High Temperature Silicone Cable

Eland Product Group: ASI

APPLICATION
Designed for use in environments where sustained heat resistance is required, SIA and SIAF cables have heat resistant properties up to 180°C and can also be employed at temperatures as low as -60°C. These cables are low smoke zero halogen and are suitable for power plants, a wide range of industrial applications in processing, packaging, refrigeration, foundaries, air craft construction and ship building.

CONSTRUCTION
Conductor
SIA - Class 1 solid tinned copper conductor according to BS EN 60228 (previously BS 6360)
SIAF - Class 5 flexible tinned copper conductor according to BS EN 60228 (previously BS 6360)

Insulation
Silicone rubber

CABLE STANDARDS
BS EN 60228

CHARACTERISTICS
Voltage Rating (Uo/U)
SIA : 300/500V
SIAF - 0.25-6mm²: 300/500V
SIAF - 10mm² and above: 600/1000V

Temperature Rating
Fixed: -60°C to +180°C

Minimum Bending Radius
Fixed: 4 x overall diameter

Sheath Colour
- Black
- Blue
- Brown
- Red
- White
- Grey
- Violet
- Pink
- Orange
- Yellow
- Green/Yellow

The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.
# DIMENSIONS

## Solid Core Silicone Rubber Insulated Cable (SIA)

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF CORES</th>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>NOMINAL THICKNESS OF INSULATION mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
<th>NOMINAL WEIGHT kg/km</th>
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<tbody>
<tr>
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## Flexible Core Silicone Rubber Insulated Cable (SIAF)

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<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>NOMINAL THICKNESS OF INSULATION mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
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*Eland Part No. shown above designate the sheath colour (*). For each colour substitute * for a colour code as listed below. e.g. ASI0015PK = 1.5mm² Pink

## Colour Codes

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<tr>
<th>COLOUR</th>
<th>Black</th>
<th>Blue</th>
<th>Grey</th>
<th>Green/ Yellow</th>
<th>Orange</th>
<th>Red</th>
<th>Pink</th>
<th>Yellow</th>
<th>Violet</th>
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<td>GR</td>
<td>GY</td>
<td>OR</td>
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<td>VI</td>
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### Class 1 Solid Conductors for Single Core and Multi-Core Cables (SIA)

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
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The above table is in accordance with BS EN 60228 (previously BS 6360).

### Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables (SIAF)

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<th>NOMINAL CROSS SECTIONAL AREA mm²</th>
<th>MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm</th>
<th>MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
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The above table is in accordance with BS EN 60228 (previously BS 6360).
## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity

**Solid Core Silicone Rubber Insulated Cable (SIA)**

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA</th>
<th>CURRENT RATING IN AIR</th>
</tr>
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<tbody>
<tr>
<td>mm²</td>
<td>at 30°C</td>
</tr>
<tr>
<td>0.5</td>
<td>24</td>
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<tr>
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Conductor operating temperature 180ºC

**Flexible Core Silicone Rubber Insulated Cable (SIAF)**

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA</th>
<th>CURRENT RATING IN AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm²</td>
<td>at 30°C</td>
</tr>
<tr>
<td>0.25</td>
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Conductor operating temperature 180ºC

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.