

## Assembly Instruction for the Helios H4 PV Connector



**Connectors must not be connected or disconnected under load!**

Helios H4 components come pre-assembled and the caps are loose. And the whole connector will include the male side and female side.



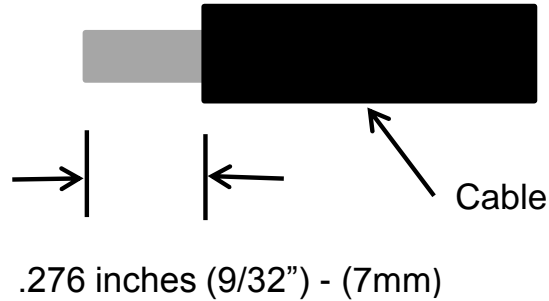
PV-100508-F – Female side Connector



PV-100508-M – Male side Connector

## 1. Assembly Instruction for the male side and female side connector

1.1 Strip cable .276 inches (9/32") - (7mm) and be careful NOT to nick conductors.



Amphenol specified strip tool can be used in this step. Adjust the striper stopper and put the cable in corresponding notch to strip the length of 7mm. See below figures.



## 1. Assembly Instructions for the male side connector and female side.

1.2 Insert striped cable into contact barrel and insure all conductor strands are captured in the contact barrel and the conductors are visible in the contact barrel observation hole. See below figures.

### Pin contact



Barrel observation hole  
Conductor should be visible

### Socket contact



Barrel observation hole  
Conductor should be visible

## 1. Assembly Instructions for the male side connector and female side.

1.3 Crimp contact barrel by using the hex crimping die. See below figures.

**Crimped pin contact**



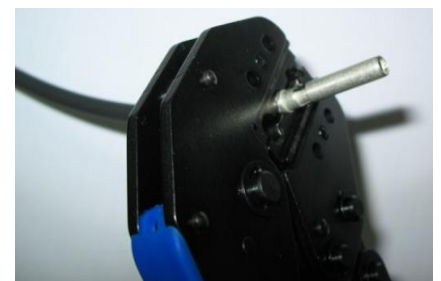
**Crimped socket contact**



Amphenol specified crimping tool can be used in this step. Put the contact barrel with striped cable in the corresponding crimping notch and crimp the contact. See below figures.

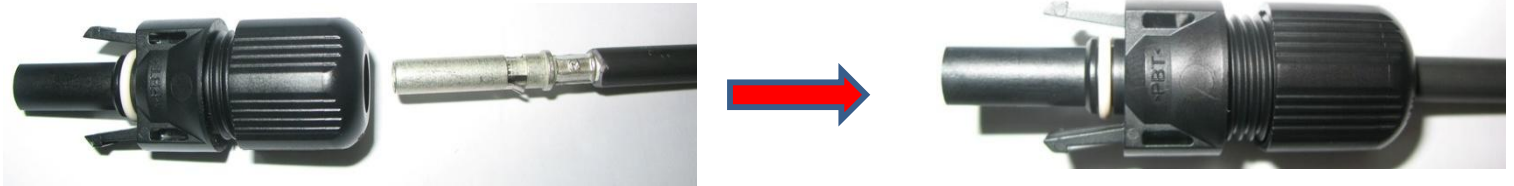
Cable size	Cable pull –out force requirement
2.5 mm <sup>2</sup>	Min. 310 N (70 Lbs)
4.0 mm <sup>2</sup>	Min. 400 N (90 Lbs)
6.0 mm <sup>2</sup>	Min. 450 N (100 Lbs)

**Amphenol crimp tool**

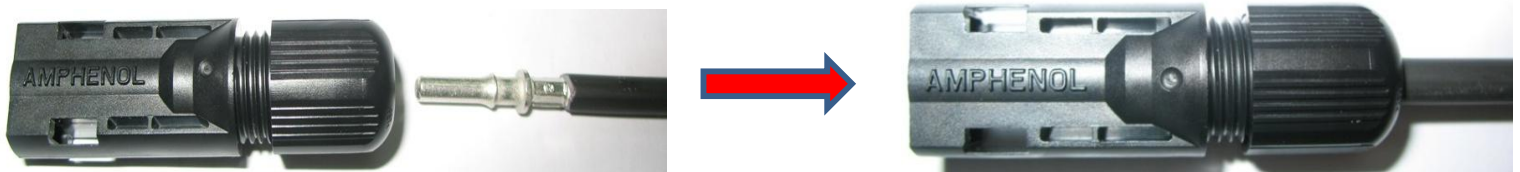


## 1. Assembly Instructions for the male side connector and female side.

1.4 Insert contact cable assembly into back of male and female connector. A “click” should be heard or felt when the contact cable assembly is seated correctly. See below figures.



**PV-090508-F – Female side Connector**



**PV-090508-M – Male side Connector**

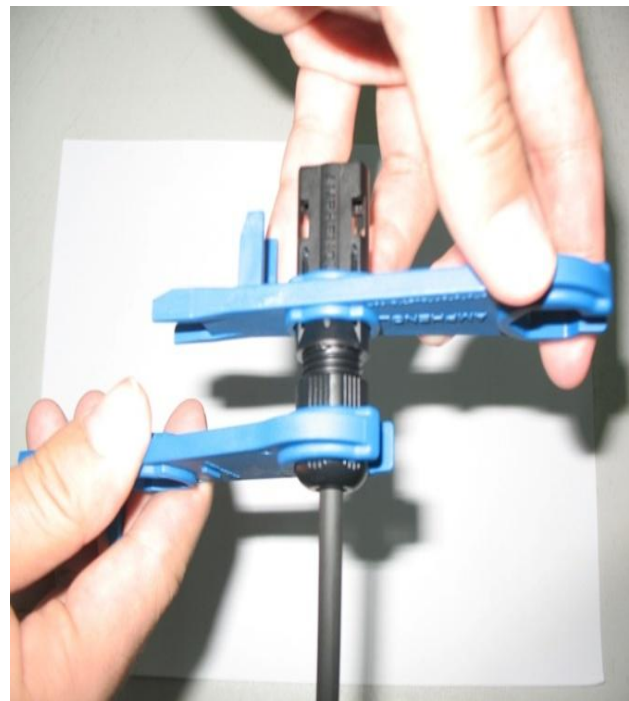
## 1. Assembly Instructions for the male side connector and female side.

1.5 Wrest the cap by using the torque to 18 - 20 inch pounds. (2.0 – 2.3 NM).



Amphenol specified wrench tool can be used in this step. Here 2 wrench tools are used, one is by hand for holding the connector by hand, another is also by hand to wrest the cap down until the tool starts to snap over.

See below figures.



## 2. Mate and separate Helios H4 connector

**2.1** After wrest the cap tightly, align the 2 half connectors and mate them together by hand until a “click” is heard or felt.



**2.2** When the separation of connector is necessary, use the Amphenol specified tool (Ring tool or wrench tool) to separate. And while using the ring tool or wrench tool, please make sure the wedge side of the fingers faces the female connector and push the tool down. Then separate the connector by hand. See below figures.



**Separated by Ring tool**



**Separated by Wrench tool**