

# High Temperature Silicone Cable SIAF/GL



Eland Product Group: ASI

## APPLICATION

Designed for use in environments where sustained heat resistance and continued function is required. They have heat resistant properties up to 180°C and can also be employed at temperatures as low as -60°C. These cables are halogen free and are particularly suitable for power plants, a wide range of industrial applications in processing, packaging, refrigeration, foundries, aircraft construction and ship building.

## CHARACTERISTICS

### Voltage Rating (U<sub>o</sub>/U)

0.5mm<sup>2</sup> to 6mm<sup>2</sup> : 300/500V

10mm<sup>2</sup> and above: 0.6/1kV, when protected

### Temperature Rating

Fixed: -60°C to +180°C

### Minimum Bending Radius

Fixed: 4 x overall diameter

## CONSTRUCTION

### Conductor

Class 5 flexible tinned copper

### Insulation

Silicone rubber

### Outer Sheath

Fibre Glass Braid

### Sheath Colour

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

## STANDARDS

EN 50252-2-41, EN 60228

## THE CABLE LAB®

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



## SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](https://www.elandcables.com/company/about-us/esg-sustainability)



## REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.





## DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | NOMINAL THICKNESS OF INSULATION<br>mm <sup>2</sup> | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|----------------|--------------|-------------------------------------------------|----------------------------------------------------|--------------------------------|-------------------------|
| ASI00025**/GL  | 1            | 0.25                                            | 0.55                                               | 2.0                            | 8                       |
| ASI00035**/GL  | 1            | 0.35                                            | 0.55                                               | 2.1                            | 9                       |
| ASI00050**/GL  | 1            | 0.5                                             | 0.55                                               | 2.2                            | 11                      |
| ASI00075**/GL  | 1            | 0.75                                            | 0.55                                               | 2.4                            | 14                      |
| ASI0010**/GL   | 1            | 1                                               | 0.55                                               | 2.6                            | 17                      |
| ASI0015**/GL   | 1            | 1.5                                             | 0.55                                               | 2.9                            | 22                      |
| ASI0025**/GL   | 1            | 2.5                                             | 0.55                                               | 3.6                            | 37                      |
| ASI0040**/GL   | 1            | 4                                               | 0.8                                                | 4.4                            | 55                      |
| ASI0060**/GL   | 1            | 6                                               | 0.8                                                | 4.9                            | 74                      |
| ASI010**/GL    | 1            | 10                                              | 1                                                  | 6.3                            | 116                     |
| ASI016**/GL    | 1            | 16                                              | 1                                                  | 7.3                            | 172                     |
| ASI025**/GL    | 1            | 25                                              | 1.2                                                | 9.0                            | 261                     |
| ASI035**/GL    | 1            | 35                                              | 1.3                                                | 10.2                           | 354                     |
| ASI050**/GL    | 1            | 50                                              | 1.4                                                | 12.0                           | 511                     |
| ASI070**/GL    | 1            | 70                                              | 1.5                                                | 14.1                           | 725                     |
| ASI095**/GL    | 1            | 95                                              | 1.7                                                | 15.8                           | 923                     |
| ASI120**/GL    | 1            | 120                                             | 1.7                                                | 17.6                           | 1189                    |
| ASI150**/GL    | 1            | 150                                             | 2                                                  | 19.7                           | 1464                    |
| ASI185**/GL    | 1            | 185                                             | 2.2                                                | 21.8                           | 1803                    |
| ASI240**/GL    | 1            | 240                                             | 2.4                                                | 24.3                           | 2375                    |
| ASI300**/GL    | 1            | 300                                             | 2.6                                                | 27.2                           | 3020                    |

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below.. e.g. ASI00025PK/GL = 0.25mm<sup>2</sup> Pink

## COLOUR CODES

| COLOUR | Black | Blue | Grey | Green/<br>Yellow | Orange | Red | Pink | Yellow | Violet | Brown | White |
|--------|-------|------|------|------------------|--------|-----|------|--------|--------|-------|-------|
| CODE   | BK    | BL   | GR   | GY               | OR     | RD  | PK   | YW     | VI     | BR    | WH    |

## CONDUCTORS

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

| NOMINAL CROSS<br>SECTIONAL AREA<br>mm <sup>2</sup> | MAXIMUM DIAMETER OF WIRES<br>IN CONDUCTOR<br>mm | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |                    |
|----------------------------------------------------|-------------------------------------------------|----------------------------------------------------|--------------------|
|                                                    |                                                 | Plain Wires                                        | Metal-Coated Wires |
| 0.25                                               | 0.21                                            | 83.8                                               | 86                 |
| 0.35                                               | 0.21                                            | 54.4                                               | 55.5               |
| 0.5                                                | 0.21                                            | 39                                                 | 40.1               |
| 0.75                                               | 0.21                                            | 26                                                 | 26.7               |
| 1                                                  | 0.21                                            | 19.5                                               | 20                 |
| 1.5                                                | 0.26                                            | 13.3                                               | 13.7               |
| 2.5                                                | 0.26                                            | 7.98                                               | 8.21               |
| 4                                                  | 0.31                                            | 4.95                                               | 5.09               |
| 6                                                  | 0.31                                            | 3.3                                                | 3.39               |
| 10                                                 | 0.41                                            | 1.91                                               | 1.95               |
| 16                                                 | 0.41                                            | 1.21                                               | 1.24               |
| 25                                                 | 0.41                                            | 0.78                                               | 0.795              |
| 35                                                 | 0.41                                            | 0.554                                              | 0.565              |
| 50                                                 | 0.41                                            | 0.386                                              | 0.393              |
| 70                                                 | 0.51                                            | 0.272                                              | 0.277              |
| 95                                                 | 0.51                                            | 0.206                                              | 0.21               |
| 120                                                | 0.51                                            | 0.161                                              | 0.164              |
| 150                                                | 0.51                                            | 0.129                                              | 0.132              |
| 185                                                | 0.51                                            | 0.106                                              | 0.108              |
| 240                                                | 0.51                                            | 0.0801                                             | 0.0817             |
| 300                                                | 0.51                                            | 0.0641                                             | 0.0654             |

The above table is in accordance with EN 60228



## CONDUCTORS

## Flexible Core Silicone Rubber Insulated Cable / Fibre Glass Braid (SIAF/GL)

| NOMINAL CROSS<br>SECTIONAL AREA<br>mm <sup>2</sup> | CURRENT RATING IN AIR<br>Amps |         |         |          |          |          |
|----------------------------------------------------|-------------------------------|---------|---------|----------|----------|----------|
|                                                    | at 30°C                       | at 60°C | at 90°C | at 120°C | at 150°C | at 170°C |
| 0.25                                               | 15                            | 13      | 11      | 9        | 6        | 3        |
| 0.35                                               | 19                            | 17      | 14      | 11       | 7        | 4        |
| 0.5                                                | 23                            | 20      | 17      | 13       | 9        | 5        |
| 0.75                                               | 30                            | 26      | 22      | 17       | 11       | 6        |
| 1                                                  | 35                            | 31      | 26      | 20       | 13       | 7        |
| 1.5                                                | 44                            | 38      | 52      | 25       | 17       | 8        |
| 2.5                                                | 61                            | 53      | 45      | 35       | 23       | 12       |
| 4                                                  | 82                            | 71      | 60      | 47       | 31       | 16       |
| 6                                                  | 104                           | 91      | 77      | 60       | 39       | 20       |
| 10                                                 | 148                           | 129     | 108     | 85       | 56       | 28       |
| 16                                                 | 197                           | 173     | 145     | 114      | 75       | 58       |
| 25                                                 | 263                           | 230     | 193     | 151      | 99       | 51       |
| 35                                                 | 327                           | 286     | 240     | 188      | 124      | 63       |
| 50                                                 | 413                           | 362     | 304     | 238      | 157      | 80       |
| 70                                                 | 531                           | 465     | 391     | 306      | 201      | 103      |
| 95                                                 | 623                           | 545     | 458     | 359      | 236      | 121      |
| 120                                                | 738                           | 645     | 543     | 425      | 280      | 143      |
| 150                                                | 850                           | 744     | 626     | 491      | 323      | 166      |
| 185                                                | 969                           | 848     | 714     | 560      | 369      | 190      |
| 240                                                | 1191                          | 1043    | 879     | 689      | 454      | 234      |
| 300                                                | 1339                          | 1173    | 988     | 776      | 512      | 264      |

Conductor operating temperature 180°C

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.