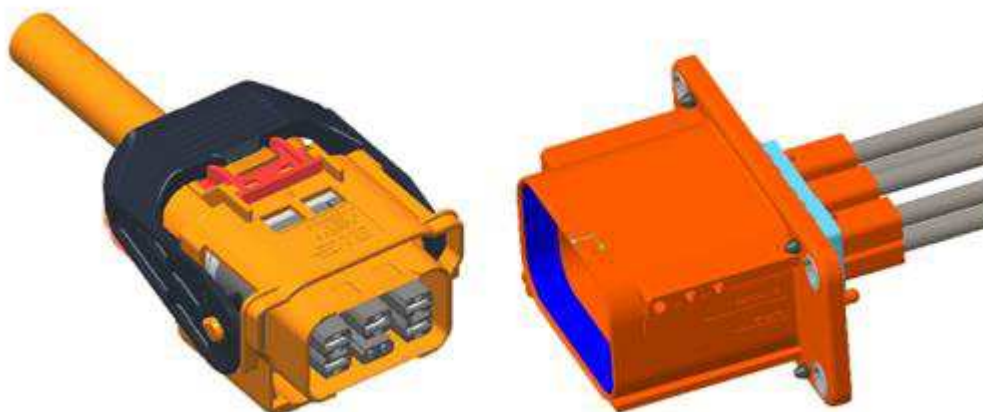




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## AMP+ High Voltage Connector HVA630-5P Inline

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|                       |             |            |
|-----------------------|-------------|------------|
|                       | Signature   | Date       |
| Product Engineer (TE) | Guanghua Xu | 12/22/2020 |
| Customer              |             |            |

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**Revision History**

版本修订

| Date       | Description                                       | Name         | Rev. |
|------------|---------------------------------------------------|--------------|------|
| 2020-12-15 | Initial version                                   | Guanghua Xu  | A    |
| 2023-03-13 | Item No. error update<br>(2141608-1 to 2141608-4) | Kaifeng Zhou | A1   |
|            |                                                   |              |      |
|            |                                                   |              |      |
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|            |                                                   |              |      |



## 1 GENERAL

### 1 综述

#### 1.1 Purpose

#### 1.1 目的

This application specification includes the guidelines to be followed during assembly, installation and disassembly of AMP+ High Voltage Connector HVA630-5P Inline.

本规范用于指导 HVA630 5P 插线连接器的组装、安装和拆卸。

#### 1.2 Processing Notes

#### 1.2 文档说明

The following technical documents, if referred to, are part of this specification. In case of a contradiction between this specification and the product drawing or this specification and the specified documentation then the product specification has priority.

The processor is responsible for ensuring the quality of the manufacturing process and the proper function of the system. The warranty and liability are excluded if quality deficiency or damages occurs by failing compliance to this specification or using not specified, not released tools and connector components.

The assembly should only be performed by trained personnel.

以下技术文件，如果涉及，是本规范的一部分。

如果本规格书与产品图纸或本规格书与指定文件之间存在矛盾，则产品规格书优先。

加工者有责任确保制造过程的质量和系统的正常功能。如果质量缺陷或损坏是由于未遵守本规范或使用未指定的、未发布的工具和连接器组件造成的，则不在保修和责任范围内。

装配应由受过训练的人员进行。

#### a): Customer drawings/客户图纸

|              |                                    |
|--------------|------------------------------------|
| 114-160081-1 | HV CONNECTOR ASSY, 5 POS FEMALE    |
| 2380323      | HV-CONNECTOR ASSY, 5POS MALE       |
| 2141608      | OUTER HOUSING ASSY, HV CONN        |
| 2381541      | RECEPTACLE HSG, ASSY, HV CONNECTOR |
| 2141261      | SHIELD CRIMP FERRULE, INNER        |
| 2141616      | SHIELDING, HV CONNECTOR, 5 POS     |
| 2141617      | OUTER CRIMP FERRULE, HV-CONNECTOR  |
| 2141612      | CABLE SEAL, HV CONNECTOR, 5 POS    |
| 2141613      | CARRIER, CABLE SEAL, HV CONNECTOR  |
| 2141614      | COVER, CABLE SEAL, HV CONNECTOR    |

## b): Specification /规范文件

|            |                                                            |
|------------|------------------------------------------------------------|
| 108-160136 | Product Specification HVA630-5phm                          |
| 114-18388  | Application Specification AMP MCP 6.3/4.8K Contact         |
| 114-18021  | Application Specification MQS Contact System               |
| 109-18212  | Shield and Insulation Crimp Validation for HV Applications |

## c): Cable specifications of prescribed cables /线材规范

|                     |                                                            |
|---------------------|------------------------------------------------------------|
| Cross-section       | 3x4,0mm <sup>2</sup>                                       |
| Supplier:           | Coroplast Fritz Müller GmbH & Co. KG,<br>D-42279 Wuppertal |
| Outer Diameter:     | 12,1 -0,6 mm                                               |
| Cable Description:  | FHLR2GCB2G 3 x 4,0 mm <sup>2</sup> / T180                  |
| Coroplast Part No.: | 9-2641 (3x4.0mm <sup>2</sup> ) / A6 / 2013-01-11           |
| TE Part No.:        | 2282257-1 Rev.A                                            |

|                     |                                                            |
|---------------------|------------------------------------------------------------|
| Cross-section       | 4x4,0mm <sup>2</sup>                                       |
| Supplier:           | Coroplast Fritz Müller GmbH & Co. KG,<br>D-42279 Wuppertal |
| Outer Diameter      | 13,3 -0,6 mm                                               |
| Cable Description   | FHLR2GCB2G 4 x 4,0 mm <sup>2</sup> / T180                  |
| Coroplast Part No.: | 9-2641 (4x4.0mm <sup>2</sup> ) / A6 / 2013-01-11           |
| TE Part No.:        | 2282258-1 Rev.A                                            |

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Cross-section     | 3x6,0mm <sup>2</sup>                                       |
| Supplier:         | LEONI, Divisione SILITHERM,<br>I-29010 Monticelli d'Ongina |
| Outer Diameter    | 14,1 -0,6 mm                                               |
| Cable Description | FHLR2G2GCB2G 3x6mmq                                        |
| LEONI Part No.:   | FHLR2G2GCB2G 00006 / Rev. 2 / 04.08.2016                   |
| TE Part No.:      | -                                                          |

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Cross-section     | 4x6,0mm <sup>2</sup>                                       |
| Supplier:         | LEONI, Divisione SILITHERM,<br>I-29010 Monticelli d'Ongina |
| Outer Diameter    | 15.1 <sub>-0.6</sub> mm                                    |
| Cable Description | FHLR2G2GCB2G 4x6mmq                                        |
| LEONI Part No.:   | FHLR2G2GCB2G 00011 / Rev. 1.1 / 22.06.2015                 |
| TE Part No.:      |                                                            |

Cross-section 5x6,0mm<sup>2</sup>  
Supplier: Coroplast Fritz Müller GmbH & Co. KG,  
D-42279 Wuppertal  
Outer Diameter **16,3 -0,6 mm**  
Cable Description FHLR2GCB2G 5 x 6,0 mm<sup>2</sup> / T180  
Coroplast Part No.: 9-2641 (4x4.0mm<sup>2</sup>) / A6 / 2013-01-11  
TE Part No.: 2282258-1 Rev.

Cross-section 3x6,0mm<sup>2</sup>  
Supplier: Coroplast Fritz Müller GmbH & Co. KG,  
D-42279 Wuppertal  
Outer Diameter 14,1 -0,6 mm  
Cable Description FHLR2GCB2G 3 x 6,0 mm<sup>2</sup> / T180  
Coroplast Part No.: 9-2641 (3x6.0mm<sup>2</sup>) / A5 / 2012-12-04  
TE Part No.: -

Cross-section 4x6,0mm<sup>2</sup>  
Supplier: Coroplast Fritz Müller GmbH & Co. KG,  
D-42279 Wuppertal  
Outer Diameter 15,1 -0,6 mm  
Cable Description FHLR2GCB2G 4 x 6,0 mm<sup>2</sup> / T180  
Coroplast Part No.: 9-2641 (4x6.0mm<sup>2</sup>) / A4 / 2012-12-15  
TE Part No.: -

Cross-section 5x6,0mm<sup>2</sup>  
Supplier: Huber + Suhner AG,  
CH-8330  
Outer Diameter **16.3 -0.6 mm**  
Cable Description FHLR91XC13X 5x6mm<sup>2</sup> / T150  
Coroplast Part No.: 84130729 (5x6.0mm<sup>2</sup>) / D / 03.10.2018  
TE Part No.: -

Cross-section 1x4,0mm<sup>2</sup>  
Supplier: FORCE AG,  
CH  
Outer Diameter 3.55-3.7 mm  
Cable Description 4,0 mm<sup>2</sup>/ T150  
Coroplast Part No.: FHLR2X/T150  
TE Part No.: —

|                           |                      |
|---------------------------|----------------------|
| Cross-section             | 1x6,0mm <sup>2</sup> |
| Supplier: FORCE AG,<br>CH |                      |
| Outer Diameter            | 4.00~4.30 mm         |
| Cable Description         | FHLR2X/T150          |
| Coroplast Part No.:       | -                    |
| TE Part No.:              | -                    |

## 2 Application tools

### 2 应用工具

Required application tools.

应用工具清单.

| Application device                             | P/N                                     | Description     |
|------------------------------------------------|-----------------------------------------|-----------------|
| AMP MCP 6.3/4.8K Contact (4-6mm <sup>2</sup> ) | See Application Specification 114-18388 |                 |
| Shield crimp, 5pos                             | 8-528041-4                              | Die set Drawing |
|                                                | 528008-4                                | Crimp Machine   |

Table1/表 1

## 3 Assembly instruction

### 3 装配说明

#### 3.1 Assembly overview

#### 3.1 装配总体说明

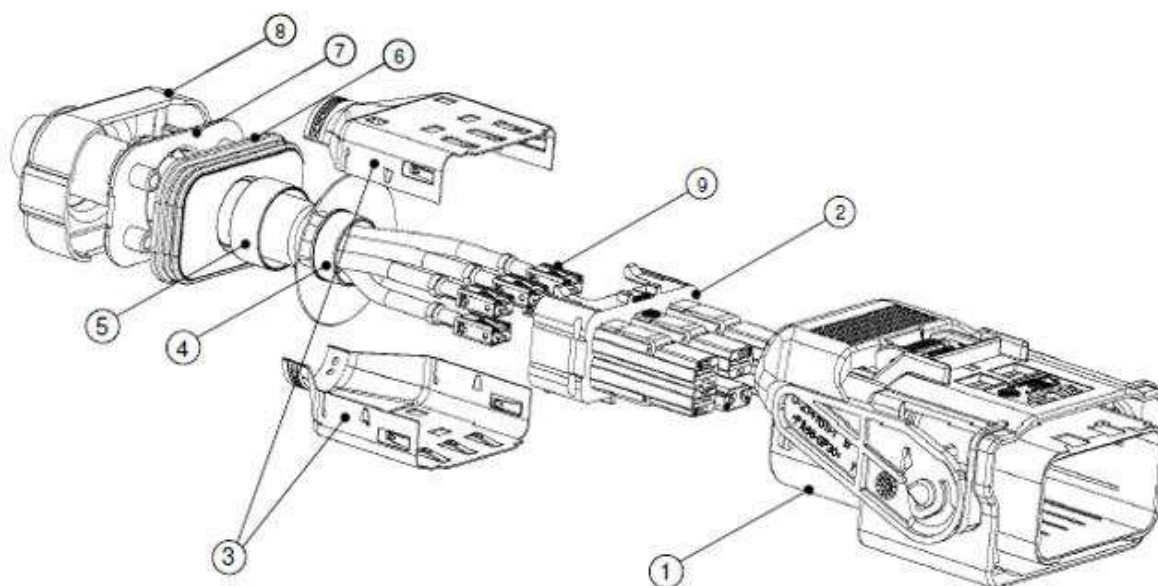


Figure 1/图 1

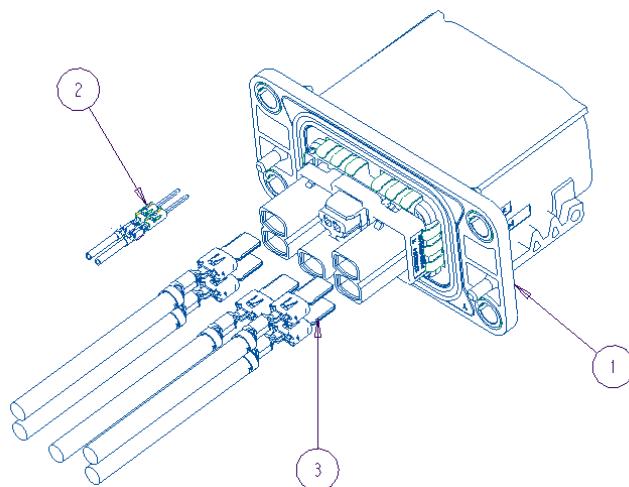


Figure 2/图 2

| Wire |       |                 | 3×4mm <sup>2</sup>          | 4×4mm <sup>2</sup> | 3×6mm <sup>2</sup> | 4×6mm <sup>2</sup> | 5×6mm <sup>2</sup> |
|------|-------|-----------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|
| Part | POS   | QTY             | Name                        | P/N                |                    |                    |                    |
| 1    | 1     | 1               | OUTER HOUSING ASSY          | 2141608-4          | 2141608-4          | 2141608-4          | 2141608-4          |
| 2    | 1     | 1               | RECEPTACLE HOUSING ASSY     | 2381541-1          | 2381541-1          | 2381541-1          | 2381541-1          |
| 3    | 2     | 2               | SHIELDING                   | 2141616-1          | 2141616-1          | 2141616-1          | 2141616-1          |
| 4    | 1     | 1               | SHIELD CRIMP FERRULE, INNER | 1-2141261-1        | 1-2141261-1        | 1-2141261-1        | 1-2141261-1        |
| 5    | 1     | 1               | OUTER CRIMP FERRULE         | 1-2141617-1        | 1-2141617-1        | 1-2141617-1        | 1-2141617-1        |
| 6    | 1     | 1               | CABLE SEAL                  | 2141612-3          | 2141612-4          | 2141612-5          | 2141612-2          |
| 7    | 1     | 1               | CARRIER CABLE SEAL          | 2141613-3          | 2141613-4          | 2141613-5          | 2141613-2          |
| 8    | 1     | 1               | COVER                       | 2141614-3          | 2141614-4          | 2141614-5          | 2141614-2          |
| 9    | 3/4/5 | AMP/MCP 6.3/4.8 | STRIP                       | 2-1241408-3        | 2-1241408-3        | 2-1241408-3        | 2-1241408-3        |

Table2/表 2



| Wire |     |                           | 5×4mm <sup>2</sup> | 5×6mm <sup>2</sup> |
|------|-----|---------------------------|--------------------|--------------------|
| Part |     |                           |                    |                    |
| POS  | QTY | Name                      | P/N                |                    |
| 1    | 1   | HEADER HOUSING ASSY, CODE | 2380323-X          | 2380323-X          |
| 2    | 2   | MQS PIN                   | 5-963716-3         | 5-963716-3         |
| 3    | 5   | TAB 5.8X0.8               | 2-968050-2         | 2-968050-2         |

Table3/表 3

### 3.2 Security Advice

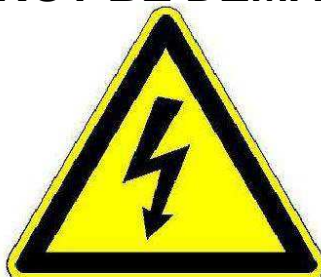
### 3.2 安全标示

**ATTENTION!**

**- HIGH VOLTAGE APPLICATION -**

**SHIELDING BRAID AND CABLE INSULATION**

**MAY NOT BE DAMAGED!**



The assembly should only be performed by trained personnel.  
Avoid prolonged or repeated skin contact with shielding. (wear protective gloves).  
装配应由受过训练的人员进行。  
避免长时间或重复的皮肤接触屏蔽。(穿防护手套)

### 3.3 Plug Assembly steps

#### 3.3 母头安装步骤

##### Step 1/步骤1

The following parts must be assembled in the following order on the cable (Figure 3).  
下面的零件需安装在导线上。

COVER, CABLE SEAL/ 导线密封圈后盖

CARRIER, CABLE SEAL/导线密封圈支架

CABLE SEAL /导线密封圈

OUTER CRIMP FERRULE /压接密封圈

In case of assembling after insulation stripping, do not damage seal or braid.

导线绝缘剥离后不能损坏密封圈和屏蔽编织。

**CAUTION: Ensure correct orientation!**

**注意：保证方向正确！**

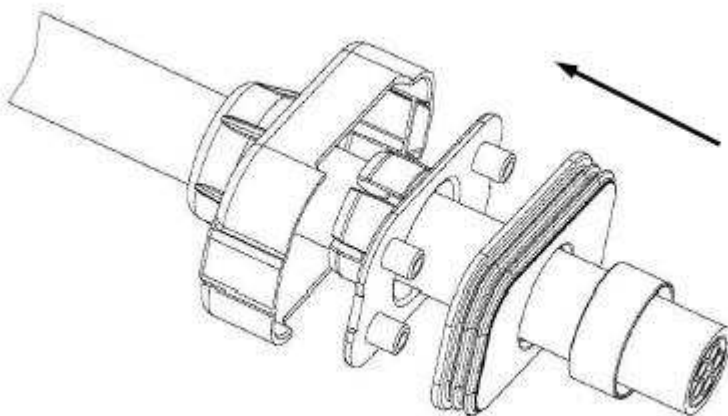


Figure 3/图 3

##### Step 2/步骤2

Dependent on pinning and order of wires in cable the cut position must be evaluated specific to each application (Position of outer sheath according Figure 10). Different pinning and different order in cable will lead to different straight length of single wires.

不同批次的电线订单，切割位置必须评估具体到不同的应用(外护套位置如图9所示)。不同的批次的导线会导致其单线的直线长度不同。

Remove wire sheath material as shown:

如下去除电线外护套材料：

Remove outer sheath and foiled shielding. (Figure 4)

如图4去除电线外护套和多余屏蔽。

Shorten shielding braid and filler (same length). The shielding braid can be combed out after that (brushed out). Choose cutting length of shielding/filler to get a braid extension according to figure 10. Only a visible shield extension ensures a crimped shielding braid.

修剪屏蔽编织带和内绝缘层确保长度相同。屏蔽编织梳理整齐，根据图10选择屏蔽/内绝缘层的切割长度，只有用于屏蔽压接的部分是可见的。

Fold the shielding braid back. (Figure 5)

把屏蔽向后折叠（如图5）

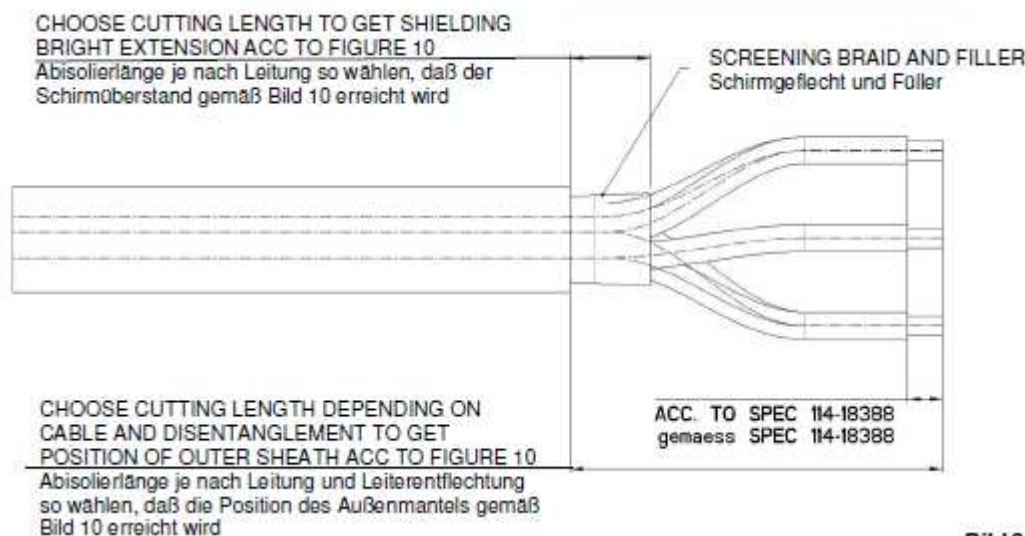


Figure 4/图 4

### Step 3/步骤3

Assemble SHIELD CRIMP FERRULE, INNER on the cable (Figure 5).

CAUTION: Ensure correct orientation!

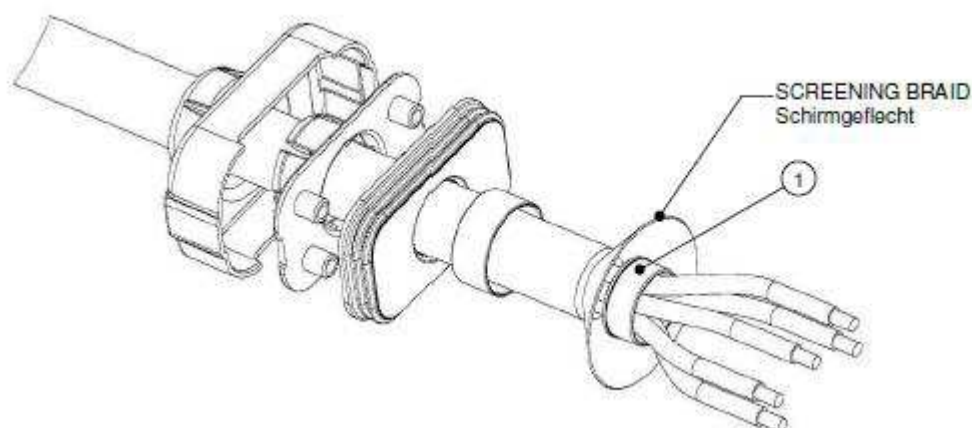


Figure 5/图 5

#### Step 4/步骤4

Remove core insulation according to spec. 114-18388 (Figure 4).

按照114-18388规范去掉绝缘皮（图4）。

Crimp on all conductors AMP MCP 6.3/4.8K contact with the specified tool according to TE SPEC. 114-18388. Avoid twisting of the conductors. For easy insertion into RECEPTACLE HOUSING all should have the same orientation (Figure 6).

压接所有的AMP MCP 6.3/4.8K的端子按照TE-114-18388规范，避免端子扭转，为了更易于装配，需确保所有的端子的方向一致（图6）

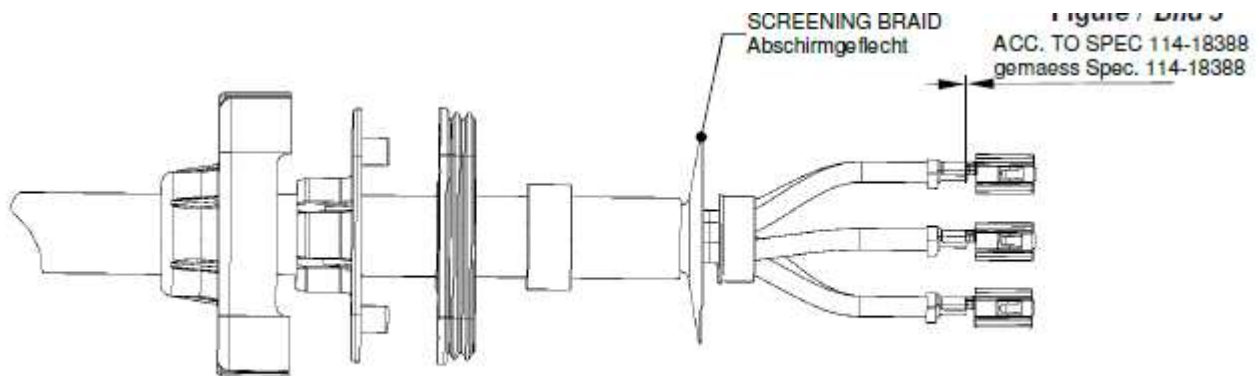


Figure 6/图 6

#### Step 5/步骤5

Insert the Contacts into the RECEPTACLE HOUSING (according to the cavity numbers shown in Figure 7) into their locking position. The contacts are locked when a click is heard on insertion. To ensure that the contacts are correctly inserted, push/pull with a force on the cables (max. 10N). After the contacts have been controlled for correct positioning and locking, the secondary lock of the RECEPTACLE HOUSING have to be locked (Figure 7). The adequate locking is audible (snap in), but must be controlled by visual inspection.

将端子插入插座外壳(根据图7所示的腔数)，进入其锁定位置。当插入时听到咔嗒声时，触点被锁定。为了确保触点正确插入，在电缆上用最大10N力推/拉。在正确定位和锁定触点后，必须锁定插座外壳的二次锁(图7)。足够的锁定是可听到的扣入的声音，但必须通过目视检查进行控制。

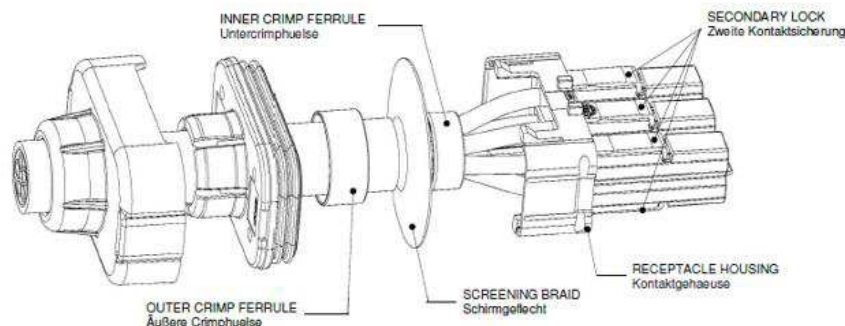


Figure 7/图 7



Figure 8/图 8

Note: If a dismounting of AMP MCP6.3/4.8K-contact is necessary use auxiliary tool according contact specification 114-18388. For opening the secondary locks use a flat screwdriver (e.g.2.3x0.5) (Figure 9). If a secondary lock has been opened the RECEPTACLE HOUSING has to be exchanged.

注意:如果需要拆卸AMP MCP6.3 /4.8 k端子, 请根据端子规范114-18388使用辅助工具。要打开二次锁, 请使用平螺丝刀(例如2.3x0.5)(图9)。如果二次锁已被打开, 插座外壳必须更换。

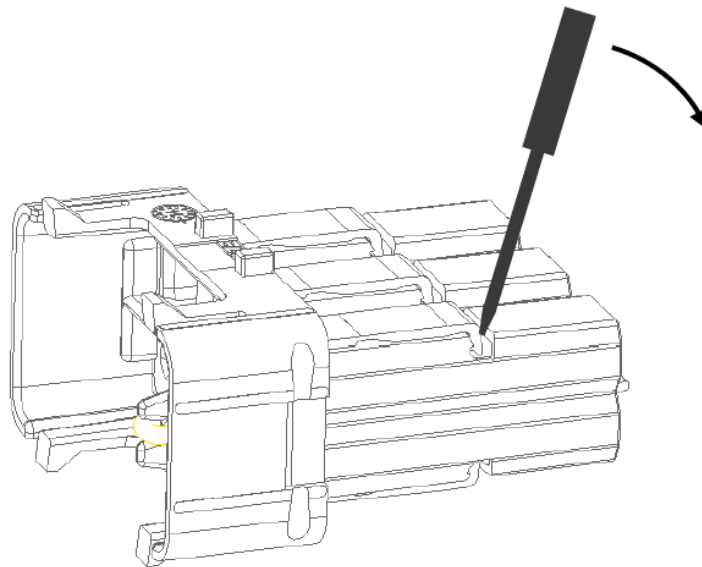


Figure 9/图 9

**Step 6**

Position the INNER CRIMP FERRULE next to the SHIELDING BRAID (Figure 10).

把内屏蔽衬套固定在屏蔽编织旁边 (图10)。

Assemble one SHIELD over the RECEPTACLE HOUSING until the clips on the sides snap into the correspondent cut-out (Figure 10).

安装第一个屏蔽壳, 确保屏蔽壳的卡扣扣在内塑料壳的槽中 (图10)。

Assemble second SHIELD over the RECEPTACLE HOUSING until the clips on the sides snap into the correspondent cut-out (Figure 10).

安装第二个屏蔽壳，确保屏蔽壳的卡扣扣在内塑料壳的槽中（图10）。

Position the INNER CRIMP FERRULE into the SHIELDING until it touches with the collar against the end of the shielding (Figure 11).

固定内屏蔽壳衬套到屏蔽壳底部，确保其底部对齐（图11）。

Put the SHIELDING BRAID over the SHIELDS (Figure 10).

把线材的屏蔽编织固定在屏蔽上（图10）

Push the OUTER CRIMP FERRULE over the SCREENING BRAID and the SHIELDS (Figure 10 11).

把外屏蔽壳衬套固定线材的屏蔽编织和屏蔽壳外侧（图10,11）。

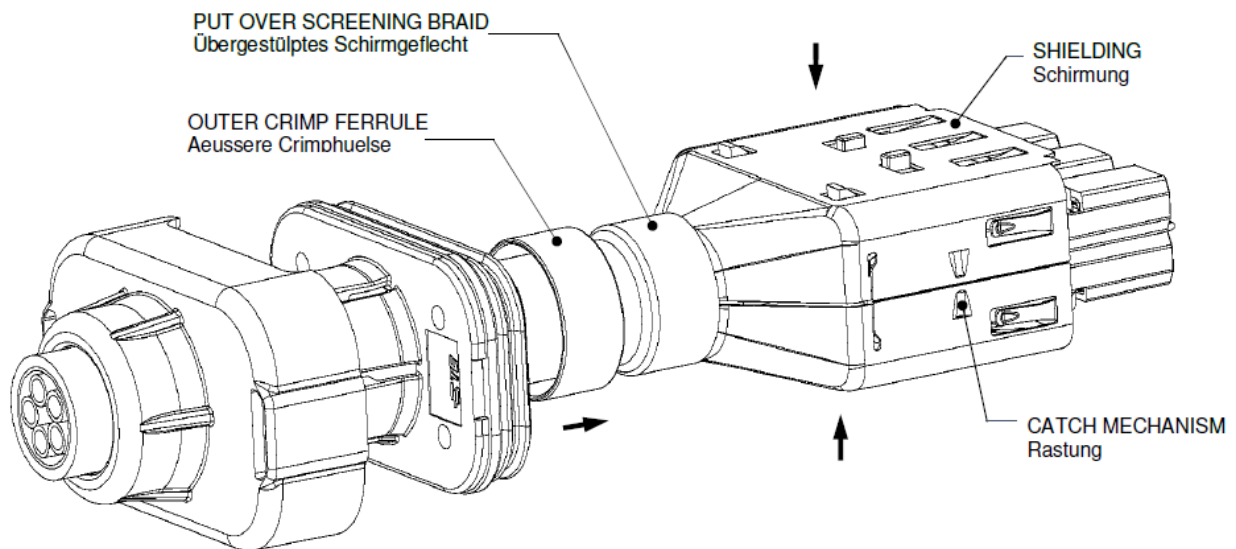


Figure 10/图 10

#### Step 7/步骤7

Ensure that all parts are in the correct position (Figure 11). Ensure that the shield braids are homogeneous spread over the circumference of the crimp ferrule. Insert the Assembly into the Die Set with locator shown in Figure 11 and crimp the shielding.

确保所有零部件都处于正确的位置(图11)。确保屏蔽的编织是均匀分布在圆形的衬套的圆周上。装配件插入模具如图11所示，确保定位准确再压接屏蔽。

After crimping the shield braid has to be visible for visual inspection of homogeneous distribution of the braids and may extend according Figure 11. CAUTION: Post crimp cutting of the braids is not permitted!

压接后，屏蔽编织带必须是可见的，以便肉眼检查均匀分布的编织，并可按图11延伸。注意：压接后修剪的编织是不允许！

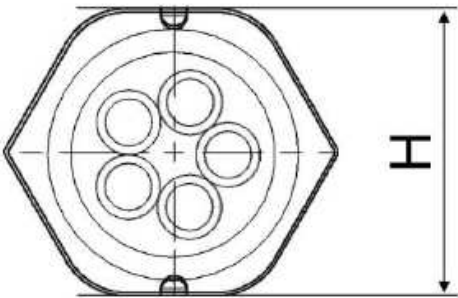
To ensure water tightness of the connector the end of the outer sheath has to be next to the outer crimp ferrule (Figure 10).

为保证连接器的水密性，外护套端部必须紧靠外屏蔽壳衬套(图10)。

The crimp quality must be confirmed to TE Spec. 109-18212. The crimp height has to be measured according Chapter 5.4 of TE Spec. 109-18212 and it has to meet the following requirement.



压接质量需按照 TE 109-18212 规范, 压接的高度量测按照 TE 109-18212 第 5 章, 而且需满足以下的要求。

| Hex Crimp Height H /<br>6kt Crimp Höhe H | Measurement Position /<br>Messposition                                                                                                                   |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16,4 +/- 0,3 mm                          |  <p>Section through crimp ring /<br/>Schnitt durch die Crimp Hülse</p> |

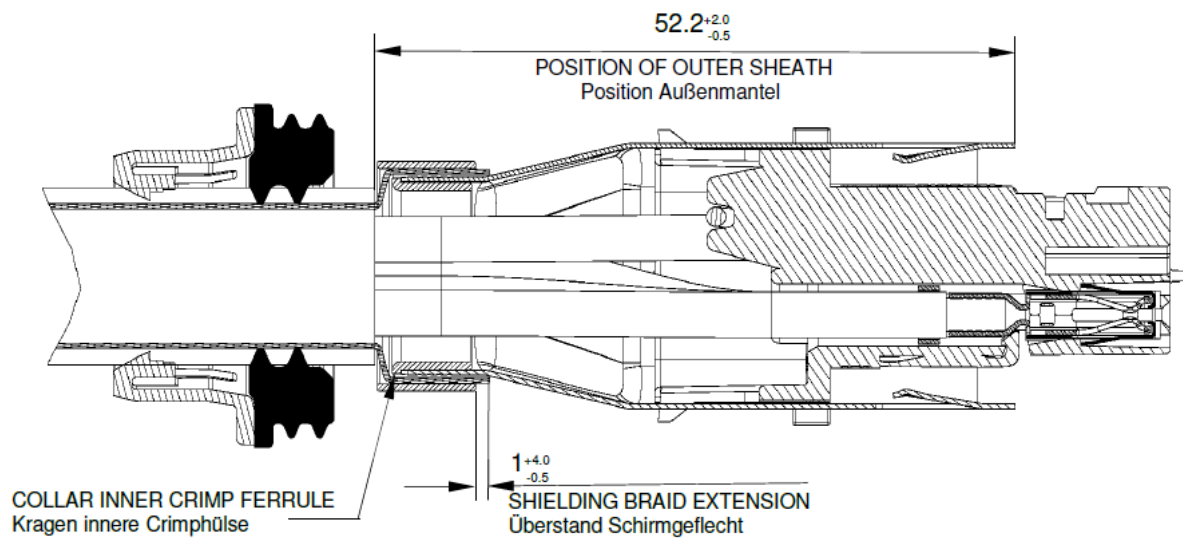


Figure 11/图 11

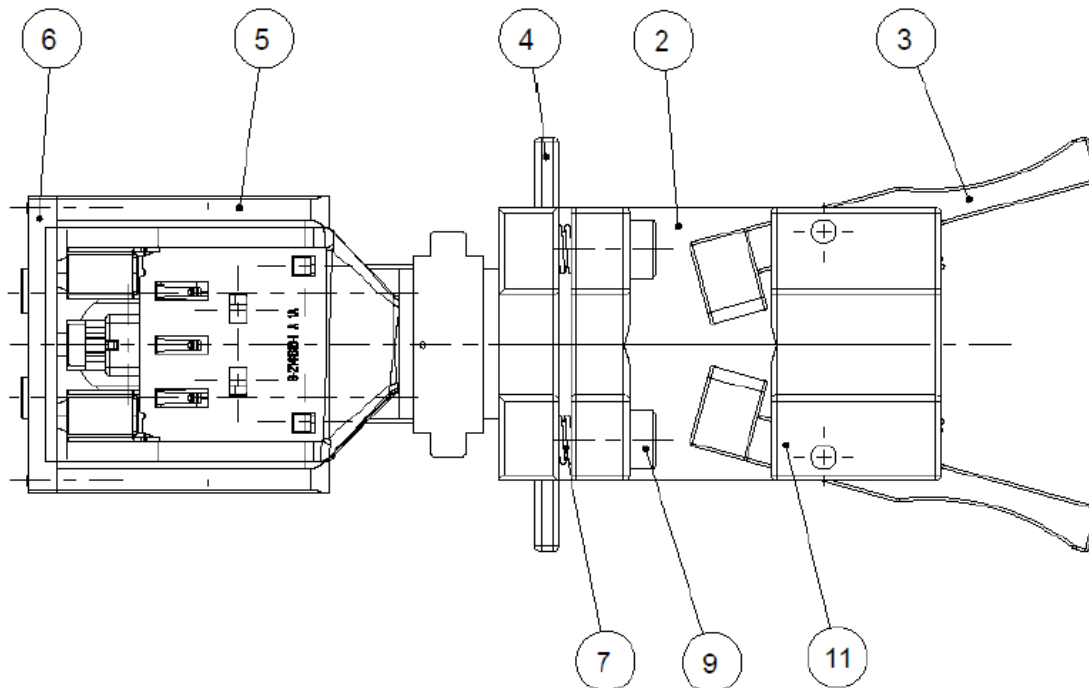


Figure 12/图 12

## Step 8 /步骤8

Insert the Multicore Shielded Cable Assembly into the OUTER HOUSING ASSEMBLY. The Receptacle Housing ensures with its coding the correct polarisation in the Outer Housing Assembly (Figure 14). To ensure that the Cable Assy is correctly snapped in, pull with a force on the cable (max. 10N).

把多芯屏蔽线的安装体插入外壳装配体中，要确保内塑壳的正确键位，为保证线材装配正确，其推入力不大于10N.

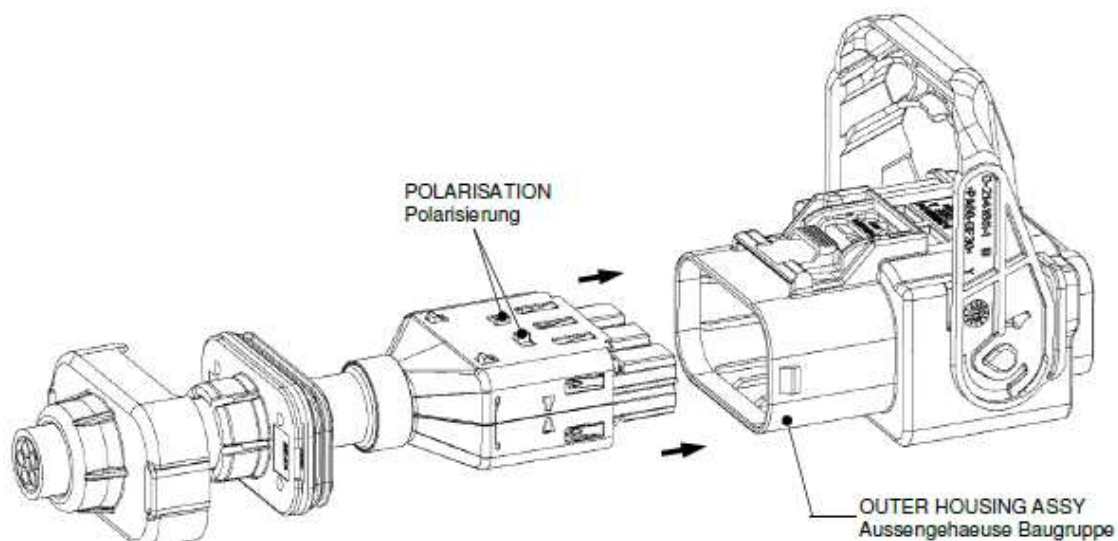


Figure 13/图 13



## Step 9

Push the SECONDARY LOCK in its final position (Figure 14).

把二次锁安装到正确位置（图14）

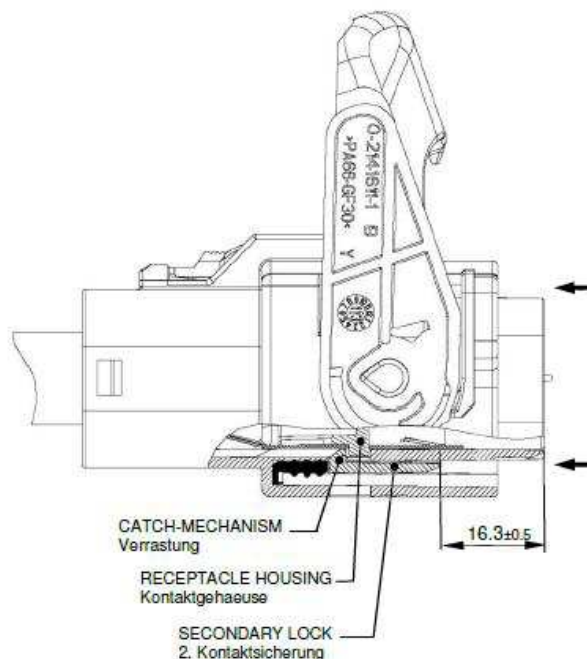


Figure 14/图 14

## Step 10/步骤10

Push the CABLE SEAL with the CABLE SEAL CARRIER into the OUTER HOUSING (Figure 15) in its final position.

将导线密封圈和密封圈载座一起装入外壳的终端位置（图15）。

**CAUTION:** Ensure that the cable isolation length after removal of the outer sheath (STEP 2) is correct to ensure proper sealing!

注意：要确保线材外侧绝缘部分剥离的长度正确（步骤2）以确保其正确密封。

Press the COVER over the OUTER HOUSING and over the CABLE SEAL CARRIER. Ensure that both Catch-Mechanisms are snapped in.

然后按压后壳挤压外壳和屏蔽载座，确保外壳卡勾安装牢固。

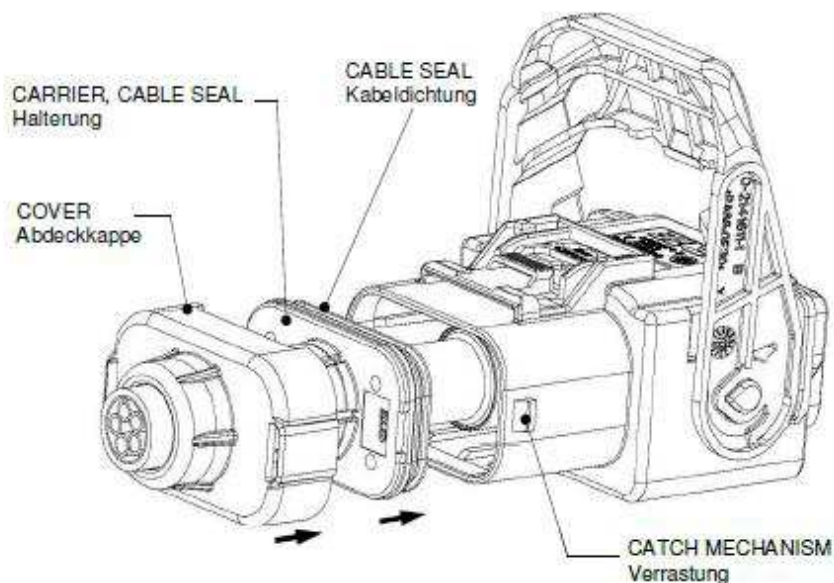


Figure 15/图 15

#### Step 11

For a save handling of the cable assembly the lever should be closed. Ensure that the lever is locked in the snap hook of the housing. In case of a CPA the CPA has to be closed directly after closing the lever to avoid plastic deformation (Figure 16).

为了节省操作电缆组件的时间，杠杆应该关闭。确保杠杆是锁在外壳的弹簧钩上。在有CPA的情况下，CPA必须被直接关闭后关闭杠杆以避免塑料变形(图16)。

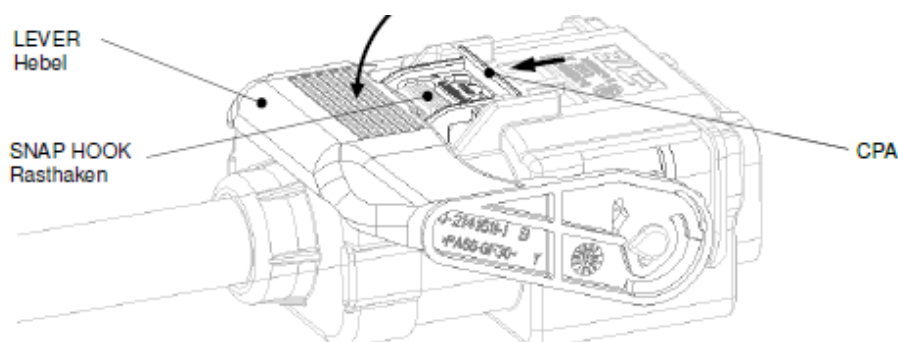


Figure 16/图 16

### 3.4 Header Assembly steps

#### 3.4 公头安装步骤

##### Step 1/步骤1

Strip the outer jacket off the cable, the dimension defined in Application Specification as shown in Figure 17.

按照应用规范定义的长度剥去导线外绝缘层，参考图 17。

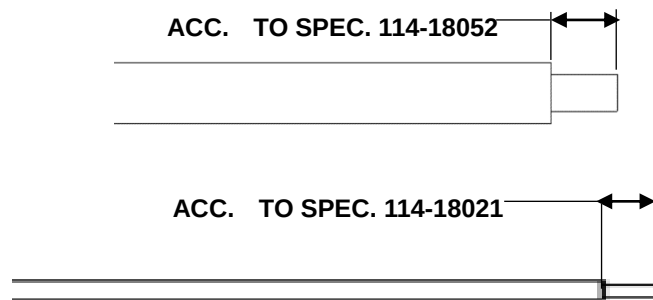


Figure 17/图 17

**Step 2/步骤2**

Apply terminals to cable using the tooling, method and dimensions and inspections detailed in Application Specification as shown in Figure 18.

端子压接的方法和尺寸及检测详见相应的应用规范，参考图18.

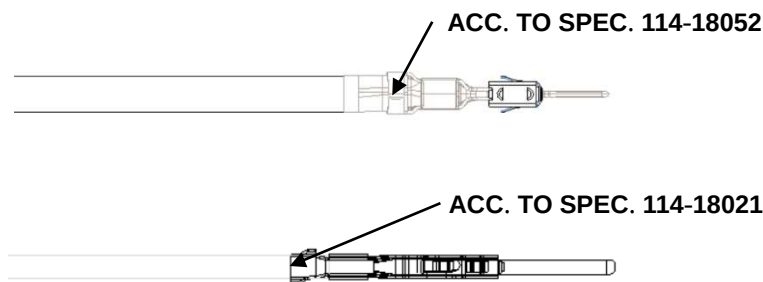


Figure 18/图 18

**Step 3/步骤3**

Check before inserting contacts if the TPA is in Pre-lock position. If not, move it to the pre-lock position as described in Figure 21.

插入端子前确认 TPA 是否在预锁位，如果不是，将其移动到预锁位置，参考图 21.

**Step 4/步骤4**

Insert the cable assembly (1.2 Terminals) until the locking lance of contact (primary lock) fully locked. Complete locking can be examined by gently pulling back the terminals.

插入线和 1.2 端子直到端子锁扣完全锁定（一次锁），然后轻拉端子检查其是否完全锁定。

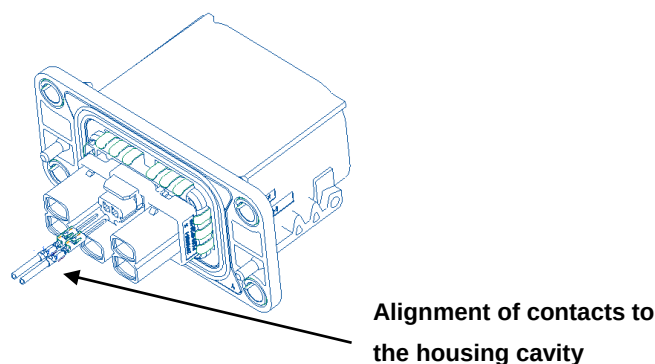


Figure 19/图 19

### Step 5 /步骤5

Insert the cable assembly (6.3/4.8K Terminal) as same direction until the locking lance of contact (primary lock) fully locked. Complete locking can be examined by gently pulling back the terminals.  
插入线和 6.3/4.8K 端子直到端子锁扣完全锁定（一次锁），然后轻拉端子检查其是否完全锁定。

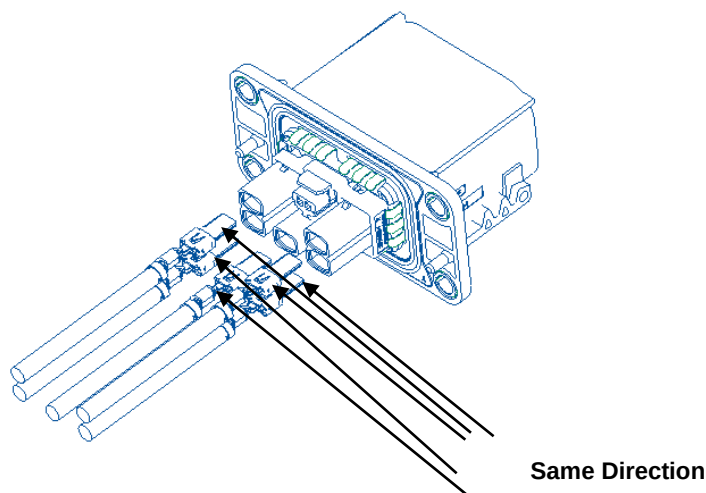


Figure 20/图 20

### Step6/步骤6

Locking TPA to final position by pushing TPA surface. If the TPA does not fully close, move it to the open position, ensure that all contacts are fully seated, then try again, DO NOT force the TPA to close.

推动 TPA 表面直到 TPA 终锁位置，如 TPA 未到终锁位置，把其移动到预锁位置，确认端子是否都在锁定位置，在锁定 TPA，不用强力推 TPA.

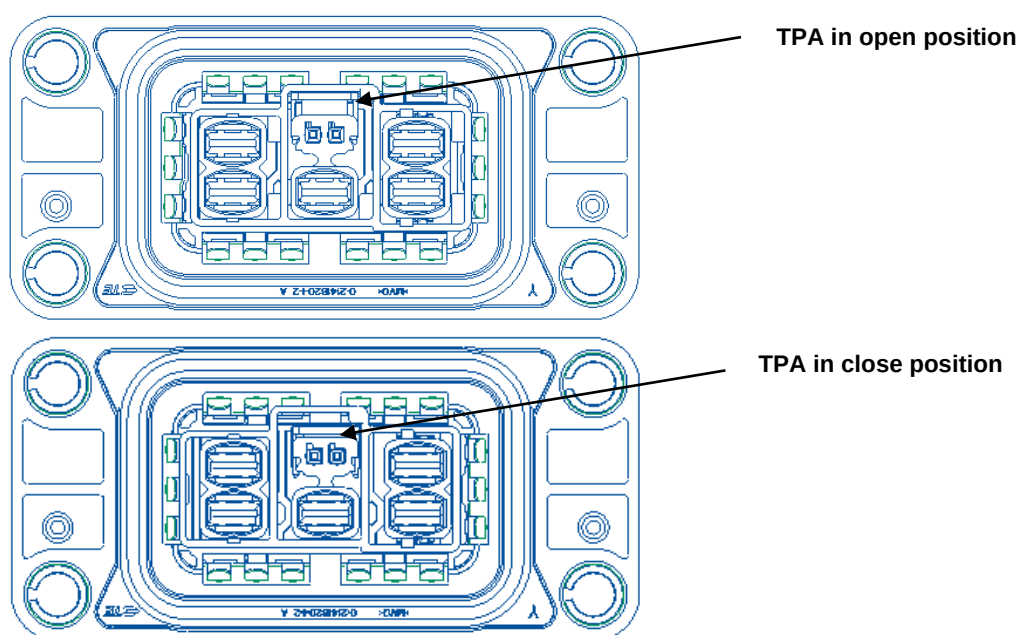


Figure 21/图 21

### Step7/步骤7

Check that the seal is present on the header, Align the polarization feature of the header with the polarization hole in the device, then push the header onto the device until it is seated against the face of device refer to Figure 22.

检查公头上的密封圈，使其键位柱和安装面孔对应，然后安装公头到安装面上，并确保屏蔽和安装面接触良好，参考图22.

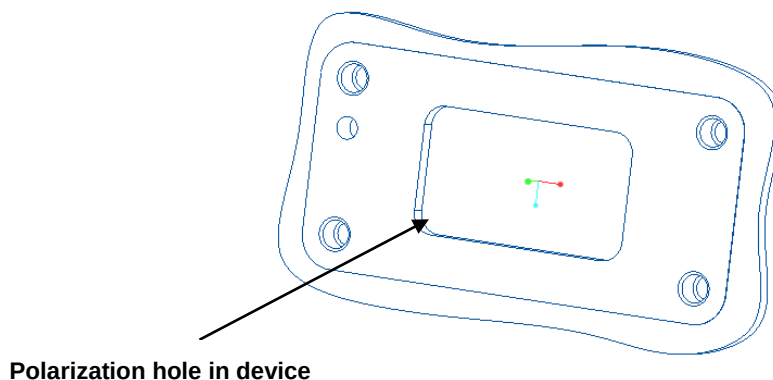


Figure 22/图 22

### Step8/步骤 8

Obtain four M5 mounting fasteners that are compatible and capable of meeting the required torque of  $5.6\text{N}\cdot\text{m} \pm 0.5\text{N}\cdot\text{m}$ . Insert each fastener through the mounting hole in the header and into the hole in the device, tighten each fastener to the required torque refer to Figure 23.

用 4 套 M5 的螺栓组件固定公头，固定螺栓组件的扭矩为  $5.6\text{N}\cdot\text{m} \pm 0.5\text{N}\cdot\text{m}$ ，按照扭力标准依次拧紧每一个螺栓组件。

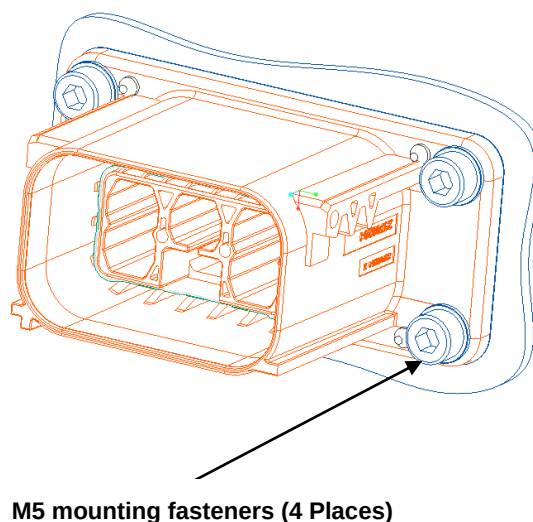


Figure 22/图 22

### 3.5 End of line

### 3.5 测试

Assembled HV Connectors have to be tested electrically and mechanically to applicable requirements.

组装完连接器后需按规范定义做相应的机械和电气测试。

## 4 Connector handling

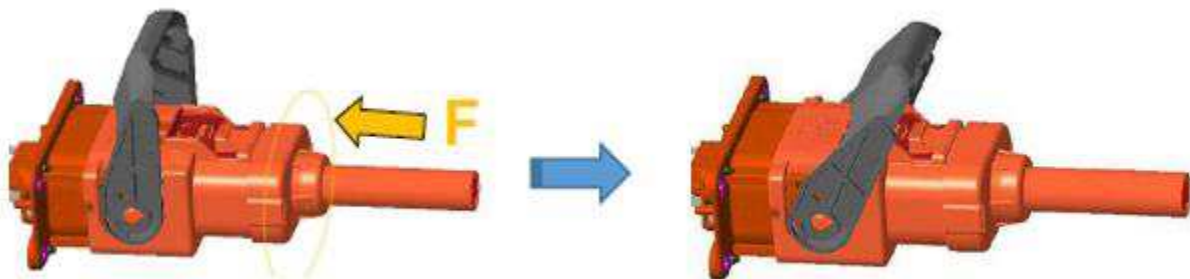
### 4 连接器操作

#### 4.1 Plugging the connector

#### 4.1 插入说明

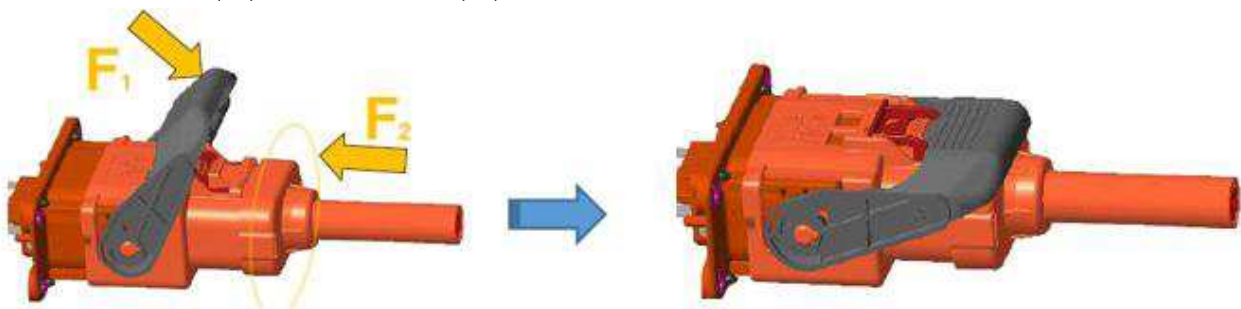
Push plug on housing with opened lever into header until lever snaps into engaged-position. Snapping point is haptical, visual and acoustical detectable. In case of oversight pull out, the lever moves automatically back into open position: bring it again into engaged-position).

将带有打开杠杆的母头装配入公头，直到杠杆卡入接合位置。啮合过程是有触觉、视觉和声测的。如母头被拉出，则退出杠杆自动回到开启位置:再将其拉回接合位置。



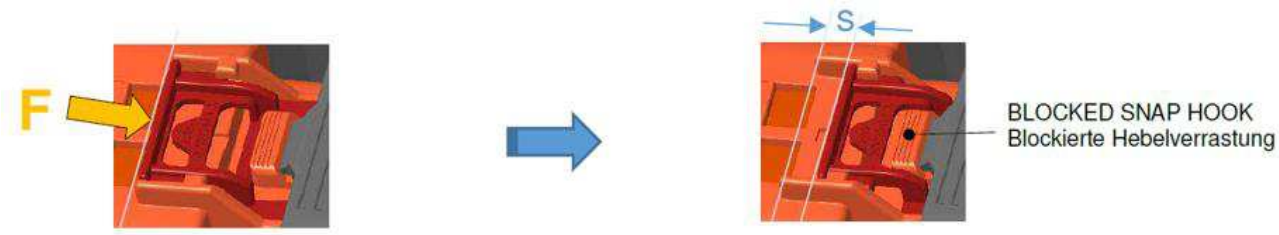
Close lever (F1) during pushing plug against to header (F2) until lever snaps hearable into plug Housing.

在将母头推到公头(F2)时同步关闭拉杆(F1)，直到拉杆最后卡入母头外壳卡勾中。



Slide CPA until stop into end position (distance "s" ). The snap hook is in this position blocked and it will not be possible to push down the snap hook to open the connection.

滑动 CPA 直到结束位置(距离 "s" )。扣钩在这个位置被阻止了，而且按下卡扣钩是不可能打开连接器的。



## 4.2 Unplugging the connector

### 4.2 拔出说明

- To unplug connection, use inversed sequence

拔出连接器，使用相反的顺序

o Open CPA/打开CPA

o Press snap hook to unlock lever/按压卡扣解锁杠杆

o Open lever/打开杠杆

o Pull out plug from header/从公头里推出母头