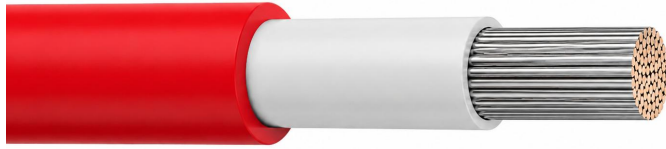


## Photovoltaic Cables



### 0.6/1 kV LSZH Insulated, Single-Core, Solar Cables

Standards: IEC 62930, EN 50618

#### Technical Properties

**Operating temperature:** -40 °C to +90 °C  
**Max. storage temperature:** +40 °C  
**Min. transport & laying temp.:** -25 °C  
**Min. bending radius at (20±10)°C:** D<12: 3 × D  
**Min. bending radius at (20±10)°C:** D>12: 4 × D

#### Electrical Properties

**Nominal voltage:** DC: 1.5/1.5 kV / AC: 1.0/1.0 kV  
**Max. permissible operating voltage (AC system):** 1.2/1.2 kV  
**Max. permissible operating voltage (DC system):** 1.8/1.8 kV

*D: cable diameter*

#### Applications

Specially designed for connections between the various elements of photovoltaic systems, such as solar panel arrays and inverters. Used unprotected, in conduit or similar enclosed systems, in indoor or outdoor fixed installations.

#### Fire Performance Tests

Vertical Flame Propagation / IEC 60332-1-2, EN 60332-1-2, DIN EN 60332-1-2 (VDE 0482-332-1-2)  
 Smoke Density (Light Transmittance) / IEC 61034-2, EN 61034-2, DIN EN 61034-2 (VDE 0482-1034-2)  
 Test of Gases Evolved During Combustion of Materials Used in Cables / IEC 60754-2, EN 50525-1, EN 60754-2, EN 50267-2-1

#### Resistance to Different Environmental Conditions

UV Resistance of the Sheath / EN 50289-4-17 (VDE 0819-289-4-17)  
 Ozone Resistance / IEC 60811-403, EN 60811-403 (VDE 0473-811-403)  
 Resistance of the Sheath to Acid and Alkaline Solutions / IEC 60811-404, EN 60811-404 (VDE 0473-811-404)  
 Dynamic Penetration Test / IEC 62930, EN 50618

#### Construction

- ① Flexible tinned copper conductor / Class 5    ② Halogen-free cross-linked insulation material  
 ③ Halogen-free flame-retardant cross-linked sheath material

#### MECHANICAL AND ELECTRICAL PROPERTIES

Cross Section	Conductor Resistance	Cable Weight (Approx.)	Cable Diameter (Approx.)	Current in Air (60°C)	Current on Surface (60°C)	Short-Circuit Current (1 s / 250°C)
mm <sup>2</sup>	(Ω/km) 20°C	kg/km	mm	A	A	kA
1x1.5	13.7	29.8	4.6	30	29	0.2
1x2.5	8.21	40.7	5.1	41	39	0.4
1x4	5.09	56.4	5.6	55	52	0.6
1x6	3.39	76.8	6.2	70	67	0.9
1x10	1.95	121.0	7.6	98	93	1.4
1x16	1.24	179.5	9.1	132	125	2.3
1x25	0.795	275.8	11.1	176	167	3.6
1x35	0.565	378.1	12.7	218	207	5.0
1x50	0.393	531.3	14.8	276	262	7.2
1x70	0.277	728.1	16.9	347	330	10.0
1x95	0.21	942.2	19.1	416	395	13.6
1x120	0.164	1197.7	21.1	488	464	17.2
1x150	0.132	1508.4	23.6	566	538	21.5
1x185	0.108	1797.0	26.4	644	612	26.5
1x240	0.0817	2377.6	29.5	775	736	34.3