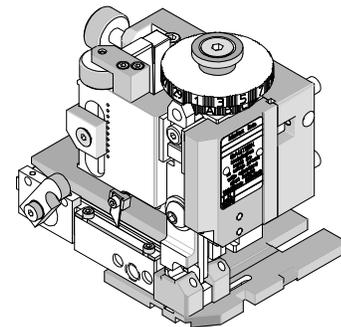




# Mini-Mac Applicator Specification Sheet Order No. 63892-5100



## FEATURES

- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of .015mm (.0006") for barrel crimp height and .063mm (.0025") for insulation height. See notes on Page 2.
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other.

## SCOPE

Products: Board-In Crimp Terminal, 22-26 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter				Strip Length	
					IPC/WHMA-A620 ♦		Terminal ♦♦ Maximum			
					AWG	mm <sup>2</sup>	mm	In.	mm	In.
4811	16-02-0034	16-02-0047	22-26	0.12-0.35	1.30-1.52	.051-.060	1.52	.060	5.97-6.35	.235-.250
41817	16-02-0118		22-26	0.12-0.35	1.30-1.52	.051-.060	1.52	.060	5.97-6.35	.235-.250
5190	08-70-0060	39-00-0193	22-26	0.12-0.35	1.30-1.70	.051-.067	1.70	.067	5.97-6.35	.235-.250

♦ To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.  
♦♦ Overall insulation OD specification for terminal.

Terminal Series No.	Terminal Order No.		Wire Size		PC Board Hole "A" Diameter	
			AWG	mm <sup>2</sup>	mm	In.
4811	16-02-0034	16-02-0047	22-26	0.12-0.35	1.30±.06	.051±.002
41817	16-02-0118		22-26	0.12-0.35	1.30±.06	.051±.002
5190	08-70-0060	39-00-0193	22-26	0.12-0.35	1.24±.08	.048±.003

## DEFINITION OF TERMS

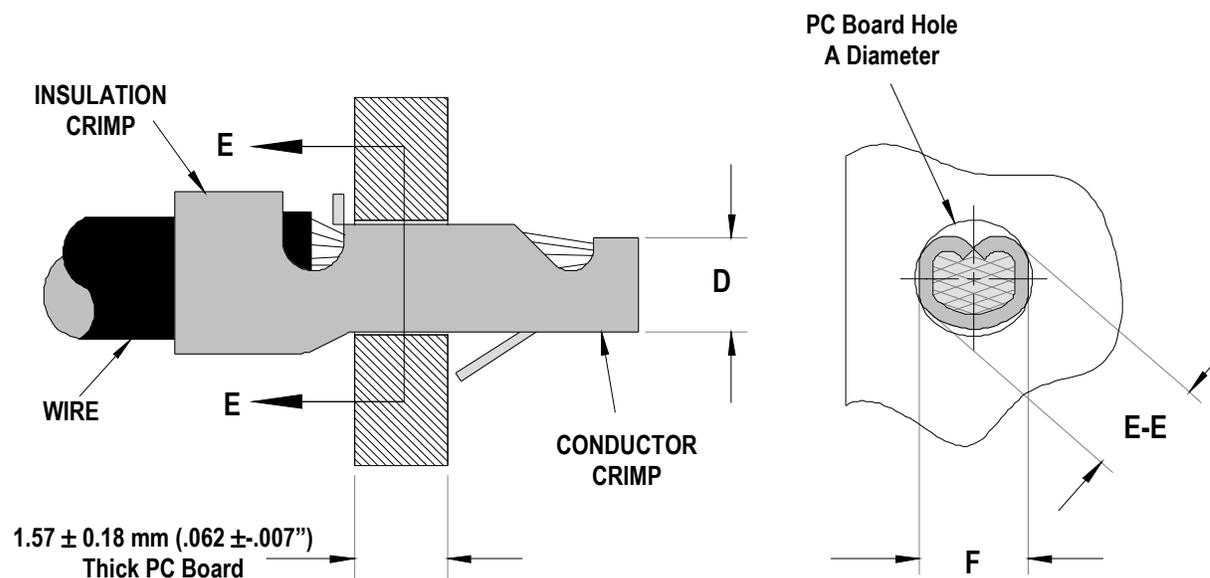


Figure 1

Section E-E

## CRIMP SPECIFICATIONS

After crimping, the conductor profiles should measure the following (See Figure 1).

Terminal Series No.	Wire Size		Dimensions (Figure 1)						Pull Force Minimum	
			D		E-E		F (Ref.)			
	AWG	mm <sup>2</sup>	mm	In	mm	In.	mm	In.	N	Lb.
4811-1	22	0.35	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
	24	0.20	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
	26	0.12	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
41817	22	0.35	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
	24	0.20	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
	26	0.12	0.88-0.97	.035-.038	1.19-1.24	.047-.049	0.97	.038	13.30	3.0
5190	22	0.35	0.88-0.97	.035-.038	1.12-1.17	.044-.046	0.97	.038	13.30	3.0
	24	0.20	0.88-0.97	.035-.038	1.12-1.17	.044-.046	0.97	.038	13.30	3.0
	26	0.12	0.88-0.97	.035-.038	1.12-1.17	.044-.046	0.97	.038	13.30	3.0

ψ The crimp on this terminal is not an electrical crimp; the final soldering operation is the electrical connection. This minimum force is what should be expected when pulling the terminal with both insulation and conductor crimped.

### Notes:

1. The Conductor crimp (D dimension on Figure 1) should be set at the maximum height to contain all wire strands, meet minimum pull, and fit into the PCB Hole. The insulation and barrel crimps are adjustable, by the cams (rings) on top of the Mini-Mac ram. The conductor crimp height is not adjustable. Shimming may be required of the conductor punch to optimize this for different wire types.

**PARTS LIST**

<b>Mini-Mac Applicator 63892-5100</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63892-5170	63892-5170	Tool Kit (All "Y" Items)	REF
1	11-18-4272	60702A103	Conductor Punch	1 Y
2	11-18-4295	60702A202	Combination Anvil	1 Y
3	11-18-4294	60702A201	Insulation Punch	1 Y
4	11-18-4271	60702A102	Barrel Form Punch	1 Y
5	11-18-4032	60705A106	Cut-Off Plunger	1 Y
6	11-18-4033	60705A107	Cut-off Plunger Retainer	1 Y
7	11-18-4276	60702A107	Rear Cut-Off Plunger and Wire Stop	1 Y
8	11-18-4277	60702A108	Rear Cut-off Plunger Retainer	1 Y
<b>Other Components</b>				
9	11-18-4034	60705A108	Front Plunger Striker	1
10	11-18-4083	60707-8	Feed Guide	1
11	11-18-4278	60702A109	Rear Plunger Striker	1
12	11-18-4279	60702A110	Tooling Washer	1
13	11-18-4282	60702A113	Rear Cover	1
14	11-24-1067	4996-4	Cut-off Plunger Spring	2
15	63803-5108	63803-5108	Conductor Bushing	1
<b>Frame</b>				
16	63801-3201	63801-3201	Top	1
17	63801-3282	63801-3282	Base	1
18	63801-6550	63801-6550	Track	1
<b>Hardware</b>				
19	N/A	N/A	M3 by 8 Long SHCS	2**
20	N/A	N/A	M4 by 8 Long SHCS	2**
21	N/A	N/A	M4 by 8 Long BHCS	2**
22	N/A	N/A	M8 by 20 Long BHCS	1**
23	N/A	N/A	#6-32 by 3/8" Long BHCS	1**
24	N/A	N/A	#6-32 by 3/8" Long SHCS	1**
25	N/A	N/A	#8-32 by 3/8" Long BHCS	4**
** Available from an industrial supply company such as MSC (1-800-645-7270).				



## NOTES

1. Molex recommends an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by manually cycling the press and 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 Manual.

**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>