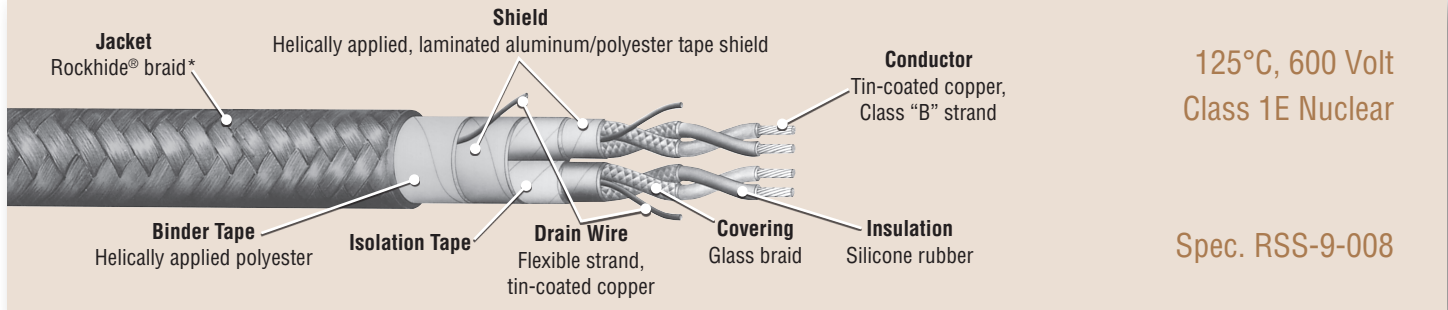


Firewall® SR Instrumentation Cable

Multi-Shielded Pairs With Overall Shield (Silicone Rubber)

RSCC Nuclear Cable
www.rsccnuclearcable.com



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 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
- Shield to shield isolation system provided and verified by electrical testing
- All cables have printed sequential footage markers for improved inventory control

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
- 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: Annealed, tin-coated copper, Class "B" strand (ASTM B-8 & B-33)

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: One leg of each pair is white. Up to 5 pairs, second legs are black, red, green, orange, or blue. Over 5 pairs, legs are white and black with printed pair number on each leg of each pair.

Shield System: Helically applied aluminum/polyester laminated tape shield in continuous contact with a flexible strand, tin-coated copper drain wire

Fillers: (Where required)

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.

Scope

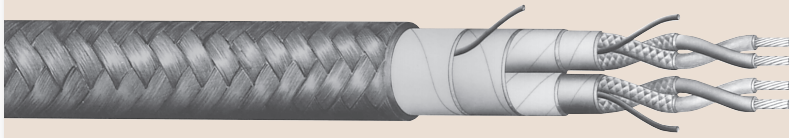
Firewall® SR Instrumentation Cable is a silicone rubber insulated construction specifically designed for high temperature applications within nuclear generating facilities. It is intended for use in harsh and demanding environments where temperature extremes preclude the use of standard cables. It may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



Marmon Engineered Wire & Cable LLC
A Berkshire Hathaway Company

Firewall® SR Instrumentation Cable

Multi-Shielded Pairs With Overall Shield
(Silicone Rubber)



125°C, 600 Volt
Class 1E Nuclear

Spec. RSS-9-008

16 AWG, 7 Strand

Product Code	Number of Pairs	Insulation Thickness (inch)	Insulation Thickness (mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
I48-3266	2	.030	.76	7	.14	18 AWG (16/s)	40	.61	15.49	125
I48-3267	3	.030	.76	7	.14	18 AWG (16/s)	40	.65	16.51	165
I48-3268	4	.030	.76	7	.14	18 AWG (16/s)	40	.74	18.80	215
I48-3269	5	.030	.76	7	.14	18 AWG (16/s)	40	.82	20.83	270
I48-3270	7	.030	.76	7	.14	18 AWG (16/s)	40	.89	22.61	350
I48-3271	9	.030	.76	7	.14	18 AWG (16/s)	40	1.06	26.92	465
I48-3272	12	.030	.76	7	.14	18 AWG (16/s)	40	1.20	30.48	555
I48-3273	15	.030	.76	7	.14	18 AWG (16/s)	40	1.34	34.04	700
I48-3274	19	.030	.76	7	.14	18 AWG (16/s)	40	1.41	35.81	860
I48-3276	37	.030	.76	7	.14	18 AWG (16/s)	40	2.03	51.56	1670

18 AWG, 7 Strand

Product Code	Number of Pairs	Insulation Thickness (inch)	Insulation Thickness (mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Drain Wire Size/Stranding	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
I48-3277	2	.030	.76	7	.13	20 AWG (10/s)	40	.57	14.48	100
I48-3278	3	.030	.76	7	.13	20 AWG (10/s)	40	.61	15.49	130
I48-3279	4	.030	.76	7	.13	20 AWG (10/s)	40	.69	17.53	170
I48-3280	5	.030	.76	7	.13	20 AWG (10/s)	40	.76	19.30	210
I48-3281	7	.030	.76	7	.13	20 AWG (10/s)	40	.83	21.08	270
I48-3282	9	.030	.76	7	.13	20 AWG (10/s)	40	.98	24.89	350
I48-3283	12	.030	.76	7	.13	20 AWG (10/s)	40	1.10	27.94	425
I48-3284	15	.030	.76	7	.13	20 AWG (10/s)	40	1.23	31.24	535
I48-3285	19	.030	.76	7	.13	20 AWG (10/s)	40	1.31	33.27	655
I48-3287	37	.030	.76	7	.13	20 AWG (10/s)	40	1.90	48.26	1300



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