

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 mm ²	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

Electrical Characteristics

Nominal Cross Sectional Area mm ²	Max. Conductor DC Resistance 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.