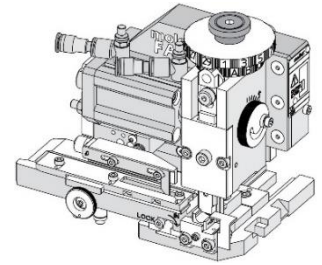


Order Number
63808-6910

molex[®]

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 adjust dial
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other
- This applicator was designed for use in a wire processor only
- This applicator is configured with a pneumatic feed, which requires a 4-way pneumatic valve for operation

SCOPE

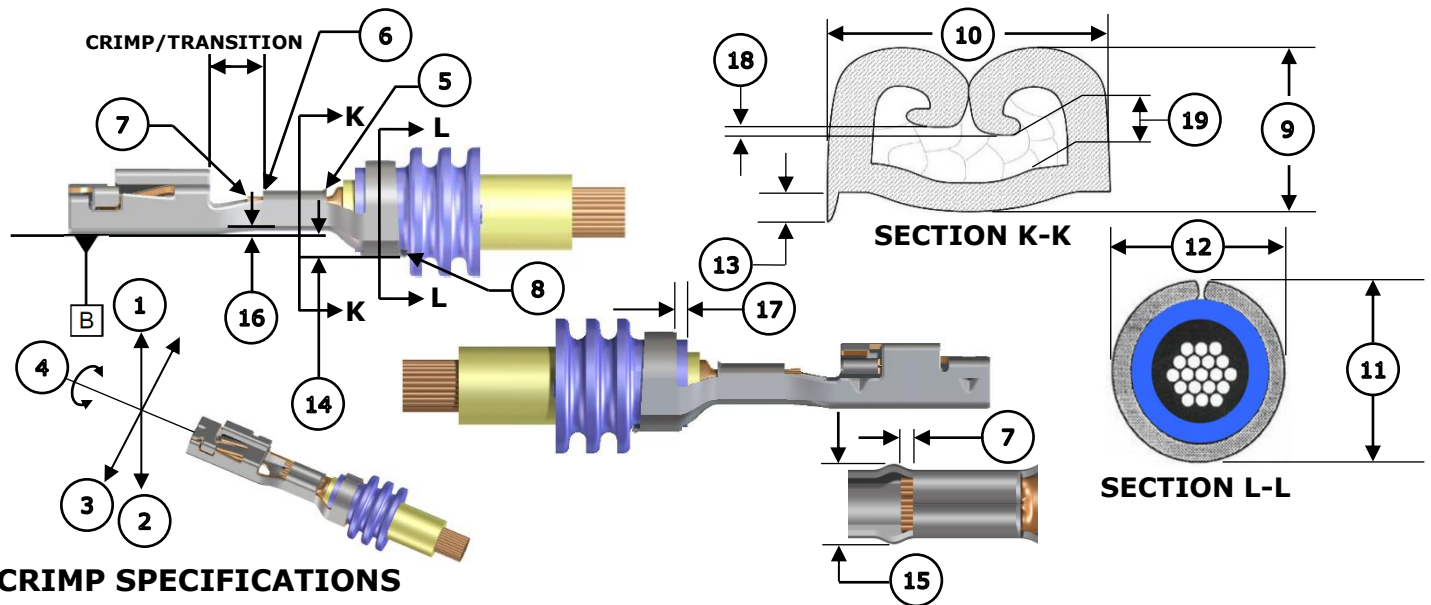
Products: CTX280 VS Grip Receptacle Wire Seal, 1.00mm², 0.75mm² and 0.50mm² wire.

Terminal Series No.	Terminal Order No.		Wire		Insulation Diameter		Strip Length	
			Wire Type	Size	mm	In.	mm	In.
34808	34808-1001	34808-2009	T3-ZHID	1.00mm ² 0.75mm ² 0.50mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	34808-1041	34808-2017						
	34808-1061	34808-2025						
	34808-1071	34808-2050						
	34808-1101	34808-2150						
34865	34865-1001	34865-1061	T3-ZHID	1.00mm ² 0.75mm ² 0.50mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	34865-1041	34865-1101						
98675	98675-1001	98675-1061	T3-ZHID	1.00mm ² 0.75mm ² 0.50mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	98675-1011	98675-1101						
	98675-1041	98675-1111						
	98675-1051	98675-2050						
208528	208528-1061	208528-2050	T3-ZHID	1.00mm ² 0.75mm ² 0.50mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
34808	34808-1041	34808-2009	FLRY-A	1.00mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	34808-1101	34808-2017						
	34808-2001	34808-2025						
34865	34865-1041	34865-1101	FLRY-A	1.00mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	98675-1041	98675-1101						
98675	98675-1041	98675-1101	FLRY-A	1.00mm ²	1.40-1.95	.055-.077	4.30-4.80	.169-.189
	98675-1051	98675-1111						

CAUTION: This applicator was designed for use in a wire processor only.

CAUTION: To operate the pneumatic feed, a 4-way pneumatic valve is required.

DEFINITION OF TERMS



CRIMP SPECIFICATIONS

The following crimp specifications are based on document AS-98675-002 Revision F5:

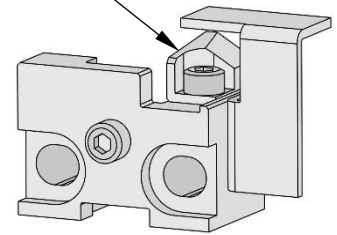
Feature	Requirement					
1. Bend Up	1° Max					
2. Bend Down	1° Max					
3. Twist	2° Max					
4. Roll	3° Max					
5. Bell Mouth Rear	0.40-0.60mm (.016-.024")					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.20-0.60mm (.008-.024")					
8. Cut-Off Tab	0.30mm (.012") Max					
Conductor Crimp	Wire Type	Wire Size	9. Crimp Height		10. Crimp Width	
	T3-ZHID	1.00mm ²	1.17-1.23mm	.046-.048 in.	1.97-2.17mm	.078-.085 in.
		0.75mm ²	1.08-1.18mm	.043-.046 in.		
		0.50mm ²	1.07-1.13mm	.042-.044 in.		
FLRY-A	1.00mm ²	1.23-1.29mm	.048-.051 in.			
Insulation Crimp	Wire Type	Wire Size	11. Crimp Height		12. Crimp Width	
	T3-ZHID	1.00mm ²	4.50-4.70mm	.177-.185 in.	4.90-5.10mm	.193-.201 in.
		0.75mm ²	4.40-4.60mm	.173-.181 in.		
		0.50mm ²	4.30-4.50mm	.169-.177 in.		
FLRY-A	1.00mm ²	4.50-4.70mm	.177-.185 in.			
Pull Force	Wire Type	Wire Size	Minimum Force		To be measured with no influence from the insulation crimp.	
	T3-ZHID	1.00mm ²	115 N	25.9 lb.		
		0.75mm ²	90 N	20.3 lb.		
		0.50mm ²	70 N	15.8 lb.		
FLRY-A	1.00mm ²	120 N	27.0 lb.			
13. Conductor Anvil Flash	0.10mm (.004") Max					
14. Insulation Grip Step	1.20-1.40mm (.047-.055")					
15. Crimp Bulge	4.15mm (.163") Max within crimp/transition area					
16. Conductor Grip Step	0.05-0.25mm (.002-.010") Above Datum B					
Misc.	Wire Type	Wire Size	17. Wire Seal Position (Terminal)		Wire Seal Color	Wire Seal No.
	T3-ZHID	1.00mm ²	1.10-2.50mm	.043-.098 in.	Red	64325-1332
		0.75mm ²				
		0.50mm ²				
	FLRY-A	1.00mm ²				
	Wire Type	Wire Size	18. Wing Dissymmetry		19. Space Between Wing Tips and Crimp Bottom	
T3-ZHID	1.00mm ²	0.00-0.32mm	.000-.013 in.	0.16-2.00mm	.006-.079 in.	
	0.75mm ²	0.00-0.32mm	.000-.013 in.	0.16-2.00mm	.006-.079 in.	
	0.50mm ²	0.00-0.32mm	.000-.013 in.	0.001-2.00mm	.000-.079 in.	
FLRY-A	1.00mm ²	0.00-0.32mm	.000-.013 in.	0.16-2.00mm	.006-.079 in.	

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.

CUTTING INSERT



Specification Notes

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

PARTS LIST

Applicator 63808-6910				
Item	Order No.	Engineering No.	Description	Quantity
Perishable Tooling				
	63808-6970	63808-6970	Tool Kit (All "Y" Items)	Ref
1	63454-0111	63454-0111	Insulation Punch	1 Y
2	63457-2006	63457-2006	Conductor Punch	1 Y
3	63456-4901	63456-4901	Insulation Anvil	1 Y
4	63455-2002	63455-2002	Conductor Anvil	1 Y
5	63443-0142	63443-0142	Cut-Off Plunger	1 Y
Non-Perishable Components				
6	63443-0135	63443-0135	Front Plunger Retainer	1
7	63700-0992	63700-0992	Cut-Off Plunger Spring	1
8	63443-0117	63443-0117	Front Scrap Chute	1
9	63443-7522	63443-7522	Anvil Mount	1
10	63443-0090	63443-0090	Wire Stop Assembly	1
11	63443-3601	63443-3601	Front Plunger Striker	1
12	63443-3702	63443-3702	Wire Hold Down Plunger	1
13	63600-5776	63600-5776	Nose Hold Down	1
14	63600-5775	63600-5775	Nose Hold Down Shank	1
15	63443-4757	63443-4757	Terminal Guide	1
16	63808-0220	63808-0220	Hold Down Block	1
17	63808-0229	63808-0229	Bend Adjust Dial	1
18	63443-1230	63443-1230	Feed Pawl	1
19	63443-4603	63443-4603	Carrier Cover	1
Frame				
20	63808-0200	63808-0200	Applicator Core	1
21	63808-0196	63808-0196	Pneumatic Feed Assembly	1
22	63808-0191	63808-0191	Track Assembly	1
Hardware				
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 3 SSS	2*
28	—	—	M3 x 6 BHCS	2*
29	—	—	M3 x 12 SHCS	4*
30	—	—	M4 x 5 SSS	1*
31	—	—	M4 x 6 SHCS	1*
32	—	—	M4 x 50 SHCS	2*
33	—	—	M5 x 12 SHCS	1*
34	—	—	#10-32 Hex Jam Nut	1*
35	—	—	#10-32 by 3/8" Long Flat Point SSS	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

ASSEMBLY DRAWING

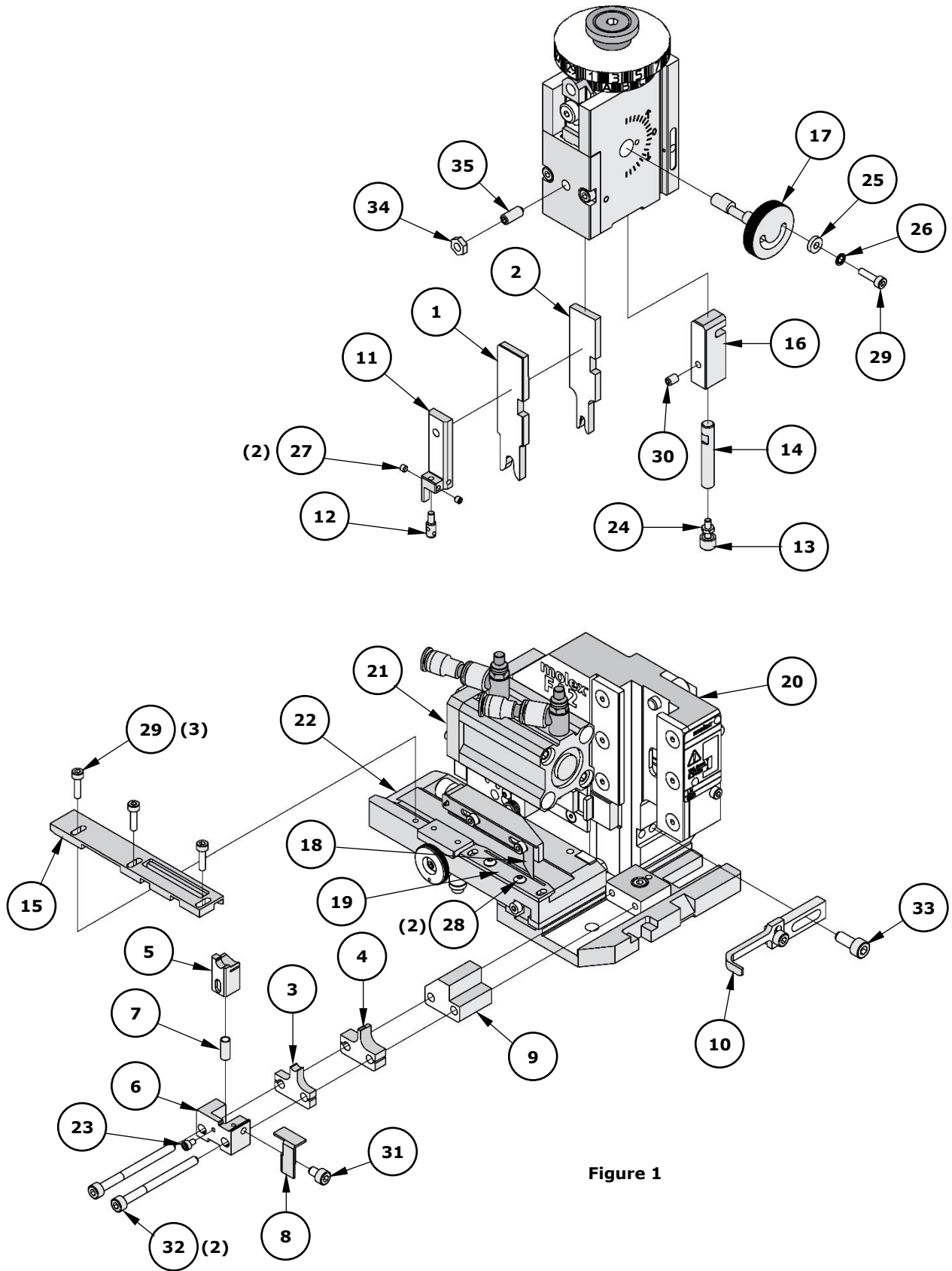


Figure 1

FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 63808-6910 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.

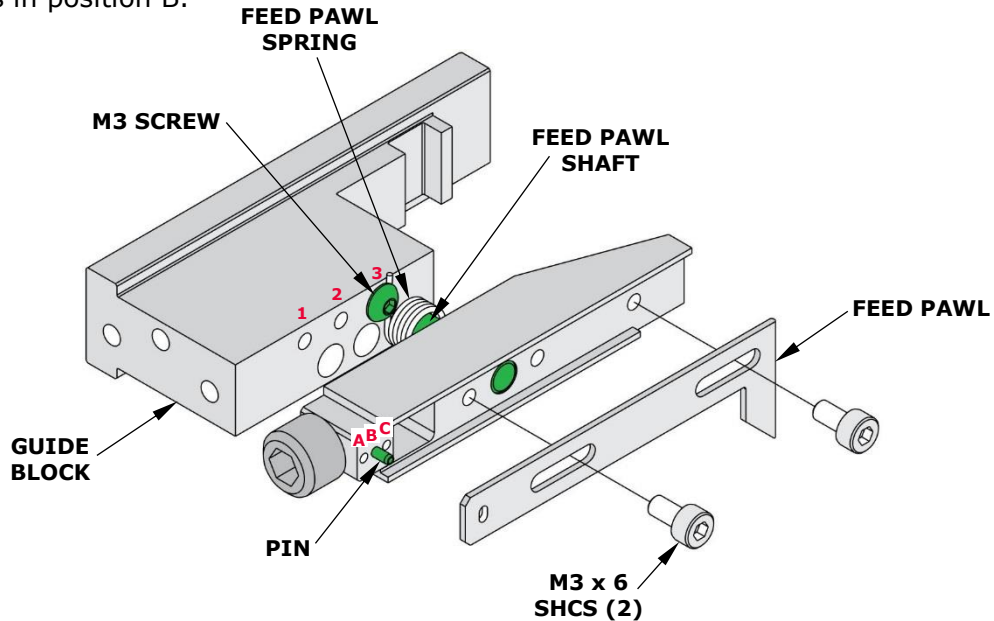


Figure 2

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

○ Indicates item number on the Parts List and Assembly Drawing

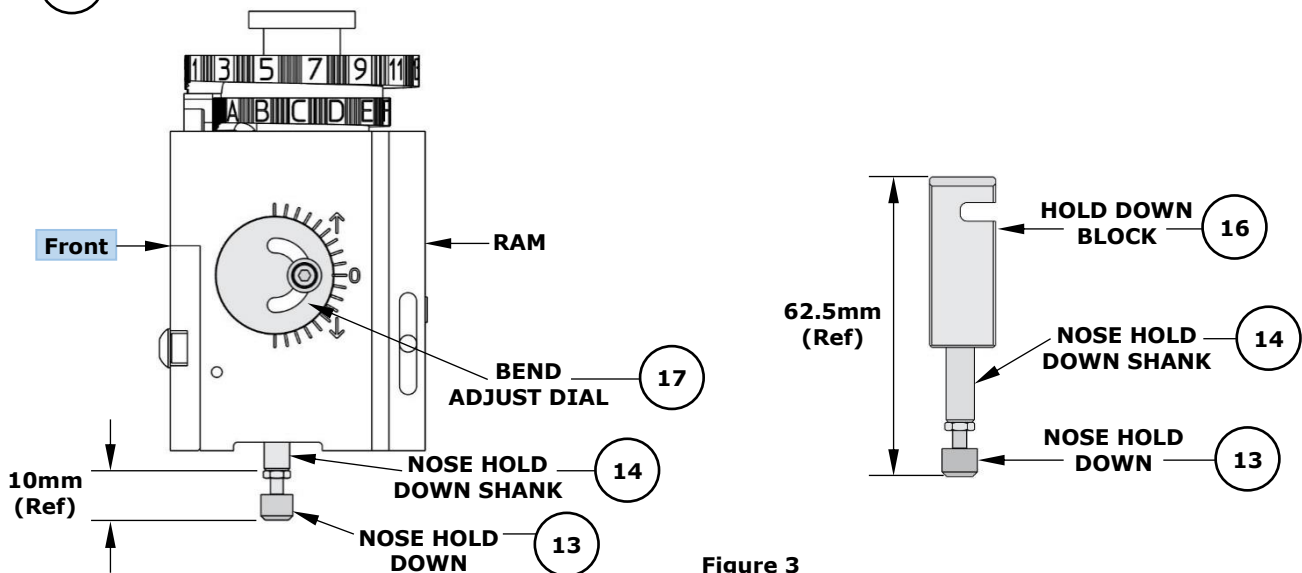


Figure 3

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.

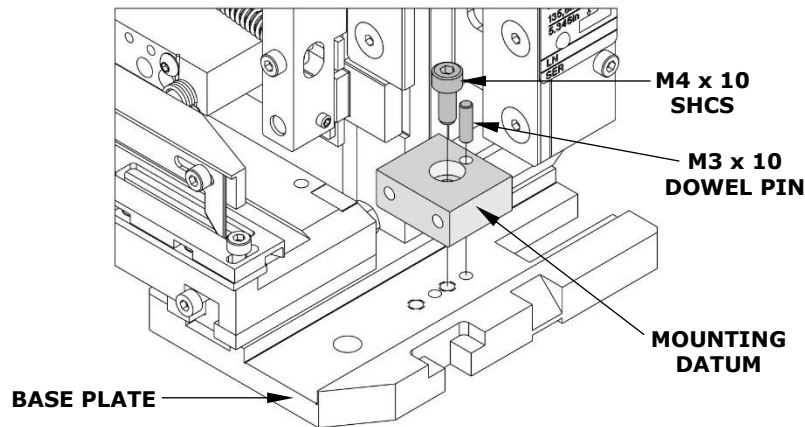


Figure 4

PNEUMATIC CONNECTION (AIR FEED)

- The pneumatic feed applicator uses a double-acting air cylinder that must be actuated by a 4-way pneumatic valve.
- The air cylinder is equipped with push-in fittings for 6mm diameter vinyl or Nylon tube. Adapters are included for 1/4" diameter and 4mm diameter vinyl or Nylon tube.

Note: The TM-3000 and TM-4000 presses have pneumatic valves with 1/4" diameter tube fittings. Be sure to install the 1/4" diameter adapters in the air cylinder fittings and use 1/4" diameter vinyl or Nylon tube.

- Pneumatic tubes must be connected as shown in Figure 5. Tubes are typically connected so the terminal feed is forward when the applicator ram is up.
- When using the TM-3000 or TM-4000 presses, connect the tubes to the press pneumatic valve as shown in Figure 6.

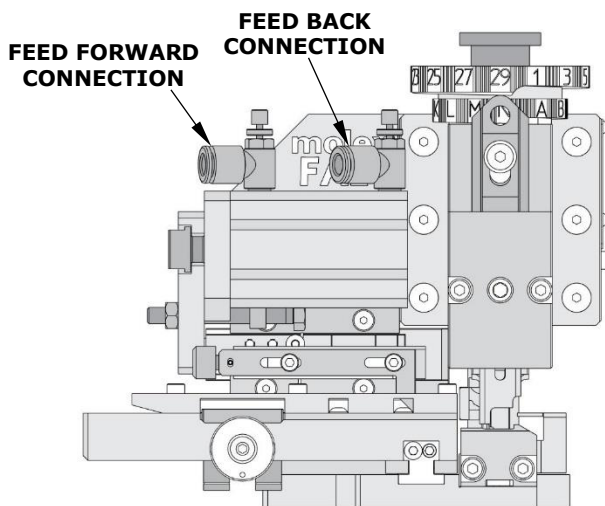


Figure 5

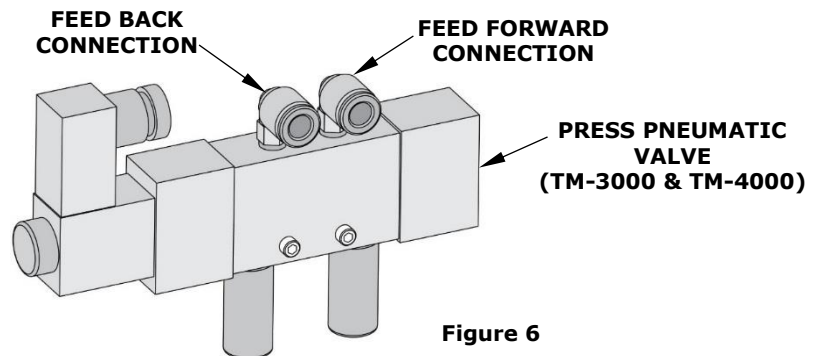


Figure 6

Application Tooling Support

Phone: (402) 458-TOOL (8665)

E-Mail: applicationtooling@molex.com

Website: www.molex.com/applicationtooling

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