

Features

- Thermoset insulation 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
- Tin-coated copper conductors for improved terminations and corrosion resistance
- All cables pass a wet dielectric (tank) test to verify insulation integrity
- Easy strippability for installation ease
- Low surface coefficient of friction insures installation ease with reduced pulling tension required

Performance Standards

- Insulation in accordance with ICEA standards S-66-524
- Class 1E qualified in accordance with IEEE-383 1974 and IEEE-323 (Rockbestos Reports QR-5804 or QR-5805)
- Wire passes 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
- Quality Assurance program in accordance with 10 CFR 50 Appendix B
- UL listed as Type SIS for sizes 14 AWG through 4/0 AWG (UL standard 44)

Construction

Conductor: Annealed, tin-coated copper, (available in various stranding classifications)

Insulation: Proprietary heat, moisture and radiation resistant, flame retardant crosslinked polyethylene

Scope

Firewall[®] SIS is a one conductor, unjacketed, nuclear Class 1E Switchboard Wire. Its tough thermoset construction allows for its use in demanding applications without additional jacketing protection. It is intended for low voltage applications and may be installed in switchboards, panel boards or other electrical apparatus where superior performance is required.

* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.
A 90°C dry rating must be used when the National Electrical Code applies.

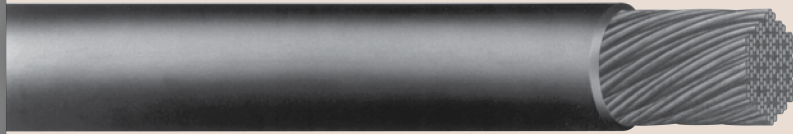
** 14 AWG & Larger



A Marmon Wire & Cable / Berkshire Hathaway Company

Firewall® SIS Switchboard Wire

(XLPE)



90°C*, 600 Volt
Class 1E Nuclear
NEC Type SIS
UL Listed**
Spec. RSS-4-002

Stranded

Product Code	Conductor Size	Number of Strands	Stranding Class	Insulation Thickness		Nominal Overall Diameter		Approximate Net Weight
				(inch)	(mm)	(inch)	(mm)	(Lbs/M')
A82-1186	18 AWG	7	"B"	.030	.76	.11	2.79	10
A82-0166	16 AWG	7	"B"	.030	.76	.12	3.05	13
A82-0146	14 AWG	7	"B"	.030	.76	.13	3.30	19
A82-0126	12 AWG	7	"B"	.030	.76	.15	3.81	28
A82-0116	10 AWG	7	"B"	.030	.76	.18	4.57	40
A82-1086	8 AWG	7	"B"	.045	1.14	.24	6.10	70
A82-1066	6 AWG	7	"B"	.060	1.52	.30	7.62	110
A82-1046	4 AWG	7	"B"	.060	1.52	.35	8.89	170
A82-1026	2 AWG	7	"B"	.060	1.52	.41	10.41	250
A82-1016	1 AWG	19	"B"	.080	2.03	.49	12.45	325
A82-1100	1/0 AWG	19	"B"	.080	2.03	.53	13.46	400
A82-1200	2/0 AWG	19	"B"	.080	2.03	.57	14.48	490
A82-1300	3/0 AWG	19	"B"	.080	2.03	.62	15.75	610
A82-1400	4/0 AWG	19	"B"	.080	2.03	.68	17.27	755

Flexible Strand

Product Code	Conductor Size	Number of Strands	Stranding Class	Insulation Thickness		Nominal Overall Diameter		Approximate Net Weight
				(inch)	(mm)	(inch)	(mm)	(Lbs/M')
A83-0186	18 AWG	16	"K"	.030	.76	.11	2.79	10
A83-0166	16 AWG	26	"K"	.030	.76	.12	3.05	14
A83-0146	14 AWG	41	"K"	.030	.76	.14	3.56	19
A83-0126	12 AWG	65	"K"	.030	.76	.15	3.81	28
A83-0116	10 AWG	105	"K"	.030	.76	.19	4.83	43
A83-0086	8 AWG	133	"H"	.045	1.14	.26	6.60	72
A83-0066	6 AWG	133	"H"	.060	1.52	.33	8.38	115
A83-0046	4 AWG	133	"H"	.060	1.52	.38	9.65	175
A83-0026	2 AWG	133	"H"	.060	1.52	.46	11.68	260
A83-0016	1 AWG	259	"H"	.080	2.03	.53	13.46	340
A83-0100	1/0 AWG	259	"H"	.080	2.03	.58	14.73	420
A83-0200	2/0 AWG	259	"H"	.080	2.03	.63	16.00	520
A83-0300	3/0 AWG	259	"H"	.080	2.03	.69	17.53	640
A83-0400	4/0 AWG	259	"H"	.080	2.03	.76	19.30	795

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