

## Delta-Q PL463(X) -40-12G-DQ连接器安装说明

### The Assembly Manual for Delta-Q PL463(X) -40-12G-DQ Plug Connector

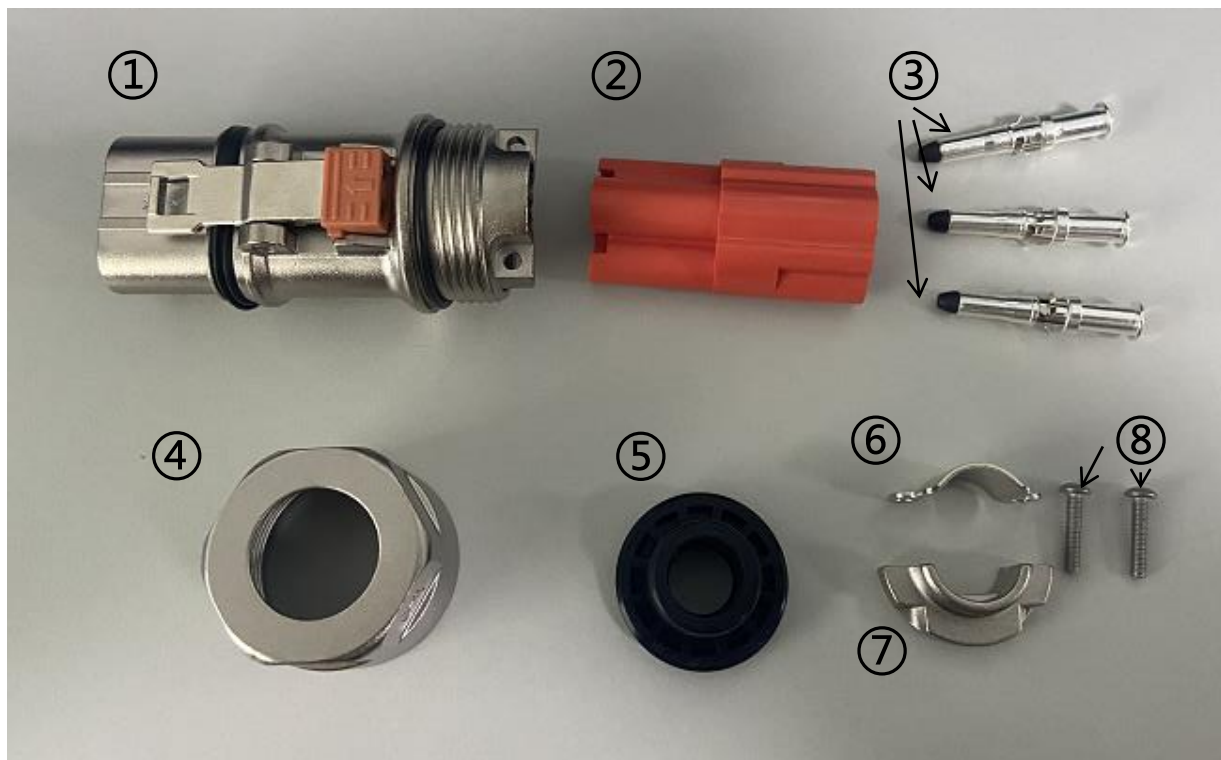


### PL463(X)-40-12G-DQ

键位 X 键 Y 键 U 键	Key X Y U	高压互锁 0: 无 1: 有  HVIL 0: NO 1: WITH	线缆大小  Cable Size 12AWG	客户定制 customer
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## 第一部分：包装清单

### Part 1 : Package contents



- ① 铁壳组件 Shell assembly ×1
- ② 胶壳 Housing×1
- ③ 端子 Terminal ×3
- ④ 尾盖 End cap ×1
- ⑤ 密封圈 Sealing ×1
- ⑥ 上锁块 Spacer ×1
- ⑦ 下锁块 Platen ×1
- ⑧ 螺栓 Bolt×2

## 第二部分：插头组装

### Part 2: Plug Assembly

#### 步骤1：穿配件

Step1 : Assemble the accessories

1-1 取各1pcs的④尾盖，⑤密封圈从右边依次穿过线缆

1-1 Take each 1pcs of ④ End cap, ⑤ Sealing, and make them pass through the cable from right in sequence

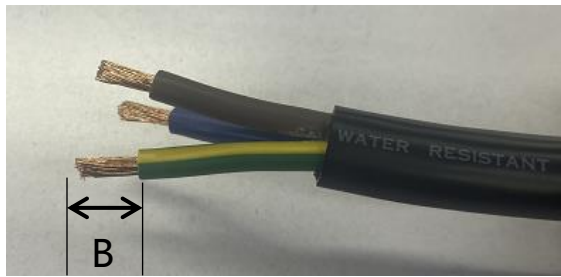
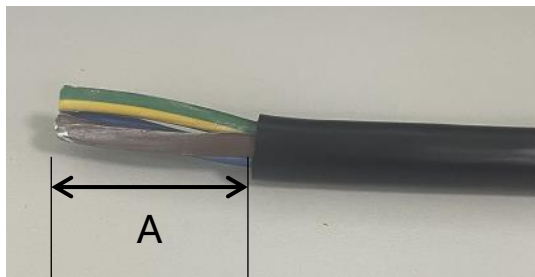


步骤2：剥线皮，按表1尺寸剥离线缆绝缘皮和外被

Step2 : Stripping, Strip off cable insulation and jacket as following size from the table 1

表1：剥线长度  
Table 1 : Strip length

连接器 Connector	外套剥线长度 A Stripping jacket (mm)	绝缘皮剥线长 B Stripping insulation (mm)
PL463系列 PL463 Series	31±1	9.0±0.5



**步骤3：压接端子****Step3：Crimping terminal**

**3-1** 将③端子套入线材进行压接，压接参数参考表2

**3-1** Take ③ Terminal, load it to the cable end on the left, then crimp(refer to table 2)



表2：端子与线缆压接规格&拉拔力要求

Table 2：Contact and Conductor Crimping spec & retention force requirement

连接器 Connector	线缆尺寸 Cable size	压缩比 Compress rate	参考抗拉拔力 Retention Force
PL463系列 PL463 Series	12AWG	80%~90%	≥310N

端子机：D-B-063

Crimp Machine: D-B-063

12AWG Die: YM-041

12AWG压模：YM-041

**(1)** 客户需要做拉拔力测试及截面分析，以确认压接合格。

Customers need to reconfirm cross section on crimping area and pull out force test to confirm the quality of crimp process

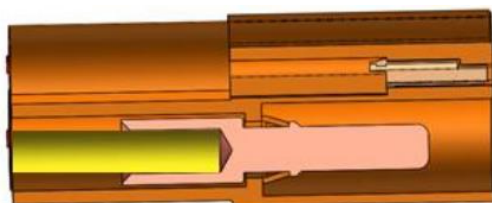
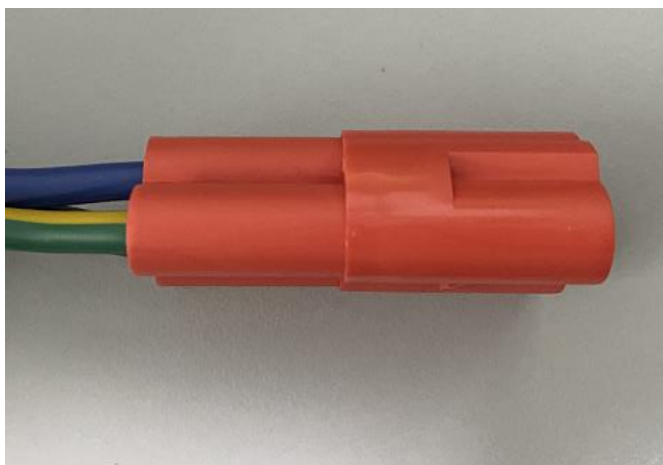
**(2)** 压缩比仅供参考,客户负责采购压接工具或刀模

Compress rate only reference tooling geometry, customer will take liability for sourcing tools or dies

**步骤4：组装接头**

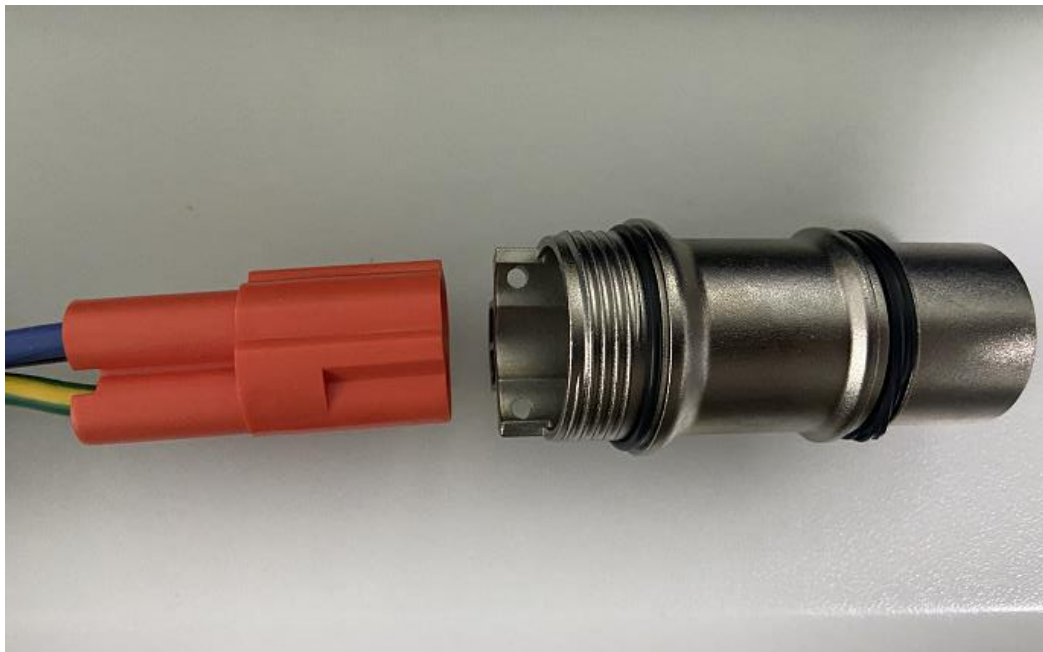
4-1 拿出②胶壳，将电缆和端子插入胶壳，听到“咔”声代表卡入到位。

4-1 Insert the cable with crimped terminals into the ② housing completely . It will be in place when it clicks.



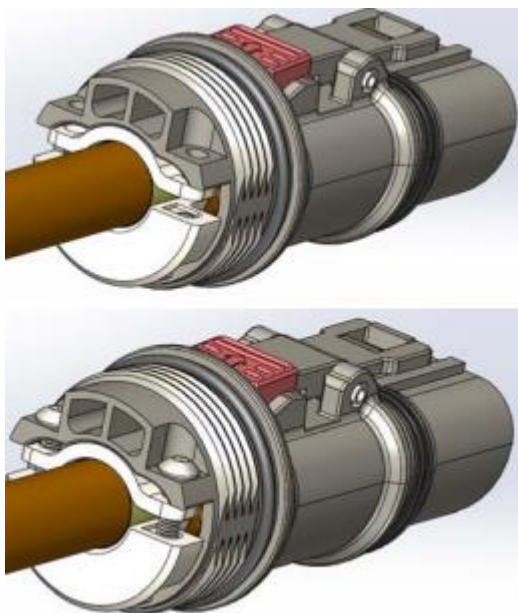
4-2 拿出① 铁壳组件 Shell assembly ，将胶壳装入铁壳组件中卡好。

4-2 Place the housing in the ① Shell assembly.



步骤5：取出⑥上锁块，⑦下锁块及⑧螺栓，用 $0.45\pm 0.10$  N·m的扭力将锁块固定在线皮上

Step5 : Load the ⑥ Spacer ⑦ Platen ⑧ Bolt, then tighten the screws with  $0.45\pm 0.1$  N·m torque. .



步骤6：推动⑤密封圈及④尾盖至①铁壳中，然后以 $10.0\pm 1.0$  N·m 的扭矩将后盖锁紧。安装完成。

Step 6: Load the ⑤Sealing and ④End cap into ① shell assembly as shown in photo, then tighten the rear cover with  $10.0\pm 1.0$  N·m torque. Installation completed.



步骤7：在线缆组装好后需要做绝缘电阻和耐压测试，建议客户参考下面的测试参数

Step7: Need to do the Insulation Resistance and DWV test after cable assembly. It is recommended that the customer refer to the following test parameters

#### 7-1 绝缘电阻测试

##### 7-1 Insulation Resistance test

Positions 位置	Test voltage ( DC ) 测试电压 ( 直流 )	测试时间 ( 推荐 ) Test Time ( recommended)	Insulation resistance 绝缘电阻
Cable(power) to shell 电缆芯线到壳体	1000 V	5S	> 500 MΩ

#### 7-2 耐压测试

##### 7-2 Dielectric Withstand Voltage test

Positions 位置	Test voltage ( DC ) 测试电压 ( 直流 )	测试时间 ( 推荐 ) Test Time ( recommended)	Leakage Current 漏电流
Cable(power) to shell 电缆芯线到壳体	5000 V	10S	< 5mA

**7-3 测试说明:**

警告:建议的电气测试及其参数应根据终端应用要求进行审查,以确保安全性并防止损坏其他部件。提供的参数是基于PowerLok连接器和其峰值1000VDC额定。提供的测试参数可能超出电缆组件或设备上使用的其他部件/材料的限制。

**7-3 Test note:**

caution: Recommended electrical tests and their parameters should be reviewed against end application requirements to ensure safety and to prevent damage to other components. Parameters provided are based on the PowerLok connectors and their peak 1000VDC rating. Test parameters provided may exceed the limit of other components/materials used on the cable assembly or device.



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