

Technical Data Sheet

BETAflam[®] Solar 125 flex UL 4703

Description

Double insulated, electron-beam cross-linked, halogen free photovoltaic wire sunlight resistant. Single conductor, flame retardant insulation.

Approvals

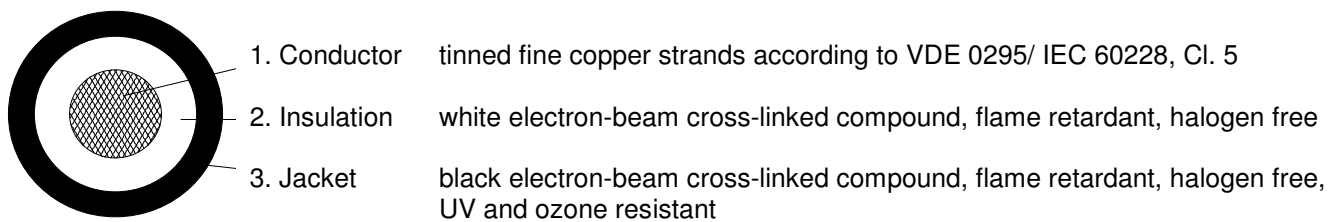
TÜV Rheinland 2 PfG 1169 08.2007 PV1-F
UL 4703 03/2006 / PV Wire UL 854 USE-2 07/2008 NEC NFPA 70 690.31A

Application

Applicable as photovoltaic wire for modules and connection to the inverter of grounded and ungrounded photovoltaic power systems. The high quality insulation components are offering UV and ozone protection at 90°C for more than 25 years.



Construction



Dimensions

| Construction | Article - Nr. | Conductor | Cond.-Ø | Cable-Ø | Resistance Max. | Weight | Fire load |
|------------------------|---------------|-----------|---------|---------|-----------------|---------|-----------|
| [n x mm ²] | | [n x mm] | [mm] | [mm] | mΩ/m | [kg/km] | [kWh/m] |
| 1x 2.5 14 AWG | 226243 | 45 x 0.25 | 2.05 | 6.50 | 8.21 | 66 | 0.187 |
| 1x 4 12 AWG | 224780 | 52 x 0.30 | 2.55 | 7.05 | 5.09 | 84 | 0.213 |
| 1x 6 10 AWG | 226135 | 78 x 0.30 | 3.10 | 7.60 | 3.39 | 107 | 0.238 |
| 1x 10 8 AWG | 302192 | 75 x 0.40 | 4.10 | 9.30 | 1.95 | 166 | 0.340 |

Other dimensions upon request.

Technical Data Sheet

BETAflam[®] Solar 125 flex UL 4703

Labelling

Cross Section

STUDERCABLES.COM SWITZERLAND BETAFLAM SOLAR 125 FLEX UL 4703 600/1000 VAC 1 X \downarrow MM²
 TÜV PV1-F / E320250 USE-2 / E300485 PV WIRE AWG 90C WET OR DRY 600V SUN RES -40C (UL)

\uparrow
 AWG Cross Section

FA NR.

\uparrow
 Production Lot Number for internal purpose only. Subject to modifications.

Technical Data

| | |
|--------------------------------------|--|
| Nominal voltage | U_0/U 600 / 1000 V AC ; 1000 / 1800 V DC |
| Test voltage | 6500 V AC 50Hz |
| Temperature rating | - 40 °C up to + 125 °C |
| Ambient temperature > 25 years (TÜV) | - 40 °C up to + 90 °C |
| Max. short circuit temperature | 280 °C, +536 °F |
| Min. bending radius | fixed installation 4 x \emptyset occasionally moved > 5 x \emptyset |

Material properties / Standards

| | |
|-----------------------------------|--|
| Design / Dimensions | TÜV 2 Pfg 1169 02.2007 PV1-F UL 4703 PV WIRE, UL 854 USE-2 |
| Halogen free | IEC 60754-1 |
| No corrosive gases | IEC 60754-2 |
| Flame retardant | IEC 60332-1 / UL 1581 1060 / VW1 |
| Low smoke emission | IEC 61034; EN 50268-2 |
| Low fire load | DIN 51900 |
| No hazardous and toxic substances | EU-Directive: RoHS 2002/95/EC; PAH 2005/69/EC; PFOS 2006/122/EC |
| Ozone resistant | EN 50264-3-1 72h/40 °C, process B Volume concentration 200x10 ⁻⁶ |

Material properties and technical data are subject to modifications.