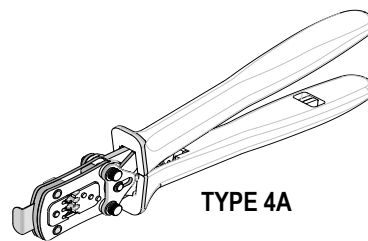


Modular Crimp Head
Order No. 63819-3770

molex

Application Tooling Specification Sheet



Hand Crimp Tool
Order No. 63819-3700

FEATURES

- % A full cycle ratcheting hand tool ensures complete crimps
- % Ergonomically designed soft handles
- % Precisely designed crimping profiles with simple contact positioning
- % Easy handling due to outstanding force ratio
- % Modular Crimp Head is removable and can be use in the Air Powered Tool Order No.63816-0100, accompanied by Air Powered Crimp Adapter (Order No. 63816-0700).
- % Can also be used in the Battery Powered Tool Order No.63816-0200 (110 V) or 63816-0250 (220 V), accompanied by Battery Powered Crimp Adapter (Order No. 63816-0600).

SCOPE

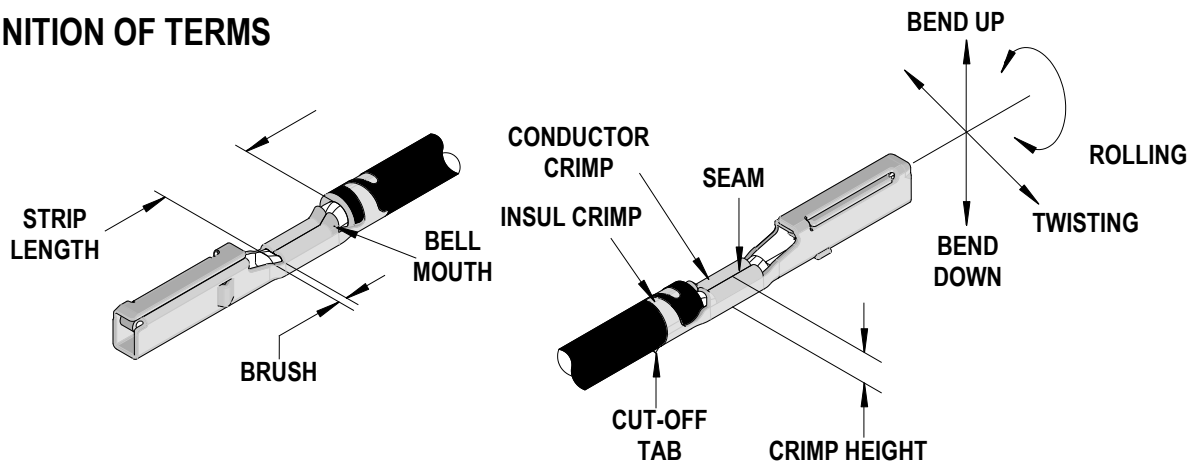
Products: CTX64 Receptacle Terminals for 0.22, 0.30, 0.35mm² and 22 AWG.

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
	*Reel Form only			AWG	mm ²	mm	In.	mm	In.
502306	502306-0111	502306-0411	502306-2307	-	0.22mm2-0.35mm2	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	502306-0113	502306-0413	502306-2308						
	502306-0121	502306-1111	502306-3111						
	502306-0123	502306-1113	502306-3113						
	502306-0211	502306-1121	502306-3211						
	502306-0213	502306-1123	502306-3213						
	502306-0221	502306-2111	502306-3403	22 AWG	-	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	502306-0223	502306-2113	502306-3407						
	502306-0403	502306-2121	502306-3411						
	502306-0404	502306-2123	502306-3413						
	502306-0407	502306-2303	502306-5303						
	502306-0408	502306-2304	502306-5307						
34803	34803-0111	34803-0411	34803-2307	-	0.22mm2-0.35mm2	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	34803-0113	34803-0413	34803-2308						
	34803-0121	34803-1111	34803-3111						
	34803-0123	34803-1113	34803-3113						
	34803-0211	34803-1121	34803-3211						
	34803-0213	34803-1123	34803-3213						
	34803-0221	34803-2111	34803-3403	22 AWG	-	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	34803-0223	34803-2113	34803-3407						
	34803-0403	34803-2121	34803-3411						
	34803-0404	34803-2123	34803-3413						
	34803-0407	34803-2303	34803-5303						
	34803-0408	34803-2304	34803-5307						

34863	34863-0211	34863-0411	34863-3403	-	0.22mm2-0.35mm2	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	34863-0213	34863-0413	34863-3407						
	34863-0403	34863-3211	34863-3411	22 AWG	-				
	34863-0407	34863-3213	34863-3413						
34970	34970-3111	34970-3403	34970-3413	-	0.22mm2-0.35mm2	1.10-1.65	.043-.065	4.00-4.50	.158-.177
	34970-3113	34970-3407	34970-5303						
	34970-3211	34970-3411	34970-5307	22 AWG	-				
	34970-3213								

* Customer to cut off terminal from reel: 0.30mm (.012") maximum Cut-off Tab.

DEFINITION OF TERMS



CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		* Conductor Brush		Bend up Bend Down		Twist Roll	
	mm	In.	mm	In.	Degree (Max)		Degree (Max)	
502306 34803 34863 34970	0.20-0.55	.008-.022	0.20-1.00	.008-.039	1	2	4	6

* Wire brush must be flush or below top of Conductor Crimp.

After crimping, the crimp profiles should measure the following (See notes on page 4).

Terminal Series No.	Wire Size		Conductor				Insulation				Pull Force Minimum	
			Crimp Height		Crimp Width (Ref)		Crimp Height Maximum		Crimp Width Maximum			
	Wire Type	mm ² / AWG	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.
502306 34803 34863 34970	FLRY-A	0.22	0.62-0.68	.024-.027	1.30	.051	1.50	.059	1.60	.063	35	7.9
	T3ZHID	0.35	0.72-0.78	.028-.031	1.30	.051	1.70	.067	1.60	.063	60	13.5
	AVSS	0.30	0.72-0.78	.028-.031	1.30	.051	1.80	.071	1.60	.063	60	13.5
	TXL	22 AWG	0.72-0.78	.028-.031	1.30	.051	1.80	.071	1.60	.063	60	13.5

Terminal Series No.	Wire Size		Profile		
			0.22mm ²	0.35mm ²	22 AWG 0.3mm ²
	Wire Type	mm ² / AWG	A	B	C
502306 34803 34863 34970	FLRY-A	0.22	X		
	T3ZHID	0.35		X	
	AVSS	0.30			X
	TXL	22 AWG			X

CAUTION: Install only Molex terminals listed above with this tool. Do not crimp hardened objects - damage can occur to the tool or die.

OPERATION

Open the tool by squeezing the handles together, at the end of the closing stroke, the ratchet mechanism will release the handles, and the hand tool will spring open.

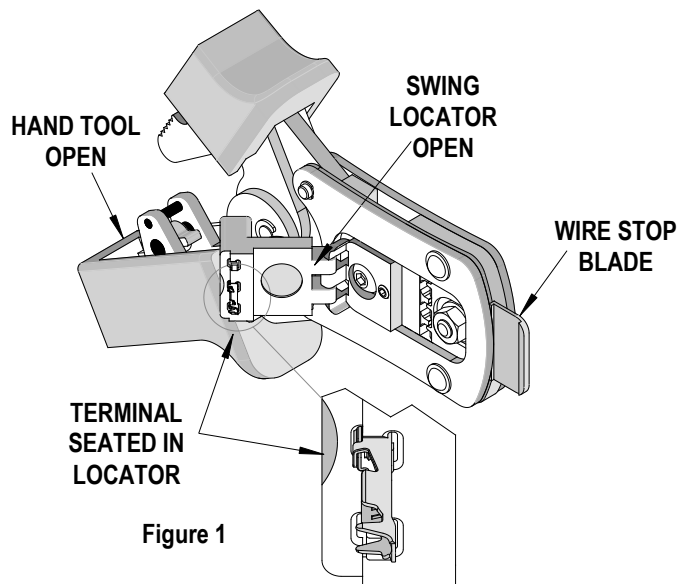


Figure 1

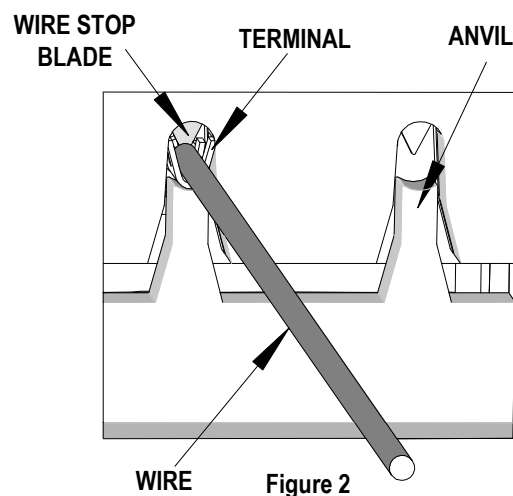


Figure 2

Crimping Terminals

1. With the hand tool in the open position, pivot the terminal locator open by pulling up on the locator knob and lift the wire stop blade up. See Figure 1.
2. Insert the terminal into the correct profile until the terminal is fully seated and stops.
3. Gently pivot the locator closed.
4. Bring down the wire stop blade, make sure the wire stop blade is fully seated on the terminal behind the conductor grip section.
5. Slide the pre-stripped wire into the terminal; make sure to aim the wire brush towards the tip point on the wire stop blade. See Figure 2. Align the wire so that it is parallel and sitting into the terminal. Maintain a light and constant pressure on the wire that is seated in the terminal at all times. (Do not let go of the wire.) Be sure to hold the wire and terminal in place until the terminal is fully crimped. See Figure 3.
6. Close the tool until the ratchet releases.
7. Lift the wire stop blade up.
8. Carefully remove the crimped terminal.

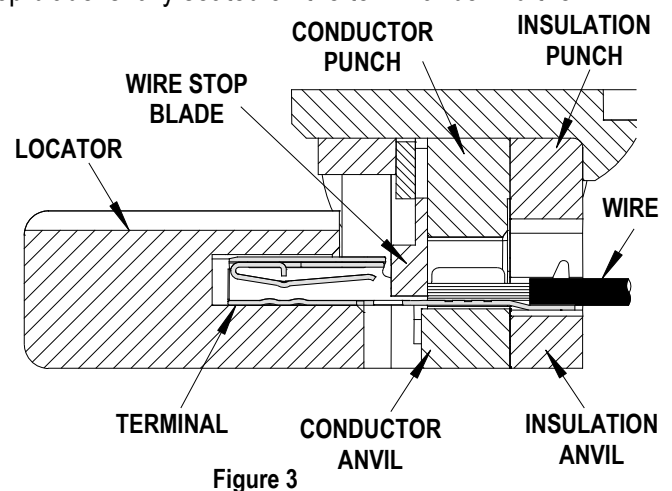


Figure 3

Note: To maintain a good brush control and a consistent bell mouth, the crimping instructions must be followed.

Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. The tool was engineered for durability but like any other equipment it needs cleaning and lubrication for a maximum service life of trouble free crimping. Light oil (such as 30 weight automotive oil) used at the oil points, every 5,000 crimps or 3 months, will significantly enhance the tool life.
4. Wipe excess oil from hand tool, particularly from crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.
5. When tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping dies, and store the tool in a clean, dry area.

Miscrimps or Jams

Should this tool ever become stuck or jammed in a partially closed position, **Do Not force the handles open or closed**. The tool will open easily by lifting the ratchet release lever. See Figure 7.

Warranty

This tool is for electrical terminal crimping purposes only. This tool is made of the best quality materials. All vital components are long life tested. All tools are warranted to be free of manufacturing defects for a period of 30 days. Should such a defect occur, we will repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.

CAUTION: Repetitive use of this tool should be avoided.

CAUTIONS:

1. Manually powered hand tools are intended for low volume or field repair. This tool is **NOT** intended for production use. Repetitive use of this tool should be avoided.
2. Insulated rubber handles are not protection against electrical shock.
3. Wear eye protection at all times.
4. Use only the Molex terminals specified for crimping with this tool.

Notes:

1. This tool should only be used for the terminals and wire gauges specified on this sheet.
2. This tool is not adjustable for crimp height; however crimp force is adjustable (See instructions above). Variations in tools, terminals, wire stranding, and insulation types may affect crimp height.
3. This tool is intended for standard conductor sizes. It may not give a good insulation crimp support for all insulation sizes.
4. Molex does not repair hand tools (see warranty above). The replacement parts listed are the only parts available for repair. If the handles or crimp tooling is damaged or worn, a new tool must be purchased.
5. Pull force should be used as the final criteria for an acceptable crimp. Pull force is measured with no influence from the insulation crimp. The insulation should be stripped long (1/2 in.) so the insulation grips on the terminal do not grip the wire insulation or the conductor. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.

6. Molex does not certify crimp hand tools.

CAUTION: Molex crimp specifications are valid only when used with Molex terminals and tooling.

Applications for the Modular Crimp Head

WARNING: NEVER operate, service, install, or adjust this Modular Crimp Head without proper instruction and without first reading and understanding the instructions in the proper Manual or Specification Sheet. See Chart below for the correct Manual or Specification Sheet.

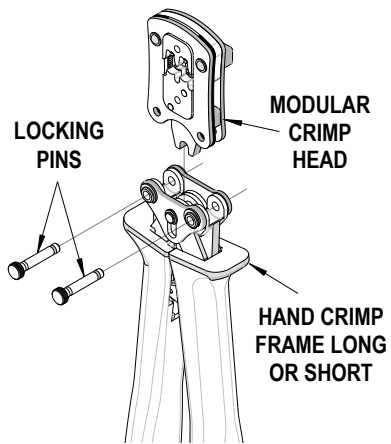
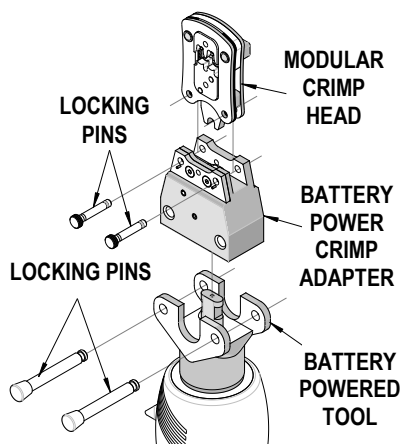
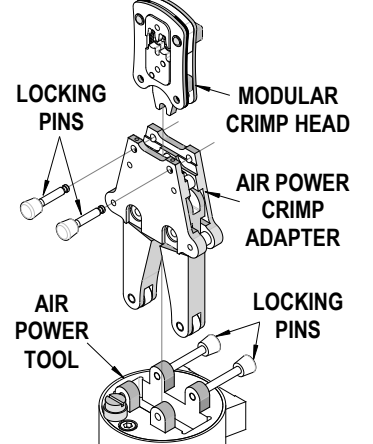
WARNING: NEVER install tooling or service this tool while it is into any power source. Disconnect the power by unplugging or turn off the Actuator from its power source.

CAUTION: Keep fingers away from the crimping area when operating this tool. It may cause severe injury.

CAUTION: Wear safety glasses when operating or serving this tool.

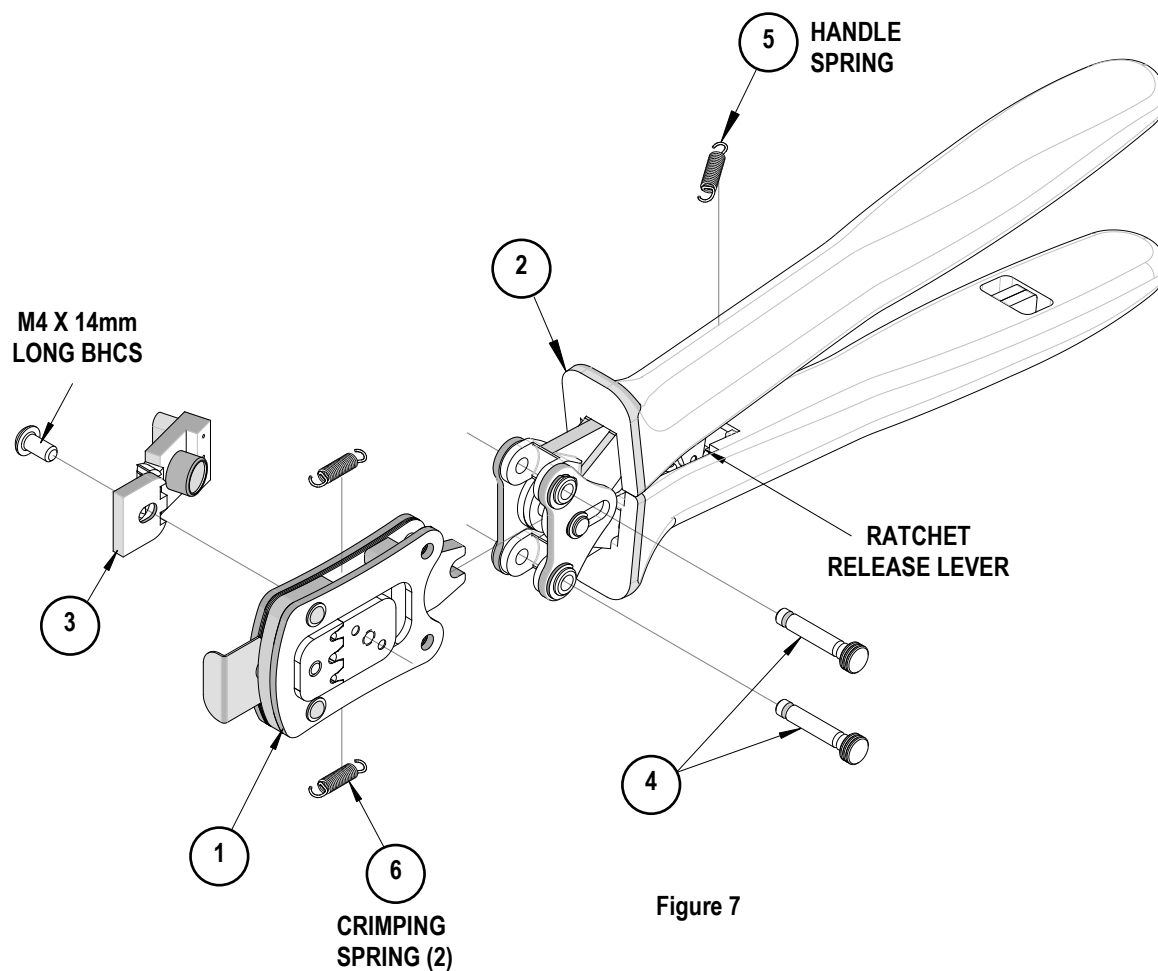
The chart below shows all applications for this Modular Crimp Head.

Modular Crimp Head Order No.	Tool Order no.	Tool Description	Adapter Order No.	Adapter Description	Figure No.
63819-3770	63816-0000	Hand Crimp Frame (Short)	N/A	N/A	4
	63816-0050	Hand Crimp Frame (Long)	N/A	N/A	4
	63816-0200	Battery Power Tool (110 V)	63816-0600	Battery Power Crimp Adapter	5
	63816-0250	Battery Power Tool (220 V)	63816-0600	Battery Power Crimp Adapter	5
	63816-0100	Air Power Tool	63816-0700	Air Power Crimp Adapter	6

Applications for the Modular Crimp Head		
Hand Crimp Tool	Battery Powered Tool	Air Powered Tool
 <p>LOCKING PINS</p> <p>MODULAR CRIMP HEAD</p> <p>HAND CRIMP FRAME LONG OR SHORT</p>	 <p>LOCKING PINS</p> <p>MODULAR CRIMP HEAD</p> <p>BATTERY POWER CRIMP ADAPTER</p> <p>BATTERY POWERED TOOL</p>	 <p>LOCKING PINS</p> <p>MODULAR CRIMP HEAD</p> <p>AIR POWER CRIMP ADAPTER</p> <p>AIR POWER TOOL</p> <p>LOCKING PINS</p>
Figure 4	Figure 5	Figure 6

PARTS LIST

Hand Crimp Tool 63819-3700			
Item	Order Number	Description	Quantity
1	63819-3770	Modular Crimp Head	1 (Ref)
2	63816-0050	Hand Crimp Frame (Long)	1 (Ref)
3	63819-3775	Locator	1
4	63816-0001	Locking Pin	2
5	63600-0525	Handle Spring	1
6	63600-0520	Crimping Spring	2



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