



■ Cable Solutions

# Solutions for Solar Systems

# Solar Cables

## LÜTZE Thermoflex Solar XPE



### Application

- Fixed installation and moving application without tensile load
- Suitable for installation in dry and humid rooms, for outdoor use, in direct sun radiation too
- Not suitable for direct burial

### Properties

- LÜTZE THERMOFLEX Solar XPE is halogen free, flame resistant and fire retardant
- No corrosive gases will be released in case of fire, the smoke density is low
- Material of insulation and jacket are excellent resistant to weathering, UV-radiation and abrasion
- The large temperature range enables the use of this cable in extreme climatic environment
- The cable is flexible and designed for high mechanical load
- A product life cycle of 25 years for THERMOFLEX Solar XPE is to be expected
- Insulation and jacket are easily removable
- Widely resistant to Sea water, Ozone, acids and bases
- All materials used in the cable are conform to European RoHS-directive
- VDE-approval acc. to German DKE specification for photovoltaic cables, dated 12.02.2008 (identical to TÜV-Specification 2 PG 1166/08.2007); VDE Reg.-No. 8293

### Technical data

#### Voltage

$U_0/U$  AC 0,6/1kV, DC 0,9/1,5 kV

#### Test voltage

(online testing) 8 kV

Insulation resistance at 20 °C  $\geq 800 \text{ M}\Omega \times \text{km}$

Short-circuit-proof at 200 °C / 5 s

Hot elongation test at 250 °C

Temperature test 20.000 h at 120 °C

#### Temperature range

fixed -50 °C to +150 °C

moving +25 °C to +125 °C

#### Minimum bending radius

fixed Cable diameter  $\times 5$

moving Cable diameter  $\times 10$

### Design

- Tinned stranded conductor according to DIN VDE 0295 class 5 and IEC 60228 class 5
- Outer jacket black. Differentiation of Plus- and Minus the signs "+" and "-" are printed on the jacket
- Additional Types of PV-cables are available on request:  
**Coloured Versions:**  
 outer jacket coloured red or blue  
**Duplex version:**  
 double core cable, "figure 8", to be separated easily
- **LÜTZE THERMOFLEX Solar XPE UL:**  
 Construction acc. to US-standards, listed acc. to UL subject 4703 certified special version for the US market  
 technical Data and ordering information on request

Part-No.	Number of strands/cross-section	Outer-Ø approx. mm	Weight kg/100 m	Cu-Index kg/100 m
<b>Signs "+"</b>				
103149	1×2,5	4,5	4,0	2,4
103150	1×4	5,2	5,9	3,8
103151	1×6	5,9	8,1	5,8
103152	1×10	6,9	12,7	9,6
103153	1×16	8,3	19,3	15,3
103154	1×25	9,6	28,4	24,0
103155	1×35	11,0	37,8	33,6
<b>Signs "-"</b>				
103159	1×2,5	4,5	4,0	2,4
103160	1×4	5,2	5,9	3,8
103161	1×6	5,9	8,1	5,8
103162	1×10	6,9	12,7	9,6
103163	1×16	8,3	19,3	15,3
103164	1×25	9,6	28,4	24,0
103165	1×35	11,0	37,8	33,6

# Solar Panel Connector

## Panel Connector for Photovoltaik Arrays TÜV and UL recognized



Part-No. 199947



Part-No. 199948



Part-No. 199946



Part-No. 199945

### 4,0 mm Panel Connector - Self-locked Type (Apply to Cable Assembly)

Part.-No.
199947
199948

#### Technical Data

Pin dimensions	4,0 mm
Suitable cables	5,0 mm - 8,0 mm
Suitable cable cross sections	4,0 - 6,0 mm <sup>2</sup> AWG 12 - AWG 10
Contact type	stamp roll contact
Rated Voltage	1.000 V DC
Rated current	30 A at 70°C / 25 A at 85° C
Contact resistance	< 5 m Ohm

#### Material

Contact material	Cu
Contact surface material	Tin plated
Housing material	PPO

#### Environmental Conditions

Protection Class	IP67 (IEC 60529)
Temperature range	-40 °C - + 90 °C
Inflammability class	UL 94V-0

#### Approvals

TÜV Certification	2 PfG 1161/01.06
UL Certification	

### 4,0 mm Panel Connector - Self-locked Type (Apply to Cable Assembly)

Artikelnummer
199945
199946

#### Technische Daten

Pin dimensions	4,0 mm
Suitable cables	5,0 mm - 8,0 mm
Suitable cable cross sections	4,0 - 6,0 mm <sup>2</sup> AWG 12 - AWG 10
Contact type	stamp roll contact
Rated Voltage	1.000 V DC
Rated current	30 A at 70°C / 25 A at 85° C
Contact resistance	< 5 m Ohm

#### Material

Contact material	Cu
Contact surface material	Tin plated
Housing material	PPO

#### Umgebungsbedingungen

Protection Class	IP67 (IEC 60529)
Temperature range	-40 °C - + 90 °C
Inflammability class	UL 94V-0

#### Approvals

TÜV Certification	2 PfG 1161/01.06
UL Certification	

More types on request!

All cables and connectors are also assembled supplied.

For further requests: [info@luetze.de](mailto:info@luetze.de) or Tel.: +49 7151 6053 -0

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