

# BETAflam® Solar 125 RV flex 1500V DC

Photovoltaic power cables, halogen free, flame retardant

## 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



## BETAflam® Solar 125 RV flex 1500V DC

### 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 acc. 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 6.5 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
- Smoke emission IEC 61034; EN 61034-2
- Low fire load DIN 51900
- Approvals EN50618; H1Z2Z2-K, IEC 62930

### Fire properties acc. to CPR

- $D_{ca}$ -s2, d2, a2 EN 50575, EN 13501-6
- Fire performance  $D_{ca}$  EN 50399
- Low corr. of the combustion gases EN 60754-2  
– halogen free a2
- Medium smoke density s2 EN 50399
- Flaming droplets d2 EN 50399
- No flame propagation EN 60332-1-2
- Material selection RoHS-compliant

| Nominal cross section | Conductor $\varnothing$ | Outer $\varnothing$ | Resistance max. at 20°C | Weight | Fire load | Order no. |        |
|-----------------------|-------------------------|---------------------|-------------------------|--------|-----------|-----------|--------|
| $n \times mm^2$       | mm                      | mm                  | m $\Omega$ /m           | kg/km  | kWh/m     | ○ White*  | ● Red* |
| 1 × 2.5               | 1.95                    | 5.00                | 8.21                    | 46     | 0.095     | 313738    | 313739 |
| 1 × 4                 | 2.45                    | 5.50                | 5.09                    | 61     | 0.109     | 313740    | 313741 |
| 1 × 6                 | 3.00                    | 6.10                | 3.39                    | 82     | 0.127     | 313742    | 313743 |
| 1 × 10                | 3.90                    | 7.20                | 1.95                    | 126    | 0.158     | 313744    | 313745 |
| 1 × 16                | 5.00                    | 8.50                | 1.24                    | 190    | 0.213     | 313746    | –      |
| 1 × 25                | 6.20                    | 10.40               | 0.79                    | 291    | 0.314     | 313747    | –      |
| 1 × 35                | 7.70                    | 11.90               | 0.56                    | 400    | 0.392     | 313748    | –      |
| 1 × 50                | 9.70                    | 14.30               | 0.39                    | 570    | 0.549     | 313749    | –      |

\* Jacket colour black with red or white inscription

| Nominal cross section | Order no.       |        |                 |                 |                 |                 |
|-----------------------|-----------------|--------|-----------------|-----------------|-----------------|-----------------|
|                       | 8 × 500 m       |        | 18 × 500 m      |                 | 8 × 1000 m      |                 |
| $n \times mm^2$       | ○ White*        | ● Red* | ○ White*        | ● Red*          | ○ White*        | ● Red*          |
| 1 × 4                 | –               | –      | <b>313740V2</b> | <b>313741V2</b> | <b>313740V3</b> | <b>313741V3</b> |
| 1 × 6                 | –               | –      | <b>313742V2</b> | <b>313743V2</b> | <b>313742V3</b> | <b>313743V3</b> |
| 1 × 10                | <b>313744V3</b> | –      | –               | –               | –               | –               |

More information on the standard packaging unit see page 34. Further packaging units on request. **Bold** printed order no. = stock item \* Jacket colour black with red or white inscription

You can download the corresponding declaration of performance from our website [www.leoni.com/en/cpr](http://www.leoni.com/en/cpr) by entering the declaration of performance ID.