

SOLAR CABLE FOR PV SYSTEM

TÜV EN50618 H1Z2Z2-K AND IEC 62930 DC 1.5KV

FRCABLE TÜV EN50618 H1Z2Z2-K 62930 IEC 131 1×mm² HALOGEN FREE LOW SMOKE DC 1.5KV <http://www.fr-cable.com>



Advantages

- ◆ E-beam cross-linked compounds
- ◆ High resistance against UV, ozone and hydrolyzation
- ◆ High temperature resistance, materials will not melt or flow
- ◆ Flexibility under cold conditions
- ◆ Long usable life, expected usable life over 25 years
- ◆ Applicable to all common connectors

Application

In a solar power system of rated voltage $U_0=1.5\text{KV}$, PV cables are used to connect between solar panels and inverters.

Construction

- ◆ Conductor : Soft tinned annealed copper according to IEC 60228, class 5
- ◆ Insulation : XLPE, flame retardant, halogen free, E-Beam cross-linked compounds
- ◆ Jacket : XLPE, flame retardant, halogen free, E-Beam cross-linked compounds, UV and ozone resistant, black / white marking
- ◆ Jacket color : All the chromatographic

Electrical performance

- ◆ Rated Voltage : $U_0=1.5\text{KV}$ DC
- ◆ Test Voltage : 6.5kV AC 5min

Thermal performance

- ◆ Operation temperature : $-40^\circ\text{C} \sim +120^\circ\text{C}$
- ◆ Ambient temperature : $-40^\circ\text{C} \sim +90^\circ\text{C}$
- ◆ Maximum short circuit temperature : 250°C

Bending radius

- ◆ Fixed setting : $>4 \times \phi$
- ◆ Moves on occasion : $>5 \times \phi$

Material characteristics / standard

- ◆ Fireproof performance : EN 60332-1-2
- ◆ Smoke emission : EN 61034-1; EN 61034-2
- ◆ Low fire load : DIN 51900
- ◆ Approval : TÜV EN50618
- ◆ Applied standard: TÜV EN50618

Article Number	Color	conductor cross-section(mm ²)	N/mm	Insulation Thickness(mm)	Jacket Thickness(mm)	OD.(mm)	Max.mΩ/m	Ampacity(A)
FREN02-2	B/R	1*2.5	49/0.25	0.85	0.90	5.5±0.2	8.21	41
FREN03-4	B/R	1*4.0	56/0.28	0.70	0.90	5.7±0.2	5.09	55
FREN04-3	B/R	1*6.0	84/0.28	0.70	1.05	6.5±0.2	3.39	70
FREN05-2	B/R	1*10.0	77/0.4	0.70	0.80	7.2±0.2	1.95	98
FREN06	B/R	1*16.0	126/0.4	1.1	1.0	9.4±0.2	1.24	132
FREN07	B/R	1*25.0	196/0.4	1.1	1.0	11.4±0.2	0.795	176
FREN08	B/R	1*35.0	276/0.4	1.1	1.0	12.83±0.2	0.57	218

FRCABLE PV CABLE SPECIFICATION

Design by:



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Checked by:



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Approved by:



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