

# FR CABLE®

SOLAR CABLES DC 1500V

TÜV EN50618 (H1Z2Z2-K) / IEC 62930

## Approvals :

- TÜV EN50618 File No.: R 50334055
- IEC62930 File No.: R 50444396
- RoHS & Reach conform

## Features:

- Electron Beam Cross Linked compound, XLPE/XLPE.
- Resistance against UV, Ozone, Fluids, Oil, Salt & General Weathering.
- Halogen Free, Flame Retardant, Low Smoke Emission.
- 25 years lifetime expectancy.
- Applicable to all major PV Connectors.
- Higher water resistance.



APPLICATION RANGE

The FRCABLE® DC Solar cable is TÜV EN50618 and IEC 62930 certified and designed for the connection of photovoltaic panels. Engineered to withstand harsh outdoor environments, the H1Z2Z2-K cable boasts superior UV resistance, ozone resistance, and water resistance, ensuring a reliable and long-lasting connection within your solar power system.

CONSTRUCTION

- Conductor:** Fine wire, Stranded tin-plated copper according to IEC 60228, class 5
- Insulation:** XLPE, E-Beam cross-linked compound, flame retardant, halogen free
- Sheath:** XLPE, E-Beam cross-linked compound, flame retardant, halogen free, UV and ozone resistant
- Sheath Color:** Black/Red
- Marking:** FRCABLE EN50618 H1Z2Z2-K 62930 IEC 131 1×4.0mm² HALOGEN FREE LOW SMOKE DC 1.5KV R 50334055 with meter marking



TECHNICAL CHARACTERISTICS

- Voltage Rating:** DC 1,5KV AC 1,0KV
- Max permitted operating voltage:** DC 1,8KV
- Test Voltage:** 6,5KV AC / 15KV DC (5 minutes water bath, 20±5°C)

Minimum Bending radius

- Fixed:** >4 x Ø
- Flexing:** >5 x Ø

TEMPERATURE RANGE

- Ambient temperature:** -40°C ~ +90°C
- Max. conductor temperature:** 120°C
- Max. short circuit temperature:** 250°C

MATERIAL PROPERTIES

- Flame-retardant:** EN 60332-1-2
- Smoke emission:** EN 61034-2
- Halogen-free:** EN 50525-1

PACKAGING

- Coil:** 100m, 250m, 300m
- Drum:** 500m, 1000m, 2000m, 3000m
- Other packaging available on request

| Aarticle No. | Color | Cross-section | Construction | Insulation Thickness | Sheath Thickness | O. D.     | Max. resistance | Rated Current |
|--------------|-------|---------------|--------------|----------------------|------------------|-----------|-----------------|---------------|
|              |       | mm²           | nxØ (mm)     | (mm)                 | (mm)             | (mm)      | Ω/km            | A             |
| FREI041      | Black | 4.0           | 56/0.28      | 0.70                 | 0.90             | 5.60±0.20 | 5.09            | 55            |
| FREI042      | Red   | 4.0           | 56/0.28      | 0.70                 | 0.90             | 5.60±0.20 | 5.09            | 55            |
| FREI061      | Black | 6.0           | 84/0.28      | 0.70                 | 0.90             | 6.20±0.20 | 3.39            | 70            |
| FREI062      | Red   | 6.0           | 84/0.28      | 0.70                 | 0.90             | 6.20±0.20 | 3.39            | 70            |
| FREI101      | Black | 10.0          | 77/0.40      | 0.70                 | 0.80             | 7.20±0.20 | 1.95            | 98            |
| FREI102      | Red   | 10.0          | 77/0.40      | 0.70                 | 0.80             | 7.20±0.20 | 1.95            | 98            |