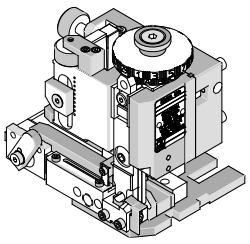
Mini-Mac Applicator
Mechanical Feed
Metal Strip

molex

Application Tooling Specification Sheet



Order No. 63895-3900

FEATURES

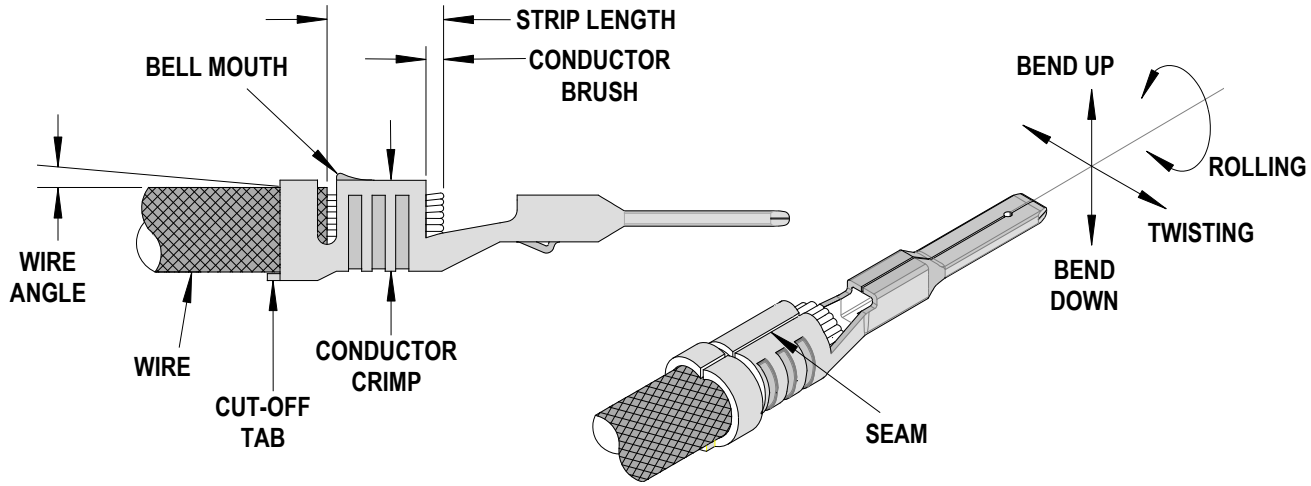
- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows 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 quickly adjust the conductor or insulation crimp height without affecting each other.

SCOPE

Products: SRC Connector using MX150L Male and Female Crimp Terminals, 3.0mm² FLRY-B wire.

Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter		Strip Length	
		Wire Type	mm²	mm	In.	mm	In.
19431	19431-0064*	FLRY-B	3.0	3.10-3.40	.122-.134	5.50-6.20	.217-.244
19434	19434-0013*	FLRY-B	3.0	3.10-3.40	.122-.134	5.50-6.20	.217-.244
Terminals were validated using the following wire specifications: ISO 6722-1, Class B * This terminal cannot be used with housing series 19432.							

DEFINITION OF TERMS



CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
19431	0.25-1.25	.010-.049	0.50	.020	0.10-0.50	.004-.020
19434	0.25-1.25	.010-.049	0.50	.020	0.10-0.50	.004-.020

Terminal Series No.	Bend up Bend down Degree		Twist Roll Degree		Punch Width (Ref) Conductor mm	Punch Width (Ref) Conductor In	Punch Width (Ref) Insulation mm	Punch Width (Ref) Insulation In	Wire Angle Degree	Conductor Seam
19431	2	3	4	8	3.80	.150	4.00	.157	5° Maximum	Seam shall not be open and no wire allowed out of the crimping area
19434	2	3	4	8	3.80	.150	4.00	.157	5° Maximum	

After crimping, the crimp profiles should measure the following:

Terminal Series No.	Wire Size		Conductor Crimp Height		Conductor Crimp Width		Pull Force Minimum	
	Wire Type	mm^2	mm	In.	mm	In.	N	Lb.
19431	FLRY-B	3.0	2.03-2.13	.080-.084	3.70-3.90	.146-.154	266	59.8
19434	FLRY-B	3.0	2.03-2.13	.080-.084	3.70-3.90	.146-.154	266	59.8

Terminal Series No.	Wire Size		Insulation Crimp Height (Ref)		Insulation Crimp Width (Ref.)	
	Wire Type	mm^2	mm	In.	mm	In.
19431	FLRY-B	3.0	3.45	.136	4.15	.163
19434	FLRY-B	3.0	3.45	.136	4.15	.163

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

Mini-Mac Applicator 63895-3900				
Item	**Order No**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63895-3970	63895-3970	Tool Kit (All "Y" Items)	REF
1	63465-0042	63465-0042	Conductor Punch	1 Y
2	63455-3801	63455-3801	Conductor Anvil	1 Y
3	63471-0017	63471-0017	Insulation Punch	1 Y
4	63443-0037	63443-0037	Cut-off Plunger Front	1 Y
5	63443-0038	63443-0038	Plunger Retainer Front	1 Y
Other Components				
6	11-18-4083	60707-8	Feed Guide	1
7	11-18-4848	60800A123	Spring Retainer	1
8	11-18-4849	60800A124	Wire Hold Down Spring	1
9	11-24-1067	4996-4	Cut-Off Plunger Spring	1
10	63443-0009	63443-0009	Scrap Chute Front	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-1727	63443-1727	Height Spacer (19.70mm)	1
14	63443-1740	63443-1740	Height Spacer (21.00mm)	1
15	63443-2201	63443-2201	Course Spacer (1.00mm)	1
16	63443-2207	63443-2207	Course Spacer (7.00mm)	1
17	63443-2314	63443-2314	Fine Spacer (3.70mm)	1
18	63443-6125	63443-6125	Rear Cover	1
19	63466-0508	63466-0508	Cut-off Plunger Striker Front	1
20	63890-0866	63890-0866	Collar-6.40 Long	1
21	63890-0995	63890-0995	Collar-4.05 Long	1
Frame				
22	63801-3201	63801-3201	Top	1
23	63801-3281	63801-3281	Base	1
24	63801-4650	63801-4650	Track	1
Hardware				
25	N/A	N/A	M3 by 6 Long FHCS	1**
26	N/A	N/A	M3 by 6 Long SHCS	2**
27	N/A	N/A	M4 by 6 Long SHCS	2**
28	N/A	N/A	M4 by 12 Long BHCS	2**
29	N/A	N/A	M4 by 50 Long SHCS	2**
30	N/A	N/A	M5 by 12 Long SHCS	1**
31	N/A	N/A	M8 by 30 Long BHCS	1**
32	N/A	N/A	2mm by 5 Long Roll Pin	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

Assembly Drawing

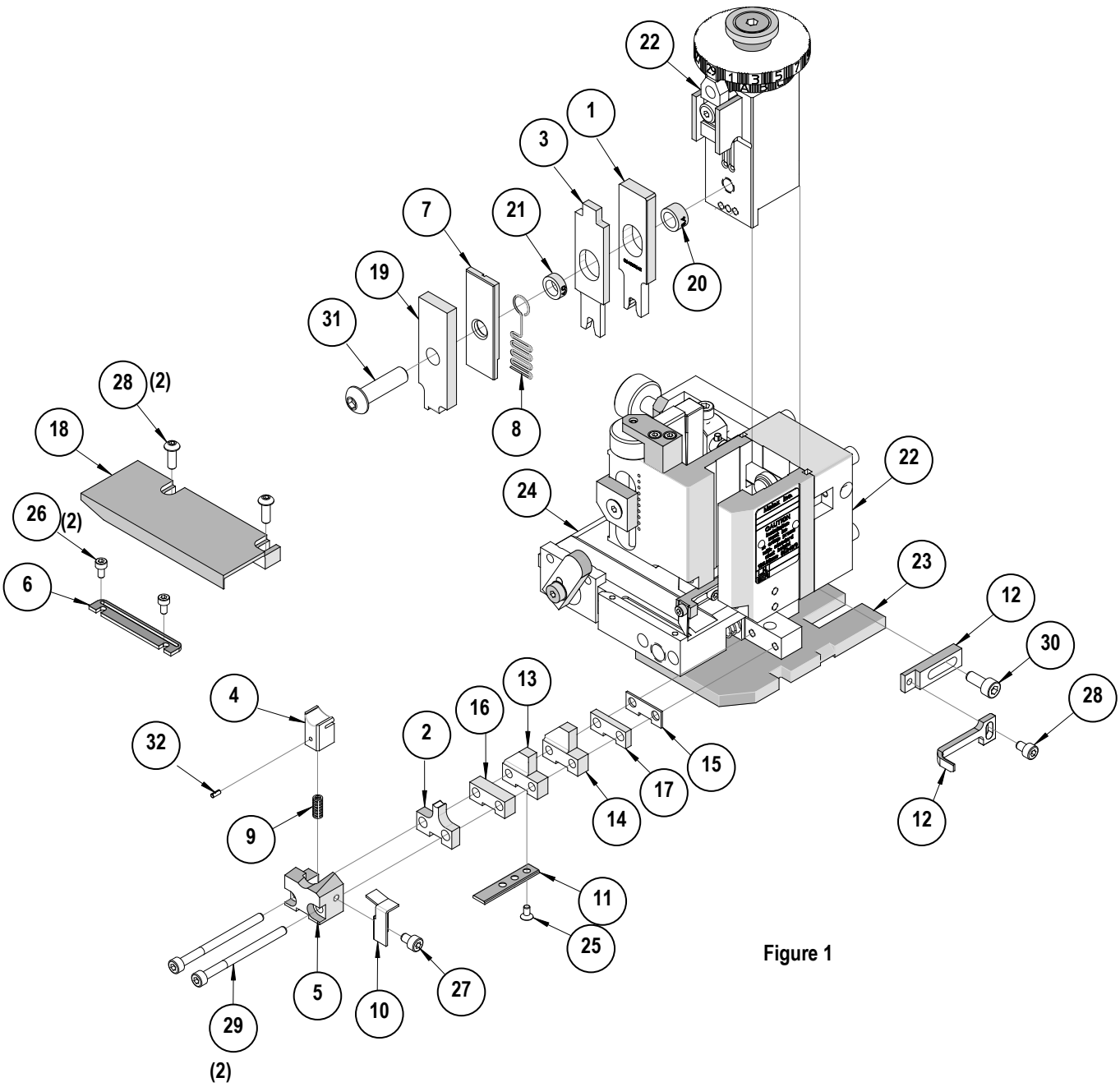


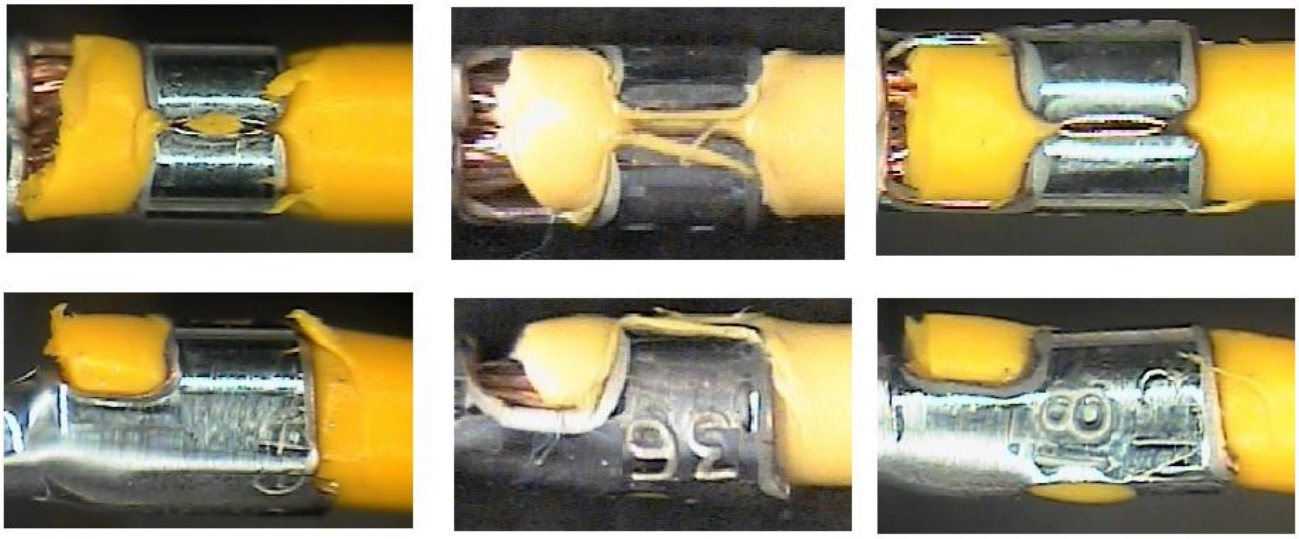
Figure 1

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 Mini-Mac Applicator Manual (Document no. 63880-0000).

Insulation Attribute Notes:

In order to help ensure the integrity of the connector seal, the design intent is to partially bury the insulation grips into the wire insulation. Due to this, skiving of the insulation may occur. This skiving attribute is acceptable. Below are examples of insulation skiving that may be seen with this connector system.



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: These Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling qualified by Molex. When using non-Molex tooling with this specific connector system listed in this document, the Molex qualification does not apply and the responsibility for full qualification of the connector system is that of the customer. Molex accepts no liability for tooling support where non-Molex tooling is used.

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