Order Number 63808-7900





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
- 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
- This applicator was designed for use in a wire processor only
- Fine adjustment of the bend is achieved using the bend adjust dial

SCOPE

Products: MX150 Blade Crimp Terminals, 14 AWG and 1.50mm² and 2.00mm² Wire.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length		
		Wire Type	Size			In.		In.
Series No.			AWG	mm ²	mm	111.	mm	10.
	33000-1001	TXL	14	_	2.10-2.70	.083106	4.70-5.60	.185220
		UTX	14	_				
33000		ISO	—	1.50				
		FLR91X-A-XPLO	—	1.50				
		AVSS	—	2.00				
	33011-0002 33011-3003	TXL	14	_	2.10-2.70	.083106	4.70-5.60	.185220
		UTX	14	_				
		ISO	—	1.50				
33011		FLR91X-A-XPLO	—	1.50				
		AVSS	—	2.00				
		PSA FTP 00949_10_00770	—	1.50				
		PSA FTP 00949_10_00771	—	2.00				
	34782-1001	TXL	14	_	2.10-2.70	.083106	4.70-5.60	.185220
34782		UTX	14	_				
		ISO	—	1.50				
		FLR91X-A-XPLO	—	1.50				
		AVSS	—	2.00				
		PSA FTP 00949_10_00770	—	1.50				
		PSA FTP 00949_10_00771	—	2.00				

CAUTION: To consistently achieve the conductor brush length, it is recommended to run this applicator on a wire processor.

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

DEFINITION OF TERMS



CRIMP SPECIFICATIONS

The following crimp specifications are based on document AS-33000-001 Rev. F:

Feature	Requirement							
1. Bend Up	3° Max							
2. Bend Down	3° Max							
3. Twist	3° Max							
4. Roll	3° Max							
5. Bell Mouth Rear	0.30-0.70mm (.012028")							
6. Bell Mouth Front	Not Applicable							
7. Conductor Brush	0.40mm Max (.016") Not to extend above the crimp/ transition height							
8. Cut-Off Tab	0.50mm (.020") Max							
	Wire Type	ype Wire Size 9. Crimp Height		Height	10. Crimp Width			
	TXL	14 AWG	1.60-1.70mm	.063067 in.	2.35-2.55mm			
	UTX	14 AWG	1.60-1.70mm	.063067 in.				
Conductor Crimp	ISO	1.50mm ²	1.35-1.45mm					
conductor crimp	FLR91X-A-XPLO	1.50mm ²	1.35-1.45mm					
	AVSS	2.00mm ²	1.55-1.65mm					
	PSA FTP 00949_10_00770		1.40-1.50mm					
	PSA FTP 00949_10_00771	2.00mm ²	1.50-1.60mm					
	Wire Type	Wire Size	11. Crim		12. Crimp Width			
	TXL	14 AWG	2.80-2.90mm		2.60-2.70mm	.102106 in.		
	UTX	14 AWG	2.70-2.90mm					
Insulation Crimp	ISO	1.50mm ²	2.70-2.80mm					
	FLR91X-A-XPLO	1.50mm ²						
	AVSS	2.00mm ²	2.80-2.90mm					
	PSA FTP 00949_10_00770		2.55-2.65mm					
	PSA FTP 00949_10_00771	2.00mm ²	2.65-2.75mm					
	Wire Type	Wire Size	Minimun					
	TXL	14 AWG	180 N	40.5 lb.				
	UTX	14 AWG	180 N	40.5 lb.	To be measured with no influence from the insulation crimp.			
Pull Force	ISO	1.50mm ²	150 N	33.7 lb.				
Puil Force	FLR91X-A-XPLO	1.50mm ²	150 N	33.7 lb.				
	AVSS	2.00mm ²	180 N	40.5 lb.				
	PSA FTP 00949 10 00770	1.50mm ²	155 N	34.8 lb.				
	PSA FTP 00949_10_00771	2.00mm ²	195 N	43.8 lb.				
13. Conductor Anvil Flash	0.10mm (.004") Max				1			
14. Insulation Grip Step	0.20-0.40mm (.008016")							
15. Crimp Bulge	2.55mm (.100") Max within		sition area					
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NOTES

Applicator Notes

- This applicator is for automatic wire processor use only.
- This applicator does not include a cutting insert.
- Installing a cutting insert will cause jamming in this applicator.

Specification Notes

• This applicator should only be run in a properly set up wire processor to consistently achieve the brush length

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 stranded copper wire only.
- 7. Lubrication must be used when crimping gold and select gold terminals to prevent terminals from sticking in the conductor punch. Use 63801-7240 oiler or equivalent.

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 wireprocessing 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.



PARTS LIST

Item	Order No.	FA2 Applicato Engineering No.	Description	Quantity
			le Tooling	- Quantity
	63808-7970	63808-7970	Tool Kit (All "Y" Items)	Ref
1	200220-2601	200220-2601	Insulation Punch	1 Y
2	63457-0116	63457-0116	Conductor Punch	1 Y
3	200221-2600	200221-2600	Insulation Anvil	1 Y
4	63455-0143	63455-0143	Conductor Anvil	1 Y
5	63443-0034	63443-0034	Cut-Off Plunger	1 Y
		Non-Perishab	e Components	
6	63443-0128	63443-0128	Front Plunger Retainer	1
7	63700-0539	63700-0539	Cut-Off Plunger Spring	1
8	63443-0117	63443-0117	Front Scrap Chute	1
9	63443-7533	63443-7533	Anvil Mount	1
10	63443-0090	63443-0090	Wire Stop Assembly	1
11	63443-2802	63443-2802	Front Plunger Striker	1
12	63443-2915	63443-2915	Wire Hold Down Plunger	1
13	63600-0021	63600-0021	Wire Hold Down Spring	1
14	63600-5776	63600-5776	Nose Hold Down	1
15	63600-5775	63600-5775	Nose Hold Down Shank	1
16	63443-4759	63443-4759	Terminal Guide	1
17	63443-7405	63443-7405	Hold Down Block	1
18	63808-0229	63808-0229	Bend Adjust Dial	1
19	63808-0297	63808-0297	Feed Cam	1
		Fra	ime	
20	63808-0200	63808-0200	Applicator Core	1
21	63808-0197	63808-0197	Mechanical Feed Assembly	1
22	63808-0190	63808-0190	Track Assembly	1
		Hard	ware	
23	—	—	M2.5 x 4 SHCS	1*
24	—	_	M3 Hex Nut	1*
25	—	—	M3 Flat Washer Hard	1*
26	—	—	M3 Inner Tooth Lock Washer	1*
27	—	—	M3 x 6 BHCS	2*
28	—	—	M3 x 12 SHCS	4*
29	—	_	M4 x 5 SSS	1*
30	—	—	M4 x 6 SHCS	1*
31			M4 x 8 SHCS	2*
32	_		M4 x 40 SHCS	2*
33	_		M5 x 12 SHCS	1*
34	_		M5 Hex Jam Nut	1*
35	—		M5 x 12 Long Cup Point SSS	

description in the table above.

ASSEMBLY DRAWING



FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 63808-7900 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 2.
- The pin is in position B.



Note: 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: The above dimensions were measured during setup and are included as a reference only. Additional adjustments may be required before crimping for production.

Mounting Datum Location

This applicator was assembled and tested by Molex with the mounting datum in the location shown in Figure 4. Do not remove the mounting datum.



Figure 4

Application Tooling Support

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

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