

ÖLFLEX® SOLAR XLS-R T

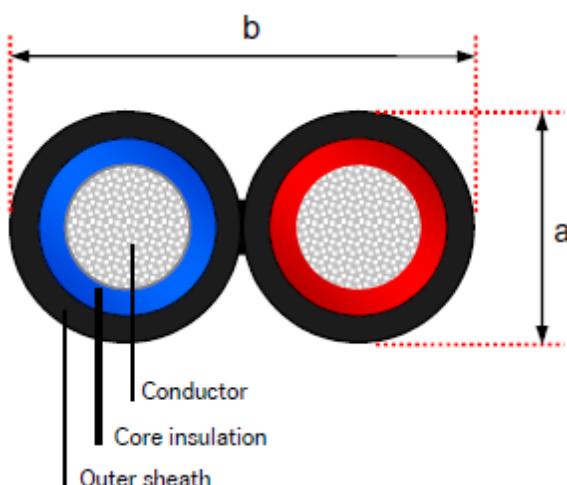
DB 0023980
valid from: 22.01.2014

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
Pair colours: black/ red resp. blue/red
3. Outer sheath: Flame retardant and halogen-free Co-Polymer, electron beam cross-linked
Jacket colour: black

3. Electrical properties

Nominal voltage U_0/U acc. to VDE	AC 600/1000 V / DC 900/1500 V
Max. permitted DC voltage	1,8 kV (Conductor/Conductor, unearthing system)
Test voltage	AC 6,5 kV
Voltage resistance tests	according to EN 50395

4. Thermal properties

Temperature range	fixed installation: -40 °C up to +100 °C max. conductor temp.
Short circuit temperature	+200 °C
Installation temperature	flexible: down to -25 °C
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

AbN
automation

Originator: A. Terpe / PCM approved: HAPF / PDC	Document: DB0023980EN	page 1 of 2
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Minimum bending radius	occasional flexing: 15 x cable diameter
Dynamic penetration	fixed installation: 5 x cable diameter
Notch propagation	according to requirement specification AK 411.2.3 Annex F
Tensile strength and elongation of insulation and jacket	according to requirement specification AK 411.2.3 Annex G 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