

SOLAR CABLES / PHOTOVOLTAIC CABLES



SOLAR CABLE / H1Z2Z2-K PHOTOVOLTAIC CABLE

Single-conductor • Twin-conductor • 1500VDC/1000VAC • TÜV Certified



Conductor

Soft annealed tin-coated flexible stranded copper per IEC 60228

Insulation

UV-resistant, cross-linkable, halogen-free, flame-retardant irradiated cross-linked polyethylene.

Jacket

Black, low smoke non-halogenated, flame retardant, oil, abrasion, chemical and sunlight resistant cross-linked compound.

APPLICATIONS

solar cables are versatile single-conductor and twin-conductor cable designed to meet the varying needs of the Solar Industry. Applications include connection to module junction boxes and required cable routing in balance of

system (BOS) integration. Rated 1500VDC/1000VAC.

FEATURES

- A two-layer construction with a low smoke halogen-free, flame retardant and sunlight resistant cross-linked compound outer-layer and halogen-free thermoset polyolefin inner layer.
- Vertical Flame Performance: EN 60332-1-2
- ◆ Excellent UV and Ozone resistance
- Suitable for wet, damp, and humid locations
- Specially designed for excellent flexibility
- Compatible with all major connectors
- ◆ Cold bend and impact: -40°C
- Made in China

RATINGS & APPROVALS

- ◆ TÜV-certified BS EN 50618
- ♦ H1Z2Z2-K
- ◆ IEC 60228: Conductors Class 5
- RoHS compliant
- ◆ EN60811-2-1
- ◆ EN60811-1-4
- ◆ EN50396
- ◆ EN60332-1-2





• BS EN 50618 H1Z2Z2-K PHOTOVOLTAIC CABLE



H1Z2Z2-1 Single-Conductor

Part No.	Size	Conductor	Insulation Thickness	Jacket Thickness	OD of Jacket	Conductor resistance	Current Carring Capacity
	(mm2)	n×mm	mm	mm	mm	Ω /km	Α
7194000	1.5	30×0.25	0.75	0.90	4.9±0.2	13.7	30
7194001	2.5	50×0.25	0.75	1.00	5.5±0.2	8.21	41
7194002	4.0	56×0.30	0.75	1.05	6.20±0.2	5.09	55
7194003	6.0	84×0.30	0.75	1.05	7.0±0.2	3.39	70
7194004	10.0	80×0.40	0.90	1.20	8.30±0.3	1.95	98
7194005	16.0	128×0.40	0.90	1.20	9.45±0.2	1.24	132
7194006	25.0	200×0.40	0.90	1.20	10.75±0.2	0.795	250

- lack Cable diameters are subject to $\pm 5\%$ manufacturing tolerance.
- ◆ The most common color is black, but red is also chosen.
- Insulation: 125°C XLPE/XLPO
- ♦ Jacket: 125°C XLPE



H1Z2Z2-1 Twin-Conductor

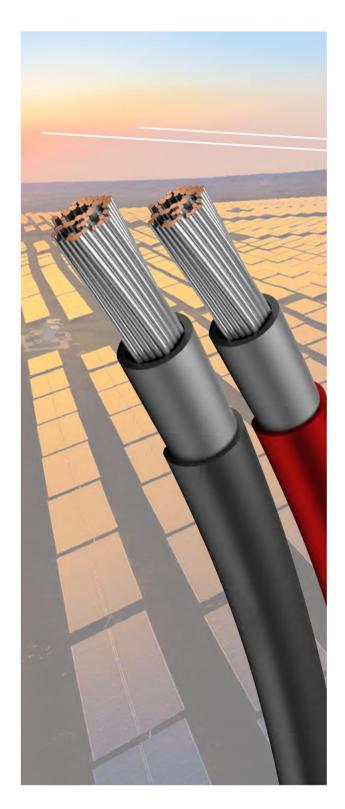
Part No.	Size	Conductor	Insulation Thickness	Jacket Thickness	OD of Jacket	Conductor resistance	Current Carring Capacity
	(mm2)	n×mm	mm	mm	mm	Ω /km	Α
7194101	2×1.5	30×0.25	0.75	0.90	4.9×9.9	13.7	30
7194102	2×2.5	50×0.25	0.75	1.00	5.5×11	8.21	41
7194103	2×4.0	56×0.30	0.75	1.05	6.20×12.3	5.09	55
7194104	2×6.0	84×0.30	0.75	1.05	7.0×14.5	3.39	70
7194105	2×10.0	80×0.40	0.90	1.20	8.30×17.8	1.95	98

- ◆ Cable diameters are subject to ±5% manufacturing tolerance.
- ◆ The most common color is black, but red is also chosen.
- ♦ Insulation: 125°C XLPE/XLPO
- ♦ Jacket: 125°C XLPE



SOLAR CABLE / TYPE PV UL4703 PHOTOVOLTAIC CABLE

Single-conductor • 600/1000V • Rated 90°C • PV Wire • VW-1



Conductor

Soft annealed stranded copper per ASTM B-3

Insulation

UV-resistant, cross-linkable, halogen-free, flame-retardant irradiated cross-linked polyethylene.

Jacket

Black, low smoke non-halogenated, flame retardant, oil, abrasion, chemical and sunlight resistant cross-linked compound.

APPLICATIONS

solar cables are single-conductor cable that meets the newest standards as introduced in National Electrical Code (NEC) Article 690. Applications include connection to module junction boxes; required cable routing in balance of system (BOS) integration; and where also allowed by the NEC.

FEATURES

- A two-layer construction with a low smoke halogen-free, flame retardant and sunlight resistant cross-linked compound outer-layer and halogen-free thermoset polyolefin inner layer.
- ◆ Suitable for continuous operating temperature of 90°C wet or dry
- ◆ 600/1000V
- Cold bend and impact: -40°C
- UL listed as Sunlight Resistant
- ◆ Flame Resistance: UL VW-1
- Compatible with all major connectors
- Made in China

RATINGS & APPROVALS

- 90°C Temperature Rating
- Insulated Wires & Cables, Types RHH, RHW-2, UL VW-1
- UL Subject 4703: Outline of Investigation for Photovoltaic Wire, Type PV, Direct Burial
- ◆ CSA Standard C22.2 No 271: Photovoltaic Cables, RPV-90
- ◆ ASTM B-3: Standard Specification for Soft or Annealed Copper Wire
- ◆ ASTM B-8: Standard Specification for Concentric Lay Stranded Copper Conductors, Hard, Medium-Hard or Soft (Class B strand only)
- ◆ ASTM B-33: Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes (Flexible strand only)
- ASTM B-172: Standard Specification for Rope-Lay Stranded Copper Conductors having Bunch-Stranded Members, for Electrical Conductors (Flexible strand only)
- RoHS compliant



• BS EN 50618 H1Z2Z2-K PHOTOVOLTAIC CABLE



UI4703 Solar Cable

Part No.	Size	Conductor	Insulation Thickness	Jacket Thickness	OD of Jacket	Current Carring Capacity	Service Life
	AWG	n×AWG	Inch	Inch	Inch	Α	Year
7194201	10.0	65×28	0.05	0.03	0.3	55	25
7194202	12.0	65×30	0.05	0.03	0.3	40	25
7194203	14.0	41×30	0.05	0.03	0.2	35	25
7194204	16.0	26×30	0.05	0.03	0.2	24	25

Part No.	Size	Conductor	Insulation Thickness	Jacket Thickness	OD of Jacket	Current Carring Capacity	Service Life
	AWG	n×mm	mm	mm	mm	Α	Year
7194201	10.0	65×0.32	1.23	0.80	7.03±0.2	55	25
7194202	12.0	65×0.25	1.23	0.80	6.40±0.2	40	25
7194203	14.0	41×0.25	1.23	0.80	5.89±0.2	35	25
7194204	16.0	26×0.25	1.23	0.80	5.49±0.2	24	25

- ◆ Cable diameters are subject to ±5% manufacturing tolerance.
- ◆ The most common color is black, but red is also chosen.
- ♦ Insulation: 125°C XLPE/XLPO
- ♦ Jacket: 125°C XLPE

