

Solar PV Energy Cable -TÜV 2PfG 1169/08.2007, H1Z2Z2-K. BS EN 50618 - 1.5mm² to 240mm²



Description

Standard solar energy cable intended for the connection of solar panel arrays and similar equipment. Suitable for internal and external installations, fixed, or within conduit. Our solar energy cable is manufactured in accordance to $\mbox{T\"{UV}}$ 2PfG 1169/08.2007 (PV1-F) BS EN 50618 and meets harmonised standard of H1Z2Z2-K.

Key Features



Voltage Rating 1.0/1.0kV AC 1.8kV DC Test Voltage: 6.5kV AC



Minimum Bending Radius 5 x Overall Diameter



Flame Retardancy BS EN 60332-1-2



Temperature Limits Ambient Temperature: -40 to 90°C Maximum conductor temp: 120°C Maximum short circuit temp: 250°C (max 5s) Short Circuit temp: 250°C

Standards

- TÜV 2PfG 1169/08.2007 (PV1-F)
- AD7 & AD8 water resistance available.
- BS EN 50618
- EN 50288-3-7
- EN 60068-2-78
- FN 50395
- Halogen free to IEC 60754
- Smoke Density: light transmittance according to IEC 61034
- IEC/EN 60332-1-2

Construction

- Conductor: Class 5 flexible, Electrolytic tinned copper
- Insulation: Cross Linked halogen free compound
- Sheath: Cross-linked halogen-free compound
- Sheath Colour: Black

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.







CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis





















$Solar\ PV\ Energy\ Cable\ -T\ddot{U}V\ 2PfG\ 1169/08.2007,\ H1Z2Z2-K.\ BS\ EN\ 50618\ -\ 1.5mm^2\ to\ 240mm^2\ -\ Dimensions$

| Reference | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|------------|----------------------|-------------|---------------|----------------------|---------------|
| SOLAR1X1/5 | 1.5 | 1 | 29/0.25 | 4.9 | 40 |
| SOLAR1X2/5 | 2.5 | 1 | 48/0.25 | 5.35 | 49 |
| SOLAR1X4 | 4 | 1 | 48/0.30 | 6 | 66 |
| SOLAR1X6 | 6 | 1 | 72/0.30 | 6.15 | 86 |
| SOLAR1X10 | 10 | 1 | 126/0.3 | 7.6 | 132 |
| SOLAR1X16 | 16 | 1 | 116/0.4 | 8.6 | 188 |
| SOLAR1X25 | 25 | 1 | 180/0.4 | 10.8 | 294 |
| SOLAR1X35 | 35 | 1 | 260/0.4 | 11.9 | 390 |
| SOLAR1X50 | 50 | 1 | 396/0.40 | 14 | 540 |
| SOLAR1X70 | 70 | 1 | 360/0.50 | 16.1 | 740 |
| SOLAR1X95 | 95 | 1 | 475/0.50 | 17.5 | 965 |
| SOLAR1X120 | 120 | 1 | 608/0.50 | 19.5 | 1210 |
| SOLAR1X150 | 150 | 1 | 756/0.50 | 21.8 | 1495 |
| SOLAR1X185 | 185 | 1 | 925/0.50 | 25 | 1885 |
| SOLAR1X240 | 240 | 1 | 1221/0.50 | 27.6 | 2395 |



















SOLAR ENERGY CABLE - ELECTRICAL PROPERTIES

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|---------------------|--------------------------|-----------------------------------|-------------------------------------|----------------------------------|----------------------------------|
| SECTIONAL AREA MM2 | SINGLE CABLE IN FREE AIR | SINGLE CABLE FREE ON A SURFACE | TWO CABLES ADJACENT ON A SURFACE | MAXIMUM DC RESISTANCE AT 20°C | MAXIMUM DC RESISTANCE AT 90°C |
| 1.5 | 30 | 29 | 24 | 13.700 | 17.468 |
| 2.5 | 41 | 39 | 33 | 8.210 | 10.469 |
| 4 | 55 | 52 | 44 | 5.090 | 6.490 |
| 6 | 70 | 67 | 57 | 3.390 | 4.322 |
| 10 | 98 | 93 | 79 | 1.950 | 2.486 |
| 16 | 132 | 125 | 107 | 1.240 | 1.581 |
| 25 | 176 | 167 | 142 | 0.795 | 1.013 |
| 35 | 218 | 207 | 176 | 0.565 | 0.720 |
| 50 | 276 | 262 | 221 | 0.393 | 0.501 |
| 70 | 347 | 330 | 278 | 0.277 | 0.353 |
| 95 | 416 | 395 | 333 | 0.210 | 0.267 |
| 120 | 488 | 464 | 390 | 0.164 | 0.209 |
| 150 | 566 | 538 | 453 | 0.132 | 0.168 |
| 185 | 644 | 612 | 515 | 0.108 | 0.137 |
| 240 | 775 | 736 | 620 | 0.082 | 0.104 |

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