

Finolex

XCEEDS EXPECTATIONS

FINOLEX SOLAR CABLES

**POWERING
SUSTAINABLE
GROWTH**



EMPOWERED WITH E-BEAM IRRADIATION TECHNOLOGY

MTR FINOLEX 24H020001 H1Z2Z2-K 1C X 6.0 SQ mm

www.finolex.com

SOLAR PV CABLES -

Powering Photovoltaic Systems with Efficiency and Reliability

Solar energy, one of the most abundant power sources, offers vast potential for sustainable electricity generation. At the forefront of this energy revolution are photovoltaic (PV) systems that convert sunlight into electrical energy through PV module arrays. Integral to these systems are specially designed solar PV cables.

Finolex Cable emerges as a trusted manufacturer and supplier

in the PV industry, offering a comprehensive range of solar cables tailored to diverse project needs. Our solutions span cable selection, design, and efficient project management, all upported by technical expertise. We also provide unwavering support through logistics and after-sales service, ensuring a seamless experience for our valued customers.

Committed to excellence, Finolex

Cable upholds stringent quality standards throughout the manufacturing process, delivering reliable products that meet the highest benchmarks of performance. Our nationwide presence empowers solar initiatives, driving the transition towards a sustainable energy landscape.

Code Designation: H1Z2Z2-K

Application:

The TÜV-certified Finolex Cable PV H1Z2Z2-K cable (EN 50618) is suitable for both fixed and mobile solar installations, including solar farms, rooftop installations, and floating plants. This flexible cable is compatible with all major connectors and is designed to connect photovoltaic panels effectively.

This versatile multi-stranded conductor cable is designed to meet the diverse needs of the solar industry. Finolex Solar Cables are also suitable for wet, damp, and humid locations.



SOLAR PV INSTALLATIONS STRING CABLE

CONSTRUCTION:

- **Conductor:** Electrolytic Annealed Tinned Copper Class 5 (Flexible) as per EN 60228.
- **Insulation:** Electron Beam Cross-Linked Halogen-free & Flame Retardant Compound (XLPO), compliant with EN 50618.
- **Outer Sheath:** Electron Beam Cross-Linked Halogen-free & Flame Retardant Compound, compliant with EN 50618.
- **Color:** Red & Black, or Black with Red stripe.

CHARACTERISTICS:

The TÜV-certified Finolex Cable PV H1Z2Z2-K cable (EN 50618) and complying to IS 17293:2020 & IEC 62930 standards is suitable for both fixed and mobile solar installations, including solar farms, rooftop installations, and floating plants. This flexible cable is compatible with all major connectors and is designed to connect photovoltaic panels effectively. The single-conductor cable is versatile, meeting the diverse needs of the solar industry. Finolex Solar Cables are also suitable for wet, damp, and humid locations.



ELECTRICAL PERFORMANCE:

- Max. Operating Voltage - 1.5 kV DC
- Nominal Voltage - 0.6 / 1.0 kV AC
- Test Voltage - 6.5 kV as per EN 50395



THERMAL PERFORMANCE:

- Ambient Temperature: -40 to 90°C
- Max Conductor Temperature: 120°C
- Max Short-Circuit Temperature: 250°C (up to 5 seconds)
- Min Service Temperature: -40°C (for fixed and protected installations)



FIRE PERFORMANCE:

- Flame non-propagation: EN 60332-1-2 / IEC 60332-1-2
- Fire non-propagation: EN 50399
- Low smoke halogen-free: EN 50267-2-1 & EN 60754-2 / IEC 60754-2
- Low corrosive gas emission: EN 60754-2 / IEC 60754-2
- Low smoke emission: EN 50268-2 EN 61034 / IEC 61034: Light transmittance > 60%



MECHANICAL PERFORMANCE:

- Min Bending Radius:
 - 4x cable diameter (≤ 8 mm)
 - 5x cable diameter (8-12 mm)
 - 6x cable diameter (> 12 mm)
- Impact Resistance: AG2 Medium Severity



ENVIRONMENTAL PERFORMANCE:

- Chemical & Oil Resistance: Excellent
- Grease & Mineral Oil Resistance: Excellent
- Ozone Resistance: EN 50396
- UV Resistance: EN 50618 and IEC 62930
- Water Resistance: AD7 (Immersion), AD8 (Submersion)

INSTALLATION CONDITIONS

- In open air

Standards / Compliance:

- EN 50618; H1Z2Z2-K

Standards and Approvals:

- TÜV Rheinland
(2.5 to 35mm², in Black and Red)

FEATURES

- * In-house Electron Beam curing facility, imported from Korea*
- * UV, Ozone, Temperature & Hydrolysis Resistant
- * Flame Retardant, Low Smoke
- * Excellent Encapsulation
- * Service Life exceeding 25 years

Material Code

Description

16906018	56/0.3 ATC 4.0 SOLAR CABLE Ebeam 500M Red
16996018	56/0.3 ATC 4.0 SOLAR CABLE Ebeam 500M Black
16907016	84/0.3 ATC 6.0 SOLAR CABLE Ebeam 300M Red
16997016	84/0.3 ATC 6.0 SOLARCABLE Ebeam 300M Black



Number and Nominal Cross Section Area of Conductors	Maximum Conductor Resistance at 20°C	Current Carrying Capacity (Single Cable Free in Air)	Thickness of Insulation Specified Value	Thickness of Sheath Specified Value	Mean Overall Diameter Upper Limit Informative Value	Minimum Insulation Resistance at 20°C	Minimum Insulation Resistance at 90°C
Sq.mm	Ω/km	Amp	mm	mm	mm	MΩ.km	MΩ.km
1 x 1.50	13.70	30	0.70	0.80	5.40	860	0.86
1 x 2.50	8.21	41	0.70	0.80	5.90	690	0.69
1 x 4.00	5.09	55	0.70	0.80	6.60	580	0.58
1 x 6.0	3.39	70	0.70	0.80	7.40	500	0.50
1 x 10.0	1.95	98	0.70	0.80	8.80	420	0.42
1 x 16.0	1.24	132	0.70	0.90	10.10	340	0.34
1 x 25.0	0.795	176	0.90	1.00	12.50	340	0.34
1 x 35.0	0.565	218	0.90	1.10	14.00	290	0.29
1 x 50.0	0.393	276	1.00	1.20	16.30	270	0.27
1 x 70.0	0.277	347	1.10	1.20	18.70	250	0.25
1 x 95.0	0.210	416	1.10	1.30	20.80	220	0.22
1 x 120.0	0.164	488	1.20	1.30	22.80	210	0.21
1 x 150.0	0.132	566	1.40	1.40	25.50	210	0.21
1 x 185.0	0.108	644	1.60	1.60	28.50	200	0.20
1 x 240.0	0.081	775	1.70	1.70	32.10	200	0.20

ABOUT US

Finolex Cables Ltd., now recognized as India's premier manufacturer in the electrical and telecommunication cable sector. Finolex Cables initiated its operations by producing PVC insulated electrical cables tailored for the automotive industry. Over time, the company has been dedicated to broadening its product offerings. This expansion includes an array of items such as PVC Insulated Industrial Cables, HF FR LSH (Halogen Free Flame Retardant) Single Core Flexible Cables, FR-LSH PVC Insulated Industrial Cables, and a diverse range of PVC Insulated Single Core and Multicore Flexible Industrial Cables compliant to Rodent Repellent & Vermin Proof Multicore Flexible Industrial Cables, PVC Insulated Winding Wires, and 3 Core Flat Cables.

The company's repertoire further extends to XLPE 3 Core Flat Cables, Power and Control Cables, High Voltage Power Cables (up to 33 kV), and Polyethylene Insulated Jelly Filled Telephone Cables. Moreover, Finolex products include Auto & Battery Cables, Co-axial and CATV cables, LAN Cables, Switchboard Cables, Fibre Optic Cables, Solar Cables, among other cable products.



Finolex

Cables Limited

AN IS/ISO 9001 CERTIFIED COMPANY

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