



CABLES FOR PHOTOVOLTAIC SYSTEMS

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



SABsolar PV1-F halogen-free cable for photovoltaic systems

B 090361971003

VDE-REG. no. 8292

+120 °C

SABsolar PV1-F 4,0 mm² · VDE-REG.-Nr. 8292 · TÜV Süd-Bauart geprüft B 090361971003



Marking for SABsolar PV1-F 71913386:

SAB BRÖCKSKES · D-VIERSEN · SABsolar PV1-F 4,0 mm² · VDE-REG.-Nr. 8292 · TÜV Süd-Bauart geprüft B 090361971003 CE

Construction:

Conductor :	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Primary insulation:	SABIX [®] solar
Color code primary insulation:	see table below
Secondary insulation:	SABIX [®] solar
Color code secondary insulation:	see table below

Outstanding features:

- fulfills DKE draft AK 411.2.3 as at 12.02.2008
- 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

Technical data:

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

item no.	nominal cross-section mm ²	outer-∅ max. mm	copper figure kg/km	cable weight ≈ kg/km
7191 .. 82	1,50	5,3	14,4	39
7191 .. 84	2,50	5,7	24,0	50
7191 .. 86	4,00	6,4	38,4	67
7191 .. 87	6,00	7,1	57,6	95
7191 .. 88	10,0	9,5	96,0	162
7191 .. 89	16,0	10,9	153,6	234
7191 .. 90	25,0	13,2	240,0	353
7191 .. 91	35,0	14,7	236,0	463

Other dimensions are possible on request.

Marking for primary insulation and secondary insulation

Primary insulation / secondary insulation	
33 black / black	38 black / red
32 black / blue	83 red / black
88 red / red	22 blue / blue
23 blue / black	Other colours are possible on request.

suitable for protecting class II



*as at 12.02.2008