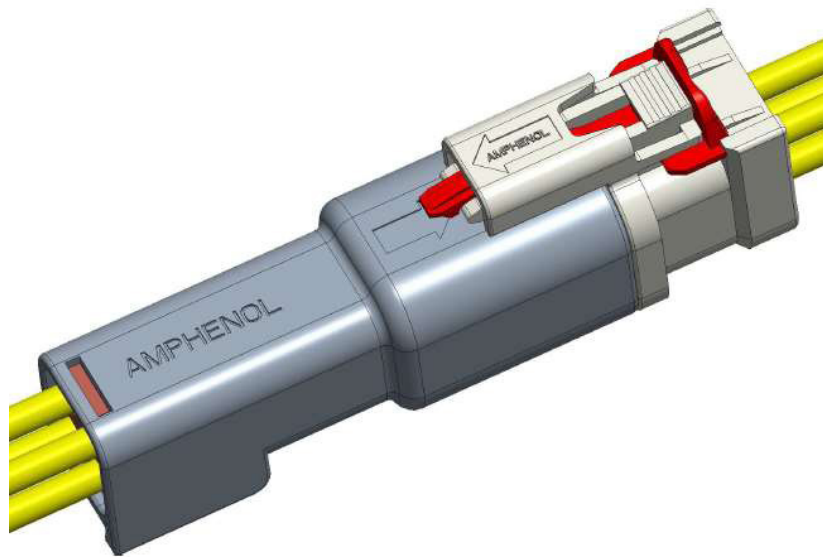


CONNECTOR ASSEMBLY INSTRUCTIONS









## Tru-Loc 4-Way Connector 2.0



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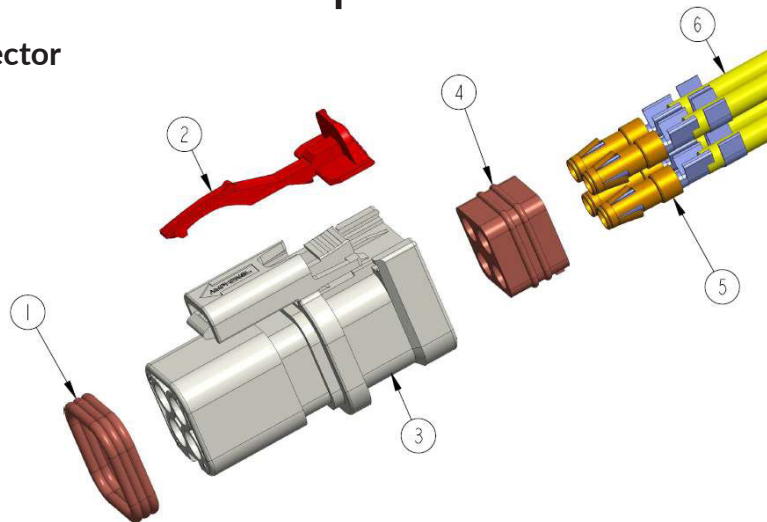
# Part 1: Safety & Caution

-  1. The connector must be isolated and disconnected from the power supply during the assembly or disassembly process.
-  2. Do not disconnect under load.
-  3. The mated Amphenol PV connectors are IP68 (under water 1meter for 24 hour) compliant in the function of sealing. However please prevent connectors from being immersed in water.
-  4. The product may be assembled and installed only by qualified and trained specialists who observe the applicable safety regulations.
-  5. Amphenol declines any liability in the event of failure to comply with this assembly instruction.
-  6. Connectors not made by Amphenol which can be mated with Amphenol elements and in some cases are also described as “Amphenol-compatible” do not conform to the requirements for safe electrical connection with long-term stability, and for safety reasons must not be plugged together with Amphenol elements. Amphenol can therefore accept no liability for damage which occurs as a result of mating these connectors that lack Amphenol approval with Amphenol elements.
-  7. Please be aware that this 3rd Party laboratory test is just a reference for application. It is the customer's responsibility to validate connector durability in system function at specific and extreme environment conditions, we recommend customer to consider a margin in actual applications with high current situations that can lead to overheating.
-  8. Amphenol warns customers and users to avoid exposure of chemical substances in the connector application environment. Chemical compatibility of thermoplastics e.g. Lexan polycarbonate is dependent on contact time, temperature, concentration and stress (external stress to which the application is subjected to). Chemicals exposure can result in discoloration, softening, swelling, cracking or loss of properties of the thermoplastics. DO NOT allow the connectors contact any chemicals including below but not limited as they may cause stress cracking. Grease, Oils, Mold Release Agent, Binder, Alcohols, Fatty hydrocarbons, Acid, Aromatic hydrocarbon, Ketones, Halogenated hydrocarbon, Organic solvents including Gasoline, Kerosene, Ethyl acetate and others, Cleaning agents. Detailed refer to file. See Appendix A or file: WI -S047-ENG (Chemicals Exposure Vheck List).

The list of chemicals provided by Amphenol does not include all chemicals that may appear in the production and subsequent use of customers. Customers are requested to verify their impact on products and take corresponding to risk management measures for chemical contamination. Amphenol does not accept any return requests for products contaminated with chemicals.

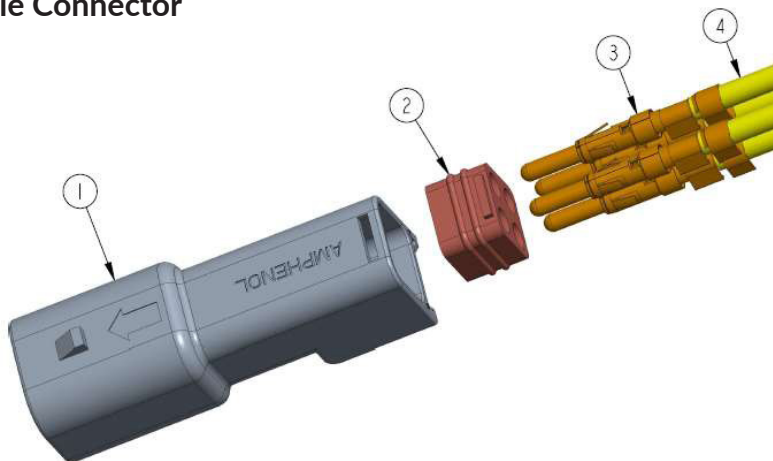
## Part 2: Product Component

### 2.1 Plug Connector



POS	Description	QTY
1	Sealing Ring	1
2	Latch	1
3	Body	1
4	Grommet	1
5	Socket Contact	1
6	Cable	N/A

### 2.2 Receptacle Connector

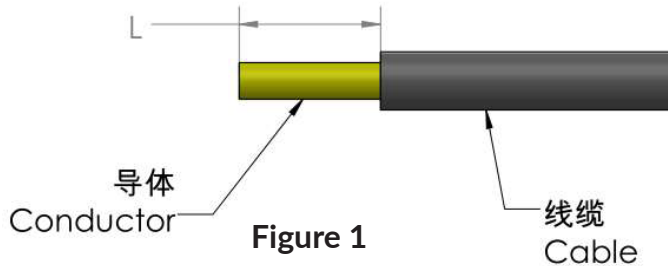


POS	Description	QTY
1	Body	1
2	Grommet	1
3	Pin Contact	4
4	Cable	N/A

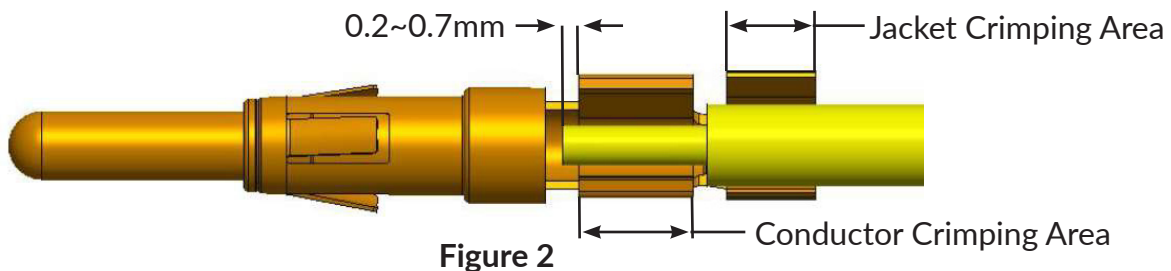
# Part 3: Product Assembly

## 3.1 Crimp Contacts (The methods of the female terminals are the same)

- a) As shown in Figure 1, the cable is cut according to  $L=5.3\pm0.5\text{mm}$ , and the cable conductor is leaked. When cutting the cable, make sure that the cutting surface is flush and there is no damage to the wire.



- b) Crimping, as shown in Figure 2.

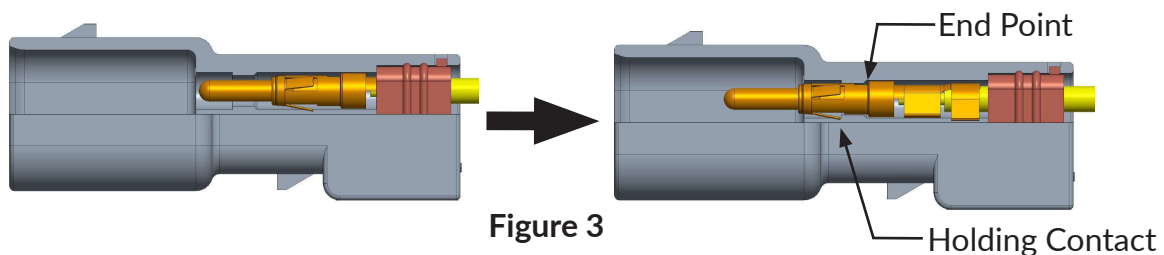


### Recommended Crimping Parameters:

Contact P/N ( )=Plating	Cable (AWG)	Pull-Out Force (N)	CCH (mm) $\pm 0.05$	CCW(mm) $\pm 0.05$	Jacket Area
C10-780109-12()	12	311.5 Min.	1.85	3.40	$\Phi 3.9\sim 4.2\text{mm}$
C10-780110-12()	14	222.5 Min.	1.50	3.35	$\Phi 3.3\sim 3.6\text{mm}$

## 3.2 Insert the contact into the housing (The methods of the female terminals are the same)

- a) To insert a contact, push it straight into the appropriate circuit cavity as far as it will go (see Figure 3).



### 3.2 (continued)

b) Pull back on the contact wire with a force of 4.45 to 8.9 N to be sure the retention claws are held in the contact (see Figure 4).



Figure 4

## Part 4: Plug and Receptacle Mating

### 4.1 Connector Orientation

Align the plug connector and the receptacle connector in the same position (see Figure 5).

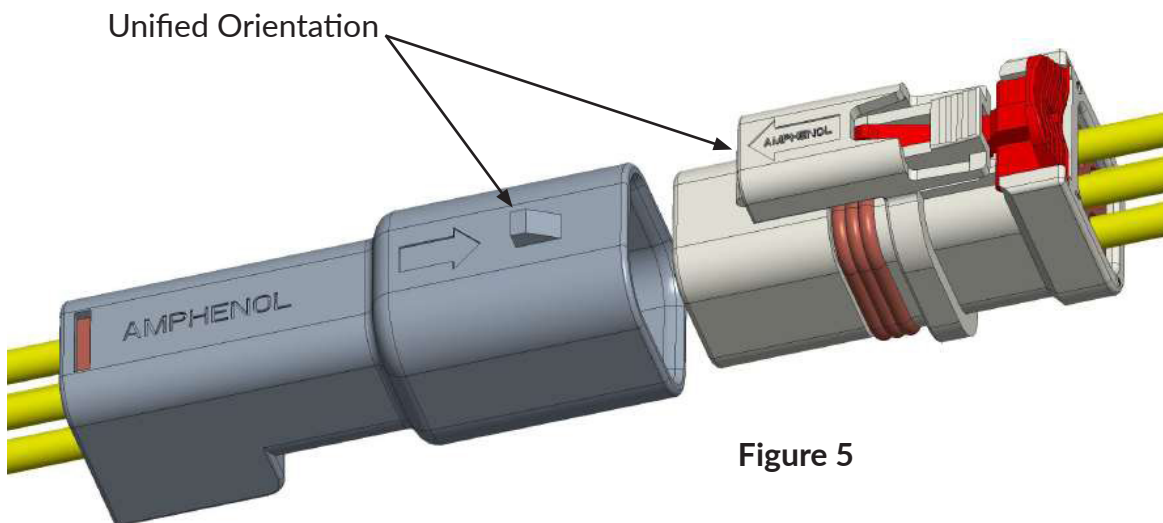


Figure 5

### 4.2 Push in the plug connector

Push the plug connector into the receptacle connector (see Figure 6).

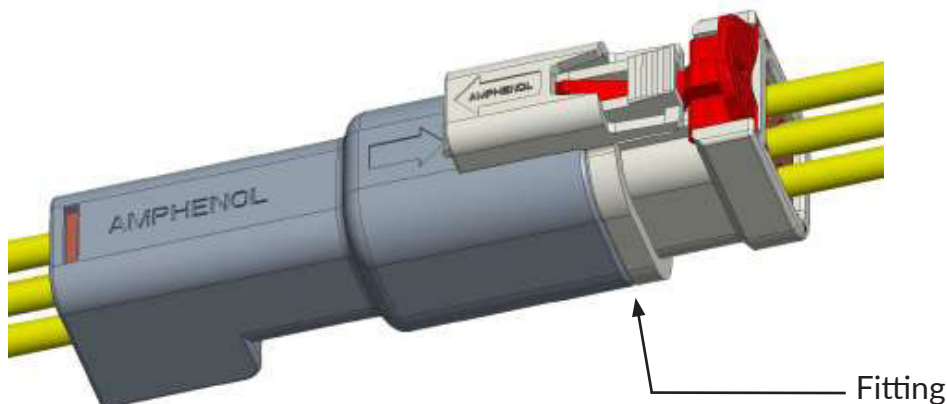
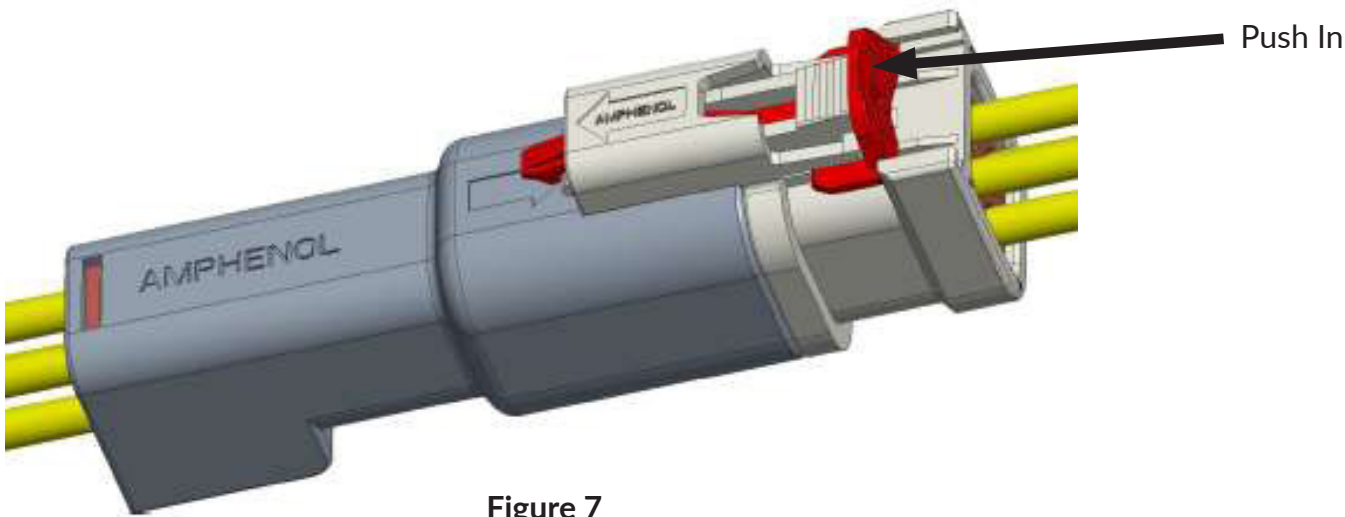


Figure 6

4.3 CPA Locking

Push in the CPA to complete the assembly (see Figure 7)



Part 5: Revision History

Rev.	Date	Zone	Description	Owner
A	2025/05/19	N/A	Initial Release	Liang Xu

(Prepared by) : \_\_\_\_\_

(Checked by) : \_\_\_\_\_

(Date) : \_\_\_\_\_

(Date) : \_\_\_\_\_