Amphenol Industrial

CONNECTOR ASSEMBLY INSTRUCTIONS

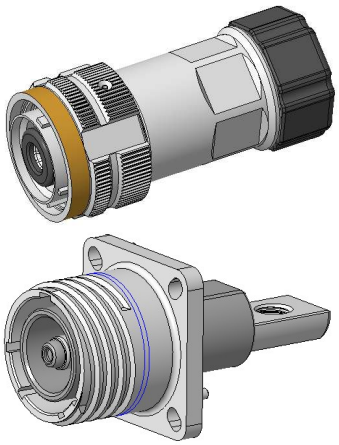
Amphe-Lite HV



Amphenol Industrial

Document NO. : ATZ-WI-202403-001
Date: 20251128
Rev. A

Amphe-lite 6mm单芯插头连接器
装配作业指导书
The Assembly Work Instruction
For Amphe-lite 6mm 1 way Connector

Part Number	Picture
ZH-805244-01P ZH-805244-01PA ZH-805245-01S ZH-805245-01SA ZH-805487-01S ZH-805487-01SA	

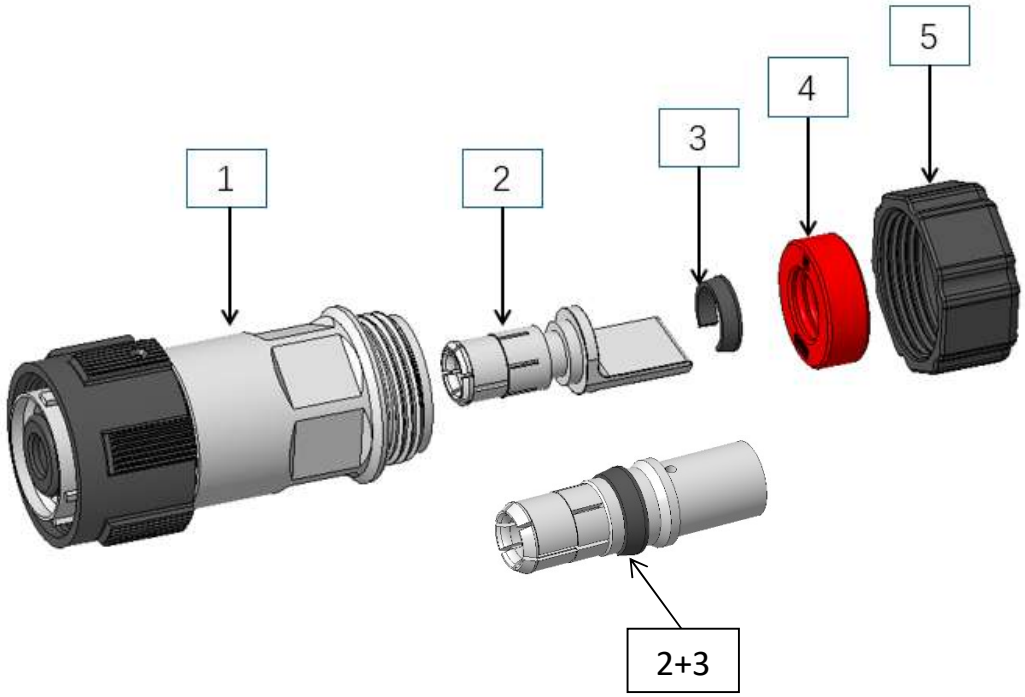
Revision	Description	Issue Date
A	Initial release	2025/11/28

第一部分：插头组装

Part 1: Plug assembly

1. 包装清单 Package contents：

序号 No.	描述 Description	数量 quantity	插头料号 Plug P/N	插头料号 Plug P/N
			ZH-805245-01S ZH-805245-01SA	ZH-805487-01S ZH-805487-01SA
1	插头壳体组件 Plug Shell assembly	1PC	√	√
2	插头端子 Plug contact	1PC	√	√
3	C 型卡扣 COLLAR	1PC	√	√
4-1	线缆密封圈 25mm² Cable Grommet 25mm²	1PC	×	√
4-2	线缆密封圈 35mm² Cable Grommet 35mm²	1PC	√	×
5	线缆尾盖 Cable Cover	1PC	√	√



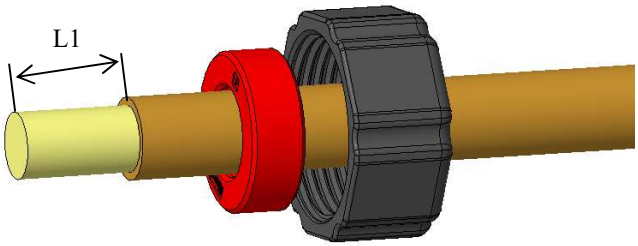
2. 推荐线缆规格Recommended wire specification

非屏蔽线规格 Unshielded cable specifications				
线缆规格 Wire size	线缆绝缘外径 Insulation Diameter(mm)	推荐焊接宽度 Recommended Min. Welding Width	推荐焊接后端子最小剥离力 Recommended Min. Pullout force(N)	参照标准 Reference Standard
Cu 25mm^2	9.4~10.0mm	9mm	1350	USCAR-38
AL 35mm^2	10.3~11.0mm	12mm	1200	USCAR-38

3. 组装步骤 Assemble steps：

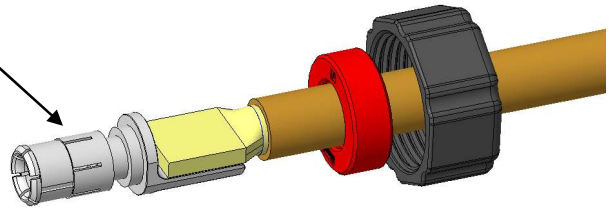
步骤1:非屏蔽线剥皮并组装焊接防水圈和线缆后盖。

Step 1: Unshielded wire stripping the insulation and assemble cable gromet, caver.

线缆类型 Wire type	裁剪绝缘后的图示 Picture after cutting insulation	裁剪长度 L1 Cutting length L1
25mm^2 非屏蔽线 Unshielded wire		14~15mm
35mm^2 非屏蔽线 Unshielded wire		16~18mm

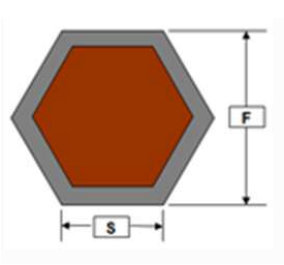
步骤2:超声波焊接插头端子（零件2）。

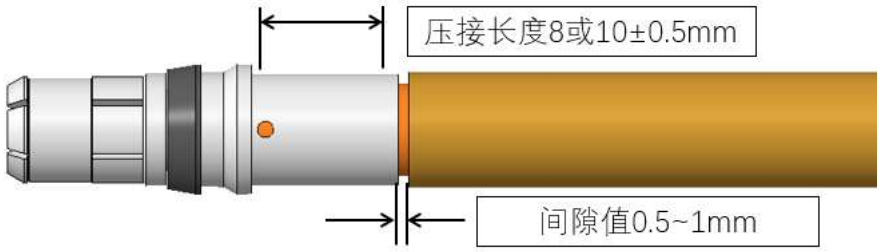
Step 2: Welding Plug contact（Part 2)

线缆类型 Wire type	组装后的图示 Picture after assembly
非屏蔽线 Unshielded wire	

步骤2-1: 正六边形压接插头端子（零件2+3）。

Step 2-1: Contact crimping（Part 2+3)

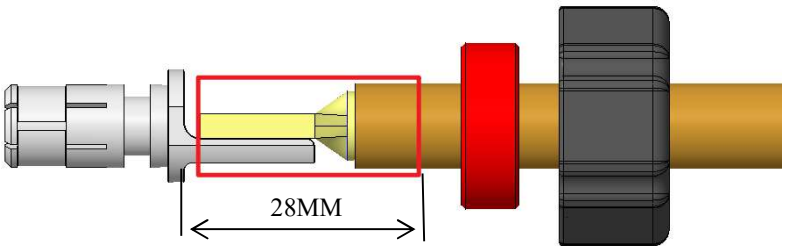




线材尺寸 Cable size	推荐压接边长度S Recommended crimp length of Side S	推荐压接平面距离F Recommended crimp dist across Flats F	推荐压接后端子 最小拔出力 Recommended Min. Pullout force
25mm^2	/	7.5±0.1mm	1900N

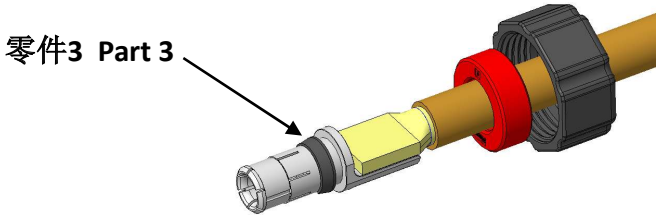
步骤3: 在焊接区域套冷缩套管（压接端子可跳过）

Step 3: Cold shrink tubing assembled to welding area(not applicable for crimping type).

线缆类型 Wire type	**组装后的图示 Picture after assembly**
非屏蔽线 Unshielded wire	

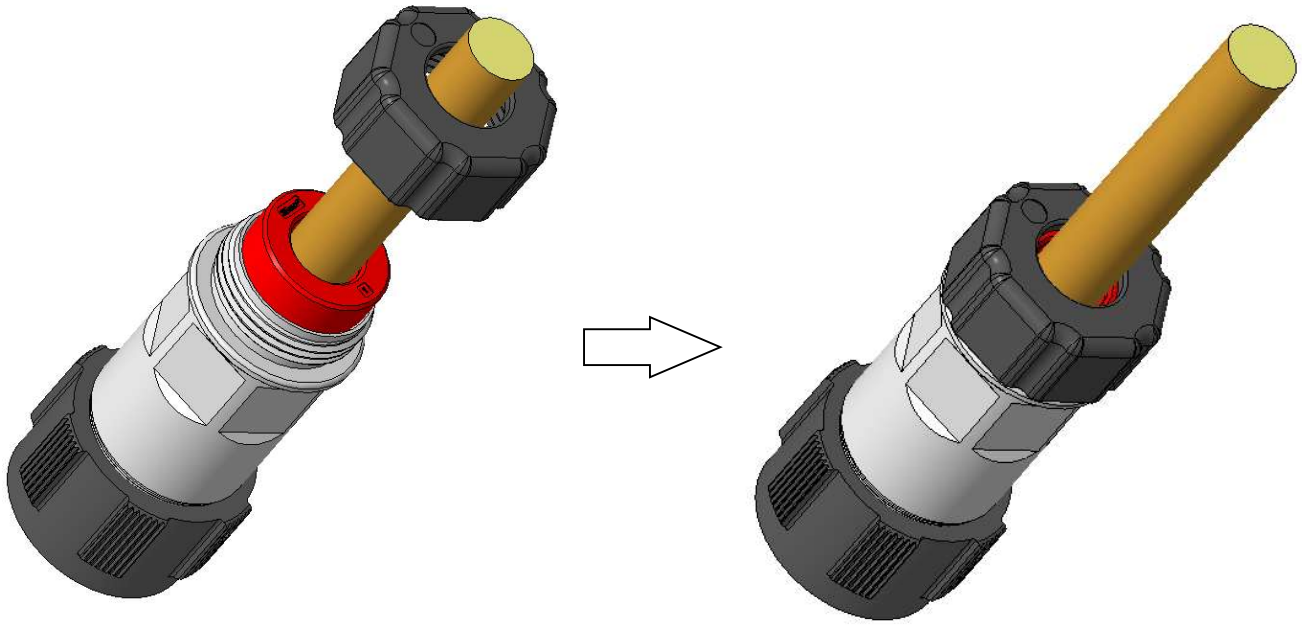
步骤4: 将C型卡扣（零件3）组装在插头端子（零件2）上。

Step 4: Assemble the collar (part 3) on the plug contact (part 2).

线缆类型 Wire type	**组装 C 型卡扣后的图示 Picture after collar assembly**
非屏蔽线 Unshielded wire	

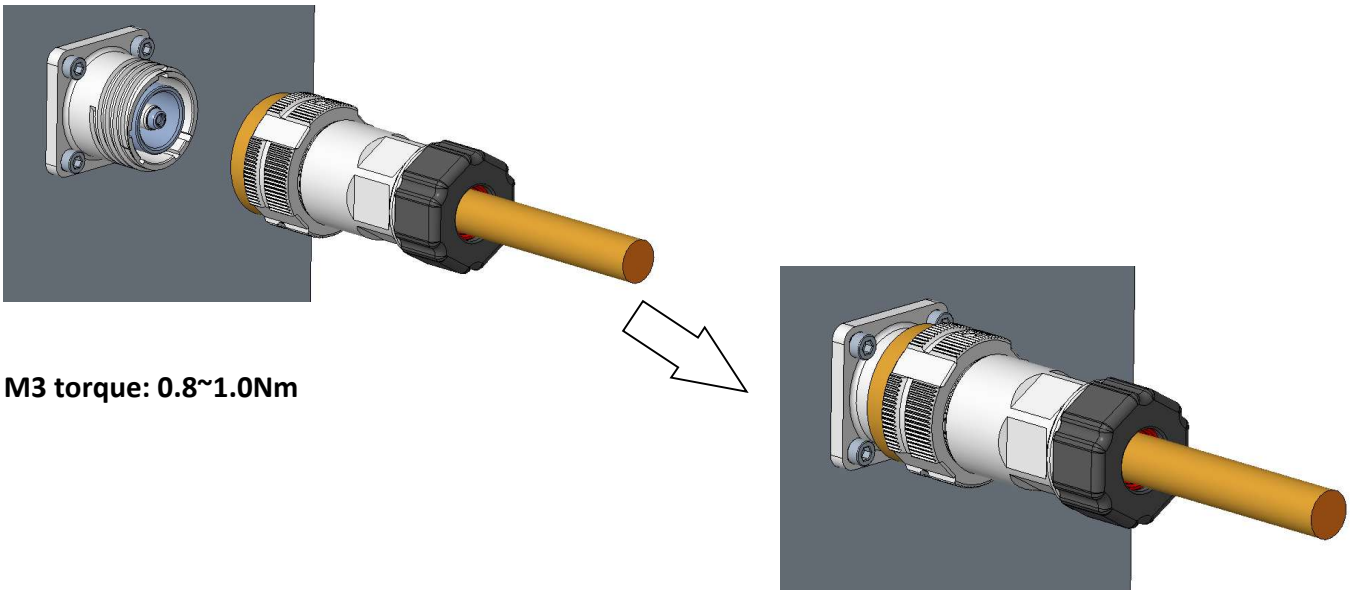
步骤5: 将压线后的端子先后插入插头组件（零件1）中,先组装尾部密封圈（零件4）,再组装后盖（零件5）,建议后盖安装扭矩2.5~3.5N*m。

Step 5: Insert the crimped terminal into the Plug shell assembly (Part 1) one by one. First assembly the rear sealing grommet (Part 4), After that assembly the rear cover (Part 5), Recommended torque 2.5~3.5N*m.



步骤6:将插头连接器安装到插座连接器上,建议最大拧紧扭矩2.26N*m。

Step 6: Plug assembled to receptacle, suggest maximum torque 2.26N*m.



M3 torque: 0.8~1.0Nm

注意 Notes:

1. 在线缆装好后需要做绝缘电阻和耐压测试
1. Need to do Insulation Resistance and DWV test after cable assembly
2. 绝缘电阻测试：1000V DC, 5000MΩ Min, 60s
3. Insulation Resistance test: 1000V DC, 5000MΩ Min, 60s
4. 耐压测试：3000V AC, 漏电流≤5mA, 60s

插头线缆尾部出线100MM后再折弯，折弯半径≥6 X 线缆OD。

4. Bend the tail of the plug cable 100mm out of the cable. The bend radius is greater than or equal to 6 X OD of the cable。
5. 插头线缆尾部200mm或折弯处必须使用轧带或者固定环固定线缆，防止振动失效。
5. Must fix in place 200mm out of the cable or bending location to avoid vibration failure.
6. 负极为常规键位，色带颜色黑色，正极为A键位，色带颜色橙色，公母互配时，插头的连接螺帽一定要拧紧，直到插座端的色带目视不可见。
6. Negative pole is key normal with black band; positive negative electrode is key A with orange band. When plug connects to receptacle, the coupling nut must be tight, until cover the band of receptacle.

未组装图示Unmated type	组装后图示Mated type
