

# Junction box connector specification

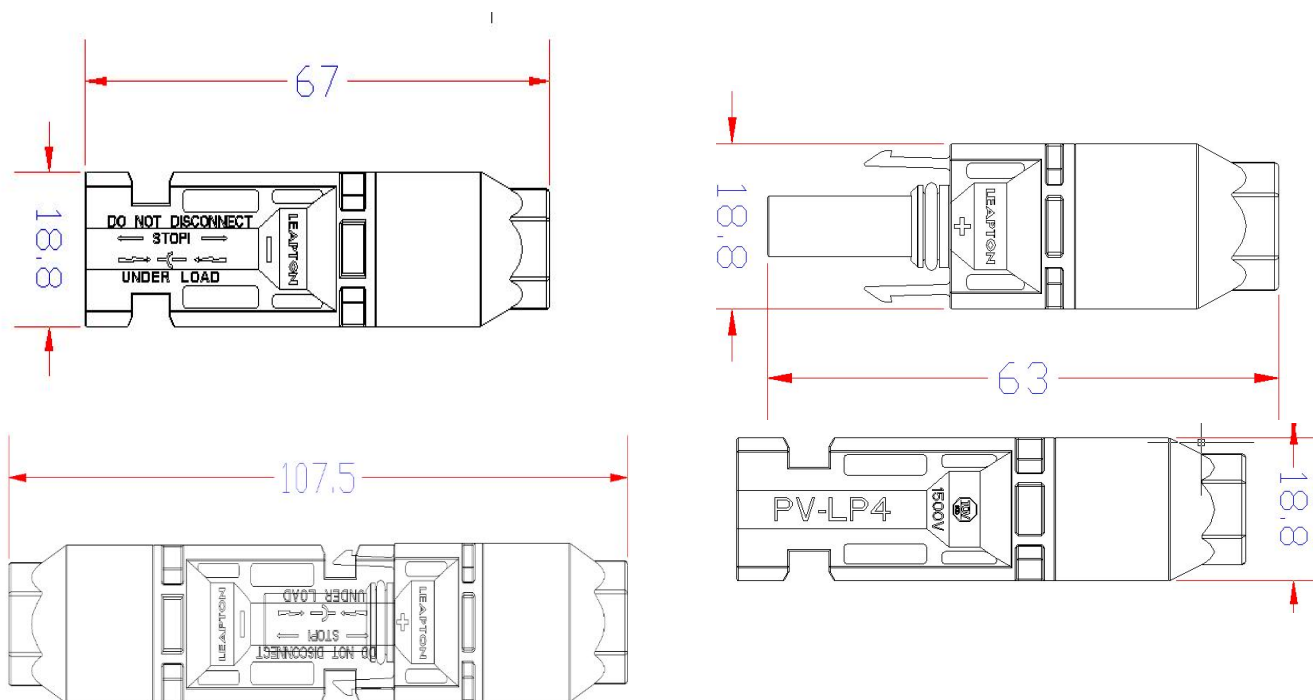
## Product Description:

PV-LP4 is a DC photovoltaic connector with good weather resistance. The product adopts a self-locking structure, stable performance, and easy installation. It meets the requirements of long-term outdoor use of photovoltaic systems. The product has passed TUV certification.

## Technical parameters:

Rated voltage	1500 (V) (TUV)
Rated current	39A
Operating temperature range	-40°C ~ +85°C
Security Level	Class II
Protection level	IP68
Contact resistance	≤0.5mΩ
Flame retardant grade	UL94-V0
Application Cable	4mm <sup>2</sup>
Metal Materials	Copper tinning
Insulation Materials	PPO/PA
Dimensions	107.5× ϕ 18.8mm

## Product drawings:



#### 4. How to use PV-LP4:

1. Connector docking: Insert PV-LP4 (+) into PV-LP4 (-) according to the diagram. When you hear a "click" sound, use a pulling force of about 50N to check whether the connector is inserted in place. If it cannot be pulled apart, the connection is valid and the electrical connection is complete.



2. Separation of connector: Use the tool to insert into the PV-LP4 (-) slot as shown in the figure, hold the positive and negative ends of the PV-LP4 connector with your left and right hands respectively and pull in the opposite direction, and the connector can be separated.



## PV-LP4 installation method:

### 1. Terminal Crimping Pliers



### 2. Wire strippers



### 3. Lock picking tools

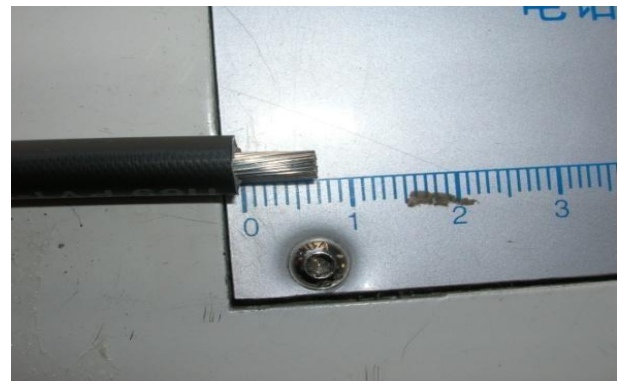


### 4. wrench



## Installation Process

1. Use wire strippers BT1154 to cut and strip the cable according to the specified length. The stripping length of the wire end is 6.5-7.5mm.



2. Insert the metal parts into the corresponding terminal crimping pliers slot, as shown below (cable 14AWG, in the left slot, 12AWG in the middle slot, 10AWG in the right slot)



3. Insert the cable into the U-shaped groove of the connector metal terminal and crimp it with terminal crimping pliers.



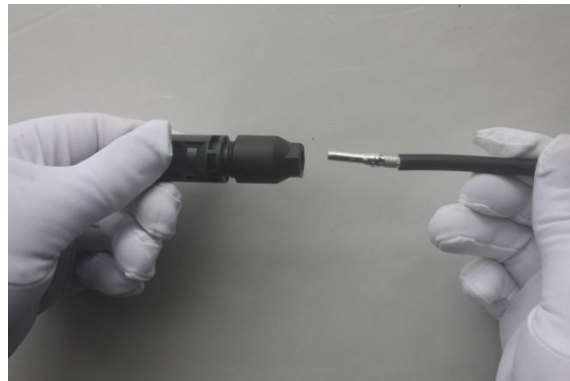
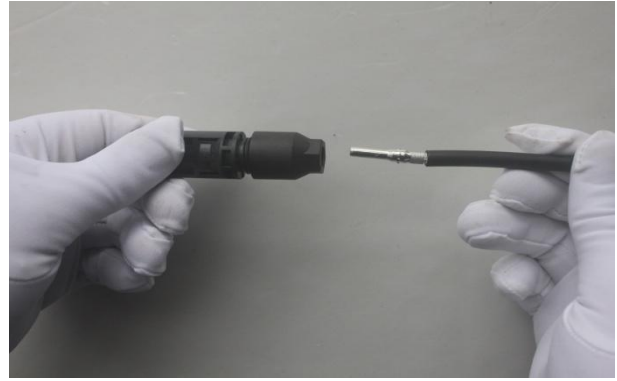
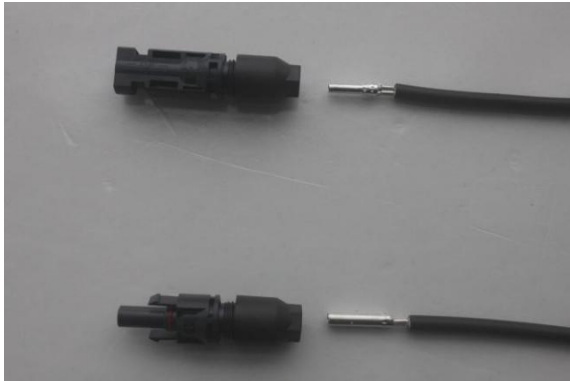
4. Install PV-LP4+ and PV-LP4-. Install the plastic basket and nut according to the diagram. The inner plug must be installed flat and in place.



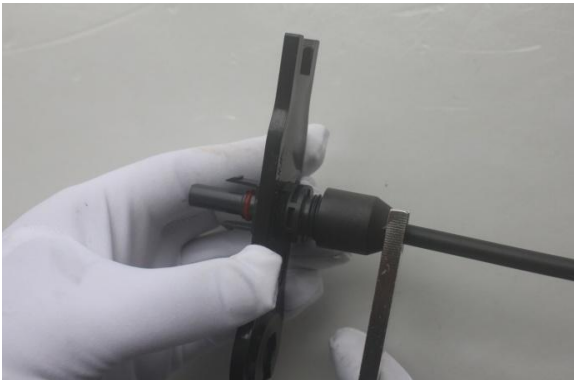
5. Insert the metal terminals crimped with the wires into the socket with the corresponding positive and negative polarities until they are engaged. Pull the wire with a force of about 20N to check

---

whether the metal parts are firmly engaged.



6. Use the wrench GZX-KB2 to tighten the nut until the nut port and the socket housing are seamless. The tightening force of the nut should be controlled within 1.5 to 2.5 Nm.



**Notes:**

1. The cable stripping head must be stripped according to the size of the cable diameter corresponding to the wire stripping pliers notch.
  2. The cable and connector crimping must correspond to the notch crimping.
  3. When installing the connector by loose parts, the parts must not be omitted, installed upside down, or installed in place.
  4. The positive and negative sides of the connector metal parts cannot be inserted into the wrong position when inserting into the plastic shell.
  5. The nut must be screwed into place when assembling the connector.
  6. The connector should be inserted into place when it is plugged in.
  7. When opening the connector with a lock opener, make sure that the thin edge of the lock opener faces the positive head.
  8. The connector cannot be separated in the working state.
  9. The use of the connector cannot exceed the rated voltage and rated current.
  10. The connector must be installed and maintained by professionals.
-