

6381Y Cable to BS6004

Eland Product Group A1F

Application

Suitable for D.C. power supplies on Telecom equipment and power applications where flexibility is required.

Standards

Generally to BS6004

Conductor

Class 5 flexible plain copper conductors to BS EN 60228:2005 (previously BS6360)

Insulation

PVC (Polyvinyl Chloride) Type TI1 to BS7655

Sheath

PVC (Polyvinyl Chloride) Type TM1 to BS7655 with oxygen index > 30%

Flame retardant to BS4066 Part 1

Meets requirements for flammability as required by BT specification M231

Sheath Colour (Insulation Colour)

Blue (Blue), Grey (Grey), Green/Yellow (Green/Yellow), Brown (Brown), Special colours to order

Voltage Rating

450/750V: 10-35mm²
600/1000V: 50mm² +

Temperature Rating

0°C to +70°C

Minimum Bending Radius

Up to 50mm²:
3 x overall diameter

Above 70mm²:

4 x overall diameter

**Dimensions**

Eland Part Number	No. of Cores x Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A1FY*0015	1 x 1.5	0.9	0.8	4.91	38.0
A1FY*0025	1 x 2.5	0.9	0.8	5.35	48.8
A1FY*004	1 x 4.0	1.0	0.9	6.25	70.7
A1FY*006	1 x 6.0	1.1	0.9	7.60	100.5
A1FY*010	1 x 10.0	1.2	1.1	8.56	151.6
A1FY*016	1 x 16.0	1.2	1.1	9.75	212.7
A1FY*025	1 x 25.0	1.4	1.1	11.50	307.0
A1FY*035	1 x 35.0	1.4	1.1	12.50	404.5
A1FY*050	1 x 50.0	1.4	1.4	15.10	579.2
A1FY*070	1 x 70.0	1.4	1.4	16.95	768.2
A1FY*095	1 x 95.0	1.6	1.5	19.10	1007.3
A1FY*120	1 x 120.0	1.6	1.8	21.60	1281.3
A1FY*150	1 x 150.0	1.8	1.8	23.40	1570.6
A1FY*185	1 x 185.0	2.0	1.8	25.50	1895.0
A1FY*240	1 x 240.0	2.2	1.8	28.50	2435.0
A1FY*300	1 x 300.0	2.4	2.0	31.20	3050.0
A1FY*400	1 x 400.0	2.6	2.1	35.30	4035.0
A1FY*500	1 x 500.0	2.8	2.2	38.80	4970.0
A1FY*630	1 x 630.0	2.8	2.4	43.80	6510.0

* Eland Part numbers shown above designate the sheath colour (*). For each colour substitute * for a colour code as; Blue: BL/BL, Grey: GR/GR, Green/Yellow: G/Y, Brown: BR/BR

Conductors**Class 5 flexible Copper Conductors for Single Core and Multi-Core cables**

Nominal Cross Sectional Area mm ²	Maximum Diameter of Wires in Conductor mm	3
		Maximum Resistance of Conductor at 20°C Plain Wires ohms/Km
1.5	0.26	13.3000
2.5	0.26	7.9800
4.0	0.31	4.9500
6.0	0.31	3.3000
10.0	0.41	1.9100
16.0	0.41	1.2100
25.0	0.41	0.7800
35.0	0.41	0.5540
50.0	0.41	0.3860
70.0	0.51	0.2720
95.0	0.51	0.2060
120.0	0.51	0.1610
150.0	0.51	0.1290
185.0	0.51	0.1060
240.0	0.51	0.0801
300.0	0.51	0.0641
400.0	0.51	0.0486
500.0	0.61	0.0384
630.0	0.61	0.0287

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

Datasheet Continues »

Electrical Characteristics

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

Nominal Cross Sectional Area mm ²	Voltage Drop mV/A/m	Current Rating in Earth Amps	Current Rating in Air Amps
1.5	26.6000	41	27
2.5	15.9600	55	32
4.0	9.9000	71	42
6.0	6.6000	90	59
10.0	3.8200	124	81
16.0	2.4200	160	107
25.0	1.5600	208	144
35.0	1.1080	250	176
50.0	0.7720	296	214
70.0	0.5440	365	270
95.0	0.4120	438	334
120.0	0.3220	501	389
150.0	0.2580	563	446
185.0	0.2120	639	516
240.0	0.1602	716	618
300.0	0.1282	845	711
400.0	0.0972	975	843
500.0	0.0768	1125	994
630.0	0.0574	1230	1102