

SMC4 Solar Connector



- 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.
- TUV and UL approved.

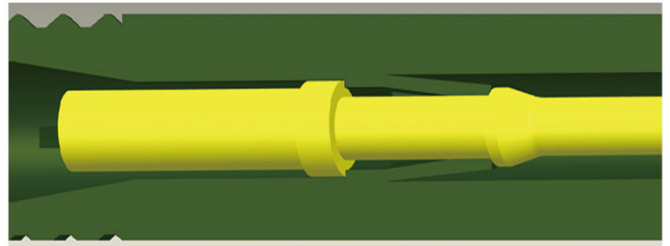
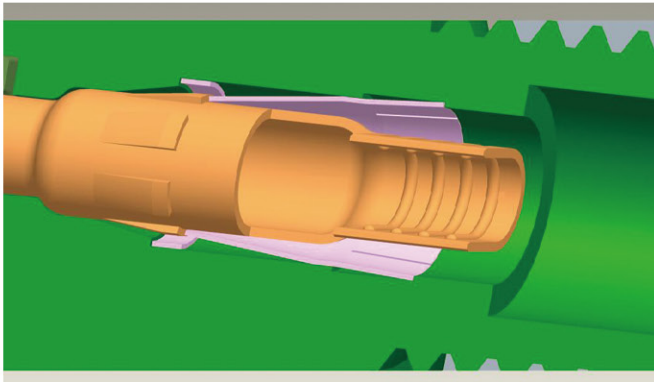


Specifications

Order NO.	Part P/N		Cable	
	Connector	Terminal	Conductor size (mm ²)	Cable OD (Φ Dmm)
SMC4-CMMM-14	SMC4-CMMM-H	SMC4-CM-T14	AWG 14(2.5 mm ²)	Φ 4.5- Φ 8.5
SMC4-CMMM-12		SMC4-CM-T12	AWG 12(4.0 mm ²)	
SMC4-CMMM-10		SMC4-CM-T10	AWG 10(6.0 mm ²)	
Order NO.	Part P/N		Cable	
	Connector	Terminal	Conductor size (mm ²)	Cable OD (mm)
SMC4-CFPM-14	SMC4-CFPM-H	SMC4-CF-T14	AWG 14(2.5 mm ²)	Φ 4.5- Φ 8.5
SMC4-CFPM-12		SMC4-CF-T12	AWG 12(4.0 mm ²)	
SMC4-CFPM-10		SMC4-CF-T10	AWG 10(6.0 mm ²)	
Rated current		30A(2.5-6mm ²)		
Rated voltage		1000v DC		
Test voltage		6000V(50Hz, 1min)		
Overvoltage type/pollution degree		CAT III /2		
Contact resistance of plug connector		1mΩ		
Contact material		Copper,Tin-plated		
Insulation material		PPO		
Degree of protection		IP2X/IP67		
Flame class		UL94-VO		
Safety class		II		
Suitable cable		OD 4.5-8.5(2.5-6.0 mm ²)		
Insertion force/withdrawal force		≤50N/≥50N		
Connecting system		Crimp connection		
Temperature range		-40℃~-+125℃		

comparison for internal structure

Connectors of other companies

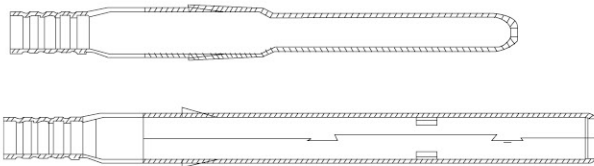


Structure:

Insulator design by forced demoulding Create a slot (red circle marked) to fix spring by forced demoulding. Using spring to position terminal.

Shortcoming:

- Forced demoulding is not very steady It can't ensure any products with same performance.
- Maintain force will change between 7~20kgf.
- Must assemble spring . It is to be a risk that sometimes operator will miss the spring.



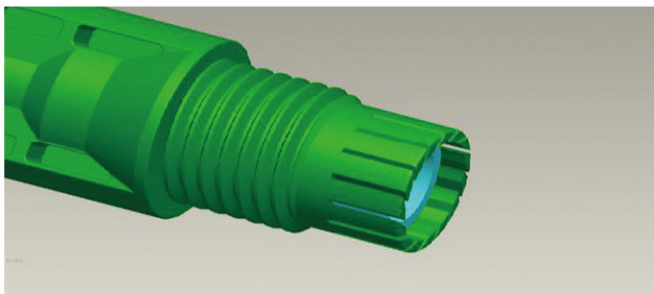
Process: Stamping , Tin plating

Strongpoint:

- Low cost ,high productive capacity.
- It can be continually rivet because of terminal have strip feeder .

Shortcoming

- Material is thin .
- It's easy to deform.
- It will be heat serious in a long time when using
- It need to solder after riveting to reach pull force 31kgf.



Strongpoint:Simple structure

Shortcoming:

The thread can't return back when screw open

Because of first reason , it can't be reuse.

The screw is easy to get open.

Structure:

Moulding a fixed structure to replace spring (red circle marked) .The fixed structure will be expand when terminal insert into insulator . It will be back to original position when terminal is to correct position and hold to terminal.

Shortcoming:

- All product is with same performance.
- Maintain force is 35kgf Min.
- Cut down the accessories.



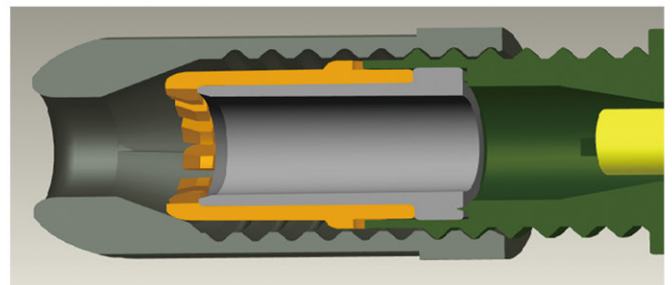
Process: Lathe Machining , Ag plating

Strongpoint:

- High cost ,low productive capacity
- It can't be continually rivet because it 's without terminal rail.

Shortcoming

- Material is thin .
- It's easy to deform.
- It will be heat slight in a long time when using.
- Pull force can reach 31kgf after riveting.



Strongpoint:Add a part

Shortcoming:

The thread can return back when screw open.

It can be reuse.

It's with an anti-loosen part ,screw is not easy to get open.