

BETAflam® Solar 125 RV flex FRNC

Photovoltaic power cables, halogen free, flame retardant



Advantages

- Electron-beam cross-linked compounds
- UV, ozone and hydrolysis resistant
- High temperature resistance, the materials do not melt or flow
- Very long service life > 25 years at 90 °C
- Compatible to all popular connectors
- Flexible and space-saving installation

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Applications

Double insulated, electron-beam cross-linked cables for photovoltaic power applications. With reduced diameter and integrated jacket.

Construction

- Conductor Tinned fine copper strands, 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
- Jacket colour ● black

Electrical characteristics

Rated value $U_0/U = 600/1000 \text{ V AC} / 1000/1800 \text{ V DC}$
 Test voltage 6500 V, 50 Hz, 5 min.

Thermal characteristics

Operating temperature -40°C up to $+125^\circ\text{C}$
 -40°F up to $+257^\circ\text{F}$
 Ambient temperature -40°C up to $+90^\circ\text{C}$
 -40°F up to $+194^\circ\text{F}$
 > 25 years (TÜV)
 Max. short circuit temp. $+280^\circ\text{C}$, $+536^\circ\text{F}$ / 5 s

Bending radius

	$\varnothing < 10 \text{ mm}$	$\varnothing > 10 \text{ mm}$
Fixed installation	$> 4 \times \varnothing$	$> 5 \times \varnothing$
Occasionally moved	$> 5 \times \varnothing$	$> 7 \times \varnothing$

Standards / Material properties

- Fire performance: IEC 60332-1; IEC 60332-3-24
- Smoke emission: IEC 61034; EN 61034-2
- Low fire load: DIN 51900
- Approvals: TÜV 2 PfG 1169 08.2007 PV1-F
- Appl. standards: UNE 21123; UNE 20.460-5-52, UTE C 32-502

Construction	Conductor	Conductor $\varnothing$	Outer $\varnothing$	Resistance max. at 20°C	Weight	Fire load	Order no.	
$n \times \text{mm}^2$	$n \times \text{mm}$	mm	mm	$\text{m}\Omega/\text{m}$	kg/km	kWh/m	○ White*	● Red*
1×2.5	45×0.25	2.05	4.65	8.21	41	0.079	304467	307701
1×4	52×0.30	2.55	5.05	5.09	56	0.086	304468	306470
1×6	78×0.30	3.10	5.65	3.39	76	0.100	304469	306471
1×10	75×0.40	4.10	6.70	1.95	118	0.126	304471	–
1×16	119×0.40	5.00	9.20	1.24	203	0.274	304472	–
1×25	181×0.40	6.20	10.80	0.79	299	0.358	304474	–
1×35	257×0.40	7.70	12.30	0.56	409	0.443	304475	–
1×50	371×0.40	9.70	14.70	0.39	581	0.611	304476	–

* Jacket colour black with red or white inscription

Construction	Order no.									
$n \times \text{mm}^2$	50 × 100 m		24 × 500 m		18 × 500 m		18 × 1000 m		8 × 1000 m	
	○ White*	● Red*	○ White*	● Red*	○ White*	● Red*	○ White*	● Red*	○ White*	● Red*
1×4	304468V8	∅	304468V1	306470V1	∅	∅	304468V2	306470V2	∅	∅
1×6	304469V8	∅	∅	∅	304469V2	306471V2	∅	∅	304469V3	306471V3
1×10	∅	–	∅	–	304471V2	–	∅	–	∅	–

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

* Jacket colour black with red or white inscription