

## IEWC SOLBLK

FLEXIBLE SINGLE CORE CABLE HALOGEN FREE FOR PHOTOVOLTAIC SYSTEMS



APPROVALS:  
Certificate Nr R60030137

- 1 – *sheath*:  
halogen free special copolymer
- 2 – *insulation*:  
halogen free special copolymer
- 3 – *Copper conductor*

1<sup>st</sup> and 2<sup>nd</sup> INSULATION COLOUR



Twisted flexible tinned copper conductor

### APPLICATIONS



### Technical Data

Nominal Voltage U <sub>0</sub> /U	0,6/1.0 kV AC – 0.9/1.5 kV DC
Test Voltage	6.5 kV AC
Conductor Type	TCW Class 5
Insulation Material	XLPE LSZH
Jacket Material	UV Resist LSZH
Operating Temperature	-40 ÷ +90°C
Max. core temperature	+120°C (for 20.000 hrs.)
Min. bending radius	5 x D cable (fixed installation)
Approved	TÜV Rheinland
References:	TÜV 2 Pfg 1169/08.2007
Projected cable lifespan 25 years	EN 60216-1-2 - EN 50267-2-1 IEC 60332.1 – DIN VDE 0282-2 HD 22.2 S3: 1997 +A1:2002

TYPE	SECTION	MAX WIRE DIAMETER OF CONDUCTOR	INSULATION THICKNESS 1 <sup>ST</sup> / 2 <sup>ND</sup>	OVERALL DIAMETER	RAME STAGNATO TINNED COPPER	REACTANCE (at 50 Hz)
	mm <sup>2</sup>	mm	mm	mm	Ω/Km	Ω/Km
TÜV SOLAR CABLE	1x4.00	0.31	0.80 / 1.00	6.00	5.09	0.143
	1x6.00	0.31	0.90 / 1.10	6.80	3.39	0.135
	1x10.0	0.41	1.00 / 1.20	8.40	1.95	0.119

Diameter tolerances: according with TÜV standards

Current carrying capacity of PV cables in accordance to the installation (T=60°C)			
SECTION	Single cable free in air	Single cables on surfaces	To cables adjacent on surfaces
mm <sup>2</sup>	(A)	(A)	(A)
1 x 4.0	55	52	44
1 x 6.0	70	67	57
1 x 10	98	96	79

### Properties

The cable is able to satisfy the latest requirements fixed for PV systems in accordance to the following Reference Standards: TÜV 2 Pfg 1169/08.2007 – EN 60216-1-2 – EN 50267-2-1.

The special insulation has qualities of high abrasion resistance to high temperature. Moreover the insulation has property of flame retardant and ozone resistance. The cable is UV-resistant and the external sheath can be removed from the inner layer of extruded insulation.