EMT conduit; 60" max. support spacing

14AWG 7-strand OFHC; 2-conductor vertical straight-through w/ couplings in EMT conduit; 72" max. support spacing

14AWG 7-strand OFHC; 2-conductor horizontal straight-through w/ couplings in EMT conduit; 60" max. support spacing

14AWG 7-strand OFHC; 2-conductor horizontal straight-through w/ pull box in EMT conduit; 60" max. support spacing

14AWG 7-strand OFHC; 2-conductor horizontal w/ mechanical splice in ¾" EMT conduit; 60" max. support spacing

14AWG solid OFHC; 2-conductor vertical straight-through w/ couplings in EMT conduit; 72" max. support spacing

14AWG solid OFHC; 2-conductor horizontal straight-through w/ couplings in EMT conduit; 60" max. support spacing

14AWG solid OFHC; 2-conductor horizontal straight-through w/ pull box in EMT conduit; 60" max. support spacing

14AWG solid OFHC; 2-conductor horizontal w/ mechanical splice in ¾" EMT conduit; 60" max. support spacing

HARDWARE SYSTEM CERTIFIED:

- EMT Conduit --- Wheatland*, Tube FasTrak Plus
- EMT Couplings --- Raco or Halex
- Compression Fittings --- Cooper Crouse-Hinds
- NEMA 1 Splice Enclosure/Pull Box --- Cooper B-Line (Pull box size up to 12x12x4)
- Set-screw Fittings --- Hubbell
- Copper Off-Set Fixed Lug Connector with ¼-20 set-screw --- Penn-Union
- Pulling Lubricant --- Polywater J

*Certified assemblies, no substitute of any kind can be made

COMPLIANCE:

UL 1424 Listed FPL for Power-Limited Fire Alarm Circuits; 300V/90°C classified

UL Certified to UL 2196 2-hour fire rating in FHIT System 28A

Meets National Fire Protection Code (NFPA 70 & 72) fire alarm survivability circuit requirements

APPLICATION

Fire alarm circuit integrity (NEC Article 760), and emergency systems (NEC Articles 700 and 517).

Suitable for 2-hr. certified fire-resistive applications in EMT conduit.*

Fire certified for Power-Limited system use at 72V phase-to-phase utilization voltages.

Meets fire alarm survivability circuit requirements in the National Fire Protection Code (NFPA 72)

* DuraLife™ FPL products are not approved for use in RMC or IMC conduit systems



Radix™

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DuraLife™ FPL

UL 2-Hour Fire Certified FIRE RESISTIVE ALARM CABLES FHIT.28A Electrical Circuit Integrity System

CONSTRUCTION:

Oxygen-free bare copper (OFHC) conductors, solid and stranded; proprietary ceramifiable silicone rubber insulation; color-code black and red insulation on leads

Low smoke - zero halogen FRPE outer jacket. Black jacket color available at an additional charge

Patent Pending

PACKAGING:

Available on 1,000 ft., 2,000 ft. and 5,000 ft. standard length reels, smaller reels available from distributors

RADIX WIRE-II DURALIFE™ E241484 2/C 16 AWG SHIELDED FPL 90C / (UL) CLASSIFIED FIRE RESISTIVE CABLE FOR USE IN ELECTRICAL CIRCUIT INTEGRITY SYSTEM 28A. SEE UL FIRE RESISTANCE DIRECTORY R21213 CSA LL13427 FAS90 300V FT1 - (MONTH/YEAR)

RADIX P/N	#COND	AWG	NOMINAL INSUL THICKNESS (INCH)	NOMINAL JACKET THICKNESS (INCH)	NOMINAL O.D. (INCH)	MIN. - MAX. SPEC. RANGE	NET WEIGHT (LBS PER MFT)	COPPER LBS/MFT	NOMINAL CAPACITANCE (pF/FT)	CHARACTERISTIC IMPEDANCE @1MHZ (OHMS)
CI16A0102	2	16 SOLID	0.032"	0.035"	0.292"	0.272" - 0.312"	55.41	15.6	15.3	110.9

RADIX WIRE-II DURALIFE™ E241484 2/C 14 AWG SHIELDED FPL 90C / (UL) CLASSIFIED FIRE RESISTIVE CABLE FOR USE IN ELECTRICAL CIRCUIT INTEGRITY SYSTEM 28A. SEE UL FIRE RESISTANCE DIRECTORY R21213 CSA LL13427 FAS90 300V FT1 - (MONTH/YEAR)

RADIX P/N	#COND	AWG	NOMINAL INSUL THICKNESS (INCH)	NOMINAL JACKET THICKNESS (INCH)	NOMINAL O.D. (INCH)	MIN. - MAX. SPEC. RANGE	NET WEIGHT (LBS PER MFT)	COPPER LBS/MFT	NOMINAL CAPACITANCE (pF/FT)	CHARACTERISTIC IMPEDANCE @1MHZ (OHMS)
CI14A0702	2	14/7	0.032"	.0035"	0.332"	0.312"-0.352"	61.1	25.1	17.3	99.4
CI14A0102	2	14 SOLID	0.032"	0.035"	0.326"	0.322"-0.334"	59.01	25.62		

Certifications & EMT Fill Listings

Certifications	16 AWG	14 AWG
Solid Conductor	✓	✓
7-Strand Conductor	-	✓
Single-Cable EMT Horizontal	¾" - 2" Wheatland	¾" - 2" Wheatland
Single-Cable EMT Vertical	½" - 2" Wheatland	½" - 2" Wheatland
Multi-Cable EMT Vertical	¾" - 2" Wheatland	¾" - 2" Wheatland
Fill Rates	16 AWG	14 AWG
½" EMT Vertical	1 Cable	1 Cable
¾" EMT Horizontal	1 Cable	Up to 2 Cables
1" EMT Horizontal	Up to 2 Cables	Up to 2 Cables
¾" - 1" EMT Vertical	Up to 4 Cables	Up to 3 Cables
1¼" EMT Vertical & Horizontal	Up to 4 Cables	Up to 3 Cables
1½" EMT Vertical & Horizontal	Up to 6 Cables	Up to 4 Cables
2" EMT Vertical & Horizontal	Up to 10 Cables	Up to 8 Cables

Note: 16AWG, and 14AWG cables may be installed within the same raceway when not exceeding the number of cables associated with the 14AWG installation.

All dimensions listed above are nominal

Compliance: UL Listed File No. E241484. Fire Directory R21213

Information included in this catalog is intended as a guideline only. for applications that require tight tolerances. Please contact the Radix factory for dimensional verification. Information herein is believed to be accurate as of publication date; however, if an error exists it is unintentional and Radix Wire is not responsible for any claim traceable to such error.



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