

## Scope

Firewall® III-Unipass 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 to perform low voltage power and lighting functions and may be installed in trays, ducts, conduits or directly buried.\*\*

## 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 termination 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
- Upon specific request, can be UL listed as Type RHH-RHW-2 and additionally marked "CT-USE" for sizes 1/0 AWG & larger

## Construction

### Conductor:

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

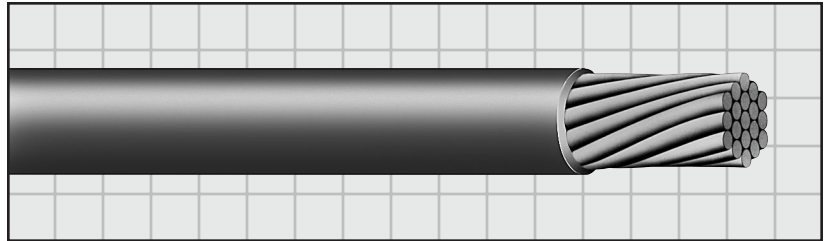
### Insulation:

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

\*\* Sizes 9 AWG and smaller are not recommended for direct burial in earth.

\* 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-Unipass**  
**Power Cable**  
 (XLPE)  
 90°C\*, 600 Volt  
 Class 1E Nuclear



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)	
P51-3553	14 AWG	7	.045	1.14	.16	4.06	23
P51-3554	12 AWG	7	.045	1.14	.18	4.57	33
P51-3555	10 AWG	7	.045	1.14	.21	5.33	47
P51-3556	8 AWG	7	.060	1.52	.27	6.86	76
P51-3557	6 AWG	7	.060	1.52	.30	7.62	110
P51-3558	4 AWG	7	.060	1.52	.35	8.89	170
P51-3559	2 AWG	7	.060	1.52	.41	10.41	250
P51-3560	1 AWG	19	.080	2.03	.49	12.45	325
P51-3561	1/0 AWG	19	.080	2.03	.53	13.46	400
P51-3562	2/0 AWG	19	.080	2.03	.57	14.48	490
P51-3563	3/0 AWG	19	.080	2.03	.62	15.75	610
P51-3564	4/0 AWG	19	.080	2.03	.68	17.27	755
P51-3565	250 kcmil	37	.095	2.41	.76	19.30	900
P51-3566	350 kcmil	37	.095	2.41	.86	21.84	1220
P51-3567	500 kcmil	37	.095	2.41	.99	25.15	1720
P51-3568	750 kcmil	61	.110	2.79	1.20	30.48	2565
P51-3703	1000 kcmil	61	.110	2.79	1.35	34.29	3375

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