



# CABLES FOR PHOTOVOLTAIC SYSTEMS



## SAB solar PV1-F mit UL halogen-free cable for photovoltaic systems

B 090361971003



VDE-REG. no. 8292

+120 °C

The requirements acc. to the DKE draft AK 411.2.3\* are fulfilled.



B 090361971003 AWG12 (UL) Photovoltaic Wire 600V 90°C dry 90°C wet sunlight-resistant

Marking for SAB solar PV1-F mit UL 71913346:

SAB BRÖCKSKES · D-VIERSEN · SAB solar PV1-F 4,0 mm<sup>2</sup> · VDE-REG.-Nr. 8292 · TÜV Süd-Bauart geprüft B 090361971003  
AWG12 (UL) Photovoltaic Wire 600V 90°C dry 90°C wet sunlight-resistant -40°C CE

### Construction:

<b>Conductor :</b>	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5 and UL standard 758 table 5.1 + UL 1581 table 20.1
<b>Primary insulation:</b>	SABIX® solar
<b>Color code primary insulation:</b>	see table below
<b>Secondary insulation:</b>	SABIX® solar
<b>Color code secondary insulation:</b>	see table below

### Outstanding features:

- fulfills DKE draft AK 411.2.3 as at 12.02.2008
- UL Subject 4703 PV Wire
- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- up to +120 °C
- weather resistant
- sunlight resistance
- with improved fire performance
- expected service life, up to 25 years
- very good resistance against acids and alkaline solutions
- connection cable for photovoltaic modules acc. to NEC Section 690.31 (A)

### Technical data:

<b>Nominal voltage U<sub>0</sub>/U:</b>	0,6/1 kV (AC) (UL): 600 V (AC)
<b>Testing voltage:</b>	6500 V (AC) (UL): 3000 V (AC)
<b>Min. bending radius</b> Ø ≤ 12 mm: Ø > 12 mm:	3 x d 4 x d
<b>Temperature range</b>  <i>for ambient temperature:</i> <i>maximum temperature at the conductor:</i> <i>for installation:</i> <i>fixed laying:</i> <i>short circuit:</i>	VDE-REG.-no. 8292 as well as TÜV SÜD type tested B 090361971003: up to +90 °C (UL): -40°C/+90°C  +120 °C -30/+120 °C -40/+120 °C +250 °C
<b>Halogen-free :</b>	no hydrogen chloride content acc. to EN 50267-2-1, no fluorine content acc. to EN 60684-2
<b>Corrosiveness of conflagration gases:</b>	in compliance with IEC 60754-2 + EN 50267-2-2 VDE + 0482 part 267-2-2 no development of corrosive conflagration gases
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 +EN 60332-1-2 and (UL) FT1
<b>Sunlight resistance (UL):</b>	yes
<b>Weather resistance:</b>	very good
<b>Ozone resistance:</b>	acc. to EN 50396
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24

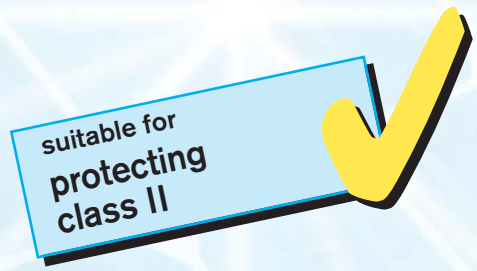
item no.	nominal cross-section mm <sup>2</sup>	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
7191 .. 46	4,00	6,8	38,4	79
7191 .. 47	6,00	7,5	57,6	114

Other dimensions are possible on request.

### Marking for primary insulation and secondary insulation

Primary insulation / secondary insulation	
33 black / black	83 red / black
23 blue / black	63 white / black

Other colours are possible on request.



\*as at 12.02.2008