

Twinflex Battery Cable

Eland Product Group **A1T**



Application

For indoors and outdoors, in dry as well as wet location on motorised vehicles, or battery powered equipment such as fork lifts and field conveyors. Also in high quality booster cables.

Standards

Figure 8 configuration based on VDE0250

Technical Data

Conductor

Class 6 extra flexible plain copper conductors to BS EN 60228:2005 (previously BS6360)

Insulation

TPE (Thermoplastic Elastomer)

Sheath

PVC (Polyvinyl Chloride) Type TM2 to VDE0207

Insulation Colour

Red and Black

Sheath Colour

Transparent

Voltage Rating

300/500V

Temperature Rating

-25°C to +70°C

Minimum Bending Radius

6 x overall diameter

Dimensions

Eland Part Number	No. of Cores x Nominal Cross Sectional Area # x mm ²	No. x Nominal Diameter of Strands #/mm	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A1TW0025BK	2 x 2.5	133 x 0.15	0.8	0.8	4.4 x 10.8	90
A1TW004BK	2 x 4.0	217 x 0.15	0.8	0.8	4.7 x 11.4	120
A1TW006BK	2 x 6.0	189 x 0.20	0.8	0.8	5.3 x 12.6	160
A1TW010BK	2 x 10.0	315 x 0.20	1.0	0.8	6.0 x 13.8	270
A1TW016BK	2 x 16.0	494 x 0.20	1.0	0.8	6.7 x 15.2	400
A1TW025BK	2 x 25.0	779 x 0.20	1.2	1.0	8.1 x 18.0	605
A1TW035BK	2 x 35.0	1083 x 0.20	1.2	1.0	9.1 x 20.0	780
A1TW050BK	2 x 50.0	1554 x 0.20	1.4	1.0	14.6 x 30.6	1150
A1TW070BK	2 x 70.0	2220 x 0.20	1.4	1.0	16.4 x 34.4	1580
A1TW095BK	2 x 95.0	2950 x 0.20	1.6	1.0	18.4 x 38.6	2080

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.

Conductors

Class 6 flexible Copper Conductors for Single Core and Multi-Core cables

1 Nominal Cross Sectional Area mm ²	2 Maximum Diameter of Wires in Conductor mm	3 Maximum Resistance of Conductor at 20°C		4
		Plain Wires ohms/Km	Metal-Coated Wires ohms/Km	
2.50	0.16	7.9800	8.2100	
4.00	0.16	4.9500	5.0900	
6.00	0.21	3.3000	3.3900	
10.00	0.21	1.9100	1.9500	
16.00	0.21	1.2100	1.2400	
25.00	0.21	0.7800	0.7950	
35.00	0.21	0.5540	0.5650	
50.00	0.31	0.3860	0.3930	
70.00	0.31	0.2720	0.2770	
95.00	0.31	0.2060	0.2100	

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

Electrical Characteristics

Current Carrying Capacity (amperes)

No. of Cores x Nominal Cross Sectional Area # x mm ²	Booster Cable 3 Minute Rating* Amps	Current Rating at 60°C Amps
2 x 2.5	70	34
2 x 4.0	110	46
2 x 6.0	150	59
2 x 10.0	220	79
2 x 16.0	300	106
2 x 25.0	400	140
2 x 35.0	500	171
2 x 50.0	600	215
2 x 70.0	700	266
2 x 95.0	850	317

*Note: 3 Minutes out of 10

De-rating Factors

Ambient Temperature	25°C	30°C	35°C	40°C	45°C
De-rating Factor	1.00	0.96	0.90	0.88	0.83

To allow the operator to handle the cable during use, with suitable gloves, a maximum conductor temperature of 60°C is advisable.