solarplast®

H1Z2Z2-K / TWIN H1Z2Z2-K

Cables for photovoltaic solar panels

- **Double-insulation**
- **Excellent UV resistance**
- **Very good abrasion resistance**
- **Excellente flexibility**
- **Good resistance to ozone craking**
- **LSZH**

- 1,0/1,0 KV A.C. 1,5/1,5KV D.C.
- Class II
- From -40 °C to +90 °C and peaks +120 °C
- Recyclable, RoHS-compliant
- Low-smoke
- Zero-halogen-LSZH
- Service Entrance Cable per UL 854 (H1Z2Z2-K)
- Permanent immersion AD8 (H1Z2Z2-K)

Lloyd's Register

Petroleum reserves won't last forever !

This is hard-and-fast reality, and the leading EU nations are mobilized on efforts to cut the share of electricity produced from fossil fuels.
Electricity produced from renewable sources has been gaining ground across Europe for a number of years now, with one source massively exploited-sunlitght

From panel through to AC/DC inverters and back to the battery packs, OMERIN offers a range of cables purpose-engineered for solar PV applications.

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Applications

The solarplast® range has been engineered for PV panel-to-panel and array-to-hardware cabling. Ideal for connecting solar modules to charge controller and charge controller to battery pack, these flexible cables are popular with manufacturers and installers. Our single-conductor or twin-conductor solarplast® cables offer cabling solutions that seamlessly adapt to the PV panel environment and the connector technology solution needed. The cable dimensions have been engineered to fit all the market-leading connectors. The build materials employed led the solarplast® ange extremely high UV resistance.
These extreme-performance cables comfortably handle any weather conditions thrown at them (rain, wind, snow, frost, hail, and more...).

Cables for photovoltaic solar panels

- **Certified by the Lloyd's Register to standard EN 50618**
- **Good resistance to environmental stressors (UV, ozone, hydrolysis)**
- **Emits very little fumes when exposed to flame**
- **Zero-halogen and RoHS-compliant**
- **Duty service life 25 years according to IEC 60216**
- **Servive Entrance Cable per UL 854 sections 23 and 24 (H1Z2Z2-K)**
- **Permanent immersion AD8 per NF C 15-100 (H1Z2Z2-K)**

Cross-section (mm²)	Approx. overall diameter (mm) min	Approx. overall diameter (mm) max	Approx. linear weight (kg/km)
solarplast® H1Z2Z2-K			
2.5	4.3	5.9	44
4	4.7	6.6	60
6	5.2	7.4	80
10	6.5	8.8	128
16	8.1	10.1	185
25	9.9	12.5	305
35	10.8	14.0	397
50	13.0	16.3	551
70	15.0	18.7	752
95	16.4	20.8	962

Cross-section (Nb x mm²)	Approx. overall diameter (mm)	Approx. linear weight (kg/km)
solarplast® TWIN H1Z2Z2-K		
2 x 2.5	5.5 x 11.2	115
2 x 4	5.6 x 11.4	140
2 x 6	6 x 12.2	185

Product brief

Construction

Core
- Class-5 flexible tinned copper to IEC 60228

Inner insulation
- Cross-linked LSZH compound

Outer sheath
- Cross-linked LSZH compound
- Colour H1Z2Z2-K : Black

Packaging
- Reels, drums, coils..

Markings
- OMERIN SOLARPLAST H1Z2Z2-K 1x cross-section mm²
  - Year/Month - 1.0/1.0 kV A.C

Reference standards
- Certified to standard EN 50618
- Smoke density test-classed to standard IEC 61034-2 as (low smoke)
- Gases evolved and corrosive fume generation test-classed to standards IEC 60754-1 and IEC 60754-2 as (zero-halogen)
- Flame retardant according to IEC 60332-1-2
- UV and ozone resistances to EN 50618
- Schock resistance according to standard (Impact-Resistance Test)
- Crush resistance according to standard UL 854.24 (Crushing-Resistance Tests)

RoHS Directive
- Certificate of compliance to EU Directive 2002/95/EC

Thermal and mechanical performance specs

Ambient temperature range	-40 to +90°C
Max. conductor temperature	+120°C
Short-circuit temperature rating	+250°C
Thermal endurance to 20,000-h aging at	at 120°C to IEC 60216
Bending radius	to 6 x cable diameter (mm)

Electrical performance specs

Conductor resistance at 20°C	according to IEC60228
Rated voltage	1.0 / 1.0 kV A.C. - 1.5 / 1.5 kV D.C.
Peak voltage	1.2 kV A.C. - 1.8 kV D.C.
Test voltage	6.5 kV A.C. - 15 kV D.C.
Maximum current rating	to EN 50618

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