

Scope

Firewall® III Thermocouple Extension Cable is a totally thermoset construction specifically designed for applications in power generation plants, substations and other similar locations. It is intended for use in harsh and demanding environments, including

Class 1E Nuclear applications. It may be installed in trays, ducts, conduits or in direct burial applications to perform a variety of signaling and related functions. *Designed for use on circuits where shielding from external electrostatic interface is required.*

Features

- Thermoset insulation and jacket for enhanced thermal stability
- Specially formulated insulation for superior long term water resistance
- Extremely flame retardant
- Nuclear qualified with a minimum 40-year thermal life expectancy at 90°C
- Radiation resistant (up to 200 megarads)
- Full traceability
- Excellent mechanical properties
- All singles pass a wet dielectric (tank) test prior to cabling to verify insulation integrity
- All jackets have printed sequential footage markers for improved inventory control
- Easy strippability for installation ease

Performance Standards

- UL listed Type TC for cable tray installations (UL 1277)
- Insulation in accordance with ICEA Standard S-66-524 and UL approved for 90°C applications in both wet & dry locations
- Jackets in accordance with ICEA Standard S-19-81 for heavy-duty chlorosulfonated polyethylene (CSPE)
- Class 1E qualified in accordance with IEEE-383 1974 and IEEE-323 (Rockbestos Reports QR-5804 or QR-5805)
- Cable passes IEEE-383 1974 70,000 BTU/hr vertical tray flame test as modified by NRC Reg. Guide 1.131
- Cable passes ICEA 210,000 BTU/hr vertical tray flame test (Standard T-29-520)
- Single conductors pass the vertical flame tests specified in IEEE-383 1974 para. 2.5.6 (ICEA S-19-81 Section 6.19.6) and UL VW-1
- ANSI standard MC 96.1
- Quality assurance program in accordance with 10 CFR 50 Appendix B
- Cable components are in compliance with the maximum leachable lead level required by the EPA in 40 CFR, Part 261

Construction

Conductor:

Solid alloys per ANSI MC 96.1 (Extension Grade, standard limits of error)

Insulation:

Proprietary heat, moisture and radiation resistant flame retardant crosslinked polyethylene

Pair Assembly:

Two insulated conductors twisted with a flexible strand, tin-coated copper drain wire, a helically applied aluminum/polyester laminated tape shield

Circuit Identification:

Individual conductors color coded to ANSI requirements by means of pigmented insulation

Jacket:

Heavy-duty chlorosulfonated polyethylene (colors to ANSI standard by type)

* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

Firewall® III Thermocouple Extension Cable

Single Pair Shielded

(XLPE/CSPE)

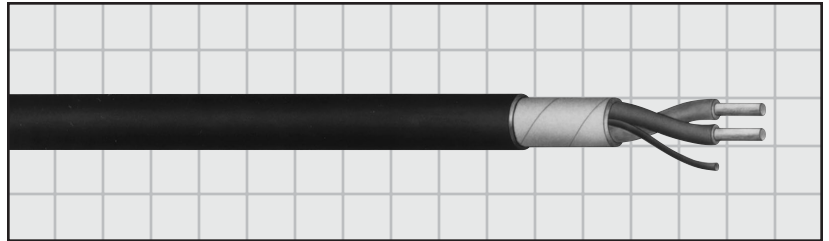
90°C, 600 Volt

Class 1E Nuclear

NEC Type TC

UL Listed

Spec. RSS-3-021



Single Shielded Pair - 16 AWG Solid

Product Code	Conductor Type	Insulation Thickness		Insulated Conductor Diameter (Inch)	Drain Wire Size/ Stranding	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
		(Inch)	(mm)				(Inch)	(mm)	
I67-3423	JX	.025	.64	.10	18 AWG (16/s)	45	.30	7.62	65
I67-3424	EX	.025	.64	.10	18 AWG (16/s)	45	.30	7.62	65
I67-3425	KX	.025	.64	.10	18 AWG (16/s)	45	.30	7.62	65
I67-3426	TX	.025	.64	.10	18 AWG (16/s)	45	.30	7.62	65

Single Shielded Pair - 18 AWG Solid

I67-3419	JX	.025	.64	.09	20 AWG (10/s)	45	.28	7.11	50
I67-3420	EX	.025	.64	.09	20 AWG (10/s)	45	.28	7.11	50
I67-3421	KX	.025	.64	.09	20 AWG (10/s)	45	.28	7.11	50
I67-3422	TX	.025	.64	.09	20 AWG (10/s)	45	.28	7.11	50