

TÜV 2PFG/1169 PV1-F Single Core Solar Cable



APPLICATION

Solar Cable is used in photovoltaic power generation and solar system, interconnects solar modules and electrical components in the photovoltaic system, suitable for outdoor extreme environments, UV, ozone, hydrolysis resistant.

CHARACTERISTICS

Voltage Rating (Uo/U)

AC: 600/1000V

DC: 1800V

Test Voltage

6500V AC

Temperature Rating

Rated: -40°C to +90°C

Max. conductor temp: +120°C

Short Circuit: +250°C

Minimum Bending Radius

Ø < 8mm ≥ 4 x overall diameter

Ø ≥ 8mm ≥ 6 x overall diameter

Testing Standard

Flame Test : IEC60332-1-2 , EN60332-1-2

Halogen Free : EN50627-2-1 , EN60684-2

CONSTRUCTION

Conductor

Tinned stranded copper ,
comply with IEC60228 ,
EN60228, VDE0295, Class 5

Insulation Color

Black or other colors

Jacket

XLPE TÜV 2PFG/1169

Insulation

XLPE TÜV 2PFG/1169

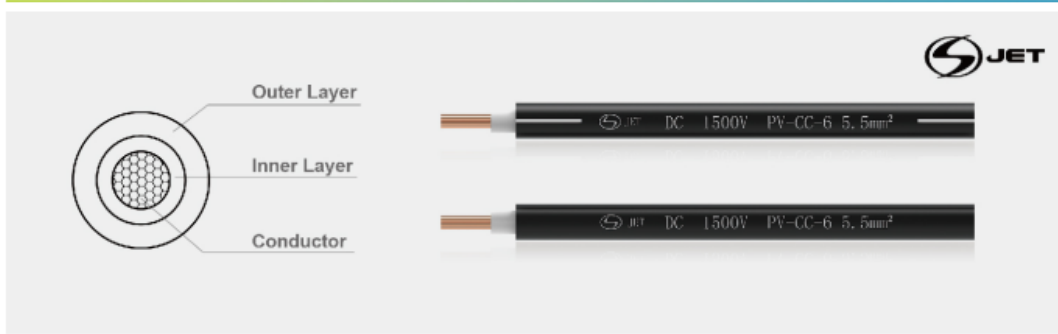
Jacket color

Black or other colors

DATA SHEET

Cable Name	Cross Section (mm ²)	Construction (No./mm)	Conductor Stranded O.D. (mm)	Conductor Resistance Max (Ω/km)	Cable O.D. (mm)	Max. DC Voltage (V)
PV1-F Single Core TÜV 2PFG/1169	1.5	30/0.24	1.51	13.7	4.3	1800
	2.5	49/0.24	1.93	8.21	5.4	
	4.0	56/0.285	2.46	5.09	6.1	
	6.0	84/0.285	3.17	3.39	6.87	
	10	77/0.4	4.56	1.95	9.0	
	16	126/0.4	5.6	1.24	10.3	
	25	196/0.4	7.25	0.795	12.2	
	35	276/0.4	8.74	0.565	13.8	

S-JET PV-CC Japanese Solar Cable



APPLICATION

Solar Cable is used in photovoltaic power generation and solar system, interconnects solar modules and electrical components in the photovoltaic system, suitable for outdoor extreme environments, UV, ozone, hydrolysis resistant.

CHARACTERISTICS

Voltage Rating (Uo/U)

DC: 1500V

Test Voltage

6500V AC

Temperature Rating

Rated: -40°C to +90°C

Testing Standard

Cold Bending Test : JIS C3660-1-4

Flame Test : JIS C 3665-1-2

CONSTRUCTION

Conductor

Stranded bare copper

Jacket

XLPE

Insulation

XLPE

Jacket color

Black

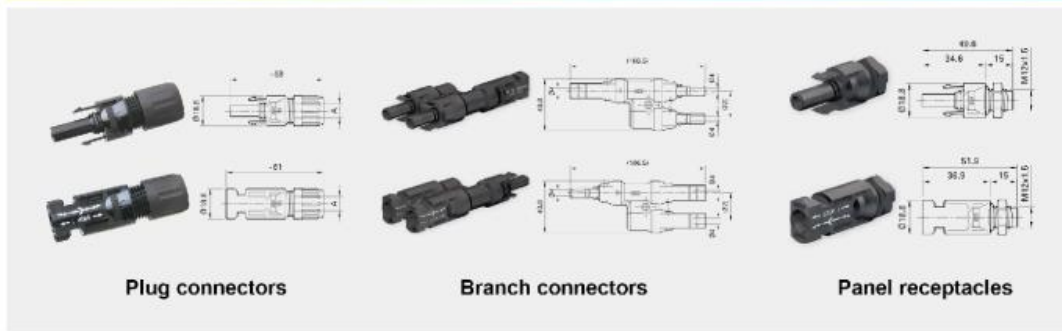
Insulation Color

White

DATA SHEET

Cable Name	Cross Section (mm ²)	Construction (No./mm)	Conductor Stranded O.D. (mm)	Conductor Resistance Max (Ω/km)	Cable O.D. (mm)	Max DC Voltage (V)
JET PV-CC	2.0	7/0.6	1.8	9.24	5.7	1500
	3.5	7/0.8	2.4	5.2	6.3	
	5.5	7/1.0	3	3.33	7.1	
	8.0	7/1.2	3.6	2.31	7.8	

MC4 SERIES PV CONNECTORS



Plug connectors

Branch connectors

Panel receptacles

FEATURES

- Outstanding reliability
- Consistently low contact resistance
- Low service cost & reduced downtime
- Elimination of risks for hotspots & fire
- Low power losses
- Lifetime > 25 years
- TÜV & UL double approval
- Applicable for harsh environment outside
- Use male & female self-block, easy to lock & unlock

DATA SHEET

Item	MC4 plug connector	MC4 branch connector	MC4 panel receptacles
Connector system	Ø4 mm	Ø4 mm	Ø4 mm
Rated voltage	1000V DC (IEC 62852) 1500V DC (2Pfg 2330) 1500V DC (UL)	1500V DC (UL)	1250V DC (TÜV) 1500V DC (UL)
Rated current	22.5A (2.5mm ²) 39A(4mm ² /6mm ²) 45A(10mm ²) 30A (14AWG/12AWG/10AWG) 50A (8AWG)	50A	22.5A (2.5mm ² , 14AWG) 39A(4mm ² , 12AWG) 45A(6mm ² , 10AWG) 51A(10mm ²)
Rated impulse voltage	12kV (1000V DC TÜV) 16kV (1500V DC TÜV)	12kV	16kV (1250V)
Ambient temp range	-40°C~+85°C(TÜV) -40°C~+75°C (UL)	-40°C~+85°C(UL)	-40°C~+85°C(TÜV/UL)
Upper limiting temp	105°C(TÜV)	105°C(TÜV)	105°C(TÜV)
Degree of protection, mated	IP65, IP68 (1h/1m)	IP67	IP65, IP68 (1h/1m)
unmated	IP2X	IP2X	IP2X
Overvoltage category/Pollution degree	CATIII/3	CATIII/2	CATIII/3
Contact resistance of plug connectors	≤0.25mΩ	≤0.5mΩ	≤0.25mΩ
Safety class	1000v DC: II 1500V DC: 0	II	II
Contact system	MULTILAM	MULTILAM	MULTILAM
Type of termination	Crimping	Recessed	Crimping
Contact material	copper, tin plated	copper, tin plated	copper, tin plated
Insulation material	PC/PA	PC	PC/PA
Flame class	UL94-V0	UL94-V0	UL94-V0
Certification	TÜV EAC RA CE	EAC RA	TÜV EAC RA CE

SOLAR CABLE ASSEMBLY



FEATURES

- Rated Current Max 50A
- Rated System Voltage 1000V / 1500V
- Low Cost Solution
- UV Resistance
- IP68
- UL9703 / UL4248 Approved



DATA SHEET

Model	Cable Size	Connector Type	System Voltage	Fuse Rating
Fuse Holder	12AWG 10AWG	SKE		1A 2A UPTO 30A
I Style Junction		MC4	1000V	
R Style Junction	12AWG	MC4-EVO 2	1500V	
T Style Junction	10AWG	AMPHENOL H4		NA
X Style Junction	8AWG	AMPHENOL UTX		
Y Style Junction				

SOLAR EXTENSION CABLE



CHARACTERISTICS

Model No. Solar Extension Cable	Ambient Temp -40°C~+90°C
Cable Insulation Material Double XLPE	Plug Force ≤ 50N
Cable Conductor Stranded Tinned Copper	Withdraw Force ≥ 50N
Connector Material PC/PA/PPE	IP Level IP68
Rated Current TÜV 30A /UL 20A	Safety Class II
Rated Voltage 1000-1500V DC	Flame Class UL94-V0
Contact Resistance ≤0.5mΩ	Application Solar cable 4mm ² /12 AWG, 6mm ² /10AWG

FEATURES

- Connector is set up at BOTH or SINGLE end of cable.
- Appointed length is acceptable.
- No need for terminal processing.
- Tinned copper contact is pre-assembled , no need for crush tool.
- If O.D. of two ends are different can also be connected.
- Application : used in solar system , module, junction box and so on.

STANDARD LENGTH (M)

0.6	1	1.5	5	10
15	20	40	60	80

Remark : Customized length is acceptable