

Solar MC4 Connector



MC4 Connector

MC4 connector is a single-contact electrical connector commonly used for solar connecting, rated for 1000V. The newer versions are rated at 1500V, which allows longer strings to be created. They are divided into wire ends and board ends. Generally speaking, MC4 refers to wire ends.

MC4 is composed of metal parts and insulating parts. After the MC4 and the cable are connected, it needs to be tested. Under normal circumstances, the resistance is zero, and it will not break if you pull it hard with both hands.



MC4 Connector

Usually sold as a set (male & female), you can also purchase the shell and pin separately.

Features:

- Simple on-site processing
- Accommodates PV cable with different insulation diameters
- Mating safety provided by keyed housings
- Multiple plugging and unplugging cycles
- High current carrying capacity

Code

HMC4

PVBM

HMC4-P

Spec.

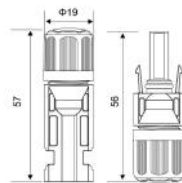
30A 1000V

45A 1000V

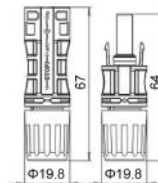
30A 1500V

45A 1500V

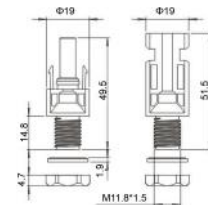
30A 1000V



HMC4



PVBM



HMC4-P



HMC4/PVBM 30A Pin (Copper, tin-plated)



HMC4/PVBM 45A Pin (Copper, silver-plated)



HMC4-P 30A Pin (Copper, tin-plated)

Technical Data:

- Connector system: $\Phi 4$ mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 30A, 45A (2.5-10mm²)
- Test voltage: 6KV (50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5m Ω
- Safety class: II
- Contact material: Copper, tin-plated (2.5-6mm²), silver-plated (10mm²)
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

Solar MC4 T Branch Connector

HYOCIE

MC4 T Branch Connector

MC4 branch connector is compatible with 2.5mm², 4mm² and 6mm² in solar connection projects. Connecting solar panels in series or parallel quickly and reliably connects the solar lines to the photovoltaic system (solar panels, converters).



HMC4T
MC4 T Branch Connector

Technical Data:

- Pin Dimensions: $\varnothing 4\text{mm}$
- Rated voltage: 1000VDC
- Rated current: 30A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Degree of protection: IP67
- Contact resistance of plug connectors: $< 0.5\text{m}\Omega$
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

HMC4T-3



HMC4T-4



HMC4T-5



HMC4T-6



HMC4T-7



Solar MC4 Y Branch Connector

HYOCIE

MC4 Y Branch Connector

MC4 Y branch connector makes it parallel wire PV modules with multi-contact out put cables. They are rated for a maximum current of 45 A and a maximum voltage of 1500 VDC.



HMC4Y
MC4 Y Branch Connector
(45A,1500V needs to be customized.)

Technical Data:

- Pin Dimensions: \varnothing 4mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 30A, 45A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Degree of protection: IP67
- Upper limiting temperature: +105°C
- Contact resistance of plug connectors: $< 0.5m\Omega$
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PC/PA
- Locking system: Snap-in
- Flame class: UL-94-V0

HMC4Y-3



HMC4Y-4



HMC4Y-5



Solar MC4 Fuse Connector

MC4 Fuse Connector MC4 fuse connectors are specifically designed to protect photovoltaic strings. These fuse links are capable of interrupting low overcurrents associated with faulted photovoltaic string arrays (reverse current, multi-array fault).



Technical Data:

- Connector system: $\Phi 4$ mm
- Rated voltage: 1000VDC, 1500VDC
- Rated current: 10A, 15A, 20A, 30A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5m Ω
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

MC4 Fuse Connector

Code	Spec.
HMC4F	30A 1000V
HMC4F	30A 1500V

HMC4F 1000V



HMC4F 1500V



Solar MC4 Diode Connector

MC4 Diode Connector When solar cell modules are connected in series to form a square cell array, it is necessary to connect an MC4 diode connector antiparallel to the positive and negative output terminals of each cell panel. The role of the diode at this time is to prevent a certain element or a certain part of the element in the square array from being blocked or malfunctioning to stop generating electricity. The component's bypass diode is forward-biased, causing the diode to conduct. The working current of the component string bypasses the faulty component and flows through the diode without affecting the power generation of other normal components. At the same time, it protects the bypass components from damage.



Technical Data:

- Connector system: $\Phi 4\text{mm}$
- Rated voltage: 1000VDC
- Rated current: 10A, 15A, 20A
- Test voltage: 6KV(50HZ, 1min.)
- Ambient temperature range: 40°C...+90°C
- Upper limiting temperature: +105°C
- Degree of protection: IP2X/IP67
- Contact resistance of plug connectors: 0.5m Ω
- Safety class: II
- Contact material: Copper, tin-plated
- Insulation material: PPO
- Locking system: Snap-in
- Flame class: UL-94-V0

MC4 Diode Connector

Code	Spec.
HMC4D	20A 1000V



Solar MC4 Extension Cable



MC4 Extension Cable

Solar Extension Cable is a solar cable complete with fitted MC4 connectors. Used in photovoltaic power generation and solar systems to interconnect solar panels and electrical components in the photovoltaic system.



PV1 Single Core	2.5mm ²	4mm ²	6mm ²
Rated voltage	1000V/1500V	1000V/1500V	1000V/1500V
Length	customized	customized	customized
Outer diameter(mm)	5.4	6.1	7.2
Overall diameter(mm)	49*0.254	56*0.3	84*0.3
Current temperature	-40°C~+120°C	-40°C~+120°C	-40°C~+120°C
Conductor:	copper wire structure	copper wire structure	copper wire structure
Insulation material:	XLPE	XLPE	XLPE
Colors	black/red	black/red	black/red



Single core solar cable

Code	Spec.
PV1-F	2.5mm ² ,4mm ² ,6mm ² ,10mm ²

