

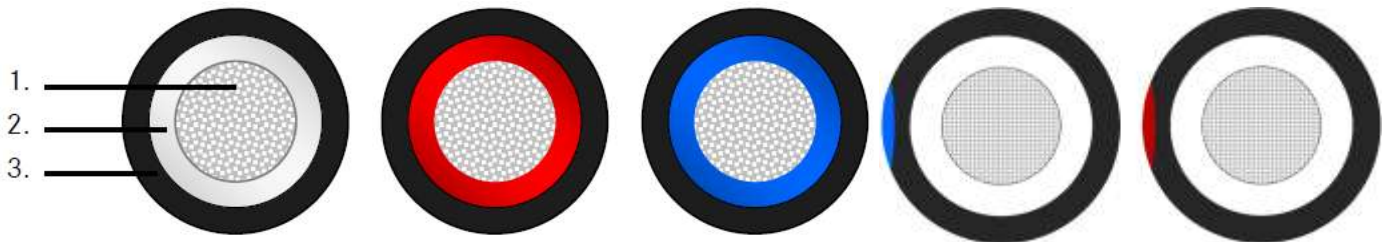
ÖLFLEX® SOLAR XLR-R

DB 0023 175EN

valid from: 05.02.2014

**1. Application**

ÖLFLEX® SOLAR XLR-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. The cable is approved by TÜV Rheinland according to 2 PFG 1169/08.07 (PV1-F).

2. Cable design

1. Conductor:
2. Core insulation:
3. Outer sheath:

Fine wire strands of tinned copper according to IEC 60228, Class 5
 Electron beam cross-linked polyolefin co-polymer
 Colour: white, red or blue
 Electron beam cross-linked polyolefin co-polymer
 Outer sheath colour: black or black with red or blue coloured stripe

3. Electrical properties

Rated voltage U_0/U acc. IEC	AC 600/1000 V DC 900/1500 V
Max. permissible operating voltage 2 PFG 1169/08.07	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 +120 °C (max. conductor temperature according to EN 60216-2)
Temperature range according TÜV 2 PFG 1169/08.2007	fixed installation: -40 °C up to +90 °C ambient temperature
Installation temperature	flexible: max. -25 °C
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	according EN 60811

6. Chemical Properties

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

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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. Approval

TÜV Rheinland Type approved according 2 PfG 1169/08.2007 (PV1-F)

9. 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.

10. Versions

Part.No.	Colour insulation	Colour outer sheath	Conductor cross section [mm²]	Outer diameter approx. [mm]
0023175	white	black	1 x 1.5	4.4
0023176	white	black	1 x 2.5	4.8
0023177	white	black	1 x 4	5.2
0023178	white	black	1 x 6	5.8
0023179	white	black	1 x 10	7.0
0023180	white	black	1 x 16	8.3
0023186	red	black	1 x 1.5	4.4
0023187	red	black	1 x 2.5	4.8
0023188	red	black	1 x 4	5.2
0023189	red	black	1 x 6	5.8
0023190	red	black	1 x 10	7.0
0023191	red	black	1 x 16	8.3
0023192	blue	black	1 x 1.5	4.4
0023193	blue	black	1 x 2.5	4.8
0023194	blue	black	1 x 4	5.2
0023195	blue	black	1 x 6	5.8
0023196	blue	black	1 x 10	7.0
0023197	blue	black	1 x 16	8.3
0023360	white	black + red stripe	1 x 2.5	4.8
0023361	white	black + red stripe	1 x 4	5.2
0023362	white	black + red stripe	1 x 6	5.8
0023363	white	black + red stripe	1 x 10	7.0
0023364	white	black + red stripe	1 x 16	8.3
0023370	white	black + blue stipe	1 x 2.5	4.8
0023371	white	black + blue stipe	1 x 4	5.2
0023372	white	black + blue stipe	1 x 6	5.8
0023373	white	black + blue stipe	1 x 10	7.0
0023374	white	black + blue stipe	1 x 16	8.3
0023375	white	black	1 x 25	10.8
0023376	white	black	1 x 35	12.4
0023377	white	black	1 x 50	14.6
0023378	white	black	1 x 70	16.4
0023379	white	black	1 x 95	18.8
0023380	white	black	1 x 120	20.4
0023381	white	black	1 x 150	22.4
0023382	white	black	1 x 185	25.2
0023383	white	black	1 x 240	28.6
0023384	white	black	1 x 300	32.0