

PHOTOVOLTAIC MODULE CABLES

BETAflam® Solar 125 flex WR 1500

Photovoltaic power cables, halogen-free, flame retardant



EN 50618
certified

IEC 62930
certified

TÜV 2Pfg 2750/09.20
certified

Applications

Special water resistant and tested according to TÜV Rheinland, Germany: 2Pfg 2750/09.20 for floating PV applications (FPV).

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

Benefits

- TÜV Rheinland, Germany: 2Pfg 2750/09.20, EN 50618, IEC 62930 certification
- Water resistant tested acc. to UL standards
- Electron-beam cross-linked compounds
- UV, ozone and hydrolysis resistant
- High temperature resistance, the materials do not melt or flow
- Very long service life¹, good cold flexibility
- Compatible to all popular connectors
- Direct burial

Electrical properties

Rated value	U ₀	1500V DC (max. permitted voltage U ₀ 1800V DC)
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Thermal properties

Operating temperature	-40°C up to +120°C -40°F up to +248°F
Ambient temperature min. 25 years¹	-40°C up to +90°C -40°F up to +194°F
Max. short circuit temperature	+280°C/5s +536°F/5s

Bending radius

Fixed installation	>4×outer Ø
Occasionally moved	>5×outer Ø

Standards / Material properties

Fire performance	IEC 60332-1
Smoke emission	IEC 61034; EN 61034-2
Low fire load	DIN 51900
Approval	TÜV 2Pfg 2750/09.20; EN 50618; IEC 62930

Nominal cross section (n×mm ²)	Conductor Ø (mm)	Outer Ø (mm)	Resistance max. at 20°C (mΩ/m)	Weight (kg/km)	Fire load (kWh/m)	Order no.		
						8×500m	8×1000m	
1×4	2.45	6.55	5.09	74	0.196	317048	317048V2	317048V3
1×6	3.00	7.10	3.39	94	0.221	317049	317049V2	317049V3
1×10	3.90	8.70	1.95	150	0.329	317050	317050V3	–
1×16	5.00	10.70	1.24	234	0.472	317051	–	–
1×185	17.90	26.00	0.108	1933	2.063	317363	–	–
1×240	20.70	29.00	0.085	2497	2.404	317243	–	–
1×300	23.30	31.60	0.069	3074	2.785	–	–	–

Further packaging units on request.

¹ Subject to the standard IEC 60216-1 (Thermal endurance properties – Ageing procedures and evaluation of test results) and the test conditions specified in the EN 50618-2014 (Electric cables for photovoltaic systems), a cable material should pass a test with specific test conditions described therein. The standard IEC 60216-1 further states that these test conditions simulate a lifetime of min. 25 years. Studer Cables warrants that the cables would successfully pass this test before the delivery to the customer.