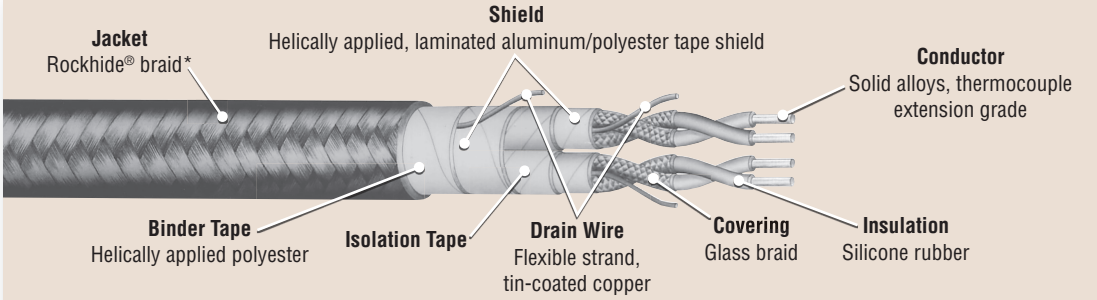
Firewall® SR
Thermocouple Extension Cable
Multi-Shielded Pairs With Overall Shield (Silicone Rubber)

RSCC Nuclear Cable
www.rsccnuclearcable.com



125°C, 600 Volt
Class 1E Nuclear

Spec. RSS-9-008

Features
- Nuclear qualified with a minimum 40-year thermal life expectancy at 125°C
- Radiation resistant (up to 200 megarads)
- Flame retardant
- Extremely flexible for installation ease
- Excellent circuit integrity during flame conditions
- Full traceability
- Easy strippability for installation ease
- All singles pass a wet dielectric (tank) test prior to braid covering to verify electrical integrity
- Shield to shield isolation system provided and verified by electrical testing
- All cables have printed sequential footage markers for improved inventory control

Scope
Firewall® SR Thermocouple Extension Cable is a silicone rubber insulated construction specifically designed for high temperature applications within nuclear generating facilities. It is intended for use in harsh and demanding environments where temperature extremes preclude the use of standard cables. It may be installed in trays, ducts, conduits or in confined spaces such as equipment housings. *Designed for use on critical circuits where complete isolation is required between pairs and from external interference.*

Performance Standards
- Silicone rubber insulation in accordance with ICEA Standard S-19-81
- Class 1E qualified in accordance with IEEE-383 1974 and IEEE-323 (Rockbestos Report QR-8802)
- Cable passes IEEE-383 1974 70,000 BTU/hr vertical tray flame test as modified by NRC Reg. Guide 1.131
- ANSI standard MC 96.1
- Cable passes ICEA 210,000 BTU/hr vertical tray flame test (Standard T-29-520)
- Single conductors pass the vertical flame test specified in IEEE-383 1974 para. 2.5.6 (ICEA S-19-81 Section 6.19.6)
- Quality Assurance program in accordance with 10 CFR 50 Appendix B

Construction
Conductor: Solid alloys per ANSI MC 96.1 (Extension Grade, standard limits of error)
Insulation: Proprietary heat, moisture and radiation resistant silicone rubber
Covering: Glass braid with high temperature finish
Pair Assembly: Two insulated and braided conductors twisted with a flexible strand, tin-coated copper drain wire, a helically applied aluminum/polyester laminated tape shield and an isolation tape
Cabling: Required number of pairs cabled together
Circuit Identification: Individual pair single conductors color coded to ANSI requirements by means of colored braids with printed pair numbers on both singles for pair identification
Fillers: (Where required)
Shield System: Helically applied aluminum/polyester laminated tape shield in continuous contact with a flexible strand, tin coated copper drain wire
Binder Tape: Helically applied polyester
Overall Covering: Rockhide® braid* with high temperature finish (colors to ANSI standards by type)

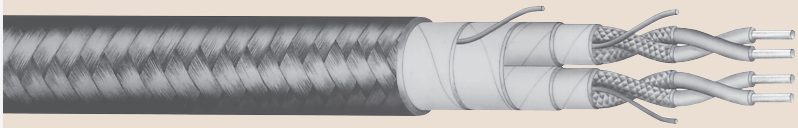
* Rockhide® is a proprietary blend of aramid and other high temperature synthetic fibers.

RSCC® World Class Engineered Cable

MARMON
Marmon Engineered Wire & Cable LLC
A Berkshire Hathaway Company

Firewall® SR
Thermocouple Extension Cable

Multi-Shielded Pairs With Overall Shield
(Silicone Rubber)



125°C, 600 Volt
Class 1E Nuclear

Spec. RSS-9-008

16 AWG Solid

Product Code*	Number of Pairs	Conductor Type*	Insulation Thickness (inch)	(mm)	Individual Conductor Diameter (inch)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	(mm)	Approximate Net Weight (Lbs/M')
I68-3347	2	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	.58	14.73	115
I68-3351	3	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	.62	15.75	150
I68-3355	4	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	.71	18.03	200
I68-3359	5	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	.78	19.81	245
I68-3363	7	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	.85	21.59	315
I68-3367	9	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	1.00	25.45	425
I68-3371	12	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	1.13	28.70	505
I68-3375	15	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	1.27	32.36	635
I68-3379	19	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	1.34	34.04	780
I68-3383	37	JX	.030	.76	7.5	.13	18 AWG (16/s)	40	1.94	49.28	1500

18 AWG Solid

Product Code*	Number of Pairs	Conductor Type*	Insulation Thickness (inch)	(mm)	Individual Conductor Diameter (inch)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	(mm)	Approximate Net Weight (Lbs/M')
I68-3307	2	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.54	13.72	90
I68-3311	3	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.58	14.73	120
I68-3315	4	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.66	16.76	155
I68-3319	5	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.72	18.29	190
I68-3323	7	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.79	20.07	245
I68-3327	9	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	.93	23.62	315
I68-3331	12	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	1.05	26.67	390
I68-3335	15	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	1.17	29.72	490
I68-3339	19	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	1.24	31.50	595
I68-3343	37	JX	.030	.76	7.5	.12	20 AWG (10/s)	40	1.69	42.93	1130

* **Product Code Sequence:** Codes for other alloy combinations can be obtained by applying the following numbering sequence:

Type	Product Code
EX	Add “1” to above “JX” code
KX	Add “2” to above “JX” code
TX	Add “3” to above “JX” code

Example: I68-3348 = 2 PAIR 16 AWG Type “EX”

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A Berkshire Hathaway Company