

连接器安装说明书 PV-JC005 /xyab Series

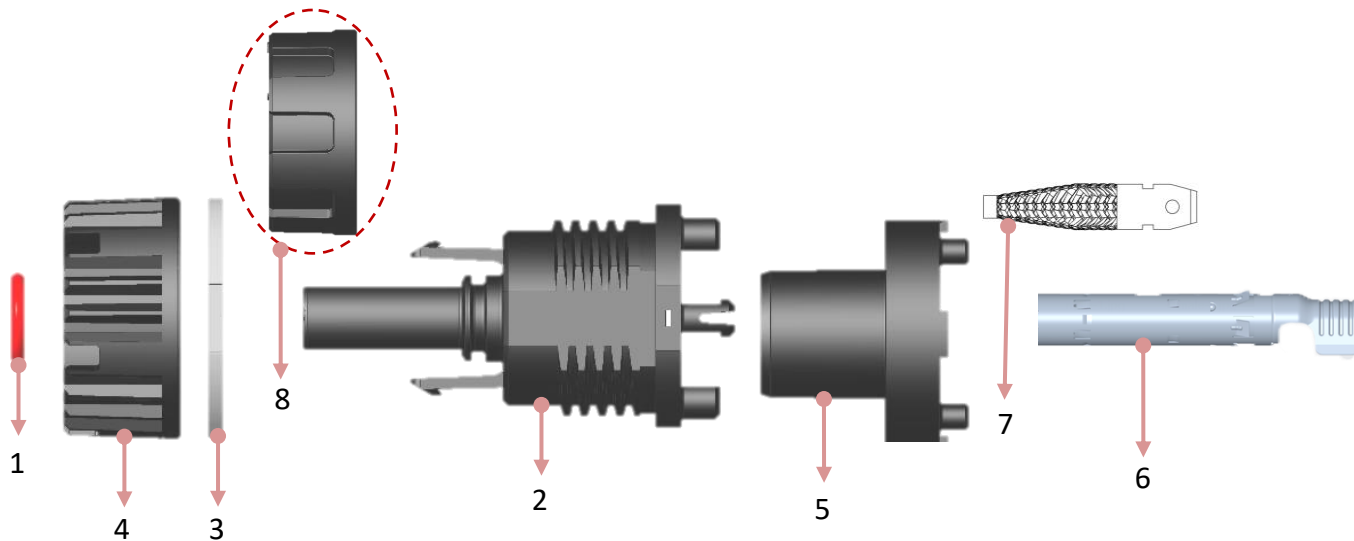
Installation Manual for PV-JC005/xyab Series Panel Connector



目录 Catalog

1.产品简介 Products Overview	- 2 -
2.工具及配件简介 Tools and Parts Overview	- 4 -
3.技术参数 Technical Data.....	- 5 -
4.工具使用说明 Tools Instruction	- 7 -
5.安装说明 Installation Instruction	- 10 -
5.1 插座安装 Installation of receptacles	- 10 -
5.2 连接器安装.....	- 12 -
5.3 连接器拆卸 Disconnecting Connector	- 13 -
5.4 安装提示 Installation Warning.....	- 13 -
6. 变更清单 Change List	- 16 -

1.产品简介 Products Overview



1 O型圈 (O Ring)

2 母面板插座 (Female panel receptacle)

3 密封垫圈 (Seal gasket)

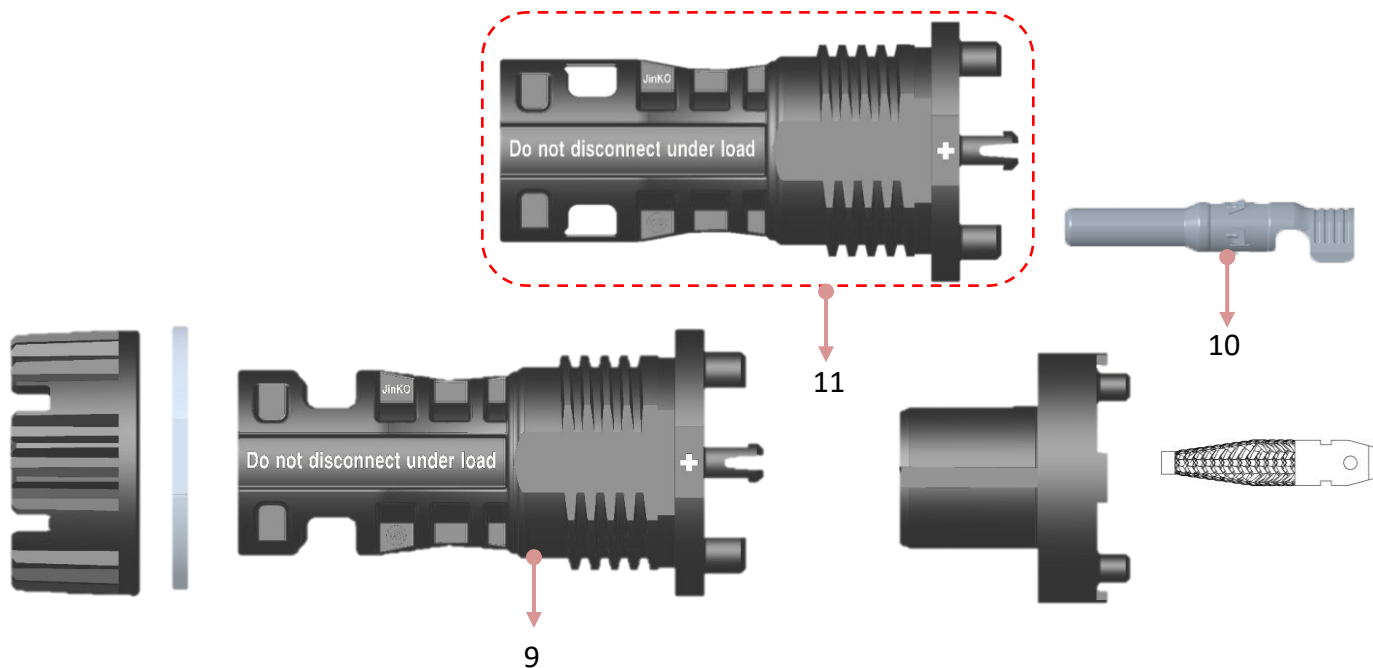
4 塑胶螺母-标配 (Gland nut)

5 后盖 (Cover)

6 插套 (Female Terminal)

7 编织端子 (Braided Terminal)

8 塑胶螺母-选配 (Gland nut-Optional)







9 公面板插座-标配 (Male panel receptacle)

10 插针 (Male Terminal)

11 公面板插座-选配 (Male panel receptacle-Optional)

2.工具及配件简介 Tools and Parts Overview

Item	Tool Type	Tool Name	Pic.
1	JKT-012	组装工具 Assembly Tool Open-end-Wrench	
2	JKT-013	组装工具 Assembly Tool Open-end-Wrench	
3	JKT-04	通用工具 Universal Tool	
4	4JB03M31005 4JB03M31007	防尘塞 Dust plug	

3.技术参数 Technical Data

产品型号 Type Name or Model No.	PV-JC005/xyab Series
额定电压 Rated Voltage (V DC)	1500 V DC (IEC/UL), for x=1
额定绝缘电压 Rated Insulation Voltage	8000 V (1500V DC)
额定电流 Rated Current (A DC)	50 A, for y=A (IEC/UL) 45 A, for y=B (IEC)
应用等级 Application Class	Class A
防护等级 / 污染等级 Protection Class / Pollution Degree	Class II / 2
工作温度范围 Operating Temperature	- 40°C to +85°C
温度上限 Upper Limit Temperature	115°C (IEC)
过电压等级 Over Voltage Category	CAT III
防火等级 Flammability Class	UL94 V-0

防护等级, 插合状态 / 未插合状态 Degree of Protection, mated / unmated	IP68(1m, 2h) in mated condition IP2X in unmated condition
解锁方式 Unlock method	开口式 Latching type, for a=1 闭口式 Locking type, for a=2
塑胶螺母 Gland nut	带缺口 With notch, for b=1 无缺口 No notch, for b=2
接触电阻 Contact Resistance	≤0.50mΩ
接触材料 Contact material	铜, 镀锡 Copper, tin plated
绝缘材料 Insulation Material	PA
焊接方式 Welding Method	波峰焊 Wave soldering
焊接温度 Soldering Temperature	260C° ,10second
认证标准 Certification Standard	IEC62852 UL6703

Note: IEC PV-JC005-F/xyab ; PV-JC005-M/xyab (x=1, y=A or B, a=1 or 2, b=1 or 2)
UL PV-JC005-F/xyab ; PV-JC005-M/xyab (x=1, y=A, a=1 or 2, b=1 or 2)

4.工具使用说明 Tools Instruction

◇ 通用工具-JKT-04 一套=1 把；

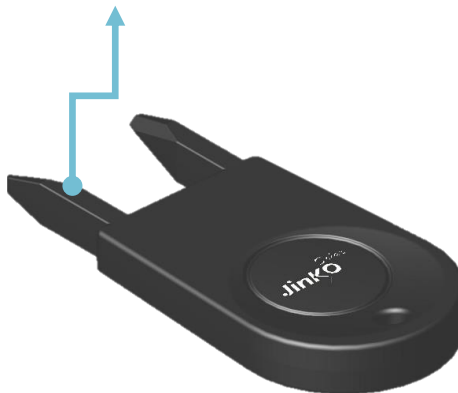
Universal Tool -JKT-04, there are one assembly tools per tool set.

作用：用于拆卸连接器。

Function: Used for disassembling connectors.

作用：打开紧锁装置

Function: To open the locking device



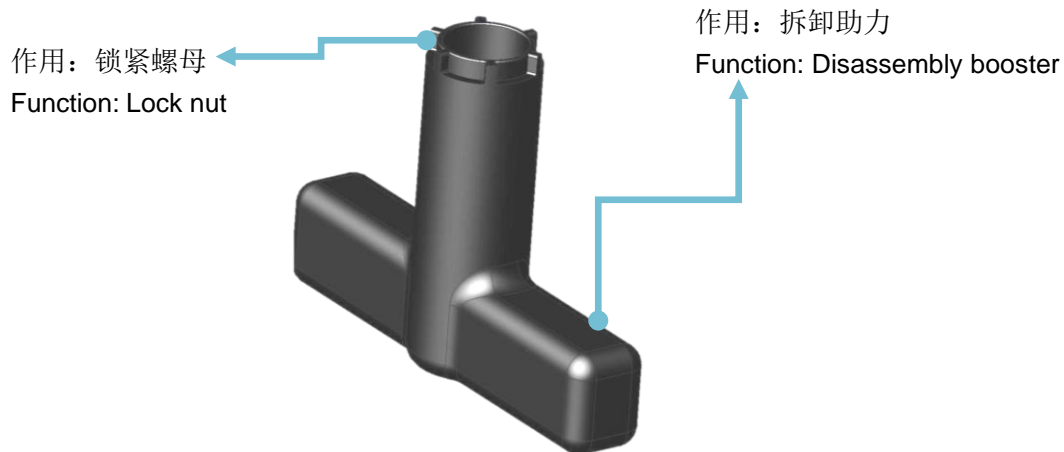
Universal Tool -JKT-04

◇ 组装工具-JKT-012: 适用带缺口螺母, 一套=1 把;

Assembly Tool -JKT-012: Applicable to notched nut, there are two assembly tools per tool set.

作用: 用于组装拆卸连接器。

Function: Used for assembling and disassembling connectors.



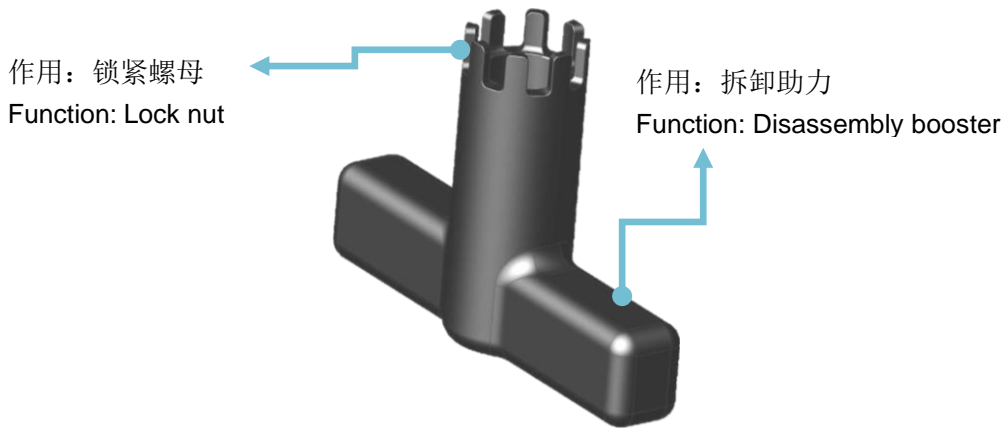
Assembly Tool -JKT-12

◇ 组装工具-JKT-013: 适用无缺口螺母, 一套=1 把;

Assembly Tool -JKT-013: Applicable to no-notched nut, there are two assembly tools per tool set.

作用：用于组装拆卸连接器。

Function: Used for assembling and disassembling connectors.



Assembly Tool -JKT-13

5. 安装说明 Installation Instruction

5.1 插座安装 Installation of receptacles

◇ 请确保面板厚度不小于 2mm 且最大不超过 2.5mm。在面板厚度小于 2mm 的情况下，验证过程需由客户来完成。
 Ensure a housing wall thickness not less than 2mm and a maximum of 2.5mm. If using a wall thickness below 2mm, the validation process has to be done by the customer.

◇ 面板钻孔。钻孔的建议尺寸如图 1，所有钻孔边缘的毛刺需要清除。我们建议，无论水平或垂直结构，间距值 (X) 至少要有 30mm。

Drill the panel wall. Recommended bore dimension see fig.1, all burrs must be removed from the edges of all bores. For both horizontal and vertical mounting, a spacing (X) of at least 30mm is recommended.

◇ 在公/母面板连接器插入钻孔前，请确保已安装防水垫圈，且防水垫圈安装在墙板的外侧(如图 2)
 Please ensure seal gasket is located and positioned outside of the mounting surface before the male or female panel connector inserts the drilled hole. (Fig.2)

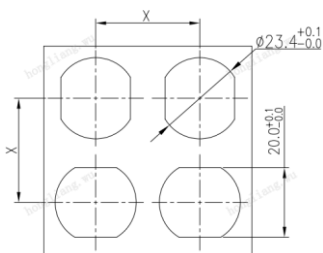


Figure 1



Figure 2

- ✧ 安装公/母面板连接器时，推荐用 2.0 Nm 的扭矩锁紧螺母。具体情况，需要由终端用户根据不同的面板验证合适的扭矩。(如图 3)

When installing the male or female panel connector, it is recommended to use 2.0 Nm torque lock nut. The appropriate torque has to be verified in the end use according to the respective housing. (Fig.3)

- ✧ 安装后目测检查，确保防水垫圈没有破裂、折痕及其他干扰物。

No cracks, folds or other disturbances during a visual check after assembly.

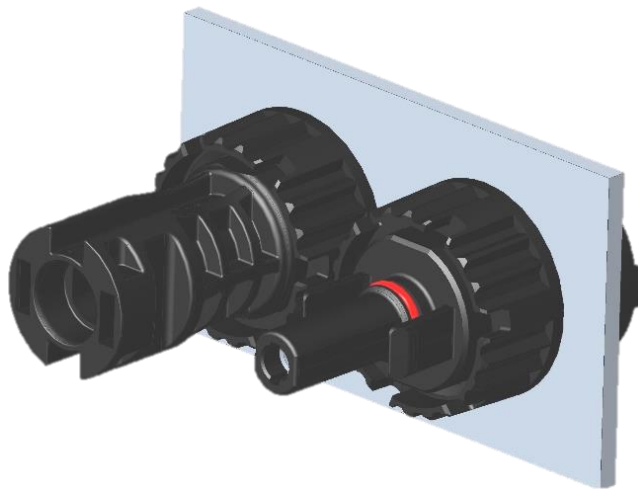


Figure 3

5.2 连接器安装

- ◇ 公母连接器插合：将公/母电缆连接器插入母/公面板连接器，直至其啮合。轻轻拉动，以检查是否啮合牢固（如图 4&5）。

Insert the Male/ female cable connector into the female/ male panel connector until they engage. And pull lightly to check correct engagement (Fig. 4&5).

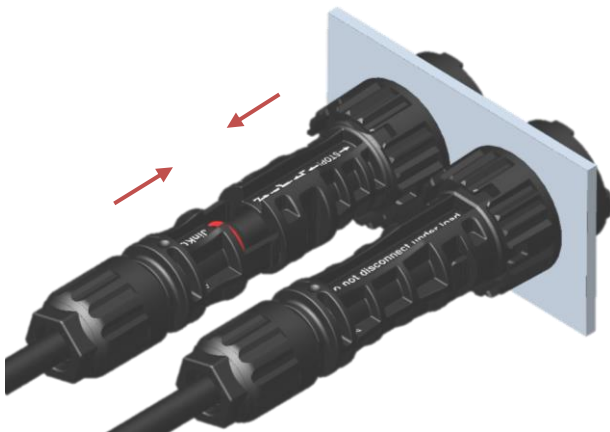


Figure 4



Figure 5

5.3 连接器拆卸 Disconnecting Connector

- ◇ 使用组装工具带有插销的一端插入连接器的卡扣位置（如图 6）
Insert the forks into the buckle of the connector by the assembly tool. (Fig. 6)
- ◇ 拉拔电缆连接器，即可分开公母连接器（如图 7-8）。
Pull the cable connector by hand respectively. The connector can now be separated. (Fig. 7 -8)

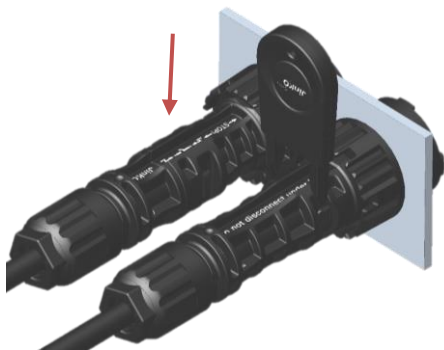


Figure 6

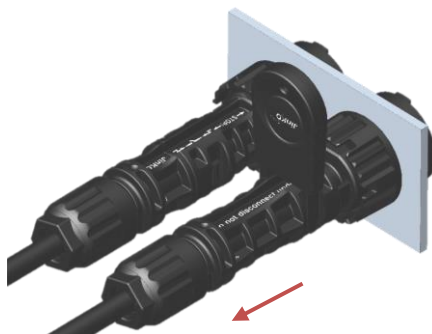


Figure 7

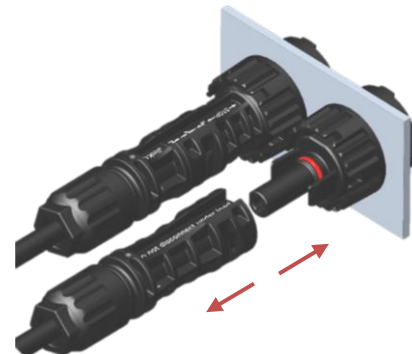


Figure 8

5.4 安装提示 Installation Warning

- ◇ 在自行安装时，如果所用的部件和工具不是 Jinko 官方指定的，或者没有按照官方要求进行准备和安装操作，我们将不保证产品的安全性和技术参数的一致性。
If parts and tools used are not specified by Jinko or not prepared and assembled as Jinko described during installation, the safety and the technical data on products are not guaranteed.

- ✧ 在安装及使用时，应避免接触机械油、油脂、溶剂等可能会造成连接器功能失效的物质，同时需注意施工人员的手套不能带有以上物质。被污染的连接器的不能插合使用。
During assembly, the connector must not be touched with any machine oil, grease, solvent, with which connector would be out of action. It should be noted that the gloves of the construction personnel could not contain the above substances. The contaminated connector cannot be mated and used.
- ✧ 该说明书中的所有操作不允许在带电或者负载下进行。
Operations in the manual are not allowed to be carried out when under power or load.
- ✧ 不要在负载下断开连接：光伏连接器在负载下不能断开连接。它们可以通过关闭直流和交流转换器或断开交流电路而处于无负载状态。
Do Not Disconnect Under Load: PV plug connections must not be disconnected while under load. They can be placed in a no load state by switching off the DC/AC converter or breaking the AC circuit.
- ✧ 长期不对插连接或断开连接时必须盖上防尘塞（4JB03M31005&4JB03M31007）以防止灰尘和湿气。
When disconnected for a long time, the dust plug（4JB03M31005&4JB03M31007） must be covered to prevent dust and moisture.
- ✧ 插合状态后的连接器符合 IP68 水密性的标准。但是它们不适合长期在水下使用。请勿将连接器直接放置在屋顶表面。
The connector in the plugged state meets the IP68 watertight standard. They are not suitable for long-term underwater use. Also, do not place the connector directly on the roof surface.
- ✧ 连接器不能承受持续垂直于产品外力。
The plug connection must not be subjected to continuous mechanical tension.
- ✧ 出于安全原因，强烈建议在专业人员指导下进行操作。
For safety reason, it is highly recommended to operate under the guidance of professionals.

- ◇ 连接器只有按照安装说明指定的方式组装时，才被认定符合 UL 6703。
The connector is considered to be in compliance with UL 6703 only when assembled in the manner specified by these assembly instructions.
- ◇ 此连接器只适用于 B 类和 C 类铜导线(参见 NFPA NEC 70 第 9 章，表 10)。
This connector is only suitable for copper wires of Class B and Class C (Refer to Table 10, Chapter 9, NFPA NEC 70).

备注：连接器安装过程中操作困难或无法操作，请参照如下联络方式询问、查询：

Notes: If you have any questions during installation, please contact us as follows:

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6. 变更清单 Change List

版本号 Ver.	修订内容 Rev. content	修订日期 Rev. date
A0	初版发行 First edition	2024.06.26
A1	增加变更清单 Add change list	2024.10.10