

Aluminium Power Cable

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

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

Conductors

Class 1 solid conductors for single core and multi-core cables

1 Nominal Cross Sectional Area mm ²	4 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 into a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.