

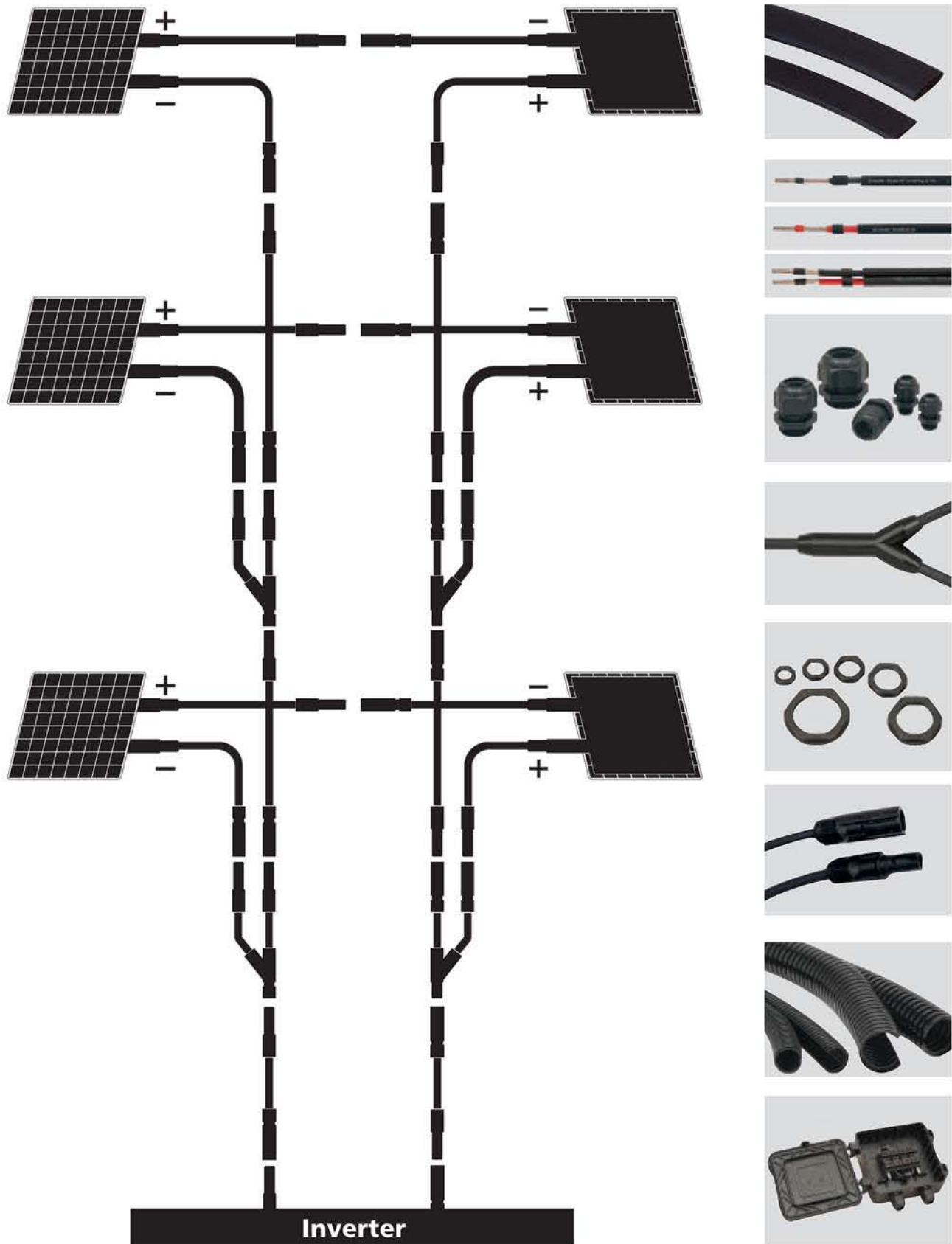


## **Cables & Accessories for the Solar / Photovoltaic Industry**











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## Design Principle of a Photovoltaic System



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Properties	Type	SOLARFLEX® 100 / 110	SOLARFLEX® 101 / 111	SOLARFLEX® 104 / 105	SOLARFLEX® 106 / 107	SOLARFLEX® 108 / 109
Flexible		●●●	●●●	●●●	●●●	●●●●●
Abrasion-resistant		●●●	●●●	●●●	●●●	●●
Flame resistant		●●●	●●●	●●●	●●●	●●●
Halogen-free		yes	yes	yes	yes / no	no
Recyclable		yes	yes	yes	yes	yes
Marten a. rodent protection		no	yes*	no	no	no
UV-resistant		●●●	●●●	●●●	●●●	●●●
Approvals		VDE, TÜV, UL	VDE, TÜV**	- / UL	-	-
Temperature		+90°C	+120°C	+90°C	+90°C/+80°C	+80°C/+80°C
AC nominal voltage		600/1000V	600/1000V	600/1000V	600/1000V	600/1000V
DC nominal voltage		900/1500V	900/1500V	900/1500V	900/1500V	-
Test voltage 50Hz		4000V	4000V	4000V	4000V	3000V
Minimum bending radius (X x cable diameter)		4 x	4 x	4 x	4 x	4 x / 6 x

\* applies only to SOLARFLEX 101-V4A LiTPE TPE  
 \*\* in preparation

- = High
- = Medium
- = Low

## Approvals:



= UL (Underwriters Laboratories)

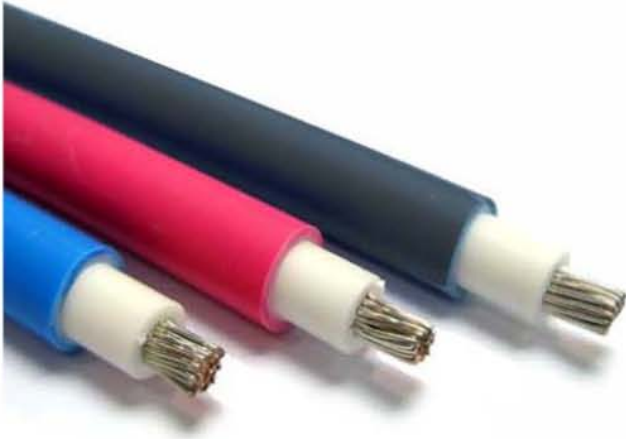


= ISO 9001: 2000



= Association of German Electrical Engineers

## SOLAR CABLE



### UL Cable (600V DC)

Part Number	Cross Section [AWG]	Conductor composition [mm]	Outer Diameter [mm]	Color
HTC-0120	12	48/0.30	6.4	Red
HTC-0160	12	48/0.30	6.4	Blue
HTC-0100	12	48/0.30	6.4	Black
HTC-0020	10	76/0.30	7.0	Red
HTC-0060	10	76/0.30	7.0	Blue
HTC-0000	10	76/0.30	7.0	Black



### Technical Data

#### Materials

Conductor: Tinned Stranded copper wire  
 Insulation: XLPE 1125C  
 Jacket: XLPE 1125C

#### Electrical

Rated Current: 25 A\*  
 Rated voltage UL: 600V DC  
 Conductor Resistance: < 4.44 Ω/km\*  
 \*for wire size 4.0 mm<sup>2</sup>

#### Mechanical

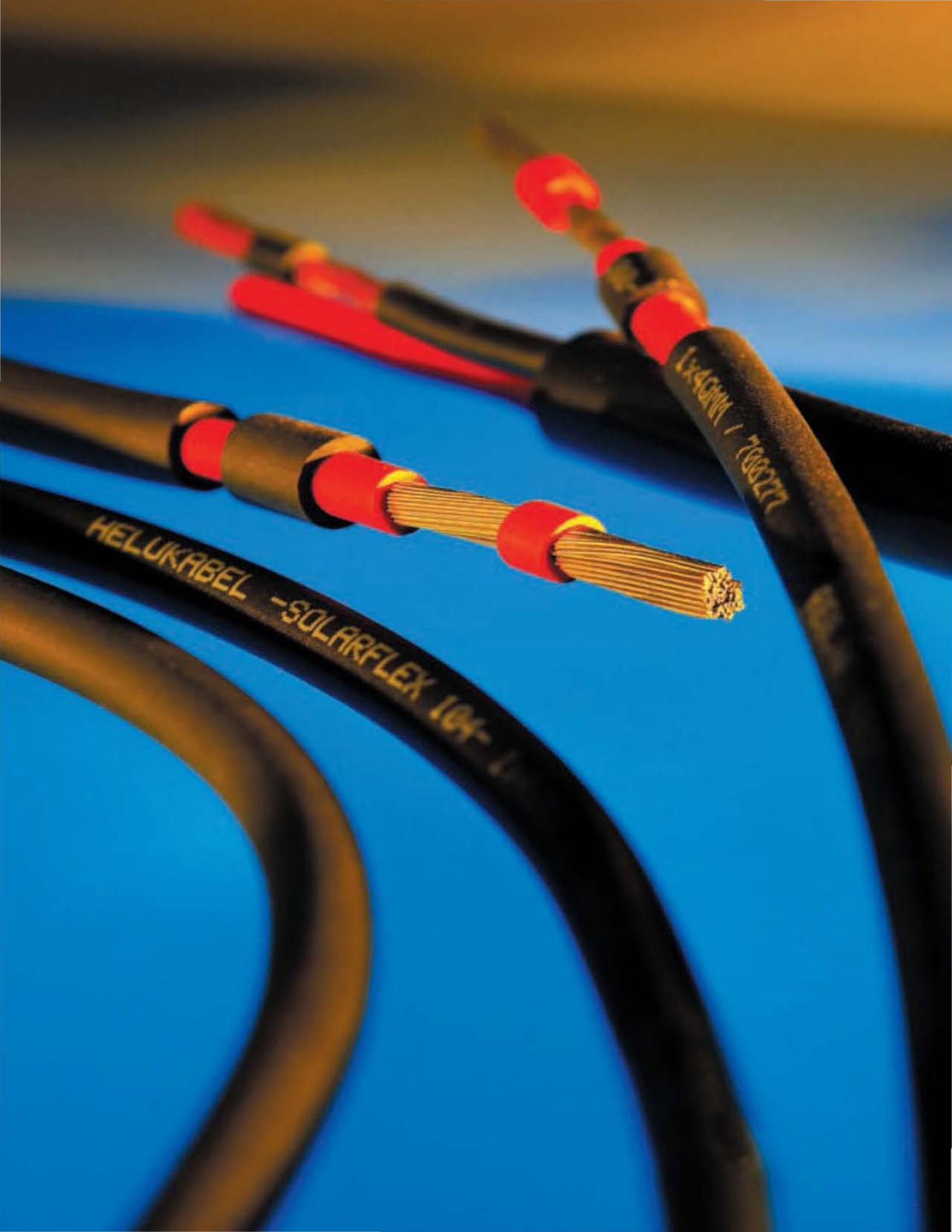
Wire Size Range: 4.0, 6.0 mm<sup>2</sup>  
 AWG 10, 12  
 Min. bending radius: 48mm for 4.0 mm<sup>2</sup>

#### Environmental

Temperature Range UL: -40°C up to +90°C  
 (-40°F up to +194°F)  
 Flame tested: EN 50265-2-1  
 Halogen Free  
 RoHS Compliant

#### Safety Approval and Standards

UL: Approved



HELUKABEL

-SOLARFLEX 104-1

1x40mm / 200277

## SOLARFLEX® 100 LiTPEPUR 3-standard



new

### Technical data

- **Temperature range**  
-40°C to +90°C (-40°F to +194°F)  
UL to +80°C (+176°F)  
-40°C to +120°C (-40°F to +248°F)  
(3,000 hours)
- **Nominal voltage**  
according to VDE 600/1000V AC, 900/1500V DC  
according to UL 1000V
- **AC test voltage**, 50 Hz  
4000 V
- **Minimum bending radius**  
for fixed installation  
approx. 4 cable diameters

### Cable structure

- Double-insulated
- Bare copper, tinned, finely stranded according to DIN VDE 0295 cl.5 and IEC 60228 cl. 5
- Special TPE insulation
- PUR jacket, halogen-free and flame retardant
- For colors see table

### Properties

- Approval: VDE and TÜV up to 16 mm<sup>2</sup>
- UL on request
- UV, ozone, weather and hydrolysis-resistant
- Very good resistance to oils and chemicals
- Flame-resistant according to VDE 0482-332-2, DIN EN 60332-1 and according to UL 1581 "cable flame test"
- Very robust and abrasion-resistant sheath
- These cables have very good installation properties when being laid in narrow areas and in pipes
- Resistant to short-circuits up to 250°C thanks to their double insulation
- No cold flow meaning optimum long-term tightness of the connection systems
- Easy machine processing
- Very good flexibility
- Recyclable
- RoHS approved

### Application

The SOLARFLEX®100 with very rugged PUR jacket is used for the cabling between interconnected solar modules

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core color	AWG-No.
700549	1 x 2,5	5,8	24,0	55,0	black/red	14
701504	1 x 2,5	5,8	24,0	55,0	blue/black	14
701505	1 x 2,5	5,8	24,0	55,0	black/black	14
700277	1 x 4	6,7	38,4	85,0	black/red	12
701506	1 x 4	6,7	38,4	85,0	blue/black	12
701507	1 x 4	6,7	38,4	85,0	black/black	12
700278	1 x 6	7,6	57,6	95,0	black/red	10
701508	1 x 6	7,6	57,6	95,0	blue/black	10
701509	1 x 6	7,6	57,6	95,0	black/black	10
700368	1 x 10	9,6	96,0	110,0	black/black	8
701510	1 x 10	9,6	96,0	110,0	black/blue	8
701511	1 x 10	9,6	96,0	110,0	black/red	8
700369	1 x 16	11,0	153,6	170,0	black/black	6
701512	1 x 16	11,0	153,6	170,0	blue/black	6
701513	1 x 16	11,0	153,6	170,0	red/black	6

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core color
702188	1 x 25	13,1	240,0	295,0	black/red
702189	1 x 25	13,1	240,0	295,0	black/blue
702190	1 x 25	13,1	240,0	295,0	black/black
702192	1 x 35	14,1	336,0	395,0	black/blue
702191	1 x 35	14,1	336,0	395,0	black/red
702193	1 x 35	14,1	336,0	395,0	black/black
701963	1 x 50	17,4	480,0	630,0	black/blue
701943	1 x 50	14,1	336,0	395,0	black/red
701964	1 x 50	17,4	480,0	630,0	black/black
701965	1 x 70	18,9	672,0	850,0	black/blue
701944	1 x 70	18,9	672,0	850,0	black/red
701966	1 x 70	18,9	672,0	850,0	black/black
701967	1 x 95	21,8	912,0	1200,0	black/blue
701945	1 x 95	21,8	912,0	1200,0	black/red
701968	1 x 95	21,8	912,0	1200,0	black/black
701969	1 x 120	24,3	1152,0	1550,0	black/blue
701946	1 x 120	24,3	1152,0	1550,0	black/red
701970	1 x 120	24,3	1152,0	1550,0	black/black
701971	1 x 150	26,6	1440,0	1730,0	black/blue
701972	1 x 150	26,6	1440,0	1730,0	black/black

Dimensions and specifications may be changed without prior notice.

## SOLARFLEX® 101 LITPETPE 2-standard, 3-standard



new

### Technical data

- **Temperature range**  
-40°C to +120°C (-40°F to +248°F)  
UL to +80°C (-40°F to +248°F)
- **Nominal voltage:**  
according to VDE U0/U 600/1000V AC,  
900/1500V DC, UL: 1000V
- **AC test voltage, 50 Hz**  
4,000 V
- **Minimum bending radius:**  
For fixed installation approx. 4 cable diameters

### Cable structure

- double-insulated
- bare copper, tinned, finely stranded according to DIN VDE 0295 class 5 and IEC 60228 cl. 5
- special TPE insulation
- special TPE jacket
- for colors, see table

### Properties

- approval: VDE and TÜV up to 16
- UL on request
- UV, ozone, weather and hydrolysis-resistant
- very good resistance to oils and chemicals
- flame-resistant according to VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1
- robust and abrasion-resistant
- These cables have very good installation properties when being laid in narrow areas and in pipes
- resistant to short-circuits up to 250°C thanks to their double insulation
- No cold flow meaning optimum long-term tightness of the connection systems
- easy machine processing
- very good flexibility
- recyclable & RoHS

### Application

SOLARFLEX®101-V4A LITPETPE:

Like SOLARFLEX®101 2-standard, but additionally, armoring of V4A stainless steel (Marten and rodent protection)

#### SOLARFLEX® 101 LITPETPE 2-standard

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core colour	AWG-No.
78990	1 x 2,5	6,6	24,0	46,0	black/black	14
701514	1 x 2,5	6,6	24,0	46,0	black/blue	14
701515	1 x 2,5	6,6	24,0	46,0	black/red	14
700400	1 x 4	7,5	38,4	68,0	black/black	12
700049	1 x 4	7,5	38,4	68,0	black/red	12
700048	1 x 4	7,5	38,4	68,0	black/blue	12
701712	1 x 4	7,5	38,4	68,0	red/black	12
701713	1 x 4	7,5	38,4	68,0	blue/black	12
78166	1 x 6	8,3	57,6	95,0	black/black	10
701516	1 x 6	8,3	57,6	95,0	black/blue	10
701517	1 x 6	8,3	57,6	95,0	black/red	10
700610	1 x 10	10,2	96,0	110,0	black/black	8
701518	1 x 10	10,2	96,0	110,0	black/blue	8
701519	1 x 10	10,2	96,0	110,0	black/red	8
700611	1 x 16	11,4	153,6	170,0	black/black	6
701520	1 x 16	11,4	153,6	170,0	black/blue	6
701521	1 x 16	11,4	153,6	170,0	black/red	6

#### SOLARFLEX® 101 LITPETPE

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core colour
702236	1 x 25	13,1	240,0	280,0	black/red
702237	1 x 25	13,1	240,0	280,0	black/blue
702238	1 x 25	13,1	240,0	280,0	black/black
702240	1 x 35	14,1	336,0	400,0	black/blue
702239	1 x 35	14,1	336,0	400,0	black/red
702241	1 x 35	14,1	336,0	400,0	black/black
701973	1 x 50	17,4	480,0	630,0	black/blue
701785	1 x 50	17,4	480,0	630,0	black/red
701793	1 x 50	17,4	480,0	630,0	black/red
701794	1 x 50	17,4	480,0	630,0	black/red
701974	1 x 50	17,4	480,0	630,0	black/black
701976	1 x 70	18,9	672,0	850,0	black/black
701978	1 x 95	24,8	912,0	1200,0	black/black
701980	1 x 120	24,3	1152,0	1550,0	black/black
701982	1 x 150	26,6	1440,0	1730,0	black/black

#### SOLARFLEX® 101 LITPETPE 3-APPROVALS

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core colour
701675	1 x 2,5	6,6	24,0	46,0	black/black
701676	1 x 2,5	6,6	24,0	46,0	black/blue
701677	1 x 2,5	6,6	24,0	46,0	black/red
701679	1 x 4	7,5	37,4	68,0	black/blue
701680	1 x 4	7,5	37,4	68,0	black/red
701678	1 x 4	7,5	37,4	68,0	black/black
701682	1 x 6	8,3	57,6	95,0	black/blue
701683	1 x 6	8,3	57,6	95,0	black/red
701681	1 x 6	8,3	57,6	95,0	black/black
701685	1 x 10	10,2	96,0	110,0	black/blue
701686	1 x 10	10,2	96,0	110,0	black/red
701684	1 x 10	10,2	96,0	110,0	black/black
701688	1 x 16	11,4	153,6	170,0	black/blue
701687	1 x 16	11,4	153,6	170,0	black/red
701689	1 x 16	11,4	153,6	170,0	black/black

#### SOLARFLEX® 101 LITPETPE

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core colour
702242	1 x 25	13,1	240,0	280,0	black/red
702243	1 x 25	13,1	240,0	280,0	black/blue
702244	1 x 25	13,1	240,0	280,0	black/black
702246	1 x 35	14,1	336,0	400,0	black/blue
702245	1 x 35	14,1	336,0	400,0	black/red
702247	1 x 35	14,1	336,0	400,0	black/black
701983	1 x 50	17,4	480,0	630,0	red/black
701948	1 x 50	17,4	480,0	630,0	blue/black
701986	1 x 70	18,9	672,0	850,0	black/black
701988	1 x 95	21,8	912,0	1200,0	black/black
701990	1 x 120	24,3	1152,0	1550,0	black/black
701992	1 x 150	26,6	1440,0	1730,0	black/black

#### SOLARFLEX® 101-V4A LITPETPE

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Jacket / core colour	AWG-No.
704402	1 x 2,5	7,4	48,0	66,0	black/black	14
704403	1 x 4	8,3	58,0	88,0	black/black	12
701328	1 x 6	9,1	57,6	115,0	black/black	10
701329	1 x 10	11,0	96,0	130,0	black/black	8
701330	1 x 16	12,2	153,6	195,0	black/black	6

Dimensions and specifications may be changed without prior notice.

# SOLARFLEX® 110 Thinline LITPEPUR



## Technical data

- **Temperature range**  
-40°C to +90°C (-40°F to +194°F)  
-40°C to +120°C (-40°F to +248°F) (3,000 hours)
- **Nominal voltage:**  
according to VDE U0/U 600/1000V AC,  
900/1500V DC
- **AC test voltage, 50 Hz**  
4000V
- **Minimum bending radius:**  
For fixed installation approx. 4 cable  
diameters

## Cable structure

- double-insulated
- bare copper, tinned, finely stranded  
according to DIN VDE 0295 class 5 and IEC  
60228 cl. 5
- special TPE insulation
- PUR jacket, halogen-free
- for colors, see table

## Properties

- approval: applied for VDE and TÜV
- very robust and abrasion-resistant
- UV, ozone, weather and hydrolysis-resistant
- very good resistance to oils and chemicals
- flame-resistant according to VDE  
0482-332-1-2, DIN EN 60332-1-2,  
IEC 60332-1 and according to UL 1581 "cable  
flame test"
- these cables have very good installation  
properties when being laid in narrow areas  
and in pipes
- resistant to short-circuits up to 250°C  
thanks to their double insulation
- no cold flow meaning optimum long-term  
tightness of the connection systems
- easy machine processing
- very good flexibility
- recyclable
- RoHS

## Note

- **NEW – with reduced outside diameter!**

## Application

The SOLARFLEX®110 with very rugged PUR is used for the cabling between interconnected solar modules

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour	Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour
702953	1 x 2,5	5,4	24,0	55,0	red/black	702973	1 x 35	12,8	336,0	395,0	black/black
702955	1 x 2,5	5,4	24,0	55,0	black/black	702971	1 x 35	12,8	336,0	395,0	red/black
702954	1 x 2,5	5,4	24,0	55,0	blue/black	702972	1 x 35	12,8	336,0	395,0	blue/black
702958	1 x 4	6,0	38,4	85,0	black/black	702976	1 x 50	14,6	480,0	630,0	black/black
702956	1 x 4	6,0	38,4	85,0	red/black	702974	1 x 50	14,6	480,0	630,0	red/black
702957	1 x 4	6,0	38,4	85,0	blue/black	702975	1 x 50	14,6	480,0	630,0	blue/black
702961	1 x 6	6,8	57,6	95,0	black/black	702979	1 x 70	17,4	672,0	850,0	black/black
702959	1 x 6	6,8	57,6	95,0	red/black	702977	1 x 70	17,4	672,0	850,0	red/black
702960	1 x 6	6,8	57,6	95,0	blue/black	702978	1 x 70	17,4	672,0	850,0	blue/black
702962	1 x 10	8,0	96,0	110,0	black/black	702982	1 x 95	20,0	912,0	1200,0	black/black
702964	1 x 10	8,0	96,0	110,0	red/black	702980	1 x 95	20,0	912,0	1200,0	red/black
702963	1 x 10	8,0	96,0	110,0	blue/black	702981	1 x 95	20,0	912,0	1200,0	blue/black
702965	1 x 16	9,4	153,6	170,0	black/black	702985	1 x 120	21,0	1152,0	1550,0	black/black
702967	1 x 16	9,4	153,6	170,0	red/black	702983	1 x 120	21,0	1152,0	1550,0	red/black
702966	1 x 16	9,4	153,6	170,0	blue/black	702984	1 x 120	21,0	1152,0	1550,0	blue/black
702970	1 x 25	11,2	240,0	295,0	black/black	702988	1 x 150	24,7	1440,0	1730,0	black/black
702968	1 x 25	11,2	240,0	295,0	red/black	702986	1 x 150	24,7	1440,0	1730,0	red/black
702969	1 x 25	11,2	240,0	295,0	blue/black	702987	1 x 150	24,7	1440,0	1730,0	blue/black

Dimensions and specifications may be changed without prior notice.



# SOLARFLEX® 111 Thinline LiTPETPE



new

## Technical data

- **Temperature range**  
-40°C to +120°C (-40°F to +248°F)
- **Nominal voltage:**  
according to VDE U<sub>0</sub>/U 600/1000V AC, 900/1500V DC
- **AC test voltage**, 50 Hz  
4,000 V
- **Minimum bending radius:**  
For fixed installation approx. 4 cable diameters

## Cable structure

- double-insulated
- bare copper, tinned, finely stranded according to DIN VDE 0295 class 5 and IEC 60228 cl. 5
- special TPE insulation
- special TPE jacket
- for colors, see table

## Properties

- these cables have very good installation properties when being laid in narrow areas and in pipes
- approval: applied for VDE and TÜV
- UV, ozone, weather and hydrolysis-resistant
- very good resistance to oils and chemicals
- flame-resistant according to VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60322-1
- robust and abrasion-resistant
- resistant to short-circuits up to 250°C thanks to their double insulation
- no cold flow meaning optimum long-term tightness of the connection systems
- easy machine processing
- very good flexibility
- recyclable
- RoHS approved

## Note

**NEW – with reduced outside diameter!**

## Application

The SOLARFLEX®111 with TPE-jacket for an temperature range until +120°C.

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour
702989	1 x 2,5	5,4	24,0	46,0	black/black
702991	1 x 2,5	5,4	24,0	46,0	red/black
702990	1 x 2,5	5,4	24,0	46,0	blue/black
702992	1 x 4	6,0	38,4	68,0	black/black
702994	1 x 4	6,0	38,4	68,0	red/black
702993	1 x 4	6,0	38,4	68,0	blue/black
702995	1 x 6	6,8	57,6	95,0	black/black
702997	1 x 6	6,8	57,6	95,0	red/black
702996	1 x 6	6,8	57,6	95,0	blue/black
702998	1 x 10	8,0	96,0	110,0	black/black
703000	1 x 10	8,0	96,0	110,0	red/black
702999	1 x 10	8,0	96,0	110,0	blue/black
703001	1 x 16	9,4	153,6	170,0	black/black
703003	1 x 16	9,4	153,6	170,0	red/black
703002	1 x 16	9,4	153,6	170,0	blue/black
703006	1 x 25	11,2	240,0	280,0	black/black
703004	1 x 25	11,2	240,0	280,0	red/black
703005	1 x 25	11,2	240,0	280,0	blue/black

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour
703009	1 x 35	12,8	336,0	400,0	black/black
703007	1 x 35	12,8	336,0	400,0	red/black
703008	1 x 35	12,8	336,0	400,0	blue/black
703012	1 x 50	14,6	480,0	630,0	black/black
703011	1 x 50	14,6	480,0	630,0	red/black
703010	1 x 50	14,6	480,0	630,0	blue/black
703015	1 x 70	17,4	672,0	850,0	black/black
703013	1 x 70	17,4	672,0	850,0	red/black
703014	1 x 70	17,4	672,0	850,0	blue/black
703018	1 x 95	20,0	912,0	1200,0	black/black
703016	1 x 95	20,0	912,0	1200,0	red/black
703017	1 x 95	20,0	912,0	1200,0	blue/black
703021	1 x 120	21,0	1152,0	1550,0	black/black
703019	1 x 120	21,0	1152,0	1550,0	red/black
703020	1 x 120	21,0	1152,0	1550,0	blue/black
703024	1 x 150	27,4	1440,0	1730,0	black/black
703022	1 x 150	27,4	1440,0	1730,0	red/black
703023	1 x 150	27,4	1440,0	1730,0	blue/black

Dimensions and specifications may be changed without prior notice.

## SOLARFLEX® 104 / 105 LIPURPUR



new

### Technical data

- **Temperature range**  
-40°C to +90°C (-40°F to +194°F)  
UL to +80°C (+176°F)  
-40°C to +120°C (-40°F to +248°F)  
(3,000 hours)
- **Nominal voltage**  
according to VDE U0/U 600/1000 V AC,  
900/1500V DC  
according to UL 1000V
- **AC test voltage**, 50 Hz  
4,000V
- **Minimum bending radius**  
For fixed installation approx. 4 cable  
diameters

### Cable structure

- double-insulated
- bare copper, tinned, finely stranded  
according to DIN VDE 0295 class 5 and IEC  
60228 cl. 5
- insulation PUR
- PUR jacket, halogen-free
- for colors see table

### Properties

- approval: UL on request
- UV, ozone, weather and hydrolysis-resistant
- very good resistance to oils and chemicals
- flame-resistant according to VDE  
0482-332-1-2, DIN EN 60332-1-2, IEC  
60332-1 and according to UL 1581 "cable  
flame test"
- very robust and abrasion-resistant jacket
- these cables have very good installation  
properties when being laid in narrow areas  
and in pipes
- resistant to short-circuits up to 250°C  
thanks to their double insulation
- no cold flow meaning optimum long-term  
tightness of the connection systems
- easy machine processing
- very good flexibility
- recyclable
- RoHS approved

### Application

The SOLARFLEX®104 / 105 with the very rugged PUR jacket is used for the cabling between interconnected solar modules

#### SOLARFLEX® 104

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour	AWG-No.
700019	1 x 2,5	5,8	24,0	46,0	red/black	14
74653	1 x 2,5	5,8	24,0	46,0	blue/black	14
700020	1 x 4	6,3	38,4	68,0	red/black	12
74655	1 x 4	6,3	38,4	68,0	blue/black	12
700021	1 x 6	7,6	57,6	95,0	red/black	10
78163	1 x 6	7,6	57,6	95,0	blue/black	10
700612	1 x 10	9,6	96,0	110,0	red/black	8
700613	1 x 10	9,6	96,0	110,0	blue/black	8
700614	1 x 16	11,0	153,6	170,0	red/black	6
700615	1 x 16	11,0	153,6	170,0	blue/black	6

#### SOLARFLEX® 105

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour
702194	1 x 2,5	5,8	24,0	55,0	red/black
702196	1 x 2,5	5,8	24,0	55,0	black/black
702195	1 x 2,5	5,8	24,0	55,0	blue/black
702199	1 x 4	6,3	38,4	80,0	black/black
702197	1 x 4	6,3	38,4	80,0	red/black
702198	1 x 4	6,3	38,4	80,0	blue/black
702202	1 x 6	7,6	57,6	95,0	black/black
702200	1 x 6	7,6	57,6	95,0	red/black
702201	1 x 6	7,6	57,6	95,0	blue/black
702205	1 x 10	9,6	96,0	110,0	black/black
702203	1 x 10	9,6	96,0	110,0	red/black
702204	1 x 10	9,6	96,0	110,0	blue/black
702208	1 x 16	11,0	153,6	170,0	black/black
702206	1 x 16	11,0	153,6	170,0	red/black
702207	1 x 16	11,0	153,6	170,0	blue/black
702210	1 x 25	13,1	240,0	280,0	black/blue
702209	1 x 25	13,1	240,0	280,0	black/red
702211	1 x 25	13,1	240,0	280,0	black/black
702213	1 x 35	14,1	336,0	400,0	black/blue
702212	1 x 35	14,1	336,0	400,0	black/red
702214	1 x 35	14,1	336,0	400,0	black/black
702217	1 x 50	17,4	480,0	630,0	black/black
702215	1 x 50	17,4	480,0	630,0	red/black
702216	1 x 50	17,4	480,0	630,0	blue/black
702220	1 x 70	18,9	672,0	850,0	black/black
702218	1 x 70	18,9	672,0	850,0	red/black
702219	1 x 70	18,9	672,0	850,0	blue/black
702223	1 x 95	21,8	912,0	1200,0	black/black
702221	1 x 95	21,8	912,0	1200,0	red/black
702222	1 x 95	21,8	912,0	1200,0	blue/black
702226	1 x 120	24,3	1152,0	1550,0	black/black
702224	1 x 120	24,3	1152,0	1550,0	red/black
702225	1 x 120	24,3	1152,0	1550,0	blue/black
702229	1 x 150	26,6	1440,0	1730,0	black/black
702227	1 x 150	26,6	1440,0	1730,0	red/black
702228	1 x 150	26,6	1440,0	1730,0	blue/black

Dimensions and specifications may be changed without prior notice.

**SOLARFLEX® 106 / 107 LITPEPUR**



**Technical data**

- **Temperature range**  
-40°C to +90°C (-40°F to +194°F)  
-40°C to +120°C (-40°F to +248°F) (3000 h)
- **Nominal voltage**  
U<sub>0</sub>/U 600/1000V AC, 900/1500V DC
- **Test voltage, 50Hz**  
4000V
- **Insulation resistance**  
min. 200 MOhm/km
- **Minimum bending radius**  
For fixed installation approx. 4 cable diameters

**Cable structure**

- bare copper, tinned, finely stranded according to DIN VDE 0295 class 5 and IEC 60228 cl. 5
- core insulation special-TPE
- PUR jacket, halogen-free
- black
- double-insulated

**Properties**

- UV, ozone, weather and hydrolysis-resistant
- very good resistance to oils and chemicals
- flame-resistant according to VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1, and according to UL 1581 "cable flame test"
- very robust and abrasion-resistant jacket
- these cables have very good installation properties when being laid in narrow areas and in pipes
- resistant to short-circuits up to 250°C thanks to their double insulation
- no cold flow meaning optimum long-term tightness of the connection systems
- easy machine processing
- very good flexibility
- recyclable
- RoHS approved

**Application**

The SOLARFLEX®106 with the very rugged PUR jacket is used for the cabling between interconnected solar modules

**SOLARFLEX® 106**

Part No.	No. cores x cross-sec. mm²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour	AWG-No.
701290	2 x 2,5	10,4	48,0	95,0	black/black RAL 9005	14
701291	2 x 4	11,9	76,8	135,0	black/black RAL 9005	12
701292	2 x 6	13,5	115,2	185,0	black/black RAL 9005	10
701324	2 x 10	16,0	192,0	280,0	black/black RAL 9005	8
701325	2 x 16	17,7	307,2	390,0	black/black RAL 9005	6

**SOLARFLEX® 107**

Part No.	No. cores x cross-sec. mm²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / jacket colour
702248	2 x 2,5	10,4	48,0	95,0	red/black
704400	2 x 4	11,9	76,8	135,0	red/black

Dimensions and specifications may be changed without prior notice.

# SOLARFLEX® 108 / 109 for use inside buildings

new



## Technical data

- **Temperature range**  
-5°C to +80°C (+23°F to +176°F)  
-40°C to +80°C (-40°F to +176°F)
- **Nominal voltage**  
U<sub>0</sub>/U 600/1000V
- **AC test voltage**  
3000V
- **Insulation resistance**  
minimum 20 MΩm x km
- **Minimum bending radius**  
approx. 8 x cable diameter

## Cable structure

- SOLARFLEX®108**
- bare copper, tinned, finely stranded according to DIN VDE 0295 class 5
  - 1. insulation PVC black
  - 2. insulation PVC black
- SOLARFLEX®109**
- bare copper, tinned, finely stranded according to DIN VDE 0295 class 5
  - 1. insulation PVC black
  - tinned copper braid
  - 2. insulation PVC black

## Properties

- UV, ozone-resistant
- self-extinguishing and flame retardant PVC jacket according to VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1
- good flexibility
- RoHS approved

## Application

The cheap, flexible and double insulated single conductor for indoor installation to the point of the converter. With protected installation also applicable outside.

### SOLARFLEX® 108

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / Jacket colour
702714	1 x 6	6,5	58,0	80,0	black/black
702715	1 x 10	8,4	96,0	130,0	black/black
702716	1 x 16	9,5	154,0	181,0	black/black
702717	1 x 25	11,0	240,0	274,0	black/black
702718	1 x 35	12,5	336,0	398,0	black/black
702719	1 x 50	15,4	480,0	529,0	black/black
702720	1 x 70	18,2	672,0	717,0	black/black
702721	1 x 95	20,0	912,0	1050,0	black/black
702722	1 x 120	21,0	1152,0	1240,0	black/black
702723	1 x 150	23,8	1440,0	1524,0	black/black

### SOLARFLEX® 109

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	Core / Jacket colour
702724	1 x 6	7,8	71,0	101,0	black/black
702725	1 x 10	9,7	122,0	168,0	black/black
702726	1 x 16	11,7	180,0	217,0	black/black
702727	1 x 25	13,0	282,0	342,0	black/black
702728	1 x 35	14,7	386,0	468,0	black/black
702729	1 x 50	18,7	535,0	857,0	black/black
702730	1 x 70	22,2	750,0	822,0	black/black
702731	1 x 95	23,4	1004,0	1190,0	black/black
702732	1 x 120	24,5	1260,0	1400,0	black/black
702733	1 x 150	27,8	1570,0	1710,0	black/black

Dimensions and specifications may be changed without prior notice.

## **STRAIN RELIEF FITTINGS / CORD GRIPS / INSERTS**

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- ◆ Strain Relief fitting materials - Nylon, Nickel Plated Brass, PVDF, Viton® and Stainless Steel
- ◆ Dome, Flex, Clamp and Explosive Proof
- ◆ Standard, Elongated, Reduced Body, Enlarged Body, Snap Elbow, Multi-Hole, Romex-Flat Cable, and High Performance with Clamp, EMI / RFI, Mini Wadi, Chemical Resistant and High / Low Temp
- ◆ Available in all popular thread types and sizes in all applications where excellent performance, fire resistance, and resistance against turning of the cable are critical

### **Common Industries Served:**

- ◆ Machine, apparatus and plant equipment
- ◆ Measuring control and feedback systems
- ◆ Control cabinets
- ◆ Chemical plants
- ◆ Medical Equipment
- ◆ Railroad cars and vehicles
- ◆ Power plants (hydro, gas, coal or wind)
- ◆ Industrial installations

## **LOCKING NUTS / SEAL RINGS**

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- ◆ Nylon, Nickel Plated Brass, Zinc Plated Steel, EMI / RFI Locking Nuts and Lock Nuts
- ◆ PG, NPT, and Metric Threads
- ◆ Seal Rings available in Buna-N, Viton®, Silicone, Polyethylene or Fiber-Reinforced Plastic with Metric Threads

## Pre-Assembled

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Pre-assembled solutions guarantee uniform, high quality and speed up the assembly. Costs are reduced thanks to standardization.

SOLARFLEX® cables are assembled, connected and sealed (Macromelt melting process).

Various forms of connections are possible, such as cross, Y or T distributors (with and without fastening lug).

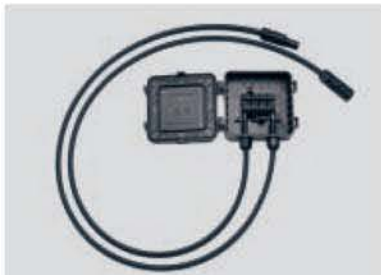
SOLARFLEX® cables are connected to panel boxes; the free ends are provided with connector plugs.



### **Quickly and easily secured**

Panel boxes have a set of adhesive elements on the rear for quick and easy installation.

Cable holders can be secured using screws or adhesive. SOLARFLEX® cables are easily snapped into place in the holder.





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