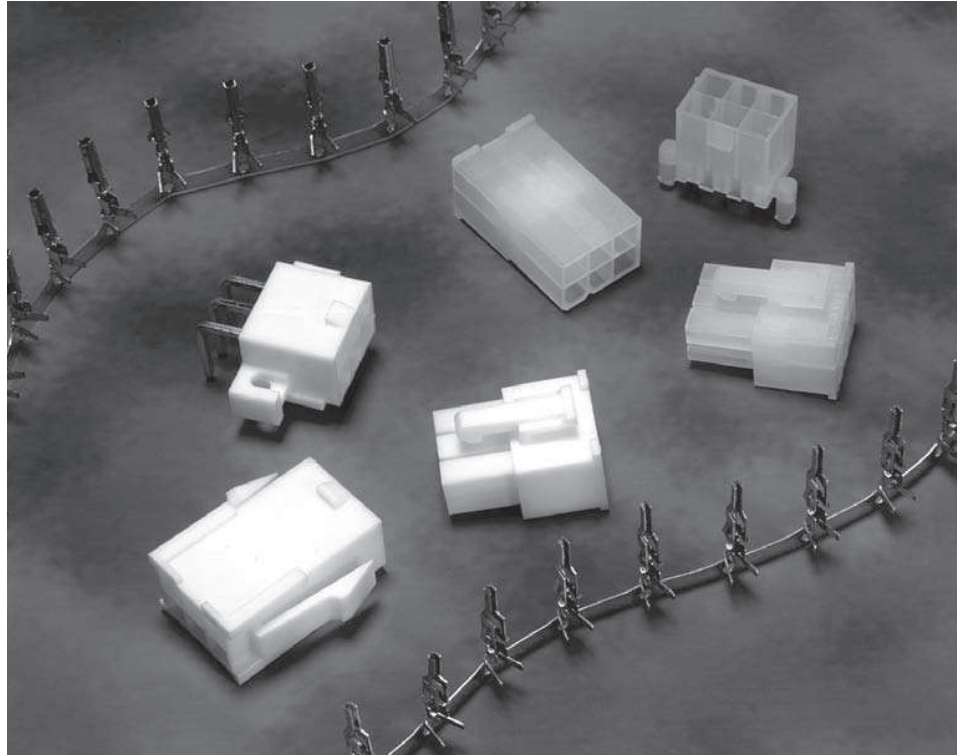


**VAL-U-LOK Connector System
(Wire-to-Wire, Wire-to-Board and Wire-to-Panel)**

Product Facts

- Low cost, wire-to-wire, wire-to-board and wire-to-panel connectors with 4.2 mm centerline
- Easy mate and unmate with positive latch design
- Single row, 3-5 positions: receptacles, panel mount or free-hanging plugs
- Double row, 2-24 positions (even only): receptacles, panel mount or free-hanging plugs, and vertical or right-angle pin headers
- Available in UL 94V-2 or UL 94V-0 flammability rated nylon
- Products are lead free to help promote a cleaner environment
- Intermateable and interchangeable with Molex Mini-Fit, Jr. and intermateable AMP-DUAC connectors
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association, File No. 208567 
- Tyco Electronics Design For Environment (DFE) Standard 230-5



High Density

VAL-U-LOK Connector System
.165 [4.20] Centerline

Performance Characteristics

- Electrical**
- Voltage**—600 VAC
 - Current**—9 amps max. in 2-position applications
 - Dielectric Withstanding Voltage**—1500 VAC min.
 - Insulation Resistance**—1000 megohms min.
 - Operating Temperature**— -40°C to $+105^{\circ}\text{C}$ [-40°F to $+221^{\circ}\text{F}$]

Mechanical

- Connector Mating**—1.55 lb. [6.90 N] max. per circuit
- Connector Unmating**—.11 lb. [.49 N] min. per circuit
- Contact Retention**—4.88 lb. [21.71 N] min. per contact
- Durability**—30 cycles, mating and unmating

Material and Finish

- Housings**—Nylon, UL 94V-2 and UL 94V-0
- Contacts**—Brass or Phos. Bronze with tin plating (Lead-Free) or gold plating

Technical Documents

- Design Objective**
108-2112
- Application Specification**
114-13172
- Engineering Test Report**
502-1204

Applications

- Computer motherboards/power supplies
- Harness assemblies used in the Vending, Gaming and Appliance industries
- Car alarm systems
- Heating systems

Molex and Mini-Fit are trademarks of Molex Incorporated.

VAL-U-LOK Connector System
(Wire-to-Wire, Wire-to-Board and Wire-to-Panel) (Continued)

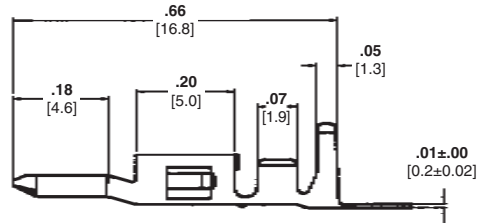
Contacts

Wire Range (AWG)	Insulation Range	Material & Finish	Pin		Socket		Applicator Part Number ¹	PRO-CRIMPER III Hand Tool Part Number
			Strip Form	Loose Piece	Strip Form	Loose Piece		
26-22	.047 - .069 [1.2 - 1.75]	Brass, Pre-Tin	794957-1	1586316-1	794958-1	1586317-1	1385448-X	91387-1
		Phos. Brz., Pre-Tin	794957-3	1586316-3	794958-3	1586317-3		
		Brass, Gold	794957-2	1586316-2	794958-2	1586317-2		
		Phos. Brz., Gold	794957-4	1586316-4	794958-4	1586317-4		
22-18	.060 - .122 [1.50 - 3.10]	Brass, Pre-Tin	794955-1	1586314-1	794956-1	1586315-1	1852668-X	91388-1
		Phos. Brz., Pre-Tin	794955-3	1586314-3	794956-3	1586315-3		
		Brass, Gold	794955-2	1586314-2	794956-2	1586315-2		
		Phos. Brz., Gold	794955-4	1586314-4	794956-4	1586315-4		
16	.071 - .122 [1.8 - 3.10]	Brass, Pre-Tin	1586054-1	1586840-1	1586055-1	1586841-1	1852294-X	1976444-1
		Phos. Brz., Pre-Tin	1586054-3	1586840-3	1586055-3	1586841-2		
		Brass, Gold	1586054-2	1586840-2	1586055-2	1586841-3		
		Phos. Brz., Gold	1586054-4	1586840-4	1586055-4	1586841-4		

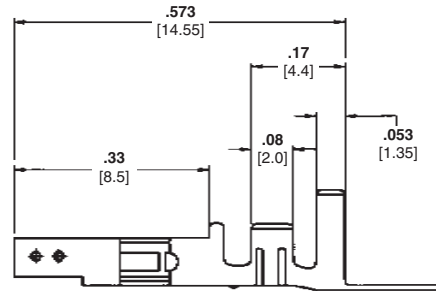
Extraction Tool Part Number 1586343-1

¹ For applicator and machine part numbers, contact Technical Support.

Pin — (used in Plug Housing)



Socket — (used in Receptacle Housing)



VAL-U-LOK Connector System
High Density
.165 [4.20] Centerline

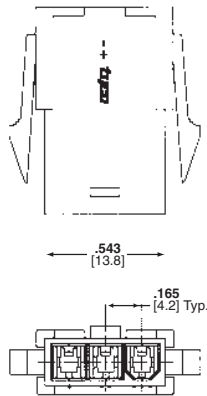
VAL-U-LOK Connector System
(Wire-to-Wire, Wire-to-Board and Wire-to-Panel) (Continued)

Housings — Single Row

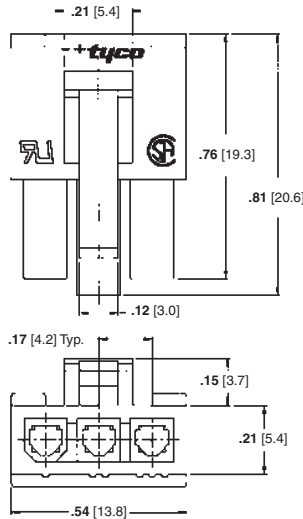
No. of Positions	UL 94V-2 Housings			UL 94V-0 Housings		
	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing
3*	1586101-3	1586103-3	1586105-3	1586102-3	1586104-3	1586106-3
4	1586022-4	1586024-4	1586026-4	1586023-4	1586025-4	1586027-4
5	1586022-5	1586024-5	1586026-5	1586023-5	1586025-5	1586027-5

*Note: 3 position housings are First Mate/Last Break.
Note: All part numbers are RoHS Compliant.

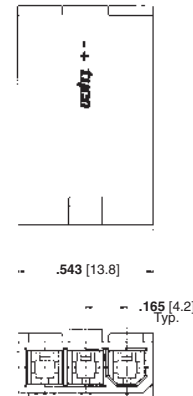
Panel Mount Plug Housing



Receptacle Housing



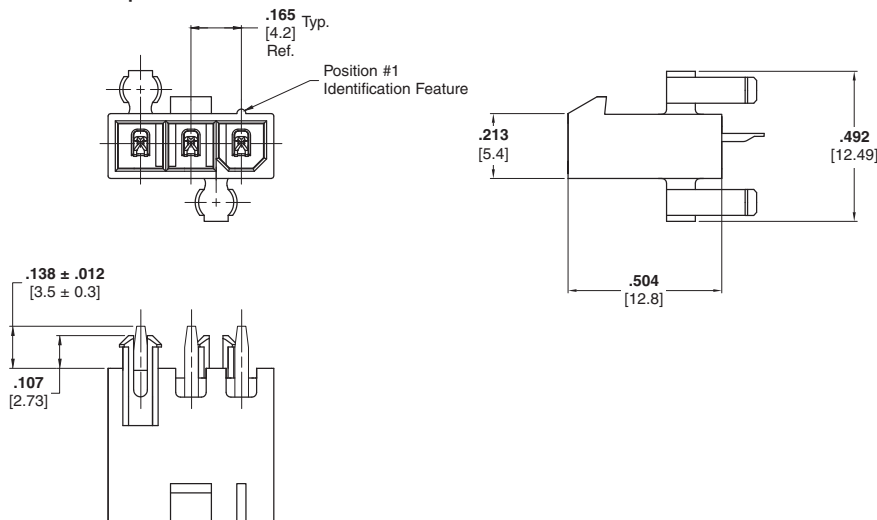
Free-Hanging Plug Housing



Headers — Single Row, Vertical

No. of	UL 94V-2 Housings		UL 94V-0 Housings
	With Drain Holes	Without Drain Holes	With Drain Holes
3*	2029054-3	2029058-3	2029056-3
4	2029054-4	2029058-4	2029056-4
5	2029054-5	2029058-5	2029056-5

*Note: 3 position housings are First Mate/Last Break.
Note: All part numbers are RoHS Compliant.



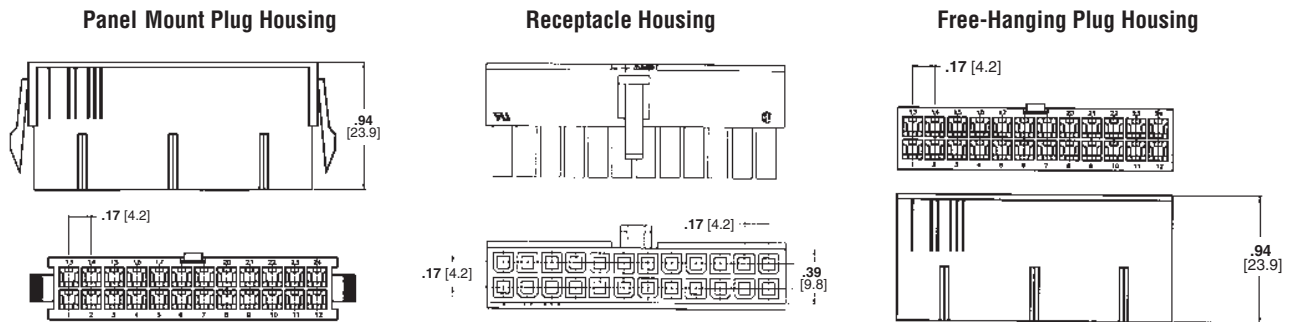
**VAL-U-LOK Connector System
(Wire-to-Wire, Wire-to-Board and Wire-to-Panel) (Continued)**

Housings — Double Row

No. of Positions	UL 94V-2 Housings			UL 94V-0 Housings		
	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing
2	794953-2	1586000-2	794954-2	1586018-2	1586017-2	1586019-2
4	794953-4	1586000-4	794954-4	1586018-4	1586017-4	1586019-4
6	794953-6	1586000-6	794954-6	1586018-6	1586017-6	1586019-6
8	794953-8	1586000-8	794954-8	1586018-8	1586017-8	1586019-8
10	1-794953-0	1-1586000-0	1-794954-0	1-1586018-0	1-1586017-0	1-1586019-0
12	1-794953-2	1-1586000-2	1-794954-2	1-1586018-2	1-1586017-2	1-1586019-2
14	1-794953-4	1-1586000-4	1-794954-4	1-1586018-4	1-1586017-4	1-1586019-4
16	1-794953-6	1-1586000-6	1-794954-6	1-1586018-6	1-1586017-6	1-1586019-6
18	1-794953-8	1-1586000-8	1-794954-8	1-1586018-8	1-1586017-8	1-1586019-8
20	2-794953-0	2-1586000-0	2-794954-0	2-1586018-0	2-1586017-0	2-1586019-0
22	2-794953-2	2-1586000-2	2-794954-2	2-1586018-2	2-1586017-2	2-1586019-2
24	2-794953-4	2-1586000-4	2-794954-4	2-1586018-4	2-1586017-4	2-1586019-4

Note: Plug housings accept pin contacts and receptacle housings accept socket contacts on page 114.

Note: All part numbers are RoHS Compliant.



Housings — Colored

Color	No. of Positions	UL 94V-2 Housings			UL 94V-0 Housings		
		Panel Mount Plug	Free-Hanging Plug	Receptacle Housing	Panel Mount Plug	Free-Hanging Plug	Receptacle Housing
Black	2-24	X-2029088-X	X-2029027-X	X-1586075-X	X-2029035-X	X-2029028-X	X-2029029-X
Red	4-24	X-2029089-X	X-2029090-X	X-2029091-X	X-2029092-X	X-2029093-X	X-2029094-X
Blue	6-24	X-2029095-X	X-2029096-X	X-2029097-X	X-2029098-X	X-2029099-X	X-2029100-X

Note: Plug housings accept pin contacts and receptacle housings accept socket contacts on page 114.

Note: All part numbers are RoHS Compliant.

VAL-U-LOK Connector System
(Wire-to-Wire, Wire-to-Board and Wire-to-Panel) (Continued)

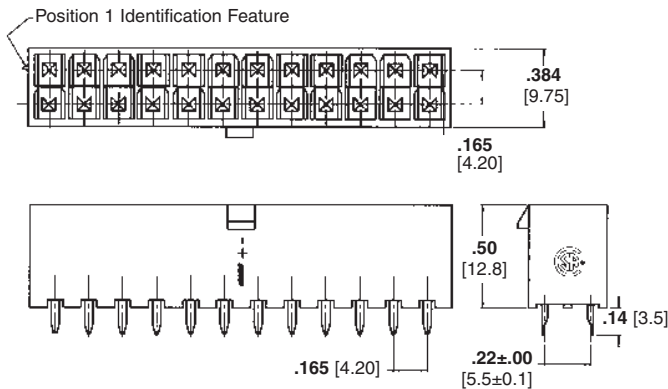
Pin Headers

No. of Positions	UL 94V-2 Pin Headers				UL 94V-0 Pin Headers			
	Vertical		Right-Angle		Vertical		Right-Angle	
	w/o Pegs	w/Pegs	w/o Pegs	Screw Mount	w/o Pegs	w/Pegs	w/o Pegs	Screw Mount
2	1586037-2	1586039-2	1586041-2	1586043-2	1586038-2	1586040-2	1586042-2	1586044-2
4	1586037-4	1586039-4	1586041-4	1586043-4	1586038-4	1586040-4	1586042-4	1586044-4
6	1586037-6	1586039-6	1586041-6	1586043-6	1586038-6	1586040-6	1586042-6	1586044-6
8	1586037-8	1586039-8	1586041-8	1586043-8	1586038-8	1586040-8	1586042-8	1586044-8
10	1-1586037-0	1-1586039-0	1-1586041-0	1-1586043-0	1-1586038-0	1-1586040-0	1-1586042-0	1-1586044-0
12	1-1586037-2	1-1586039-2	1-1586041-2	1-1586043-2	1-1586038-2	1-1586040-2	1-1586042-2	1-1586044-2
14	1-1586037-4	1-1586039-4	1-1586041-4	1-1586043-4	1-1586038-4	1-1586040-4	1-1586042-4	1-1586044-4
16	1-1586037-6	1-1586039-6	1-1586041-6	1-1586043-6	1-1586038-6	1-1586040-6	1-1586042-6	1-1586044-6
18	1-1586037-8	1-1586039-8	1-1586041-8	1-1586043-8	1-1586038-8	1-1586040-8	1-1586042-8	1-1586044-8
20	2-1586037-0	2-1586039-0	2-1586041-0	2-1586043-0	2-1586038-0	2-1586040-0	2-1586042-0	2-1586044-0
22	2-1586037-2	2-1586039-2	2-1586041-2	2-1586043-2	2-1586038-2	2-1586040-2	2-1586042-2	2-1586044-2
24	2-1586037-4	2-1586039-4	2-1586041-4	2-1586043-4	2-1586038-4	2-1586040-4	2-1586042-4	2-1586044-4

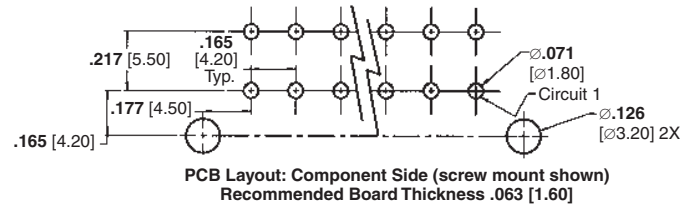
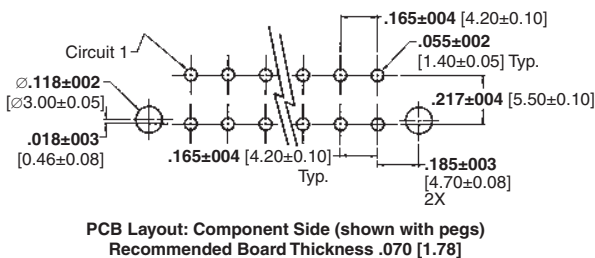
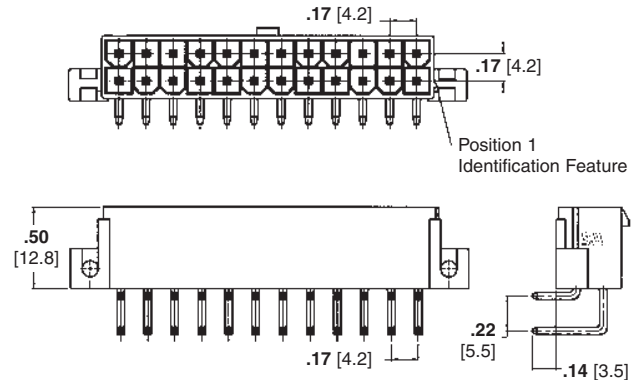
Note: All Headers have Brass, Tin-Plated contacts.

Note: All part numbers are RoHS Compliant.

Vertical Pin Headers (Part No. 1586037 shown w/o pegs)



Right-Angle Pin Headers (Part No. 1586043 Screw Mount)



High Density

VAL-U-LOK Connector System
.165 [4.20] Centerline

