



DATA SHEET	0025800
ÖLFLEX® SOLAR XLS	valid from : 07.05.2009



1. LAPP Designation

ÖLFLEX® SOLAR XLS

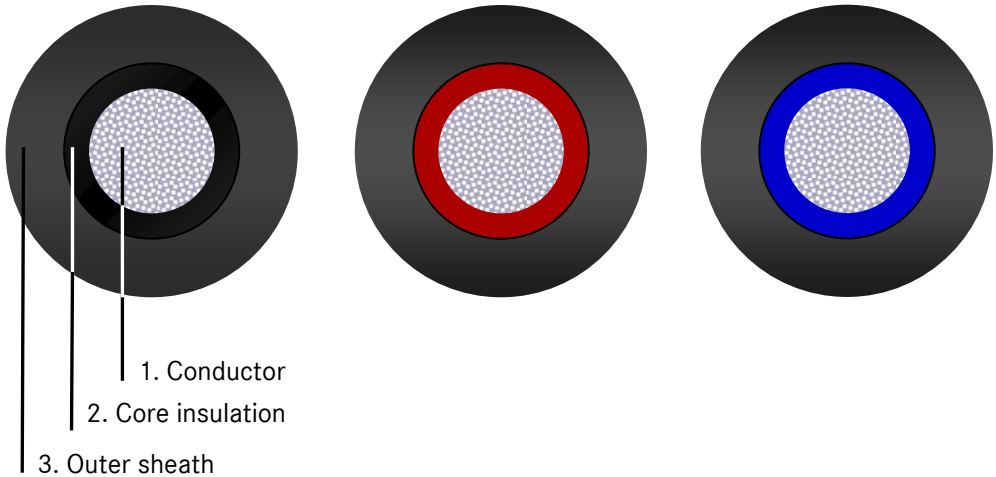
2. Application

ÖLFLEX® SOLAR XLS cables are double insulated cross-linked solar cables which are in addition halogen-free and flame retardant. Beside the extended temperature range the cross-linked compound materials achieve best values concerning weather-, ozone-, UV- and abrasion resistance.

ÖLFLEX® SOLAR XLS cables are developed for outdoor use for the individual connection of solar panels among themselves and for connection with the inverter.

The product is suitable for applications getting in contact with ammonia- resp. biogases.

3. 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
Colours: 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 U_0/U acc. to VDE	AC 600/1000 V / DC 900/1500 V
Max. permitted DC voltage	1,8 kV (Conductor/Conductor, unearthed system)
Test voltage	AC 4 kV
Voltage resistance tests	according to EN 50395

5. Thermal properties

Temperature range	fixed installed: -40 °C up to +100 °C max. conductor temperature
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
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

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).

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9. Dimensions and versions

Part No.	Core colour	Outer sheath colour	Conductor cross section	Outer diameter nominal in mm
0025800	black	black	1 X 1,5	5,4
0025801	red	black	1 X 1,5	5,4
0025802	blue	black	1 X 1,5	5,4
0025805	black	black	1 X 2,5	5,4
0025806	red	black	1 X 2,5	5,4
0025807	blue	black	1 X 2,5	5,4
0025810	black	black	1 X 4	6,0
0025811	red	black	1 X 4	6,0
0025812	blue	black	1 X 4	6,0
0025815	black	black	1 X 6	7,1
0025816	red	black	1 X 6	7,1
0025817	blue	black	1 X 6	7,1
0025820	black	black	1 X 10	8,9
0025821	red	black	1 X 10	8,9
0025822	blue	black	1 X 10	8,9
0025825	black	black	1 X 16	9,8
0025826	red	black	1 X 16	9,8
0025827	blue	black	1 X 16	9,8

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