

# Aluminium Power Cable

Eland Product Group **A3T**



## Application

BR880 solid sector shaped conductors for trackside signalling power supplies.

## Standards

BR880, BS5467, BS6346

## Technical Data

### Conductor

Sector shaped solid aluminium

### Insulation

XLPE (Cross-Linked Polyethylene)  
Type GP8 to BS7655 or PVC (Polyvinyl Chloride)  
Type TI 1 to BS7655

### Separator

PETP (Polyethylene Terephthalate)

### Sheath

PVC (Polyvinyl Chloride) Type 9 to BS7655

### Sheath Colour

Black

### Voltage Rating

600/1000V

### Limited use

Distribution of Signalling Power only  
(Not suitable for general signalling use)

### Temperature Rating

+70°C (BS6346) or +90°C (BS5467)

### Core Identification

Effective 31 March 2006  
2 Cores: Brown, Blue  
4 Cores: Blue, Brown, Black, Grey

## Dimensions

Eland Part Number	Rail Catalogue Number	No. of Cores x Nominal Conductor Area # x mm <sup>2</sup>	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A3TR016ALI	006/142419	2 x 16	1.0	1.8	14.3	420
A3TR025ALI	006/142519	2 x 25	1.2	1.8	16.6	455
A3TR035ALI	006/142609	2 x 35	1.2	1.8	18.0	525
A3TR050ALI	006/142629	2 x 50	1.4	1.8	20.4	620
A3TR070ALI	006/142639	2 x 70	1.4	1.9	22.8	840
A3TR0295ALI	006/142644	2 x 95	1.6	2.0	26.2	1020
A3TR0470ALI	006/151469	4 x 70	1.4	2.0	30.6	1750
A3TR0495ALI	-	4 x 95	1.6	2.2	35.5	2100

## Conductors

### Class 1 solid Conductors for Single Core and Multi-Core cables

1	4
Nominal Cross Sectional Area mm <sup>2</sup>	Maximum Resistance of Conductor at 20°C
	Aluminium and Aluminium Alloy Conductors, Circular or Shaped <sup>c</sup> ohms/Km
16.00	1.9100 <sup>a</sup>
25.00	1.2000 <sup>a</sup>
35.00	0.8680 <sup>a</sup>
50.00	0.6410
70.00	0.4430
95.00	0.3200 <sup>d</sup>

Table in accordance with BS EN 60228:2005 (previously BS6360)

- a Aluminium conductors 10mm<sup>2</sup> to 35<sup>2</sup> mm circular only; see 5.1.1 c)  
 c See note to 5.1.2  
 d For single core cables, four sectoral shaped conductors may be assembled into a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.

*The information contained within this datasheet is for guidance only. When selecting accessories such as cleats, glands, etc please note that actual cable dimensions may vary due to manufacturing tolerances.*