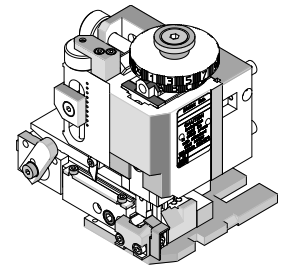


Order Number
63903-7100



Application Tooling Specification



FEATURES

- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- 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 .015mm (.0006") for conductor crimp height and .063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other

SCOPE

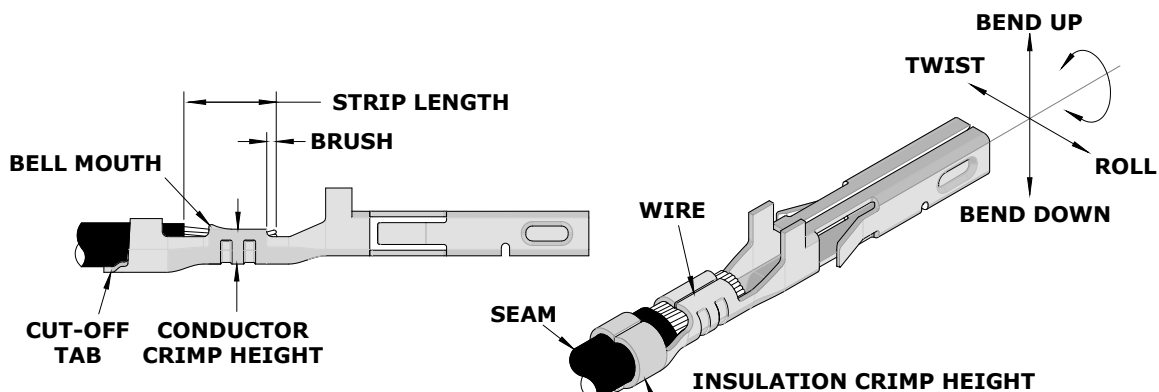
Products: Mini-Fit TPA 2.0 Crimp Terminals, 0.22mm², 0.25mm², 0.35 mm² and 22-24 AWG wires.

Terminal Series No.	Terminal Order No.	Wire Size			Insulation Diameter Terminal (2)		Strip Length	
		AWG	mm ²	Wire Type (1)	mm	In.	mm	In.
172718	172718-5111 172718-5121 172718-5123	22	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.35		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.25		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.22		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		24	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
172765	172765-5121	22	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.35		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.25		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		—	0.22		1.07-1.65	.042-.065	3.20-3.80	.126-.150
		24	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
203070	203070-5141 203070-5241	22	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
		24	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
221442	221442-5241	22	—	UL 1061	1.07-1.65	.042-.065	3.20-3.80	.126-.150
		24	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
202988	202988-5141 202988-5241	22	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150
		24	—	UL 1007	1.07-1.65	.042-.065	3.20-3.80	.126-.150

(1) Wire type shown was used to validate the crimp tooling. It is the responsibility of the end user to choose the wire type that is appropriate for their needs.

(2) Overall insulation OD specification for terminal.

DEFINITION OF TERMS



CRIMP SPECIFICATION

Terminal Series No.	Bell Mouth		Cut-Off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
172718 172765 203070 202988	0.20-0.70	.008-.028	.30	.012	0.20-0.80	.008-.032

Terminal Series No.	Bend Up	Bend Down	Twist	Roll	Punch Width (Ref)				Seam
					Conductor		Insulation		
	Degree (Max)	Degree (Max)	mm	In.	mm	In.			
172718 172765 203070 202988	3	3	3	8	1.30	.051	1.60	.063	Seam shall not be open and no wire allowed out of the crimping area

After crimping, the conductor profile should measure the following:

Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
	AWG	mm ²	Crimp Height		Crimp Width (Ref)		N	Lb.
			mm	In.	mm	In.		
172718 172765 203070 202988	22	—	0.80-0.90	.032-.035	1.20	.047	35.6	8.0
	—	0.35	0.80-0.90	.032-.035	1.20	.047	35.6	8.0
	—	0.25	0.72-0.82	.029-.032	1.20	.047	22.2	5.0
	—	0.22	0.70-0.80	.028-.031	1.20	.047	22.2	5.0
	24	—	0.68-0.78	.027-.030	1.20	.047	22.2	5.0

Terminal Series No.	Wire Size		Insulation			
	AWG	mm ²	Crimp Height (Ref)		Crimp Width (Ref)	
			mm	In.	mm	In.
172718	22	—	2.00	.079	1.75	.069
172765	—	0.35	1.90	.075	1.75	.069
203070	—	0.25	1.80	.071	1.70	.067
202988	—	0.22	1.75	.069	1.65	.065
	24	—	1.65	.065	1.65	.065

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.

PARTS LIST

FineAdjust Applicator 63903-7100				
Item	Order No.	Engineering No.	Description	Quantity
Perishable Tooling				
	63903-7170	63903-7170	Tool Kit (All "Y" Items)	REF
1	63457-1206	63457-1206	Conductor Punch	1 Y
2	63455-1203	63455-1203	Conductor Anvil	1 Y
3	63454-1602	63454-1602	Insulation Punch	1 Y
4	63456-1601	63456-1601	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Front Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Other Components				
7	11-17-0022	1739-21	Hold Down Spring	1
8	11-18-4083	60707-8	Feed Guide	1
9	11-24-1067	4996-4	Cut-Off Plunger Spring	1
10	63443-0009	63443-0009	Front Scrap Chute	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-0093	63443-0093	Shank	1
14	63443-1167	63443-1167	Blade-Wire Hold Down	1
15	63443-1722	63443-1722	Height Spacer (19.20mm)	1
16	63443-2215	63443-2215	Spacer (15.0mm)	1
17	63443-2307	63443-2307	Spacer (3.35mm)	1
18	63443-2803	63443-2803	Front Plunger Striker	1
19	63443-2911	63443-2911	Striker Plunger	1
20	63443-6117	63443-6117	Rear Cover	1
21	63600-1057	63600-1057	Striker Plunger Spring	1
22	63600-2673	63600-2673	Mini Rod	1
23	63600-4389	63600-4389	Spring-Compression	1
24	63903-6905	63903-6905	Terminal Hold Down	1
Frame				
25	63800-4901	63800-4901	Top	1
26	63801-3281	63801-3281	Base	1
27	63801-4650	63801-4650	Track	1
Hardware				
28	—	—	M3 by 6 Long SHCS	2*
29	—	—	M3 by 6 Long FHCS	1*
30	—	—	M3 by 8 Long SHCS	1*
31	—	—	M4 by 6 Long SHCS	2*
32	—	—	M4 by 12 Long BHCS	2*
33	—	—	M4 by 50 Long SHCS	2*
34	—	—	M5 by 12 Lg SHCS	1*
35	—	—	#10-32 by 3/8" Long Flat Point SSS	1*
36	—	—	#10-32 Hex Jam Nut	1*

* Available from an industrial supply company.



NOTES

1. Molex recommends that 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 the 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 135.8mm (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.

Application Tooling Support

E-Mail: toolingsupport@molex.com
Website: www.molex.com/applicationtooling

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.