## DATA SHEET



# ÖLFLEX® SOLAR XLS-T

DB0027150EN valid from: 13.07.2010



### 1. LAPP Designation

ÖLFLEX® SOLAR XLS-T

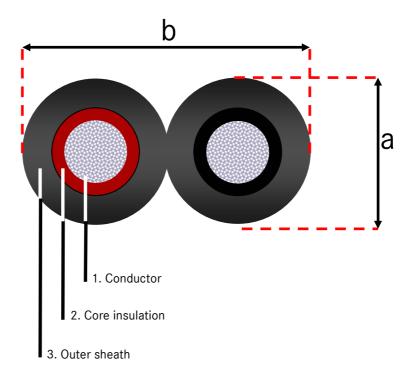
## 2. Application

ÖLFLEX<sup>®</sup> SOLAR XLS-T cables are halogen free, double insulated cross-linked solar cables for permanent outdoor use. They are designed for use for the individual connection of solar panels among themselves and for the connection with the inverter.

Beside the extended temperature range the cross-linked compound materials achieve best values concerning weather, ozone-, UV- and abrasion resistance.

## 3. Cable design

Designed with reference to TÜV 2 Pfg 1169/08.2007 "Requirements for cables for use in photovoltaic-systems"



1. Conductor: Fine wire strands of tinned copper, according to IEC 60228 resp. VDE 0295, Class 5

2. Core insulation: Colours:

Temperature resistant and halogen free Co-Polyolefine, electron beam cross-linked

Black, red resp. blue

3. Outer sheath: Flame retardant and halogen-free Co-Polymere, electron beam cross-linked

highly weather- and UV resistant

Jacket colour: Black

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#### 4. Electrical properties

Nominal voltage  $\ensuremath{U_0/U}$  acc. to VDE

Max. permitted DC voltage

Test voltage

Voltage resistance tests

AC 600/1000 V / DC 900/1500 V

1,8 kV (Conductor/Conductor, unearthed system)

AC 4 kV

according to EN 50395

#### 5. Thermal properties

Temperature range fixed installation: -40 °C up to +100 °C max. conductor temp.

Thermal endurance test according to EN 60216-2
High temperature pressure test according to EN 60811-3-1

Damp heat resistance test according to EN 60068-2-78 with 85% humidity

### 6. Mechanical properties

Minimum bending radius occasional flexing: 15 x cable diameter fixed installation: 5 x cable diameter

Dynamic penetration according to requirement specification AK 411.2.3 Annex F
Notch propagation according to requirement specification AK 411.2.3 Annex G

Tensile strength and elongation according to EN 60811

Tensile strength and elongation of insulation and jacket

### 7. Chemical properties

Ozone resistance according to EN 50396 part 8.1.3 Method B

Weathering- and UV resistance according to HD 605/A1

Flame characteristics flame retardant according to IEC 60332-1-2

Halogen-free according to IEC 60754-1

Acid and alkaline resistance according to EN 60811-2-1 (Oxal acid and sodium hydroxid)

#### 8. EC Directives

The cables are conform to the EC-Directives ECD 2006/95/EC (Low Voltage Directive) and RoHS 2002/95/EC (Restriction of the use of certain hazardous substances).

#### 9. Dimensions and versions

Part No.	Core colours	Outer sheath colour	Conductor cross section	a in mm ca.	b in mm ca.
0027150	black / red	black	2 X 2.5	5.4	10.8
0027151	blue / red	black	2 X 2.5	5.4	10.8
0027152	black / red	black	2 X 4	6.0	12
0027153	blue / red	black	2 X 4	6.0	12
0027154	black / red	black	2 X 6	7.1	14.2
0027155	blue / red	black	2 X 6	7.1	14.2

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