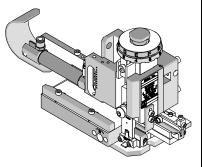


# Mini-Mac Applicator Application Tooling Specification Air Feed-Mylar Tape Order No. 63885-8600



## 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

Products: Insulkrimp<sup>™</sup> Butt Splice 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 specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate the terminal from the conductor.

Color Code	Wire Size (AWG)	*UL – 486 C	
Red	18	10	
Red	20	10	
Red	22	8	

\*<u>UL - 486 C</u> - Butt Splices, Parallel Splices, Closed End Connectors, and Wire Nuts

## **Product List**

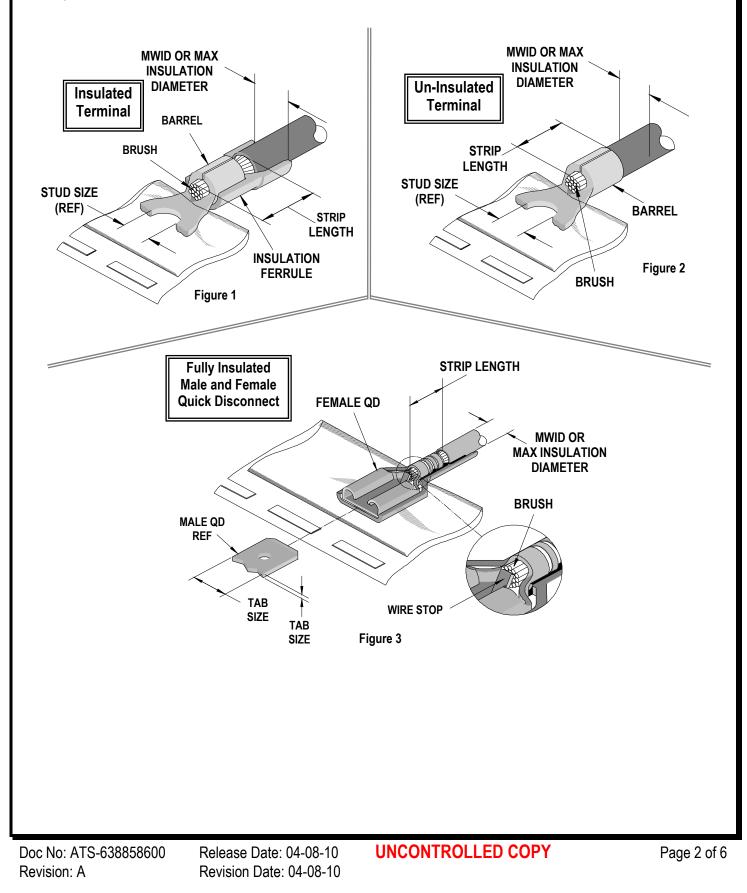
The following is a partial list of the product order numbers and their specifications that this tool is designed to run. Updates to this list are available on <u>www.molex.com</u>.

Wire Size: 18 – 22 AWG 0.80 – 0.35 mm <sup>2</sup>						
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Insul. Dia. Maximum		
reminar NO.		In	mm	In	mm	
19154-0003	A-245OVT	.312	7.92	.145	3.68	
19154-0006	A-245XT	.312	7.92	.145	3.68	
19154-0010	A-L245XT	.312	7.92	.145	3.68	
19154-0012	AS-V-345XT	.281	7.14	.145	3.68	
19154-0059	AS-V-345T	.281	7.14	.145	3.68	

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## **DEFINITION OF TERMS**

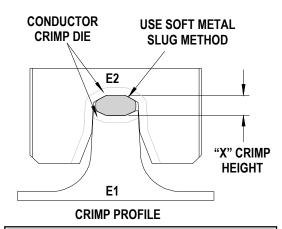
The following illustrations are a generic terminal representation and not an exact image of any terminal listed in the scope.



## **Tool Calibration**

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

- 1. The Mini-Mac applicator must be properly installed in the press.
- 2. Crimping dies must be properly installed in the Mini-Mac applicator.
- 3. The recommended method of measuring the crimp height of the conductor dies is the soft metal slug method, (See Figure 4).
- 4. The slug must have a diameter 0.51mm (.020") larger than the "X" No Go dimension before crimping.
- 5. 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").
- 6. Adjustment of the crimp height can be accomplished by indexing the conductor cam. The letter "A" gives the



Use 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 2

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**

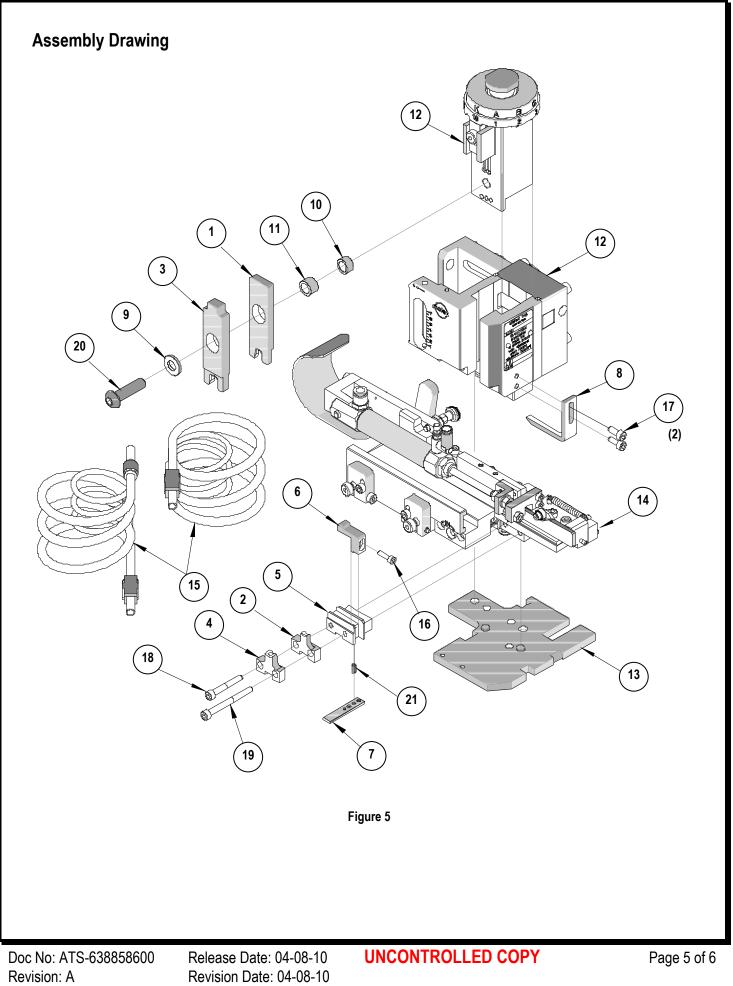
Wire Range		"X" Dimension Conductor Crimp					
		Mean		Go		No Go	
AWG	mm²	In	mm	In	mm	In	mm
18 - 22	0.80 - 0.35	.108	2.74	.105	2.67	.111	2.82

Pull Force should be measured with no influence from the insulation crimp. The above specifications are guidelines to an optimum crimp.

# PARTS LIST

	Mini-Mac Applicator 63885-8600					
Item	Order No	Engineering No.	Description	Quantity		
	Perishable Tooling					
	63885-8670	63885-8670	Tool Kit (All "Y" Items)	REF		
1	63465-0071	63465-0071	Conductor Punch	1 Y		
2	63464-0059	63464-0059	Conductor Anvil	1 Y		
3	63463-0044	63463-0044	Insulation Punch	1 Y		
4	63462-0047	63462-0047	Insulation Anvil	1 Y		
		Other C	Components			
5	63466-0912	63466-0912	Anvil Mount	1		
6	63466-0913	63466-0913	Terminal Support	1		
7	63443-0021	63443-0021	Lower Tooling Key	1		
8	63466-0921	63466-0921	Terminal Stripping Blade	1		
9	63600-1290	63600-1290	Washer	1		
10	63890-0866	63890-0866	Collar-6.4mm Long	1		
11	63890-0867	63890-0867	Collar-7.7mm Long	1		
	Frame					
12	63801-3301	63801-3301	Air Feed Applicator Frame Head	REF		
13	63801-3281	63801-3281	Base	REF		
14	63801-5850	63801-5850	Track Assembly	REF		
15	63801-3390	63801-3390	Air Kit	REF		
	Hardware					
16	N/A	N/A	M3 by 12 Long SHCS	1**		
17	N/A	N/A	M4 by 10 Long SHCS	2**		
18	N/A	N/A	M4 by 20 Long SHCS	1**		
19	N/A	N/A	M4 by 50 Long SHCS	1**		
20	N/A	N/A	M8 by 30 Long BHCS	1**		
21	N/A	N/A	3mm by 6 Long Roll Pin	1**		
**	** Available from an industrial supply company such as MSC (1-800-645-7270).					

Note: Crimp profiles used in 63885-8600 are equivalent to 19288-0010 / ATP-A-511 (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 wire-processing 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.

Americas Headquarters Lisle, Illinois 60532 U.S.A. 1-800-78MOLEX amerinfo@molex.com Far East North Headquarters Yamato, Kanagawa, Japan 81-462-65-2324 feninfo@molex.com Far East South Headquarters Jurong, Singapore 65-6-268-6868 fesinfo@molex.com European Headquarters

Munich, Germany 49-89-413092-0 eurinfo@molex.com **Corporate Headquarters** 

2222 Wellington Ct. Lisle, IL 60532 U.S.A. 630-969-4550 Fax: 630-969-1352

Visit our Web site at http://www.molex.com

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