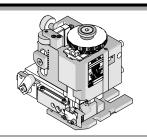




# **Application Tooling Specification Sheet**



Order No. 63902-0500

#### **FEATURES**

- Quick punch removal with the push of a button for fast and easy tooling change
- 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 conductor crimp height and .063mm (.0025") for insulation height
- Independent adjustment rings allow users to guickly adjust the conductor or insulation crimp height without affecting each other
- Directly adapts to most automatic wire processing machines

#### **SCOPE**

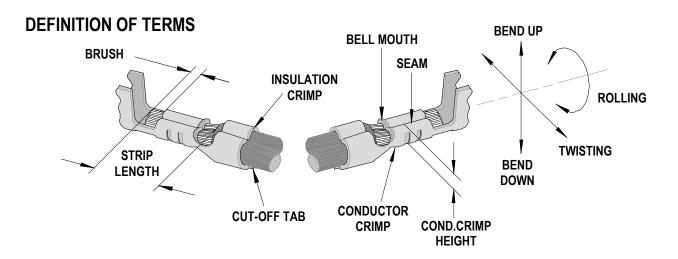
Products: 2.5 Mini Splash Proof Wire-to-Wire Crimp Terminal 20-22 AWG.

Townsia	Tamainal	Wire Size			Insulation	Ctrin I amorth			
Terminal Series No.	Terminal Order No.			IPC/WHM/	A-A620 (1)	Terminal (2)		Strip Length	
		AWG	mm²	mm	ln.	mm	ln.	mm	ln.
	50147-8000 50148-8000	22		1.40-1.60		1.40-1.90	.055075	2.00-2.50	.078098
			AVSS-0.3		.055063				
			CAVS-0.3						
50147			CAVUS-0.3						
50148		20							
			AVSS-0.5						
			CAVS-0.5					[	
			CAVUS-0.5						

To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.

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Overall insulation OD specification for terminal.



The above terminal drawing is a generic terminal representation. It is not an image of any terminal listed in the scope.

### **CRIMP SPECIFICATION**

Terminal Series No.	Bell n	nouth	Cut-off Tak	Maximum (	Conductor Brush		
Terminal Series No.	mm	ln.	mm	ln.	mm	ln.	
50147	0.00-0.30	.000012	0.00.0.20	.000012	0.10-0.90	.004035	
50148	0.00-0.30	.000012	0.00-0.30	.000012	0.10-0.90	.004033	

	Bend up Bend down		Twist Roll		Punch Width (Ref)				C	
Terminal Series No.	Bend up	Conductor			Insulation		Seam			
	Degree		Degree		mm	ln	mm In		Seam shall not be open and no wire allowed	
50147	2	2	2	10	1.40	.055	1.80	.071	out of the crimping area	
50148	2	3	3 10		1.40	.000	1.00	.071	out of the chiliping area	

After crimping, the crimp profiles should measure the following:

	Wire Size		Cond	uctor	Insul	ation	Pull Force Minimum	
Terminal Series No.			Crimp	Height	Crimp Heigh	nt Maximum		
	AWG	mm²	mm	ln.	mm	ln.	N	Lb.
	22		0.94-0.99	.037039	1.90	.075	49.0	11.0
		AVSS-0.3	0.94-0.99	037039	1.90	.075	49.0	11.0
		CAVS-0.3						
50147	20		0.96-1.06	.038042	1.90	.075	53.9	12.1
50148		AVSS-0.5	0.96-1.06	.038042	1.90	.075	53.9	12.1
		CAVS-0.5	0.90-1.00					
		CAVUS-0.3	0.94-0.99	037039	1.90	.075	49.0	11.0
		CAVUS-0.5	0.96-1.06	.038042	1.90	.075	53.9	12.1

#### Tool Qualification Notes:

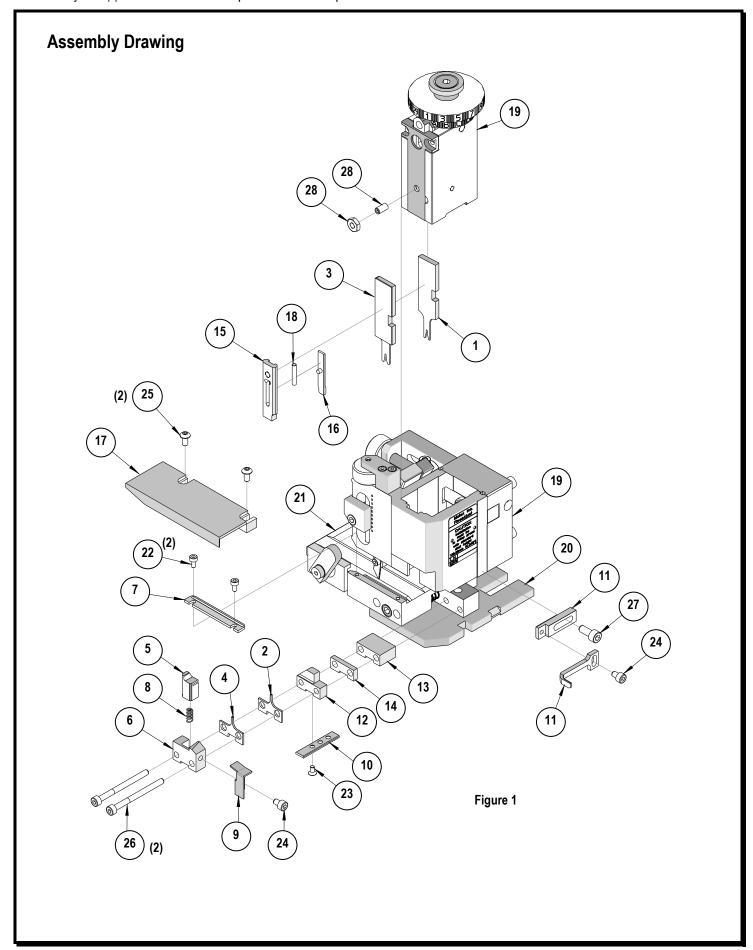
- 1. Pull Force should be measured with no influence from the insulation crimp.
- 2. The above specifications are guidelines to an optimum crimp.

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### **PARTS LIST**

FineAdjust Applicator 63902-0500										
Item	Order No									
Item Order No Engineering No. Description Quantity   Perishable Tooling										
	63902-0570	63902-0570	Tool Kit (All "Y" Items)	REF						
1	63444-1407	63444-1407	Conductor Punch	1 Y						
2	63445-1430	63445-1430	Conductor Anvil	1 Y						
3	63454-0038	63454-0038	Insulation Punch	1 Y						
4	63445-1805	63445-1805	Insulation Anvil	1 Y						
5	63443-0002	63443-0002	Cut-Off Plunger Front	1 Y						
6	63443-0012	63443-0012	Plunger Retainer Front	1 Y						
Other Components										
7	11-18-4083	60707-8	Feed Guide	1						
8	11-24-1067	4996-4	Cut-off Plunger Spring	1						
9	63443-0009	63443-0009	Scrap Chute Front	1						
10	63443-0024	63443-0024	Key	1						
11	63443-0090	63443-0090	Wire Stop	1						
12	63443-1718	63443-1718	Height Spacer	1						
13	63443-2216	63443-2216	Course Spacer (16.00mm)	1						
14	63443-2316	63443-2316	Fine Spacer (3.80mm)	1						
15	63443-2802	63443-2802	Front Plunger Striker	1						
16	63443-2906	63443-2906	Wire hold down Plunger	1						
17	63443-6111	63443-6111	Rear Cover	1						
18	63600-1057	63600-1057	Striker Plunger Spring	1						
			Frame							
19	63800-4901	63800-4901	Тор	1						
20	63801-3281	63801-3281	Base	1						
21	63801-4650	63801-4650	Track	1						
		H	lardware							
22	N/A	N/A	M3 by 6 Long SHCS	2**						
23	N/A	N/A	M3 by 6 Long FHCS	1**						
24	N/A	N/A	M4 by 6 Long SHCS	2**						
25	N/A	N/A	M4 by 12 Long BHCS	2**						
26	N/A	N/A	M4 by 45 Long SHCS	2**						
27	N/A	N/A	M5 by 12 Long SHCS	2**						
28	N/A	N/A	#10-32 by 3/8"Long Flat Point SSS	1**						
29	N/A	N/A	#10-32 Hex Jam Nut	1**						
*:	** Available from an industrial supply company such as MSC (1-800-645-7270).									

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#### **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 FineAdjust 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.

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

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