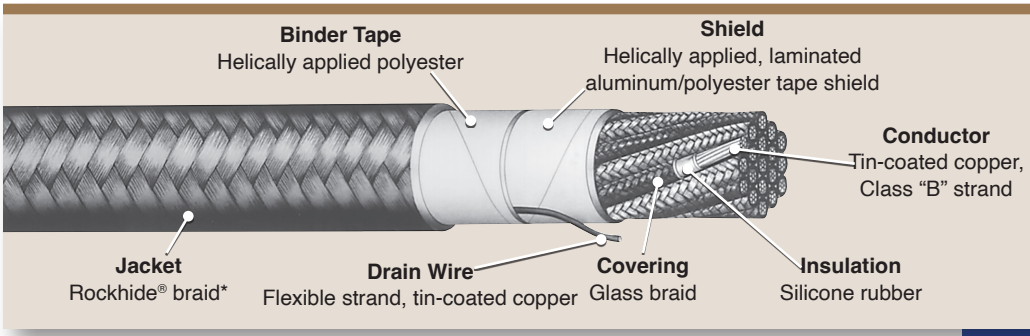
Firewall® SR
Instrumentation Cable
Multi-Conductor Shielded (Silicone Rubber)

FIREWALL®



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)
- Extremely flame retardant
- Extremely flexible for installation ease
- Excellent circuit integrity during flame conditions
- Full traceability
- Easy strippability for termination ease
- Tin-coated copper conductors for improved terminations, corrosion resistance and temperature endurance
- All singles pass a wet dielectric (tank) test prior to braid covering to verify electrical integrity
- All cables have printed sequential footage markers for improved inventory control

Scope

Firewall® SR Instrumentation 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 circuits where shielding from external electrostatic interference is required.*

Performance Standards

- Silicone rubber insulation in accordance with ICEA S-19-81
- Class 1E qualified in accordance with IEEE 383-1974 and IEEE 323-1974 (RSCC Report QR-8802)
- Cable passes IEEE 383-1974 70,000 BTU/hr vertical tray flame test as modified by NRC Reg. Guide 1.131
- Cable passes ICEA T-29-520 210,000 BTU/hr vertical tray flame test
- 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: Annealed, tin-coated copper, Class "B" strand (ASTM B8 & B33)

Insulation: Proprietary heat, moisture and radiation resistant silicone rubber

Covering: Glass braid with high temperature finish

Circuit Identification: Colored braids per ICEA Method 5, Table K-5

Fillers: As applicable

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

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

Marmon Industrial Energy & Infrastructure

Made in the USA

Marmon Electrical
A Berkshire Hathaway Company

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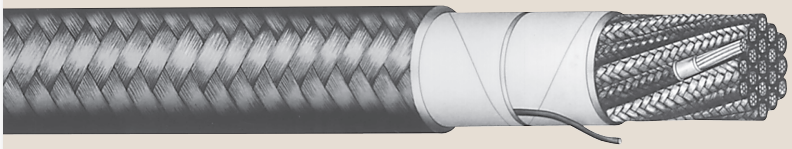

125°C, 600 Volt
Class 1E Nuclear

Spec. RSS-9-008

16 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (inch)	(mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	(mm)	Approximate Net Weight (Lbs/M')
I48-3327	2	.030	.76	7.5	.14	18 AWG (16/s)	40	.37	9.40	50
I48-3328	3	.030	.76	7.5	.14	18 AWG (16/s)	40	.39	9.91	65
I48-3329	4	.030	.76	7.5	.14	18 AWG (16/s)	40	.43	10.92	90
I48-3330	5	.030	.76	7.5	.14	18 AWG (16/s)	40	.49	12.45	110
I48-3332	7	.030	.76	7.5	.14	18 AWG (16/s)	40	.53	13.46	140
I48-3334	9	.030	.76	7.5	.14	18 AWG (16/s)	40	.62	15.75	185
I48-3335	12	.030	.76	7.5	.14	18 AWG (16/s)	40	.69	17.53	230
I48-3336	15	.030	.76	7.5	.14	18 AWG (16/s)	40	.77	19.56	290
I48-3337	19	.030	.76	7.5	.14	18 AWG (16/s)	40	.81	20.57	350
I48-3338	27	.030	.76	7.5	.14	18 AWG (16/s)	40	.97	24.64	490
I48-3339	37	.030	.76	7.5	.14	18 AWG (16/s)	40	1.09	27.69	665

18 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (inch)	(mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	(mm)	Approximate Net Weight (Lbs/M')
I48-3314	2	.030	.76	7.5	.13	20 AWG (10/s)	40	.34	8.64	40
I48-3315	3	.030	.76	7.5	.13	20 AWG (10/s)	40	.36	9.14	55
I48-3316	4	.030	.76	7.5	.13	20 AWG (10/s)	40	.40	10.16	70
I48-3317	5	.030	.76	7.5	.13	20 AWG (10/s)	40	.45	11.43	85
I48-3319	7	.030	.76	7.5	.13	20 AWG (10/s)	40	.49	12.45	110
I48-3321	9	.030	.76	7.5	.13	20 AWG (10/s)	40	.57	14.48	145
I48-3322	12	.030	.76	7.5	.13	20 AWG (10/s)	40	.64	16.26	180
I48-3323	15	.030	.76	7.5	.13	20 AWG (10/s)	40	.71	18.03	225
I48-3324	19	.030	.76	7.5	.13	20 AWG (10/s)	40	.75	19.00	270
I48-3325	27	.030	.76	7.5	.13	20 AWG (10/s)	40	.89	22.61	380
I48-3326	37	.030	.76	7.5	.13	20 AWG (10/s)	40	1.00	25.40	510

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