

VITALink® CI

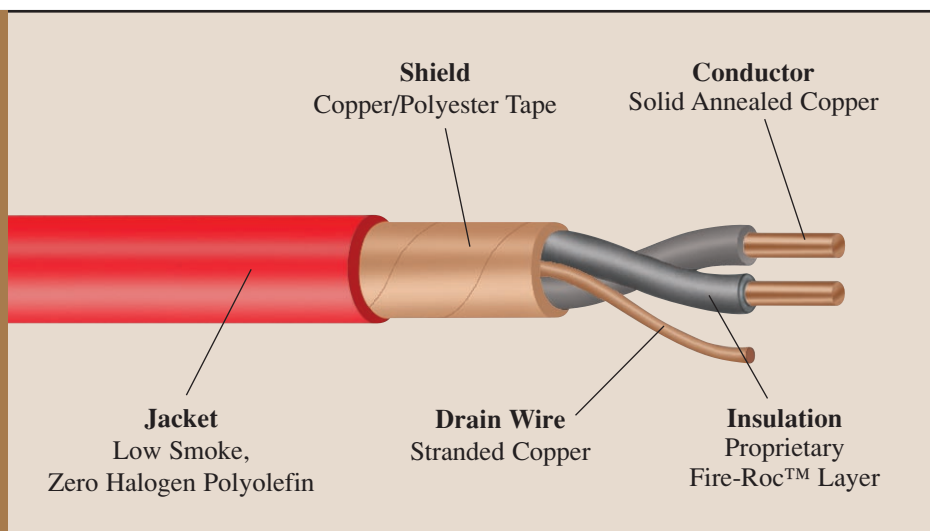
Circuit Integrity Cable

NEC Type FPLR-CI
 or
 Type CL3R

UL Listed, 300 Volt**, 90°C
 Shielded Fire Alarm

Spec. VL-102

** Max. 72V application voltage



Scope

VITALink® CI is a UL Listed Type FPLR-CI fire alarm cable intended for use in Power Limited Fire Alarm Circuits. When installed in accordance with standard code practices, it meets the requirements for "**Fire Alarm Circuit Integrity (CI) Cables**" as defined in Article 760 of the National Electrical Code (NFPA 70). It has established a minimum 2 hour fire resistance rating by passing the applicable requirements of UL Test Standard 2196, "Standard for Tests of Fire Resistive Cables".

It was specifically developed to meet the circuit "**survivability**" requirements of the National Fire Alarm Code (NFPA 72).

Its unique ability to maintain circuit integrity during attack by fire allows the fire alarm system to perform more reliably when needed most. This "**survivability**" characteristic makes the cable ideal for any circuit where continued operation may enhance the **ability to save lives or property**.

VITALink® CI Shielded Circuit Integrity Cable

Product Code	Number Of Conductors	AWG Size	Insulation Thickness (Mils)	Jacket Thickness (Mils)	Cable Diameter (In)	Approximate Weight (Lbs/MFT)	Nominal Cable Lay (In./Twist)
F21-0162	2	16	35	30	.32	50	3.7
F21-0142	2	14	35	30	.34	63	4.0
F21-0122	2	12	35	30	.38	82	4.4

Product Specification Sheet No. VL-102

(Rev. 4 Dated 9-25-00)

Scope

This specification covers shielded pair power limited fire alarm signal cable designed for service at a maximum continuous operating temperature of 90°C. Cables are rated 300 volt and are UL listed as Type FPL meeting the requirements of NEC Article 760 and UL Standard No. 1424. Cables are also UL listed as Types CL3R and MPR* in accordance with NEC Articles 725 and 800 respectively. Cables are 2 hour fire rated per UL Standard No. 2196. They are specifically designed to meet the survivability requirements of the NFAC and are UL classified as "CI" cables (Circuit Integrity).

General Construction

All cables have thermoset elastomeric insulated conductors, twisted together to form a pair wrapped with a copper/polyester tape shield and drain wire covered with a low smoke, zero halogen polyolefin jacket.

Conductors

Conductors are solid bare annealed copper per ASTM B-3. Conductor sizes range from 16 to 12 AWG.

Insulation

All conductors are insulated with a 35 mil layer of proprietary thermoset Fire-Roc elastomer.

Circuit Identification

Circuit identification is accomplished by means of printed color designations. (1-Black & 2-Red)

Shielded Assembly

Two insulated conductors are twisted together along with a flexible stranded bare copper drain wire. This assembly is helically wrapped with a laminated copper / polyester foil tape in continuous contact with the drain wire.

Jacket

The shielded cable core is covered with an extruded layer of red flame retardant, low smoke, zero halogen polyolefin with its thickness and tolerance in accordance with UL Standard No. 1424.

Cable Identification

All cables have a printed outer jacket containing cable identification, pertinent UL information and sequential footage markers.

Fire Ratings (Type FPLR - CI)

All cables are 2 hour fire rated per UL Standard No. 2196 and have a maximum application voltage of 72V. Additionally, cables are "Riser" rated by virtue of passing the flame propagation test stated in UL Standard 1666.

National Electrical Code

All cables are UL listed as Type FPLR-CI in accordance with Article 760 of the National Electrical Code and are intended for use in "Power Limited Fire Alarm Circuits". Cables are also UL listed as Types CL3R in accordance with NEC Article 725.

Product Code	Number Of Conductors	AWG Size	Maximum Capacitance (pf/ft)		Nominal Capacitance (pf/ft)	
			C/S ¹	C/C ²	C/S ¹	C/C ²
F21-0162	2	16	61	33	55	30
F21-0142	2	14	72	40	65	36
F21-0122	2	12	87	47	79	43

1) C/S is the capacitance measured from one conductor to the shield with the other conductor connected to the shield at 1000 Hz and 20°C.

2) C/C is the capacitance measured from conductor to conductor at 1000 Hz and 20°C. This is also approximately equal to the mutual capacitance.

ISO 9001 REGISTERED



Clinton, MA
172 Sterling Street
Clinton, MA 01510-1922
Tel: 978-365-6331
Fax: 978-365-4054
800-444-3792

East Granby, CT
20 Bradley Park Road
East Granby, CT 06026
Tel: 860-653-8300
Fax: 860-653-8301
800-327-7625

WEB Address:
www.vitalinkcable.com



A member of The Marmon Group of companies