

# BETAflam® Solar 125 flex 1500V DC

Photovoltaic power cables, halogen free, flame retardant



EN50618  
certified



**NEW**

BETAflam® Solar 125 flex 1500V DC



## Advantages

- EN50618 approval
- Electron-beam cross-linked compounds
- UV, ozone and hydrolysis resistant
- High temperature resistance, the materials do not melt or flow
- Good cold flexibility
- **Very long service life**  
**>25 years at 90 °C**
- Compatible to all popular connectors

## Applications

Is used as photovoltaic cable between solar modules and inverters in a photovoltaic system with a rated value  $U_0 = 1.5$  kV DC.

## Construction

- Conductor Tinned fine copper strand according to VDE 0295 / IEC 60228, Class 5
- Insulation XLPO, flame-retardant, halogen free, electron-beam cross-linked
- Jacket XLPO, flame-retardant, halogen free, electron-beam cross-linked, UV and ozone resistant, **with white or red marking and stripe**
- Jacket colour ● black

## Electrical characteristics

Rated value	$U_0 = 1500$ V DC (max. permitted voltage $U_0$ 1800 V DC)
Test voltage	11 kV AC 50 Hz

## Thermal characteristics

Operating temperature	-50 °C up to +120 °C
Ambient temperature	-50 °C up to +90 °C
Max. short circuit temp.	+280 °C, +536 °F / 5 s

## Bending radius

Fixed installation	$> 4 \times \varnothing$
Occasionally moved	$> 5 \times \varnothing$

## Standards / Material properties

- Fire performance: IEC 60332-1; IEC/EN 60332-3-25
- Smoke emission: IEC 61034; EN 61034-2
- Low fire load: DIN 51900
- Approvals: EN50618; TÜV 2 PFG 1990/05.12

Construction	Conductor $\varnothing$	Outer $\varnothing$	Resistance max. at 20°C	Weight	Fire load	Order no.	
$n \times \text{mm}^2$	mm	mm	m $\Omega$ /m	kg/km	kWh/m	○ White*	● Red*
1 × 2.5	2.05	5.65	8.21	55	0.124	309344	309348
<b>1 × 4</b>	2.55	6.15	5.09	72	0.141	<b>309345</b>	309349
<b>1 × 6</b>	3.10	6.70	3.39	94	0.159	<b>309346</b>	309350
1 × 10	4.10	7.70	1.95	136	0.191	309347	309351
1 × 16	5.00	9.00	1.24	201	0.252	310734	–
1 × 25	6.20	10.40	0.79	291	0.314	310735	–
1 × 35	7.70	12.30	0.56	417	0.453	310736	–
1 × 50	9.70	14.70	0.39	590	0.622	310737	–

\* Jacket colour black with red or white inscription

Construction	Order no.							
	40 × 100 m		50 × 100 m		18 × 500 m		8 × 1000 m	
$n \times \text{mm}^2$	○ White*	● Red*	○ White*	● Red*	○ White*	● Red*	○ White*	● Red*
1 × 4	–	–	<b>309345V8</b>	<b>309349V8</b>	<b>309345V2</b>	<b>309349V2</b>	<b>309345V3</b>	<b>309349V3</b>
1 × 6	<b>309346V8</b>	<b>309350V8</b>	–	–	<b>309346V2</b>	<b>309350V2</b>	<b>309346V3</b>	<b>309350V3</b>

More information on the standard packaging unit see page 21. Further packaging units on request.

**Bold** printed order no. = stock item

\* Jacket colour black with red or white inscription