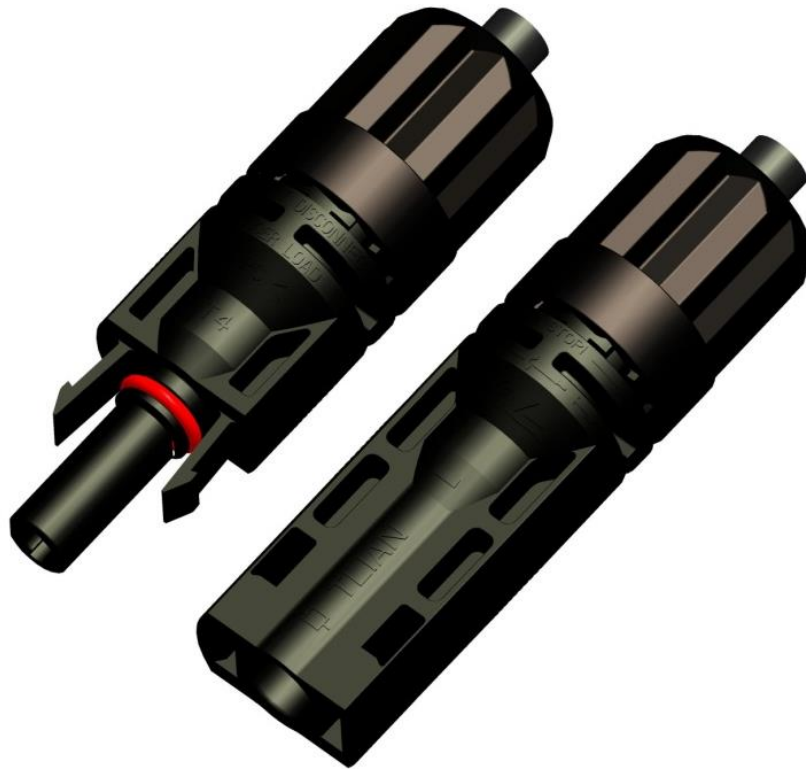
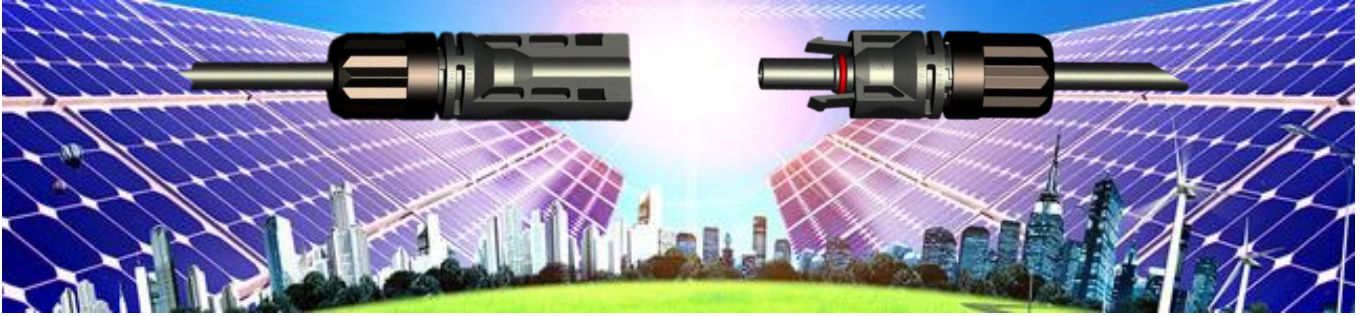
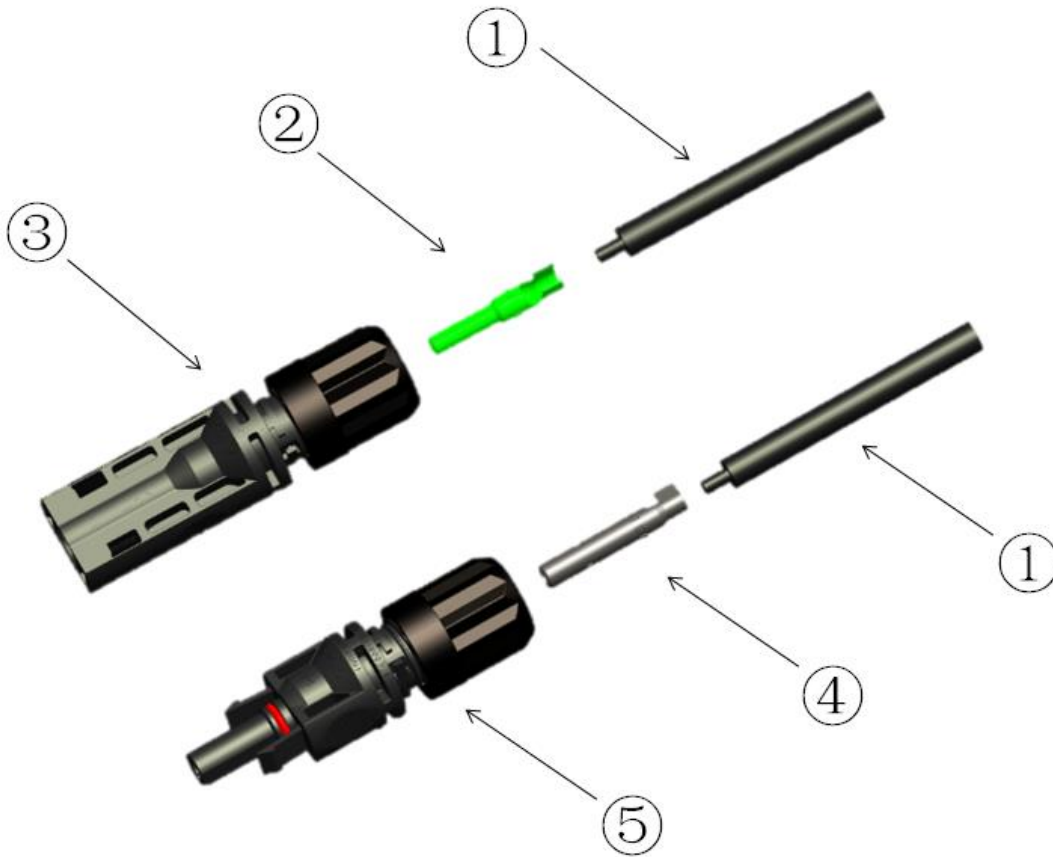


T4 PV Connector

INSTALLATION MANUAL



Component Assembly:


ITEM	Part Name
①	Wire
②	Negative Contact
③	Negative Connector
④	Positive Contact
⑤	Positive Connector

T4 Product Specifications:



PV-Negative cable connector



PV-Positive cable connector



Technical data	T4-PCXX
Rated voltage	IEC 1000V DC & UL 1500V DC
Rated current	32A for 4 mm ²
Cable OD Range	4mm ² /12AWG OD:Φ5.8mm ~Φ6.9mm
Connector system	Φ4.0mm
Pollution degree	Class II
Protection Class	Class II
Contact material	Copper, Tin plated
Contact resistance	≤ 0.5mΩ
Type of termination	Crimping
Locking system(UL)	NEC compliant locking type
Water rating	IP68
Temperature Range	-40 °C ~ +90 °C
Fire Resistance	UL94-V0

T4 Type

Article	Cable Outside Diameter (OD)	Picture	Required Torque to Lock	Reference gap
Negative Connector	5.8mm≤OD≤6.9mm		3.0N·m~4N·m	0<gap≤1.0mm
Positive Connector	5.8mm≤OD≤6.9mm		3.0N·m~4N·m	0<gap≤1.0mm
Negative Contact	---		---	---
Positive Contact	---		---	---

Safety Precautions:

Products must be assembled and installed by qualified personal, insuring all safety regulations are followed. For protection against electric shock, please insure the system is not energized during installation. Do not disconnect under load. Insure that the AC and the DC sides are both disconnected and the system is not energized before disconnecting.

Use only the tools and components listed in this installation manual. Follow the directions as stated in this manual. Do not alter or willingly damage the product in any way.

- Sealing cap must be used on disconnected connectors to prevent dust and water ingress.
- Units are rated for IP68 water protection when mated.
- Do not place connector directly on roof surface.
- Do not allow direct contact with hydrocarbon, phenol, ketone ammonia or other plastic corrosive environments or materials. Do not grease or lubricate the connector during installation.

All Required tools are included in the T4 toolkit:





Wire stripper tool

Type	Crimping Range	
2.5/14	2.5mm ²	14AWG
4.0/12	4.0mm ²	12AWG
6.0/10	6.0mm ²	10AWG



Wire Crimping tool

Mark	Riveting Range	
2.5/14	2.5mm ²	14AWG
4.0/12	4.0mm ²	12AWG
6.0/10	6.0mm ²	10AWG



Disconnect Tools

1 set=2 pieces

Connector assembly steps:



1. Positive connector appearance check

- Seal ring should fit cleanly in the slot, not warped or distorted.
- The two plastic clasps should be intact.
- Positive and negative connectors should not be obstructed by foreign objects or water.
- Plastic components should not be cracked.
- Wire must not appear damaged.



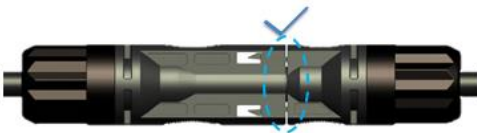
2. Negative connector appearance check

- Negative connector should not be obstructed by foreign objects or water.
- Plastic components should not be cracked.
- Wire must not appear damaged.



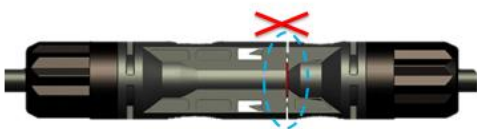
3. Connection

To connect, attach the positive and negative connectors to each other, until you hear a “click.” Once connected, gently pull on them to insure a secure connection.



4. Check connection

To check the connection, insure that you cannot see the seal ring. The gap between the connectors should be less than 0.5mm.



Wire Assembly steps:


5. Strip the insulation off the cable

Using the wire stripping tool, remove the insulation from the cable. Insure that 7.5mm of cable are exposed, and that the wire strands are not damaged during the process of stripping the insulation.


6. Crimp the contact

Place the connector pin around the bare section of the stripped wire. Crimp the connector pin using the wire crimping tool. The crimped connector should withstand pull forces $\geq 310\text{N}$.


7. Insert the connector pin

Push the crimped connector pin into the connector back until you hear a click. Pull lightly on the wire to insure the metal components of the connector are engaged.


8. Tighten the cable gland

First, finger tighten the gland, then use the disconnect tools to tighten the gland to the connector until it clicks, insuring that it is locked.

9. Make connection

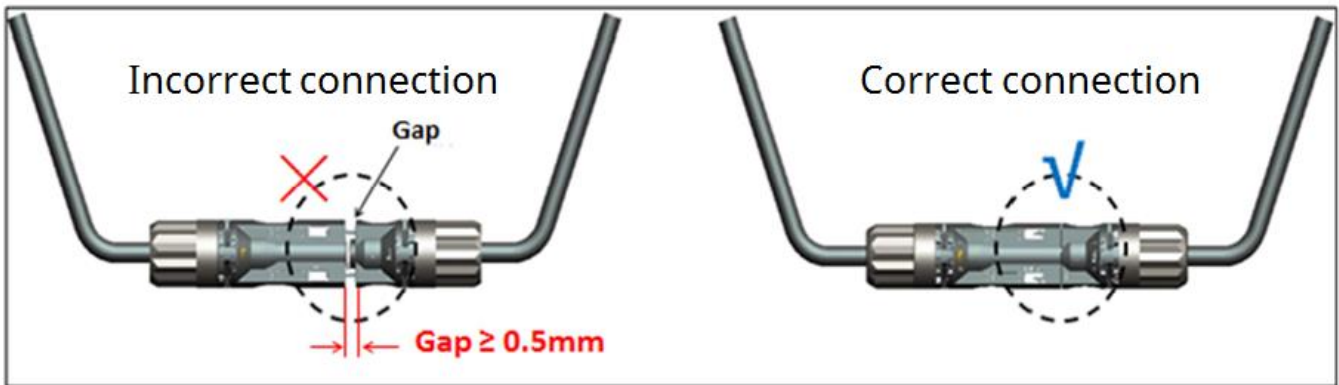
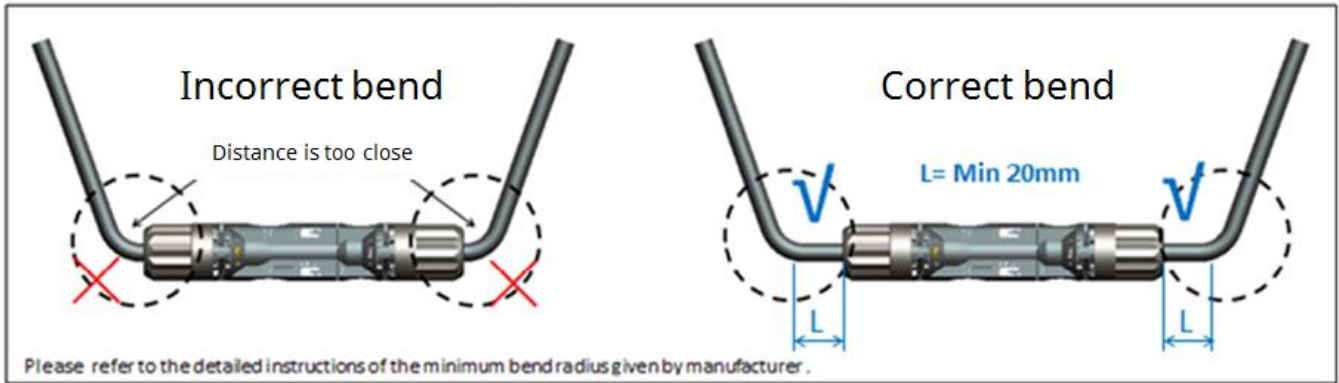


Check the appearance of the connectors before attaching them to one another. The seal ring should be in the slot with no warping or distortion. The plastic clasps should not be damaged or broken. The connectors should be free of moisture or foreign objects. Plastic parts should not be cracked. Wire should not be frayed or damaged. When attaching, insert the connectors into each other until you hear a “click.” Once attached, gently pull on the connectors to insure they are firmly connected and cannot be easily disconnected by hand.


10. Disconnect

The attachment can only be disconnected by using the disconnect tools.

Final Connection



The latest version of the manual can be downloaded from Canadiansolar.com

The technical descriptions herein are for reference only when using this product.