

ÖLFLEX® SOLAR XL multi

DB 0026585
valid from: 25.02.2010

1. LAPP Designation

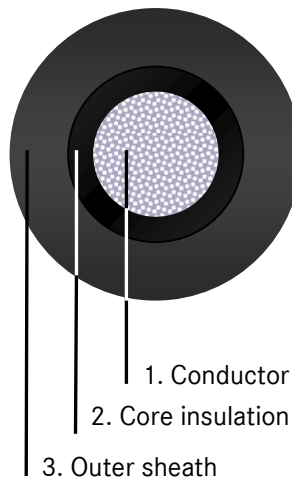


ÖLFLEX® SOLAR XL multi (previous designation LAPPTHERM® SOLAR XL multi)

2. Application

ÖLFLEX® SOLAR XL multi are weather- and UV-resistant. These halogen free, double insulated cross-linked solar cables are suitable for permanent outdoor use. They are for use for photovoltaic systems both for cabling of solar modules among themselves and as connection to the DC / AC inverter. Special features are the extended temperature range and that they achieve best values concerning UV-, ozone- and abrasion resistance. The cables are c(UL)us approved resp. listed according NEC National Electrical Code Edition 2008 under Paragraph 690.31 (USE-2) for the North American market (USA + Canada).

3. Cable Design



1. Conductor: Fine wire strands of tinned copper wires, according IEC 60228, Class 5
2. Core insulation: Temperature resistant and halogen free Co-Polyolefine, cross-linked
Colour: Black
3. Outer sheath: Flame retardant and halogen free Co-Polymere, highly weather- and UV resistant
Colour: Black



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4. Electrical Properties

Nominal voltage U_0/U acc. VDE	AC 600/1000 V / DC 900/1500 V
Working voltage acc. TÜV 2 PfG 1169	DC 1000 V
Test voltage	4 kV
Working voltage acc. UL	600 V
Voltage resistance test	according HD 22.2 - 2.2
Specific insulation resistance	$\geq 200 \text{ G}\Omega \times \text{cm}$
Conductor corrosion test	according UL 1581 8.7
Overload test	according UL 854 25.1 – 25.4

5. Thermal Properties

Temperature range	fixed installed -40 °C up to +120 °C
Temperature range acc. TÜV 2 PfG 1169	-40 °C up to +85 °C
Temperature range acc. UL (NEC)	+90 °C (normative due to UL listing)
Cold bend resp. impact test	according EN 60811-1-4 and UL 44 8.11
Deformation test	according UL 44 8.12
Short-circuit temperature	+250 °C

6. Mechanical Properties

Minimum bending radius	occasional flexing: 15 x cable diameter
	fixed installation: 4 x cable diameter
Tension load	15 N/mm ²
Tensile strength and elongation of insulation and jacket	according EN 60811 and UL 1581 400.1
Impact test	according UL 854 23.1 – 23.8 resp. 24.1 – 24.7

7. Chemical Properties

Ozone resistance	VDE Test according DIN VDE 0282-2 resp. HD 22.2 S3 Method B
Weather resistance	according ISO 4892-2 and UL 1581
Flame characteristics	flame retardant according IEC 60332-1-2 resp. EN 50265-2-1 and UL resp. CSA FT-2
Halogen free	according EN 50267-2-2
Ammonia resistance	test passed with duration of 28 days in 25% ammonia solution

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8. EC Directives

The cables are conform to the EC directives CE 2006/95/EC (Low voltage directive) and RoHS 2002/95/EC (Restriction of the use of certain hazardous substances)

9. Approvals

UL/CSA

(UL): USE-2 "SUNLIGHT RESISTANT" for USA
c(UL): RWU90 "SR" for Canada

10. Dimensions and versions

Part.No..	Jacket Colour	Conductor cross-section mm ²	Nominal outer diameter in mm	Part.No..	Jacket colour	Conductor cross-section mm ²	Nominal outer diameter in mm
ÖLFLEX® SOLAR XL multi				ÖLFLEX® SOLAR XL multi - coded			
0026585	black	1 x 2,5	5,6	0026590	black	1 x 2,5	5,6
0026586	black	1 x 4	6,0	0026591	black	1 x 4	6,0
0026587	black	1 x 6	7,1	0026592	black	1 x 6	7,1
0026588	black	1 x 10	8,5	0026593	black	1 x 10	8,5
0026589	black	1 x 16	9,5	0026594	black	1 x 16	9,5