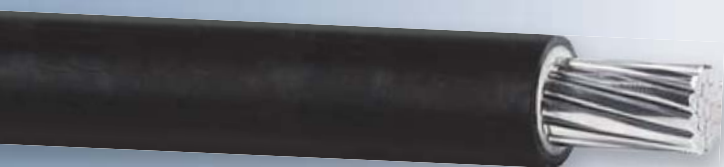


# BETAflam® Solar 125 RV AL FRNC

Photovoltaic power cables, halogen free, flame retardant



**NEW**

## BETAflam® Solar 125 RV AL FRNC

### Applications

Double insulated, electron-beam cross-linked cables for large-scale rooftop or photovoltaic power plants.

### Construction

- Conductor Aluminium, stranded wire, compacted, acc. to VDE 0295 / IEC 60228, class 2
- Insulation XLPO, flame retardant, halogen free, electron-beam cross-linked
- Jacket XLPO, flame retardant, halogen free, electron-beam cross-linked, UV and ozone resistant
- Jacket colour black

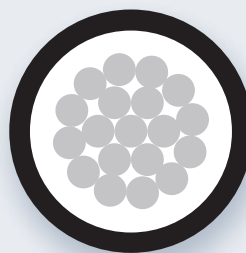
### Electrical characteristics

|                       |  |
|-----------------------|--|
| Operation temperature | $U_0/U = 600 / 1000 \text{ V AC}$ ,<br>1000 / 1800 V DC for fixed installation |
| Test voltage          | 6500 V, 50 Hz, 5 min.  |

### Dimensions, weights

| Construction           | Conductor $\varnothing$ | Outer $\varnothing$ | Resistance max. | Weight | Order no. |
|------------------------|-------------------------|---------------------|-----------------|--------|-----------|
| $n \times \text{mm}^2$ | mm                      | mm                  | m $\Omega$ /m   | kg/km  |           |
| 1 × 50                 | 8.20                    | 13.20               | 0.641           | 266    | Ø         |
| 1 × 70                 | 9.90                    | 14.90               | 0.443           | 341    | Ø         |
| 1 × 95                 | 11.50                   | 16.50               | 0.330           | 431    | Ø         |
| 1 × 120                | 12.85                   | 18.50               | 0.253           | 551    | Ø         |
| 1 × 150                | 14.20                   | 19.80               | 0.206           | 630    | Ø         |
| 1 × 185                | 16.40                   | 22.40               | 0.164           | 788    | Ø         |
| 1 × 240                | 18.36                   | 24.40               | 0.125           | 969    | Ø         |
| 1 × 300                | 20.45                   | 27.25               | 0.100           | 1206   | Ø         |

Larger cross sections upon request.



### Advantages

- Electron-beam cross-linked compounds
- UV, ozone and hydrolysis resistant
- High temperature resistant, the materials do not melt or flow
- Good cold flexibility
- Very long service life >25 years at 90 °C

### Thermal characteristics

|                           |  |
|---------------------------|--|
| Operation temperature     | -40 °C up to +120 °C<br>-40 °F up to +248 °F |
| Ambient temperature:      | -40 °C up to +90 °C                          |
| > 25 years                | -40 °F up to +194 °F                         |
| Short circuit temperature | 280 °C, +536 °F max.                         |

### Bending radius

|                    |                      |
|--------------------|----------------------|
| Fixed installation | > 10 × $\varnothing$ |
| Occasionally moved | > 12 × $\varnothing$ |

### Standards / Material properties

- Fire performance: IEC 60332-1
- Halogen free: IEC 60754-1
- No corrosive gases: IEC 60754-2
- Low fire load: DIN 51900
- Environmentalty, EU-Directives: RoHS 2002/95/EC; PAH 2005/69/EC; PFOS 2006/122/EC
- Ozon resistant: EN 50396
- UV resistant: HD605
- Construction and properties: In accordance to TÜV 2 Pfg 1169/08.2007