

Eland Extraflex Cable

Eland Product Group **A1W**



Application

For industrial uses, secondary side connection of power sources for metal arc welding, heavy duty portable supply in dry, wet and oil environments. For motor connections, generators transformers where flexible connections are required and all fixed wiring 0.6/1kV power applications.

Standards

CENELEC HD22.6, IEC 245-6, AS3147, IEC 60332-1

Technical Data

Conductor

Class 6 extra flexible plain copper

Colour

Orange

Insulation

PVC NBR (Polyvinyl Chloride Nitrile Butane Rubber) compound

Voltage Rating

600/1000V

Sheath

PVC NBR (Polyvinyl Chloride Nitrile Butane Rubber) compound

Temperature Rating

-30 to +90°C

Dimensions

Eland Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A1W006	6	1.0	1.0	5.5	94
A1W010	10	1.0	1.4	8.9	154
A1W016	16	1.0	1.4	10.1	223
A1W025	25	1.2	1.4	11.7	312
A1W035	35	1.2	1.4	12.6	415
A1W050	50	1.4	1.6	14.8	563
A1W070	70	1.4	1.8	17.0	804
A1W095	95	1.6	2.0	19.5	1032
A1W120	120	1.6	2.0	21.3	1294
A1W150	150	1.8	2.2	23.1	1593
A1W185	185	2.0	2.6	26.3	1939
A1W240	240	2.2	2.8	30.1	2538
A1W300	300	2.4	3.0	32.9	3165
A1W400	400	2.4	3.0	37.9	4092

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	
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
120.00	0.31	0.1610		0.1640
150.00	0.31	0.1290		0.1320
185.00	0.41	0.1060		0.1080
240.00	0.41	0.0801		0.0817
300.00	0.41	0.0641		0.0654

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

Electrical Characteristics

Current Carrying Capacity (amperes) and Resistance Values (ohms per kilometre)

Nominal Cross Sectional Area mm ²	Max. Conductor Resistance at 20°C ohms/Km	Current Carrying Capacity Amps 100%	Current Carrying Capacity Amps 60%	Current Carrying Capacity Amps 20%
6	3.3000	71	70	84
10	1.9100	100	101	118
16	1.2100	135	135	174
25	0.7800	180	190	254
35	0.5540	225	243	338
50	0.3860	285	316	457
70	0.2720	355	403	602
95	0.2060	430	498	765
120	0.1610	500	587	917
150	0.1290	580	689	1090
185	0.1060	665	797	1277
240	0.0801	780	920	1450
300	0.0641	880	1040	1628
400	0.0486	1000	1180	1830

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.