Mini-Mac Applicator

Air Feed-Mylar Tape



# Application Tooling Specification Sheet



Order No. 63885-8900

## FEATURES

- Directly adapts to most crimp presses and automatic wire processors
- Applicator designed to industry standard mounting and shut height of 135.80mm (5.346")
- Conductor and insulation rings allow quick adjustment for conductor and insulation crimp height change
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the crimp press

#### SCOPE

<u>Products</u>: Krimptite<sup>™</sup> Quick Disconnect Flag Terminals 18-22 AWG.

#### Testing

#### Mechanical

The tensile test, or pull test, is a means of evaluating the mechanical properties of the crimped connections. The following chart shows the UL and government specifications (MIL-T-7928) for various wire sizes. The tensile strength is shown in pounds. It indicates the minimum acceptable force to break or separate the terminal from the conductor.

Color Code	Wire Size (AWG)	*UL – 310
Red	18	20
Red	20	13
Red	22	8

\*UL - 310 - Quick Disconnects, Flag and Couplers

#### **Product List**

The following is a partial list of the product order numbers and their specifications that this tool is designed to run. Updates to this list are available on <u>www.molex.com</u>

Wire Size: 18-22 AWG 0.80-0.35mm <sup>2</sup>							
Terminal No.	Terminal	Wire Stri	p Length	Insulation Diameter Maximum			
Terminar NO.	Eng No. (REF)	In	mm	In	mm		
19008-0003	AA-1147-032T	.312	7.93	N/A	N/A		
19008-0004	AA-1147T	.312	7.93	N/A	N/A		
19008-0007	AA-1158T	.312	7.93	N/A	N/A		

### **DEFINITION OF TERMS**

The following illustrations are a generic terminal representation and not an exact image of any terminal listed in the scope.



#### **Tool Calibration**

To recalibrate this applicator, make sure the power is completely shut off on the press.

The Mini-Mac applicator must be properly installed in the press.

Crimping dies must be properly installed in the Mini-Mac applicator.

The recommended method of measuring the crimp height of the conductor dies is a pin gauge or soft metal slug method. See Figure 4.

- 1. The slug must have a diameter 0.51mm (.020") larger than the "X" No Go dimension before crimping.
- 2. Place the soft metal slug (solder) into the nest of the bottom die and crimp (by hand cycling the press) similar to a terminal. The crimp height can be measured with a blade type micrometer or dial caliper, (Dimension "X").
- 3. Adjustment of the crimp height can be accomplished by indexing the conductor cam. The letter "A" gives the loosest position and "K" gives the tightest position. A total adjustment of 0.50mm (.020") can be achieved by adjusting the conductor cam.

Note: If the crimp height is too tight on the setting "A", check the shut height of the press. See the Industrial Mini-Mac Applicator Manual Section 2.1 for adjustments.

## **CRIMP SPECIFICATIONS**



**USE PIN GAUGE OR SOFT** METAL SLUG METHOD

> Use pin gauge or soft metal slug (solder) method to measure the "X" dimension. Verify tooling crimp height calibration by referring to the Go/No Go dimensions shown in the chart below.

Figure 4

\ <b>\</b> /;_	Danga	"X" Dimension Conductor Crimp						
Wire Range		Me	Mean G		io No (		Go	Crimp Inspection Marking
AWG	mm²	In	mm	In	mm	In	mm	
18-22	0.80-0.35	.050	1.27	.048	1.22	.055	1.40	N/A

# PARTS LIST

Mini-Mac Applicator 63885-8900								
ltem	Order No	Engineering No.	Description	Quantity				
Perishable Tooling								
	63885-8970	63885-8970	Tool Kit (All "Y" Items)	REF				
1	63465-0083	63465-0083	Conductor Punch	1 Y				
2	63464-0071 63464-0071 Conductor A		Conductor Anvil	1 Y				
Other Components								
3	63443-0021 63443-0021 Lower Tooling Key		1					
4	63466-0912	63466-0912	Anvil Mount	1				
5	63466-0913	63466-0913	Terminal Support	1				
6	63466-0921	63466-0921	Terminal Stripping Blade	1				
7	63600-1290	63600-1290	Washer	1				
8	63890-0866 63890-0866 Collar-6.4mm Long		1					
Frame								
9	63801-3301 63801-3301 A		Air Feed Applicator Frame Head	1				
10	63801-3281	63801-3281	Base	1				
11	63801-5850	63801-5850	Track Assembly	1				
12	63801-3390 63801-3390 Air Kit		Air Kit	1				
Hardware								
13	N/A	N/A	M3 by 12 Long SHCS	1**				
14	N/A	N/A	M4 by 10 Lg SHCS	2**				
15	N/A	N/A	M4 by 16 Long SHCS	1**				
16	N/A	N/A M4 by 45 Long SHCS		1**				
17	N/A			1**				
18	N/A N/A		3mm by 6 Long Roll Pin	1**				
** Available from an industrial supply company such as MSC (1-800-645-7270).								

<u>Note:</u> Crimp profiles used in 63885-8900 are equivalent to 19027-0052 / ATP-AA-NIFG (UL file number E32244).



## NOTES

- 1. Molex recommends an extra perishable tooling kit be maintained at your facility.
- 2. Verify tooling alignment by manually cycling the press with applicator before crimping under power. Check that all screws are tight.
- 3. Slugs, terminals, dirt, and oil should be kept clear of work area.
- 4. Wear safety glasses at all times.
- 5. For recommended maintenance refer to the Mini-Mac Applicator Manual (Document no. 63880-0000).

**CAUTION**: This applicator should only be used in a press with a shut height of 135.80 mm (5.346"). Tooling damage could result at a lower setting.

**CAUTION**: To prevent injury, never operate this applicator without the guards supplied with the press or wireprocessing machine in place. Reference the press or wire processing manufacturer's instruction manual.

CAUTION: Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling.

#### **Contact Information**

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

http://www.molex.com