

## Scope

Firewall® III-XHHW is a one conductor, unjacketed, nuclear Class 1E power cable. Its tough thermoset construction allows for its use in demanding applications without additional jacketing protection.

It is intended for low voltage power and lighting functions and may be installed in trays, ducts and conduits.

## 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
- Reduced size and weight for increased raceway capacity
- 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 standard S-66-524
- 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)
- Cable 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 XHHW-2
- UL listed as Type SIS (14-4/0 AWG)\*\*
- UL listed for "CT USE" on sizes 1/0 AWG & larger

## Construction

### Conductor:

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

### Insulation:

Proprietary heat, moisture and radiation resistant, flame retardant cross-linked polyethylene (ICEA column "B" thickness)

\* 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-XHHW

## Power Cable

(XLPE)

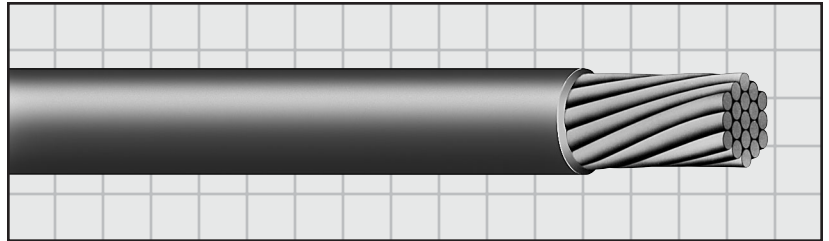
90°C\*, 600 Volt

Class 1E Nuclear

NEC Type XHHW-2, NEC Type SIS

UL Listed

Spec. RSS-3-021



Product Code	Conductor Size	Number of Strands	Insulation Thickness		Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
			(Inch)	(mm)	(Inch)	(mm)	
P51-3350	14 AWG	7	.030	.76	.13	3.30	19
P51-3328	12 AWG	7	.030	.76	.15	3.81	28
P51-3340	10 AWG	7	.030	.76	.18	4.57	40
P51-3513	8 AWG	7	.045	1.14	.24	6.10	70
P51-3488	6 AWG	7	.045	1.14	.27	6.86	105
P51-3514	4 AWG	7	.045	1.14	.32	8.13	160
P51-3515	2 AWG	7	.045	1.14	.38	9.65	240
P51-3516	1 AWG	19	.055	1.40	.44	11.18	305
P51-3517	1/0 AWG	19	.055	1.40	.48	12.19	375
P51-3518	2/0 AWG	19	.055	1.40	.52	13.21	470
P51-3519	3/0 AWG	19	.055	1.40	.57	14.48	585
P51-3520	4/0 AWG	19	.055	1.40	.63	16.00	725
P51-3521	250 kcmil	37	.065	1.65	.70	17.78	860
P51-3522	350 kcmil	37	.065	1.65	.80	20.32	1180
P51-3523	500 kcmil	37	.065	1.65	.93	23.62	1670
P51-3524	750 kcmil	61	.080	2.03	1.14	28.96	2505
P51-3669	1000 kcmil	61	.080	2.03	1.29	32.77	3285

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

\*\* 14 AWG - 4/0 AWG