

## ÖLFLEX® SOLAR XLS-R T

DB 0023980

valid from: 22.01.2014

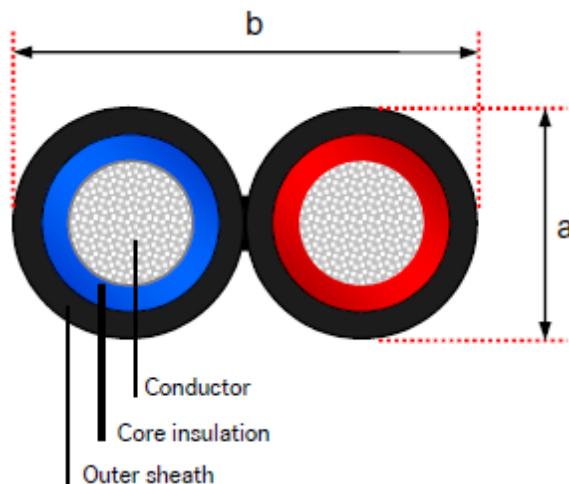


## 1. Application

ÖLFLEX® SOLAR XLS-R T cables are halogen free, double insulated and cross-linked twin cables for permanent outdoor use in photovoltaic systems. 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.

## 2. Cable design



- |                     |  |
|---------------------|--|
| 1. Conductor:       | Fine wire strands of tinned copper, according to IEC 60228 resp. VDE 0295, Class 5   |
| 2. Core insulation: | Temperature resistant and halogen free Co-Polyolefine, electron beam cross-linked<br>Pair colours: black/ red resp. blue/red |
| 3. Outer sheath:    | Flame retardant and halogen-free Co-Polymere, electron beam cross-linked<br>Jacket colour: black                             |

## 3. Electrical properties

Nominal voltage  $U_0/U$  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 6,5 kV  
according to EN 50395

## 4. Thermal properties

Temperature range  
Short circuit temperature  
Installation temperature  
Thermal endurance test  
High temperature pressure test  
Damp heat resistance test

fixed installation: -40 °C up to +100 °C max. conductor temp.  
+200°C  
flexible: down to -25 °C  
according to EN 60216-2  
according to EN 60811-3-1  
according to EN 60068-2-78 with 85% humidity

AbN  
automation

**ÖLFLEX® SOLAR XLS-R T****DB 0023980****valid from: 22.01.2014****5. 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  
of insulation and jacket

according to EN 60811

**6. 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)

**7. EC Directives**

This cable is conform to the EC-Directives 2006/95/EC (Low Voltage Directive) and 2002/95/EC and 2011/65/EC (RoHS, Restriction of the use of certain hazardous substances).

**8. Underground installation**

Solar cables can only be routed underground in protective tubing suitable for burial once it has been ensured that no long-term contact with water will occur and that any waterlogging is sure to be drawn away. The underground installation of cables and the correct carrying out of the burial must comply with VDE 0100 Section 520 or comparable standards, in order to prevent damage to the protective tubing and the constant exposure of the cables to penetrating water. Long-term, permanent storage or constant use of the cables in or underwater is not permitted.

**9. Dimensions and versions**

Part No.	Core colours	Outer sheath colour	Conductor cross section	a in mm approx.	b in mm approx.
0023982	black / red	black	2 X 2.5	4,8	9,9
0023983	blue / red	black	2 X 2.5	4,8	9,9
0023984	black / red	black	2 X 4	5,2	10,7
0023985	blue / red	black	2 X 4	5,2	10,7
0023986	black / red	black	2 X 6	5,8	11,9
0023987	blue / red	black	2 X 6	5,8	11,9
0023988	black / red	black	2 X 10	7,0	14,3
0023989	blue / red	black	2 X 10	7,0	14,3