



The Aberdare Group's product range and services are wide but specialised. Tried and tested and carrying South African Bureau of Standards (SABS) marks and complying with International Standards, we stand by our products.

Paper Insulated Cables up to 42 kV

- Screened or belted
- Fully impregnated, general purpose, heavy duty or drained
- Copper or Aluminium conductors up to 400mm² (3 core) and 1000mm² (single core)

XLPE Insulated Cables up to 66 kV

- Individually screened
- Copper or aluminium conductors up to 300mm² (3 core) and 500mm² (single core)

Elastomeric Insulated Cables

- Flexible Cable (Types HO5 RN-F;HO7 RN-F)
- Welding Cable
- Mining Trailing Cable (Up to 33kV)

Overhead Aluminium Conductors

- AAC (All Aluminium Conductors)
- AAAC (All Aluminium Alloy Conductors)
- ACSR (Aluminium Conductor Steel Reinforced)
- PHDC (Plain Hard Drawn Copper)

General Wire Insulated & Bare Copper Wire

- Slipdac Single Core Cable
- Surfix Cable
- Flat Twin and Earth Cable
- Cabtyre Cable
- Submersible Pump Cable
- Audio cord (Ripcord)

- General Welding cable
- Monster Cable
- HRQ Insulated Cable
- Panel Flex Cable
- Illumination Cable
- PVC Nitrile Panel Cable
- Nitrile Trailing Cable
- Bare Copper
- Single Core PVC 1kV Cable
- Single Core XLPE PVC 3.3kV Cable

Low Voltage Armoured Cables

- Bells and Mains Cable
- Multicore Cable
- Single Core Cable

Electrodac Cables

- Aerial Bundle Conductor (ABC) (LV & MV)
- Airdac SNE Cable
- Airdac CNE Cable

Intermediate Voltage Cables

- Armadac Cable

Specialised Cables

- SafeEarth Cable
- Insulated Airfield Lighting Cable

Theft Prevention Technology

- CableGuard™



Correction Factors for Direct Solar Radiation

Colour Code	Correction Factor	
	Solar Radiation	
	1000 W/m ² (Coastal)	1250 W/m ² (Highveld)
1,5 - 10	0,70	0,62
16 - 35	0,68	0,57
50 - 95	0,65	0,53
120 - 185	0,62	0,49
240 - 400	0,59	0,44

Short Circuit Ratings for PVC Insulated Cables

$$I_{sc} = \frac{K \times A}{\sqrt{t}} \text{ Amps}$$

where I_{sc} = Short circuit rating in amps
 K = A constant combining temperature limits and properties of conductor materials
 A = Area of conductor
 t = Duration of short circuit in seconds

Values of conductor / temperature constant K

Insulation Material	Conductor Material	Operating Temp °C	Short Circuit Temp °C	K Factor
PVC	Copper	70	160	115
PVC	Aluminium	70	160	76

Bending Radii

PVC Insulated Cables 1000V	
Multi and Single Core 16 - 50 mm ²	8 x d
70 mm ² and greater	10 x d

FLAMOSAFE RANGE OF FIRE PERFORMANCE OF ELECTRIC CABLES

FR (Flame Retardant) Red and Orange Stripe cables are designed to reduce the spread of fire along a cable tray or duct. However, when these cables burn, they give off large quantities of toxic gases and smoke. **(FYRGARD®)**



LHFR (Low Halogen) Blue Stripe cables has specially formulated PVC that reduces the emission of hydrochloric acid during burning of the cables. **(LOHAL®)**



NHLSFR (Non Halogen) White Stripe cables are designed to reduce flame propagation and smoke in those instances where a fire may develop. By replacing the standard PVC with XLPE insulation and EVA bedding and outer sheath, no HCl gases will be liberated during the burning of the cables. **(LOTOX®)**

