# Photovoltaic Solar Cable PV1-F

Eland Product Group **A6S**

## Application

TÜV approved Solar cable, intended for the interconnection of the various elements of photovoltaic systems such as solar panel arrays. Suitable for fixed installations internal and external, within unprotected pipes, or in similar closed systems. The cable is ozone-resistant according to EN50396, UV-resistant according to UNE-HD 605:2008 (HD605/A1), and is tested for durability according to EN 60216. The cable is tested to last 25 years.

## Standards

TÜV 2 PfG 1169/08.2007
CEI 20-91
UV: HD 605/A1
LSZH: IEC 61034, EN 52067-2, IEC 60754
Ozone: EN 50396
Flame: IEC 60332-1-2
Thermal Endurance: IEC 60216-1

## Technical Data

**Conductor**
Class 5 flexible tinned copper to IEC 60228

**Insulation**
Cross-Linked halogen-free rubber Type HEPR.
No toxic emissions, acids, gases or fumes.

**Sheath**
LSZH (Low Smoke Zero Halogen) Rubber.
UV-resistant as per the requirements of HD 605/A1. No toxic emissions, acids, gases or fumes.

**Sheath Colour**
Black. Red, Blue, Brown and Grey available on request.

**Voltage Rating**
AC: 600/1000V
DC: 900/1800V

**Temperature Rating**
-40°C to +90°C.

**Minimum Bending Radius**
4 x Overall Diameter

## Dimensions

| Eland Part Number | No of Cores x Nominal Cross Sectional Area # x mm² | Nominal Diameter of Conductor mm | Nominal Diameter Over Insulation mm | Nominal Overall Diameter mm | Nominal Weight kg/Km |
|---|---|---|---|---|---|
| A6S100025 | 1 x 2.5 | 2.0 | 3.5 | 5.1 | 47 |
| A6S10040 | 1 x 4.0 | 2.5 | 4.1 | 5.7 | 63 |
| A6S10060 | 1 x 6.0 | 3.2 | 4.7 | 6.6 | 89 |
| A6S1010 | 1 x 10.0 | 4.0 | 5.5 | 7.6 | 142 |
| A6S1016 | 1 x 16.0 | 5.3 | 6.8 | 8.8 | 198 |
| A6S1025 | 1 x 25.0 | 6.7 | 8.6 | 9.7 | 288 |
| A6S1035 | 1 x 35.0 | 8.0 | 9.8 | 11.0 | 429 |

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## Electrical Characteristics

| Nominal Cross Sectional Area mm² | Max. Conductor DC Resisitance at 20˚C ohms/km | Current Carrying Capacity in Air Amps | Current Carrying Capacity Inside Tubes or Boxes Amps |
|---|---|---|---|
| 2.5 | ≤ 8.21 | 41 | 33 |
| 4.0 | ≤ 5.09 | 55 | 44 |
| 6.0 | ≤ 3.39 | 70 | 57 |
| 10.0 | ≤ 1.95 | 98 | 79 |
| 16.0 | ≤ 1.24 | 132 | 107 |
| 25.0 | ≤ 0.795 | 176 | 142 |
| 35.0 | ≤ 0.565 | 218 | 176 |

Maximum conductor temperature: +120°C
Maximum short circuit temperature: +200°C

*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.*