Power connection cables

PV 1500-WR (H1Z2Z2-K)

1.5kV DC Floating Solar Cable

AD8 water-resistant 1500 V DC cross-linked polyolefin floating PV cable

2 PfG 2750 / EN 50618 | **1.5 kV DC (1.8 kV max.)** | **AD8 Floating PV**



Application

Single-core 1.5 kV DC (max. 1.8 kV DC) floating photovoltaic cable to 2 PfG 2750, EN 50618 and IEC 62930 with Class 5 tinned copper and blue AD8 water-resistant XLPO sheath.

Typical uses: Floating Photovoltaic (FPV) Farms, Reservoir & Dam Solar Arrays, Coastal & High-Humidity PV Plants, Utility-Scale 1500 V DC Combiners

Construction





Cross-section, not to scale

1	**Conductor**	IEC 60228 Class 5 fine-stranded tinned electrolytic copper · IEC 60228 Class 5
2	**Water-resistant insulation**	White AD8 water-resistant cross-linked polyolefin (XLPO) · 2 PfG 2750 / EN 50618
3	**Outer sheath**	Blue BWS-8 halogen-free cross-linked polyolefin (XLPO) sheath · 2 PfG 2750 / IEC 62930

Technical data

Typical values

Rated voltage DC	1.5/1.5 kV DC (max. 1.8 kV DC)	Rated voltage AC	1.0/1.0 kV AC (max. 1.2 kV AC)
AC test voltage	6.5 kV AC / 15 kV DC (5 min)	Conductor resistance (6 mm²)	≤ 3.39 Ω/km at 20 °C
Temperature, fixed installation	-40 °C to +90 °C ambient	Max. conductor temperature	+120 °C (20,000 h per EN 60216)
Short-circuit temperature	+250 °C (max. 5 s)	Min. bending radius, fixed	4 × OD
Min. bending radius, moving	5 × OD (floating pontoon motion)	Design service life	≥ 25 years (EN 50618 thermal endurance)
Water	AD8 permanent immersion (2 PfG 2750)	Damp-heat endurance	2,000 h @ 90 °C / 85% RH (2 PfG 2750)
UV & ozone	EN 50618 Annex E UV & ozone resistant	Flame retardance	IEC 60332-1-2
Halogen-free / Smoke density	IEC 60754-1/2 & IEC 61034-2	Standards	2 PfG 2750 / EN 50618 / IEC 62930

Sizes

5 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × mm²	AWG ≈	Outer Ø ≈ mm	Max. DCR 20 °C Ω/km	Weight ≈ kg/km	Min. bend R mm
1.5 kV DC single-core floating PV 5 sizes						
☐ PV 1500-WR 1×2.5	1 × 2.5 mm²	14 AWG	5.3	8.21	46	21
☐ PV 1500-WR 1×4	1 × 4 mm²	12 AWG	5.8	5.09	63	23
☐ PV 1500-WR 1×6	1 × 6 mm²	10 AWG	6.5	3.39	85	26
☐ PV 1500-WR 1×10	1 × 10 mm²	8 AWG	7.7	1.95	134	31
☐ PV 1500-WR 1×16	1 × 16 mm²	6 AWG	9.1	1.24	205	36

– Max. DC resistance at 20 °C per IEC 60228 Table 3 (Class 5 tinned copper). Outer diameter approximate for dual-layer AD8 XLPO construction.

Standards and approvals

- 2 PfG 2750, EN 50618 & IEC 62930 design compliance
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/pv-1500-wr-h1z2z2-k-1-5kv-dc

Typical values for this cable type, based on TÜV 2 PfG 2750 / EN 50618 / IEC 62930. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.