

High Temperature Silicone Cable

Eland Product Group **ASI**



Application

Typical industrial applications include food processing, packaging, refrigeration, furnaces and lighting.

Standards

SIA/SIAF

Technical Data

Conductor

SIA - Solid class 1 copper conductor to BS EN 60228:2005 (previously BS6360) (silver or nickel plated);
SIAF - Flexible class 5 copper conductor to BS EN 60228:2005 (previously BS6360) (silver or nickel plated)

Voltage Rating

500V

Temperature Rating

-60°C to +180°C

Insulation

Silicone Rubber

Minimum Bending Radius

4 x overall diameter

Sheath Colour

Black, Blue, Brown, Red, White, Grey, Violet,
Pink, Orange, Yellow, Green/Yellow

Dimensions

Solid Core Silicone Rubber Insulated Cable (SIA)

Eland Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
ASI*0050	1 x 0.50	0.6	2.0	9.1
ASI*0075	1 x 0.75	0.6	2.2	12.0
ASI*0010	1 x 1.00	0.6	2.3	14.9
ASI*00150	1 x 1.50	0.6	2.6	20.4
ASI*00250	1 x 2.50	0.7	3.2	32.8
ASI*0040	1 x 4.00	0.8	3.9	50.9
ASI*0060	1 x 6.00	0.8	4.4	72.1
ASI*0010	1 x 10.00	1.0	5.6	119.3

Flexible Core Silicone Rubber Insulated Cable (SIAF)

Eland Part Number	Nominal Cross Sectional Area mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
ASI*0025	1 x 0.25	0.6	1.8	6.1
ASI*0035	1 x 0.35	0.6	1.9	6.8
ASI*0050	1 x 0.50	0.6	2.1	9.6
ASI*0075	1 x 0.75	0.6	2.4	13.3
ASI*0010	1 x 1.00	0.6	2.5	15.9
ASI*0015	1 x 1.50	0.6	2.8	21.9
ASI*0025	1 x 2.50	0.7	3.4	34.7
ASI*0040	1 x 4.00	0.8	4.2	54.4
ASI*0060	1 x 6.00	0.8	5.2	82.3
ASI*0010	1 x 10.00	1.0	6.4	131.9
ASI*0016	1 x 16.00	1.2	8.0	209.1
ASI*0025	1 x 25.00	1.4	10.0	326.7
ASI*0035	1 x 35.00	1.4	11.2	438.8

ASI*0050	1 x 50.00	1.6	13.3	624.0
ASI*0070	1 x 70.00	1.6	15.4	860.2
ASI*0095	1 x 95.00	1.8	17.8	1161.0
ASI*0120	1 x 120.00	1.8	19.8	1456.2
ASI*0150	1 x 150.00	2.0	21.5	1784.8
ASI*0185	1 x 185.00	2.2	24.4	2233.4
ASI*0240	1 x 240.00	2.4	26.8	2828.6
ASI*0300	1 x 300.00	2.6	29.6	3508.2

Eland Part Numbers shown above designate the sheath colour (). For each colour substitute * for a colour code as listed below. e.g. ASI = 4.0mm² Red, A2TPK0015 = 1.5mm² Pink

Colour	Black	Blue	Grey	Green/Yellow	Orange	Red	Pink	Yellow	Violet	Brown	White
Code	BK	BL	GR	GY	OR	RD	PK	YW	VI	BR	WH

Conductors

Class 1 solid conductors for Single Core and Multi-Core cables

1 Nominal Cross Sectional Area mm ²	2 Maximum Resistance of Conductor at 20°C Circular, Annealed Copper Conductors		3
			Metal-Coated ohms/Km
	Plain ohms/Km		
0.50	36.0000		36.70
0.75	24.5000		24.80
1.00	18.1000		18.20
1.50	12.1000		12.20
2.50	7.4100		7.56
4.00	4.6100		4.70
6.00	3.0800		3.11
10.00	1.8300		1.84

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

Class 5 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
0.50	0.21	39.0000		40.1000
0.75	0.21	26.0000		26.7000
1.00	0.21	19.5000		20.0000
1.50	0.26	13.3000		13.7000
2.50	0.26	7.9800		8.2100
4.00	0.31	4.9500		5.0900
6.00	0.31	3.3000		3.3900
10.00	0.41	1.9100		1.9500
16.00	0.41	1.2100		1.2400
25.00	0.41	0.7800		0.7950
35.00	0.41	0.5540		0.5650
50.00	0.41	0.3860		0.3930
70.00	0.51	0.2720		0.2770
95.00	0.51	0.2060		0.2100
120.00	0.51	0.1610		0.1640
150.00	0.51	0.1290		0.1320
185.00	0.51	0.1060		0.1080
240.00	0.51	0.0801		0.0817
300.00	0.51	0.0641		0.0654

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

Electrical Characteristics

Conductor Resistance (ohms per kilometer) and Current Carrying Capacity (amperes)

Solid Core Silicone Rubber Insulated Cable

Nominal Cross Sectional Area mm ²	Electrical Resistance Max. ohms/Km	Current Rating Amps
0.50	36.0	3.5
0.75	21.3	5.5
1.00	17.9	7.0
1.50	12.0	10.0
2.50	7.2	14.0

Flexible Core Silicone Rubber Insulated Cable

Nominal Cross Sectional Area mm ²	Electrical Resistance Max. ohms/km	Current Rating Amps
0.35	57.00	2.5
0.50	40.10	3.5
0.75	26.70	5.5
1.00	20.00	7.0
1.50	13.70	10.0
2.50	8.20	14.0
4.00	5.09	18.0
6.00	3.40	22.0
10.00	1.95	30.0
16.00	1.24	40.0

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.