



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

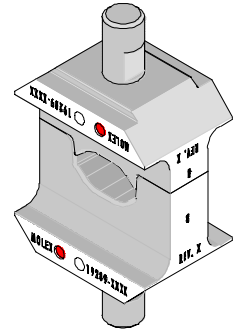
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## Crimp Tooling Specification Sheet HHL Tooling Kit No. 19290-0004 Engineering No. HHL-E-120



### 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 VersaKrimp™ Ring Tongue Terminals and Splices 6 AWG.

Refer to the Product part number charts on this sheet for terminals with the barrel and tongue styles listed above.

### Testing

#### Mechanical

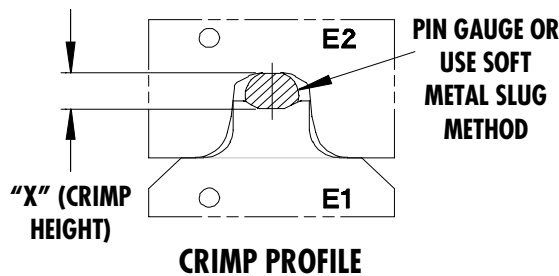
The tensile test or pull test is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL Specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate terminal from the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

Color Code	Wire Size (AWG)	*UL - 486 A	*UL - 486 C	**MIL-T-7928
Blue	6	100	50	300

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

\*UL - 486 C – Butt Splices, Parallel Splices, and Closed end Connectors

\*\*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.

Wire Range		"X" Dimension Conductor Crimp						Crimp Inspection Marking
		Mean		Go		No Go		
AWG	mm <sup>2</sup>	In	mm	In	mm	In	mm	
6	10.5-16.8	.190	4.83	.184	4.67	.196	4.98	6

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](http://www.molex.com).

Wire Size: 6 AWG 10.5-16.8mm <sup>2</sup> CMA 20,800-33,100			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19193-0206	E-357-08	.469	11.91
19193-0209	E-357-10	.469	11.91
19193-0210	E-357-10R90	.469	11.91
19193-0212	E-357-14	.469	11.91
19193-0214	E-357-14R90	.469	11.91
19193-0221	E-357-56R90	.469	11.91
19193-0223	E-357-76	.469	11.91
19193-0225	E-358-10	.469	11.91
19193-0229	E-358-14	.469	11.91
19193-0230	E-358-38	.469	11.91
19193-0232	E-358-56	.469	11.91
19193-0233	E-358-58	.469	11.91
19193-0234	E-358-76	.469	11.91
19193-0236	E-359-12	.469	11.91
19193-0237	E-359-14	.469	11.91
19193-0238	E-359-34	.469	11.91
19193-0239	E-359-38	.469	11.91
19193-0240	E-359-56	.469	11.91
19193-0241	E-359-58	.469	11.91
19193-0242	E-359-76	.469	11.91
19193-0243	E-360-08	.469	11.91
19193-0246	E-360-10R90	.469	11.91
19193-0249	E-360-14R90	.469	11.91
19193-0251	E-360-56	.469	11.91
19193-0252	E-360-56R90	.469	11.91
19193-0529	E-357-38R90	.469	11.91
19193-0652	E-360-10 Green	.469	11.91
19205-0006	E-361	.375	9.53
19215-0040	E-362	.438	11.13
19215-0042	ED-362	.438	11.13

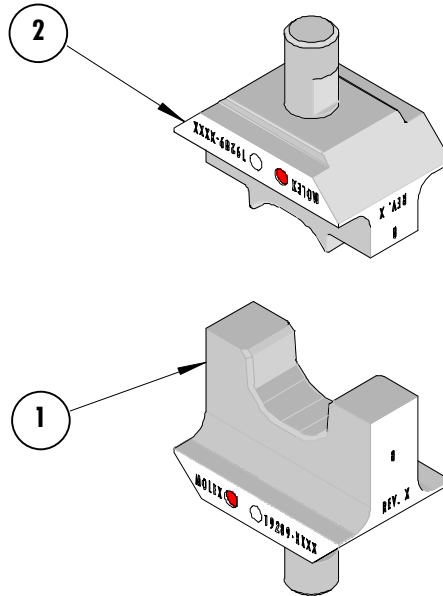
Wire Size: 6 AWG 10.5-16.8mm <sup>2</sup> CMA 20,800-33,100			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19215-0043	ED-362-UP	.438	11.13
19215-0060	BCL-6	.469	11.91
19221-0227	BCL-614-WP-PL	.469	11.91
19221-0228	BCL-6516-WP-PL	.469	11.91
19221-0229	BCL-638-PL	.469	11.91
19221-0384	BCL-638-WP	.469	11.91
19221-0406	BCL-614-WP	.469	11.91
19221-0407	BCL-6516-WP	.469	11.91
19221-0416	BCL-612-XWP-PL	.469	11.91
19221-0417	BCL-612-XWP	.469	11.91
19221-0424	BCL-610-PL	.469	11.91
19221-0425	BCL-610	.469	11.91
19221-0492	BCL-6516-PL	.469	11.91
19221-0493	BCL-6516	.469	11.91
19221-0494	BCL-614	.469	11.91
19221-0495	BCL-614-PL	.469	11.91
19221-0568	BCL-638-XWP-PL	.469	11.91
19221-0569	BCL-638-XWP	.469	11.91

MILITARY Wire Size: 6 AWG 10.5-16.8mm <sup>2</sup> CMA 20,800-33,100			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19193-0216	E-357-38	.469	11.91
19193-0219	E-357-56	.469	11.91
19193-0226	E-358-12	.469	11.91
19193-0245	E-360-10	.469	11.91
19193-0248	E-360-14	.469	11.91

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

## Parts List

Item	Order No.	Engineering No.	Description	Qty
	<b>19290-0004</b>	<b>HHL-E-120</b>	<b>HHL Tooling Kit</b>	<b>REF</b>
1	19290-0006	HHL-E-120-E2	Conductor Punch	1
2	19290-0005	HHL-E-120-E1	Conductor Anvil	1



**Americas Headquarters**  
 Lisle, Illinois 60532 U.S.A.  
 1-800-78MOLEX  
 amerinfo@molex.com

**Far East North Headquarters**  
 Yamato, Kanagawa, Japan  
 81-462-65-2324  
 feninfo@molex.com

**Far East South Headquarters**  
 Jurong, Singapore  
 65-6-268-6868  
 fesinfo@molex.com

**European Headquarters**  
 Munich, Germany  
 49-89-413092-0  
 eurinfo@molex.com

**Corporate Headquarters**  
 2222 Wellington Ct.  
 Lisle, IL 60532 U.S.A.  
 630-969-4550  
 Fax: 630-969-1352

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