

Twinflex PVC 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 forklifts and field conveyors.

CHARACTERISTICS

Voltage Rating U_o/U
450/750V

Temperature Rating
Flexed: -20°C to +70°C

Minimum Bending Radius
Flexed: 6 x overall diameter

CONSTRUCTION

Conductor
Class 6 extra flexible copper conductor

Insulation
TPE (Thermoplastic Elastomer)

Sheath
PVC (Polyvinyl Chloride)

Core Identification
● Red ● Black

Sheath Colour
○ Transparent

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A1TW0025BK	2	2.5	1	1	4.4 x 10.8	90
A1TW004BK	2	4	1	1	6.5 x 14.5	120
A1TW006BK	2	6	1	1	7.1 x 15.5	190
A1TW010BK	2	10	1	1.2	7.9 x 17.6	294
A1TW016BK	2	16	1	1.2	10 x 21.5	420
A1TW025BK	2	25	1.1	1.3	11.2 x 24.3	627
A1TW035BK	2	35	1.1	1.3	12.4 x 25.9	824
A1TW050BK	2	50	1.2	1.4	14.5 x 30.5	1132
A1TW070BK	2	70	1.6	1.6	17.2 x 36.5	1600
A1TW095BK	2	95	1.6	1	18.4 x 38.6	2080

STANDARDS

VDE 0250

Flame Retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





CONDUCTORS

Class 6 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
		Plain Wires
2.5	0.16	7.98
4	0.16	4.95
6	0.21	3.3
10	0.21	1.91
16	0.21	1.21
25	0.21	0.78
35	0.21	0.554
50	0.31	0.386
70	0.31	0.272
95	0.31	0.206

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT RATING AT 60°C Amps
2	2.5	32
2	4	42
2	6	54
2	10	73
2	16	98
2	25	129
2	35	158
2	50	198
2	70	245
2	95	292

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.

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.