

ÖLFLEX® SOLAR XLS-R

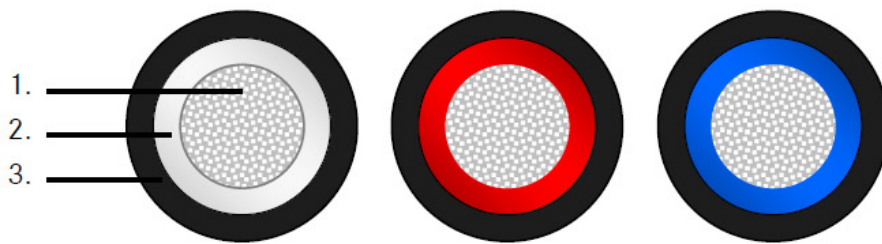
DB 0023 100EN

valid from: 01.10.2011

1. Application

ÖLFLEX® SOLAR XLS-R cables are weather-, abrasion- and UV-resistant photovoltaic cables. These cross-linked, halogen free and double insulated solar cables are suitable for permanent outdoor use and especially for the interconnection of grounded and ungrounded photovoltaic power systems. They are applicable for the connection of solar panels among themselves and as extension cable between the individual module strings or the DC/AC inverter.

2. Cable design



- | | |
|---------------------|---|
| 1. Conductor: | Fine wire strands of tinned copper according to IEC 60228, Class 5 |
| 2. Core insulation: | Temperature resistant and halogen free polyolefine co-polymer,
electron beam cross-linked
Colour: white, red or blue |
| 3. Outer sheath: | Flame retardant, weather resistant and halogen free polyolefin co-polymer,
electron beam cross-linked,
Outer sheath colour: black |

3. Electrical properties

Rated voltage U_0/U acc. IEC	AC 600/1000 V DC 900/1500 V
Max. permissible operating voltage	DC 1800 V (conductor/conductor, non earthed system)
Test voltage	AC 6,5 kV

4. Thermal properties

Temperature range	fixed installation: -40 °C up to +100 °C (max. conductor temperature according to IEC 60216)
High temperature pressure resistance	according EN 60811-3-1
Damp heat resistance	according EN 60068-2-78 at 85% humidity

5. Mechanical properties

Minimum bending radius	occasional flexing: 15 x cable diameter fixed installation: 5 x cable diameter
Dynamic penetration resistance	according DKE requirement specification PV1-F AK 411.2.3 Annex F
Notch propagation resistance	according DKE requirement specification PV1-F AK 411.2.3 Annex G
Tensile strength and elongation of insulation and jacket	according EN 60811



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6. Chemical Properties

UV and sunlight resistance	according to HD 605/A1
Ozone resistance	according to EN 50396
Halogen free	according to EN 50267
Flame retardant	according IEC 60332-1-2
Acid and alkaline resistance	according to EN 60811-2-1 (Oxal acid and sodium hydroxid)

7. EC Directives

The product does not exceed the maximum concentration of certain hazardous substances in accordance to RoHS 2002/95/EG as well as 2011/65/EU (Restriction of the use of certain hazardous substances) and conforms to the EC-Directive ECD 2006/95/EC (Low Voltage Directive).

8. Versions

Part.No.	Colour insulation	Colour outer sheath	Conductor cross section [mm²]	Outer diameter approx. [mm]
0023100	white	black	1 x 1.5	4,4
0023136	white	black	1 x 2.5	4,8
0023137	white	black	1 x 4	5,2
0023138	white	black	1 x 6	5,8
0023104	white	black	1 x 10	7,0
0023105	white	black	1 x 16	8,3
0023139	red	black	1 x 1.5	4,4
0023141	red	black	1 x 2.5	4,8
0023142	red	black	1 x 4	5,2
0023114	red	black	1 x 6	5,8
0023115	red	black	1 x 10	7,0
0023116	red	black	1 x 16	8,3
0023117	blue	black	1 x 1.5	4,4
0023118	blue	black	1 x 2.5	4,8
0023119	blue	black	1 x 4	5,2
0023120	blue	black	1 x 6	5,8
0023143	blue	black	1 x 10	7,0
0023144	blue	black	1 x 16	8,3