

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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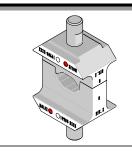






HHL Tooling Kit

Application Tooling Specification Sheet



Order No. 19290-0750

SCOPE

Tooling: HHL Tooling Kits are used with Hydraulic Head Crimper with Air/Hydraulic Pump (19286-0117) or Hydraulic Head Crimper with Electric Hydraulic Pump (19286-1300). Refer to the appropriate tool instruction manual for installation and operation information.

Products: BCL and VersaKrimpTM Ring Tongue Terminals and Splices 4 AWG. Refer to the Product part number charts on this sheet for terminals with the barrel and tongue styles listed above.

Testing

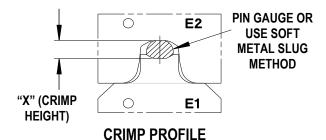
Mechanical

The tensile test or pull test is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL Specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate terminal from the conductor.

Color Code	Wire Size (AWG)	*UL - 486 A	*UL - 486 C	**MIL-T-7928
Yellow	4	140		400

*UL - 486 A - Terminals (Copper Conductors only)

*UL - 486 C - Butt Splices, Parallel Splices, and Closed end Connectors. Use 486 A values. **MIL-T-7928 - Military Approved Terminals only as listed



Use gauge pins or soft metal slug (solder) method to measure the "X" dimension. Verify tooling crimp height calibration by referring to the Go/No Go dimensions shown in the chart below.

Molex does not sell gauge pins contact your local industrial supplier.

Miro	Range	"X" Dimension Conductor Crimp						
wire	Kange	Me	an	G	io	No	Go	Crimp Inspection Marking
AWG	mm²	ln	mm	ln	mm	ln	mm	
1	NA	.218	5.55	.213	5.40	.224	5 70	Δ

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The following is a Partial List of the Product Part Numbers and their specifications that this tooling is designed to crimp. We will be adding to this list and an up to date copy is available on www.molex.com.

Wire Size: 4 AWG					
Terminal No.	Terminal	Wire Strip Length			
Terrinia No.	Eng No. (REF)	In	mm		
19215-0061	BCL-4	.500	12.70		
19221-0230	BCL-414-PL	.500	12.70		
19221-0231	BCL-4516-PL	.500	12.70		
19221-0232	BCL-438-PL	.500	12.70		
19221-0383	BCL-438	.500	12.70		
19221-0404	BCL-414	.500	12.70		
19221-0405	BCL-4516	.500	12.70		
19221-0451	BCL-410	.500	12.70		
19221-0452	BCL-410-PL	.500	12.70		
19221-0453	BCL-412	.500	12.70		
19221-0454	BCL-412-PL	.500	12.70		

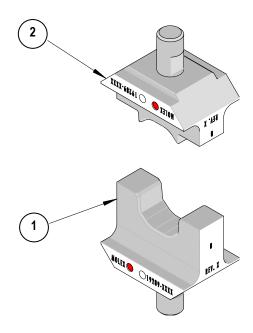
Wire Size: 4 AWG					
Terminal No.	Terminal	Wire Strip Length			
Termina No.	Eng No. (REF)	In	mm		
19221-0456	BCL-438-WP-PL	.500	12.70		
19221-0457	BCL-438-XWP-PL	.500	12.70		
19221-0458	BCL-438-WP	.500	12.70		
19221-0459	BCL-438-XWP	.500	12.70		
19221-0460	BCL-4516-WP-PL	.500	12.70		
19221-0461	BCL-4516-WP	.500	12.70		
19321-0021	BCL-4516-SH	.500	12.70		
19321-0022	BCL-4516-SH-PL	.500	12.70		

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

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Parts List

Item	Order No.	Engineering No.	Description	Qty
	19290-0750	19290-0750	HHL Tooling Kit	REF
1	19290-0751	19290-0751	Conductor Punch	1
2	19290-0008	HHL-F-130-E1	Conductor Anvil	1



Visit our Web site at http://www.molex.com

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