Aluminium Power Cable

Eland Product Group Reference **A3T**

ELAND CABLES
www.eland.co.uk

Application
BR880 solid sector shaped conductors for trackside signalling power supplies.

Standards
BR880, BS5467, BS6346

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
2 Cores: Red, Black
4 Cores: Red, Yellow, Blue, Black
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 mm²	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 mm²	Maximum Resistance of Conductor at 20°C
	Aluminium and Aluminium Alloy Conductors, Circular or Shaped [c] ohms/Km
16.00	1.9100 [a]
25.00	1.2000 [a]
35.00	0.8680 [a]
50.00	0.6410
70.00	0.4430
95.00	0.3200 [d]

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

a Aluminium conductors 10mm² to 35² 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 info a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.