

Solar Copper Cable



Specification

Application	Internal wiring for solar panel and photovoltaic system
Approval	IEC62930/EN50618
Rating voltage	DC1500V
Test voltage	AC 6.5KV,50Hz 5min
Working temperature	-40~+90°C
Max Conduct temperature	120°C
Short circuit temperature	250°C 5S
Bending radius	6×D
Life Period	≥25 years

Structure

Cross Section (mm ²)	Construction (No. /mm±0.01)	DIA. (mm)	Insulation Thickness (mm)	Jacket Thickness (mm)	Cable OD. (mm±0.2)
1×2.5	34/0.285	2.04	0.70	0.80	5.20
1×4	56/0.285	2.60	0.70	0.80	5.80
1×6	84/0.285	3.20	0.70	0.80	6.50
1×10	146/0.285	3.80	0.80	0.80	7.30
1×16	228/0.285	4.80	0.90	0.90	8.70
1×25	361/0.285	6.00	1.00	1.00	10.50
1×35	266/0.40	7.00	1.10	1.10	11.80
1×50	361/0.40	10.00	1.10	1.28	15.20
1×70	532/0.40	10.50	1.44	1.45	18.00
1×95	720/0.40	13.20	1.68	1.60	21.30
1×120	874/0.40	14.20	1.80	1.70	21.50

Package Data

Package REF	Without Spool	With Spool		
MPQ (m) (4mm ²)	100m	200m	400m	500m
One Pallet (4mm ²)	14,400m	30,000m	18,000m	12,000m
20GP Container	300,000m for 4mm ²			
	200,000m for 6mm ²			

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Electrical Data

Cross Section (mm ²)	20℃ (Ω/km) Conductor Max. Resistance @20℃ (Ω/ km)	20℃ (MΩ·km) Insulation Min. Resistance @20℃ (MΩ·km)	90℃ (MΩ·km) Insulation Min. Resistance @ 90℃ (MΩ·km)	Current Carrying Capacity (A)
1×2.5	8.21	862	0.862	41
1×4	5.09	709	0.709	55
1×6	3.39	610	0.610	70
1×10	1.95	489	0.489	98
1×16	1.24	395	0.395	132
1×25	0.795	393	0.393	176
1×35	0.565	335	0.335	218
1×50	0.393	314	0.314	280
1×70	0.227	291	0.291	350
1×95	0.210	258	0.258	410
1×120	0.164	249	0.249	480

Properties

Insulation resistance @20℃	≥ 709 MΩ·Km
Insulation resistance @90℃	≥ 0.709 MΩ·Km
Surface resistance of sheath	≥10 ⁹ Ω
Voltage test of finished cable	AC 6.5KV 5min,No break
DC Voltage test of insulation	900V, 240h(85℃, 3%NaCl) No break
Tensile strength of insulation	≥10.3Mpa
Tensile strength of sheath	≥10.3Mpa
elongation of sheath	≥125%
Shrinkage resistant	≤2%
Acid and alkali resistant	EN60811-404
Ozone resistant	EN60811-403/EN50396-8.1.3
UV resistant	EN 50289-4-17
Dynamic penetrate force	EN 50618-Annex D
(-40℃,16h) Winding at low temperature	EN 60811-504
(-40℃, 16h) Impact at low temperature	EN 60811-506
Fire performance	IEC60332-1-2 & UL VW-1
Cland Br Content	EN 50618
Thermal endurance Test	EN60216-1,EN60216-2, TI120

* Customized options available