Amphenol Industrial

CONNECTOR ASSEMBLY INSTRUCTIONS

HDPC Series



Amphenol Industrial

HOW TO INSTRUCTIONS

1. Terminal Crimping

Crimping tools provide lower total installation and maintenance costs. However, controls are required to help ensure that the proper crimp tools designed for the type and size contact are used, the pin or socket is properly inserted into the tool, the wire insulation is stripped properly, and the wire fully inserts into the contact.

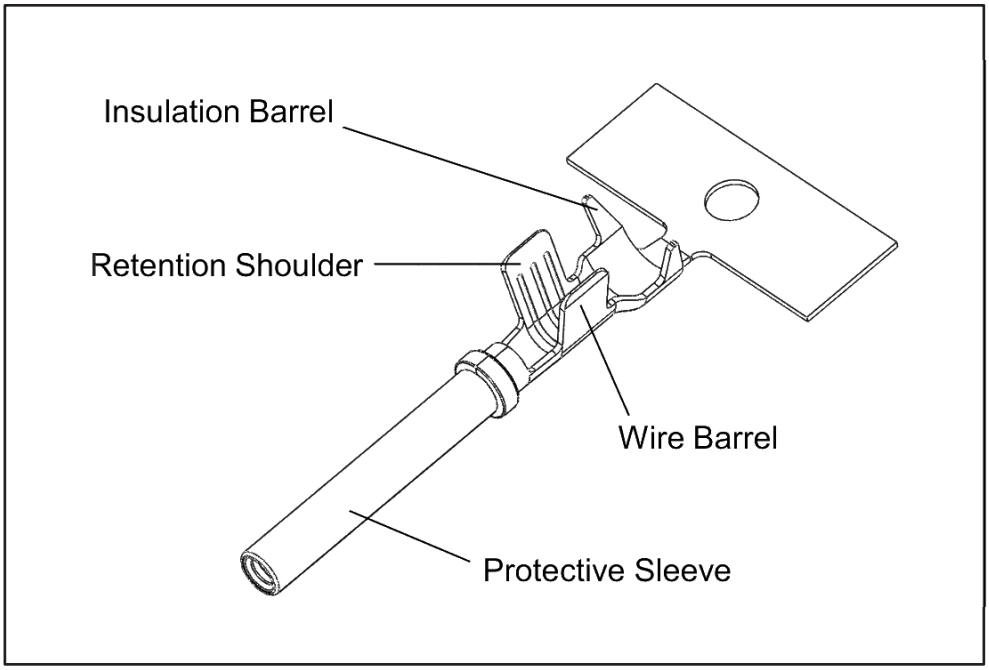
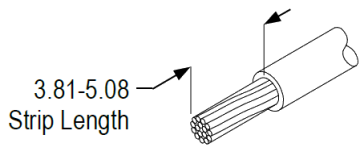


Figure1: Terminal kit View

1.1 Wire Size and Preparation

The contacts accept stranded wire sizes and insulation diameters given in Figure 2. For insulation diameter per contact, refer to the customer drawing for the contact. The wire must be stripped within the dimensions given in Figure 2. Special wire type which may require special applicator tooling settings, crimp requirements are not covered in this specification.

WIRE RANGE	INSULATION DIAMETER RANGE
0.35-2.50 mm², 22-14 AWG	1.91-3.18
0.35-1.50 mm², 22-16 AWG	1.30-2.16



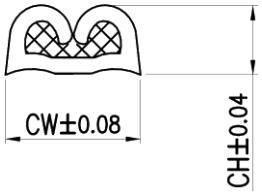
Note: Not to Scale

Figure2

1.2 Terminal Crimp Dimensions

When a crimp is completed, the crimp can be visually inspected. The inspector should check for:

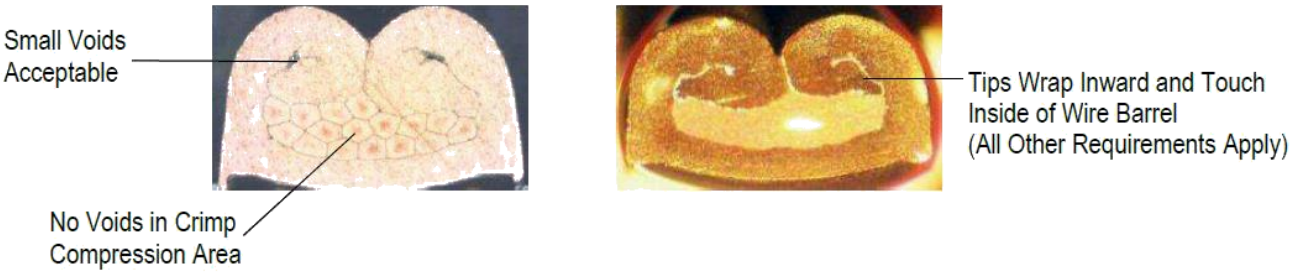
- The removed insulation should expose a conductor length that is specified in the application tooling specification.
- Wire strands intact.
- All wire strands are in the conductor crimp barrel.
- Wire is inserted to the correct depth in the terminal.
- The Insulation crimp heights and width should be equal to or less than that of the cable it is crimped to **(Note: Poor Insulation crimps can lead to difficult terminal extraction)**



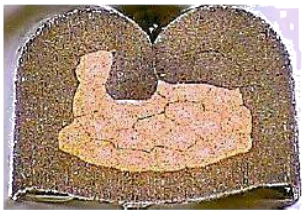
Terminal Crimping View

CC-A20-02-NS01	PLATING Ni	20-02	4	22AWG	0.93	1.88
			3	20AWG	0.98	
CC-A20-02-GS01	PLATING Au		2	18AWG	1.23	
			1	16AWG	1.26	
CC-A20-01-NS01	PLATING Ni	20-01	4	22AWG	0.93	1.88
			3	20AWG	0.98	
CC-A20-01-GS01	PLATING Au		2	18AWG	1.23	
			1	16AWG	1.26	
CC-A20-06-NS01	PLATING Ni	20-06	2	16AWG	1.54	1.94
CC-A20-06-GS01	PLATING Au		1	14AWG	1.64	
PART NUMBER	PLATING	SIZE	POS	AWG	C/H	C/W

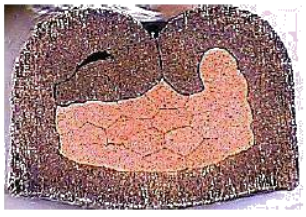
Figure1



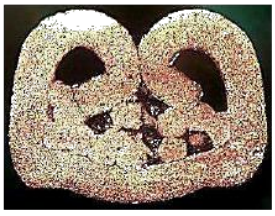
Unacceptable Wire Barrel Crimp



Uneven Crimp and
Wall Thickness and
Flash on Both Sides



Uneven Crimp and
Wall Thickness



Crimp Too Loose and
Void on Both Sides

Figure2

2.TERMINAL INSTALLATION

terminal on center with the appropriate opening in the back cover and insert through the circuit opening in the back seal. If resistance is encountered, retract the terminal and adjust the angle of insertion. Continue inserting the terminal until it stops and locks up on the lock finger with an audible click. Plug Connector/Socket Terminal shown – use same method for Receptacle/Pin.



Step 1:
Grasp crimped contact approximately one inch behind the contact barrel.



Step 2:
Hold connector with rear grommet facing you.



Step 3:
Push contact straight into connector grommet until a click is felt. A slight tug will confirm that it is properly locked in place.

3.TERMINAL EXTRACTION

1. From the rear of the connector, align the tool tip with the contact cavity of the contact to be removed. Place the wire of the contact over the tool wire entry slot and apply light pressure on the wire until it enters the wire entry slot. See Figure1.
2. Slide the tool along the wire and into the contact cavity until the tool tip engages the contact and resistance is felt. See Detail Figure2.
3. Gently pull the tool with the wire until the contact is removed. See Figure3.

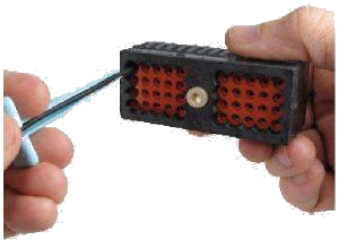


Figure1

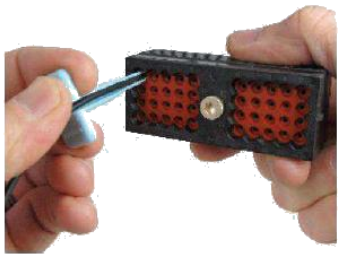


Figure2

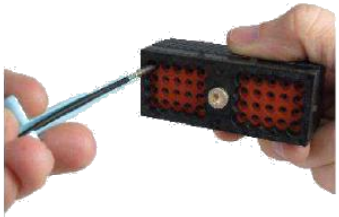


Figure3