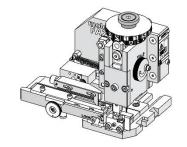
FA2 Crimp Applicator for Squba 1.8mm Plug WTW Crimp Terminals: 22-24 AWG

Order Number 213069-0500





# **Application Tooling Specification**

## **FEATURES**

- Applicator designed to industry-standard mounting and 135.80mm (5.346") shut height
- Quick setup 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 0.015mm (.0006") for conductor crimp height and 0.025mm (.001") for insulation height
- Fine adjustment of the bend is achieved using the bend control adjust dial
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other
- Directly adapts to most automatic wire processing machines

## **SCOPE**

**Products:** Squba 1.8mm Plug WTW Crimp Terminals: 22-24 AWG.

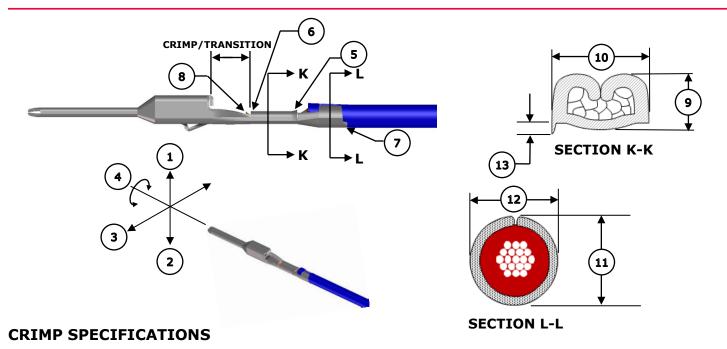
Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter		Strip Length	
		AWG	mm²	mm	In.	mm	In.
204226	204226-1001	22-24	_	0.95-1.40	.037055	3.50	.138

**CAUTION:** Lubrication must be used to prevent terminals from sticking in the conductor punch. Use 63801-7240 oiler or equivalent.

Doc. No: 2130690500 Release Date: 07-08-19 UNCONTROLLED COPY Page 1 of 7

Revision: B Revision Date: 11-21-19

# **DEFINITION OF TERMS**



Refer to the following crimp specifications:

Feature	Requirement						
1. Bend Up	3° Max						
2. Bend Down	3° Max						
3. Twist	3° Max						
4. Roll	3° Max						
5. Rear Bell Mouth	0.30-0.60mm (.012024")						
6. Front Bell Mouth	Not Applicable						
7. Cut-Off Tab**	0.25mm (.010") Max						
8. Conductor Brush	0.30-0.70mm (.012028") Max						
	Terminal Series No.	Wire Type	Wire Size		np Height		
9. Conductor Crimp Height	204226	UL1061	22 AWG	0.67-0.71mm		.026028 in.	
			24 AWG	0.63-0.67mm		.025026 in.	
10. Conductor Crimp Width	1.20mm (.047")						
	Terminal Series No.	Wire Type	Wire Size	Minimum Force			
Pull Force		UL1061	22 AWG	35.6 N	8 lb.	To be measured with no	
	204226		24 AWG	22.3 N	5 lb.	influence from the insulation crimp.	
	Terminal Series No.	Wire Type	Wire Size	Crimp Height (Ref)		Height (Ref)	
11. Insulation Crimp Height	204226	111.1061	22 AWG	1.25mm		.049 in.	
		UL1061	24 AWG	1.20mm		.047 in.	
12. Insulation Crimp Width	1.30mm (.051")						
13. Conductor Anvil Flash	0.10mm (.004") Max						

<sup>\*\*</sup> See Applicator Notes and Terminal Feed Notes on page 3.

Doc. No: 2130690500 Release Date: 07-08-19 **UNCONTROLLED COPY** Page 2 of 7 Revision: B Revision Date: 11-21-19

## **NOTES**

## **Applicator Notes**

The 204226 series terminals are extremely delicate. This section lists suggestions to help ensure smooth operation of this applicator:

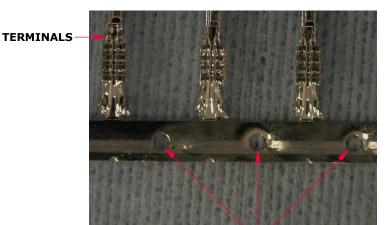
- **Caution:** The wire stop on this applicator (Order Number 63443-0090) assists in removing terminals that stick into the crimp tooling and should not be readjusted.
- Lubrication must be used to prevent terminals from sticking in the conductor punch. See General Notes below.
- The terminal feed and track may need cleaning every 10,000 cycles to reduce jamming.

\*\* Generally, a short or "zero" cut-off tab is desired. However, the tab on these terminals is extremely delicate. By maintaining a cut-off tab length of approximately 0.08-0.15mm, the terminals should feed through the cut-off plunger with minimal bending or jamming.

### **Terminal Feed Notes**

Feed jams may occur as a result of damaged carrier strip pilot holes. This damage can occur because of the following:

- Dirt buildup in the track
- Press speed is set too fast



CARRIER STRIP PILOT HOLES

### **Specification Notes**

• It is very important that the brush length is consistently within specification for this sealed connector system to work properly.

#### **General Notes**

- 1. Molex recommends that an extra perishable tooling kit be maintained at your facility.
- 2. Verify tooling alignment by hand 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 the work area.
- 4. Wear safety glasses at all times.
- 5. For recommended maintenance, refer to the FA2 manual (TM-638080200).
- 6. Molex recommends crimping standard copper wire only.
- 7. Lubrication must be used to prevent terminals from sticking in the conductor punch. Use 63801-7240 oiler or equivalent. The oiler must be positioned so that the terminals remain straight on the carrier strip.

Doc. No: 2130690500 Release Date: 07-08-19 UNCONTROLLED COPY Page 3 of 7

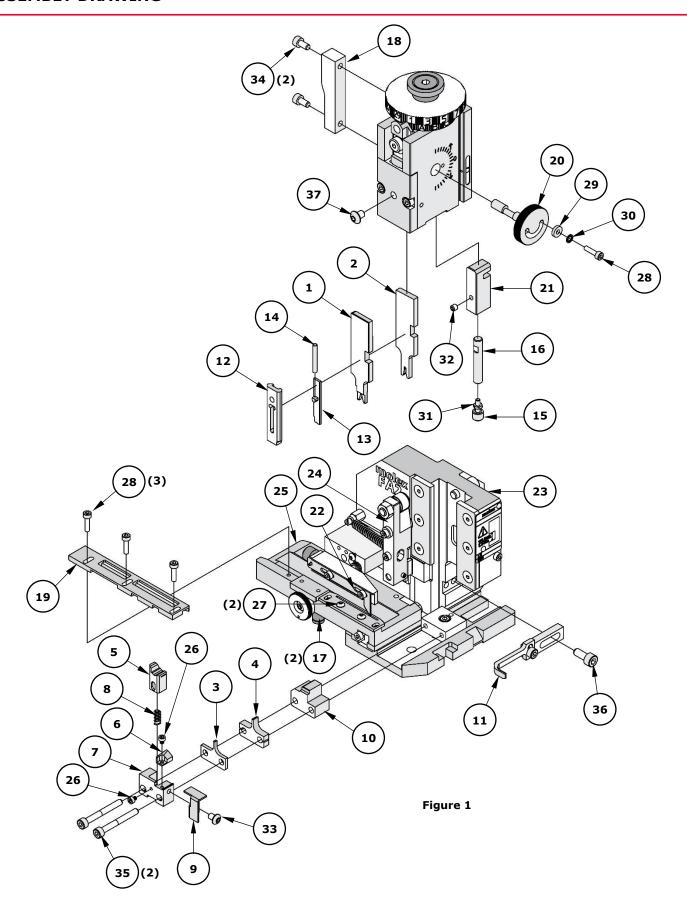
Revision: B Revision Date: 11-21-19

# **PARTS LIST**

	Applicator 213069-0500							
Item	Order No.	Engineering No.	Description	Quantity				
Perishable Tooling								
	213069-0570	213069-0570	Tool Kit (All "Y" Items)	REF				
1	63454-1305	63454-1305	Insulation Punch	1 Y				
2	63457-1215	63457-1215	Conductor Punch	1 Y				
3	63456-1304	63456-1304	Insulation Anvil	1 Y				
4	63455-1208	63455-1208	Conductor Anvil	1 Y				
5	63443-0136	63443-0136	Cut-Off Plunger	1 Y				
6	63443-0119	63443-0119	Cutting Insert	1 Y				
		Non-Perishab	le Components					
7	63443-0118	63443-0118	Front Plunger Retainer	1				
8	11-24-1067	4996-4	Cut-Off Plunger Spring	1				
9	63443-0117	63443-0117	Front Scrap Shute	1				
10	63443-7536	63443-7536	Anvil Mount	1				
11	63443-0090	63443-0090	Wire Stop	1				
12	63443-2807	63443-2807	Front Plunger Striker	1				
13	63443-2917	63443-2917	Wire Hold Down Plunger	1				
14	63600-0021	63600-0021	Wire Hold Down Spring	1				
15	63600-5776	63600-5776	Nose Hold Down	1				
16	63600-5775	63600-5775	Nose Hold Down Shank	1				
17	63600-6788	63600-6788	Drag Spring	2				
18	63443-4405	63443-4405	Feed Cam	1				
19	63443-4701	63443-4701	Terminal Guide	1				
20	63808-0229	63808-0229	Bend Adjust Dial	1				
21	63443-7403	63443-7403	Hold Down Block	1				
22	63808-0249	63808-0249	Feed Pawl Narrow	1				
			ame	_				
23	63808-0200	63808-0200	Applicator Core	1				
24	63808-0197	63808-0197	Mechanical Feed	1				
25	63808-0191	63808-0191	Track Assembly	1				
Hardware								
26	_	_	M2.5 by 3 Long SHCS	2*				
27	_	_	M3 by 6 Long BHCS	2*				
28	_	_	M3 by 12 Long SHCS	4*				
29	_	_	M3 Flat Washer Hard	1*				
30	_	_	M3 Inner Tooth Lock Washer	1*				
31	_	_	M3 Hex Nut	1*				
32			M4 by 4 Long SSS	1*				
33	_	_	M4 by 6 Long BHCS	1*				
34	_	_	M4 by 8 Long SHCS	2*				
35	_	_	M4 by 50 Long SHCS	2*				
36	_	_	M5 by 12 Long SHCS	1*				
37	_	_	#10-32UNF by .25" Long BHCS	1*				
	* /	Available from an inc	dustrial supply company.					

Doc. No: 2130690500 Release Date: 07-08-19 **UNCONTROLLED COPY** Page 4 of 7 Revision: B Revision Date: 11-21-19

# **ASSEMBLY DRAWING**



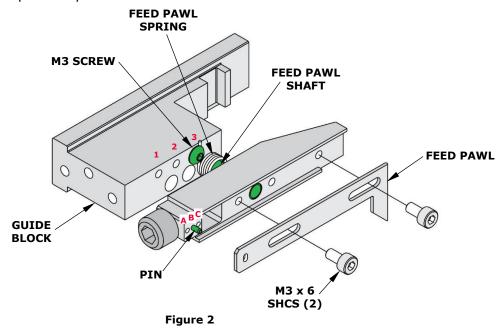
Doc. No: 2130690500 Release Date: 07-08-19 **UNCONTROLLED COPY** Page 5 of 7 Revision: B Revision Date: 11-21-19

## **FACTORY SETTINGS**

### **Feed Pawl Assembly**

The FA2 applicator number 213069-0500 ships with the following factory settings. See Figure 2:

- The feed pawl shaft and M3 screw that holds the feed pawl spring are in position 3.
- The pin is in position B.

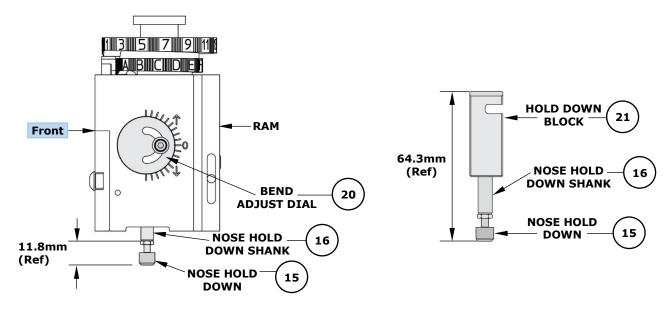


This information is included as a reference only. Each applicator is configured and tested by Molex prior to shipping, and the above settings were used to produce the included sample crimps.

# Third Dial/Ram Assembly

**Note** 

( ) Indicates item number on the Parts List and Assembly Drawing

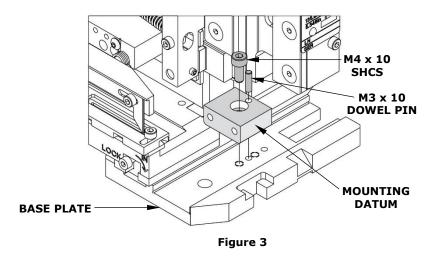


Doc. No: 2130690500 Release Date: 07-08-19 **UNCONTROLLED COPY** Page 6 of 7

Revision: B Revision Date: 11-21-19

## **Mounting Datum Location**

This applicator was assembled and tested by Molex with the mounting datum in the location shown in Figure 3. Do not remove the mounting datum.



#### WARNINGS

**CAUTION:** This applicator must be installed in a press with a standard shut height of 135.80mm (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 tooling crimp specifications are valid only when used with Molex terminals and tooling manufactured by Molex and sold by Molex or authorized distributors ("Molex Tooling"). When using tooling other than Molex Tooling with Molex-specific connector systems listed in our ATS documents, the Molex Tooling qualification does not apply, and the responsibility for full qualification of the connector system is that of the customer. Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used or where Molex Tooling is modified.

### **Application Tooling Support**

Phone: (402) 458-TOOL (8665)
E-Mail: applicationtooling@molex.com
Website: www.molex.com/applicationtooling

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Doc. No: 2130690500 Release Date: 07-08-19 **UNCONTROLLED COPY** Page 7 of 7 Revision: B Revision Date: 11-21-19