

RoHS  
Ready 



# FASTON Terminals Insulated and Uninsulated



**Table of Contents**

**FASTON Terminals**

Introduction . . . . . 3  
 Product Information and Crimp Styles . . . . . 4, 5  
 Receptacle Lines . . . . . 6  
 Product Specifications . . . . . 7-9

**FASTON Receptacles**

Introduction . . . . . 10  
 312 Series . . . . . 11  
 250 Series . . . . . 11-19  
 205 Series . . . . . 20  
 187 Series . . . . . 21-25  
 125 Series . . . . . 26  
 110 Series . . . . . 26-28  
 AMPLIVAR Receptacles (for use with Magnet Wire) . . . . . 29, 30  
 Miscellaneous Tab Receptacles . . . . . 31

**FASTON Tabs**

312 and 250 Series (High Temperature) . . . . . 32  
 250 through .060 Series . . . . . 33, 34  
 AMPLIVAR Tabs (for use with Magnet Wire) . . . . . 35  
 Weld Type Tabs . . . . . 36  
 Stud Mount Type Tabs . . . . . 36-39  
 Test Tabs . . . . . 40, 41  
 FASTON Tab Adapters . . . . . 42

**FASTON Printed Circuit Board Tabs and Receptacles**

Introduction . . . . . 43  
 250 Series through 110 Series . . . . . 44-49  
 Right Angle Printed Circuit Board Tabs . . . . . 48, 49  
 RAST 5 Tab Header Assembly . . . . . 50, 51

**FASTON Housings**

FASTIN-FASTON Product Line . . . . . 60-73  
 Introduction . . . . . 60  
 250 Series through 110 Series . . . . . 61-68  
 RAST 5 Tab Housings . . . . . 69-73

**FASTON Terminals Strip/Loose Piece Cross Reference**

74

**Positive Lock Receptacles**

Introduction . . . . . 75  
 Mark I Series . . . . . 76, 77  
 Mark II Series . . . . . 78-83  
 Positive Lock EX . . . . . 83  
 Mark III Series . . . . . 84, 85  
 110 Series . . . . . 86

**Positive Lock RAST 5 Connector System**

87, 88

**Ultra-Fast Fully Insulated FASTON Receptacles and Tabs**

89-92

**Ultra-Fast Plus Fully Insulated FASTON Receptacles and Tabs**

93, 94

**Ultra-Pod Fully Insulated FASTON Receptacles and Tabs**

95-98

**PIDG FASTON Receptacles and Tabs**

99-103

**Application Tooling**

104-110

**Technical Documents**

111

**Part Number Index**

112-115

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## Introduction

As noted, FASTON products meet or exceed industry standards UL-310 listed UL file No. E66717.

Recognized under the Component Program of Underwriters Laboratories Inc. electrical UL file no. E28476, and E13288

CSA certified file no. LR 7189A-509

■ **Produced under a Quality Management System certified to ISO 9001**

A copy of the certificate is available upon request.



The FASTON terminal product line includes Ultra-Fast, Ultra-Fast Plus and Ultra-Pod fully insulated FASTON terminals, as well as Positive Lock receptacles consisting of receptacles, tabs and splices specifically designed for quick connections. FASTON products are grouped according to tab width dimensions in series “312”, “250”, “205”, “187”, “125” and “110”. This product line offers speed of application, uniform reliability and low per line cost. These advantages have made FASTON products the number one choice of many leaders in the appliance and automotive industries. Other industries for FASTON products are computer and peripheral equipment,

industrial controllers, test equipment and telecommunications equipment manufacturers.

Speed of application is achieved through the use of application tools for which a complete line has been developed specifically for these terminals. See application tooling section in back of catalog for general information. Specific rates and capabilities can be obtained by contacting technical support at the numbers listed below.

Precisely controlled crimping specifications for each FASTON terminal allow all connections to perform as specified. Low per line costs are derived from low initial product costs, high application speeds, and plug-in

assemblies of the finished termination. While it's true that we have over fifty years of proven reliability behind our product, we are not content to rest. We are constantly striving to introduce new and improved products to add to our quick connect family. Positive Lock RAST 5 connectors, Ultra-Pod Positive Lock, C-Crimp flags and our ever expanding offering of printed circuit board tabs and receptacles are examples of recent additions to the FASTON product family.

It is our commitment to innovation and continuous improvement that allows the FASTON terminal product line to remain the leader in the industry.

### Need more information?

Call Technical Support at the numbers listed in the footer of every page.

Technical Support is staffed with specialists well versed in all TE Connectivity products. They can provide you with:

- Technical Support
- Catalogs
- Technical Documents
- Product Samples
- TE Authorized Distributor Locations

**Check the electronic catalog for the most up-to-date information.**

### Restriction on the use of Hazardous Substances (RoHS)

At TE, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

**RoHS Compliant** — Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly “Out of Scope” of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

### Getting the Information You Need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we have the answers at [www.te.com/leadfree](http://www.te.com/leadfree)



The TE family of quick connects provides the right product for most applications. All styles provide features to enhance quality and reliability of interconnections. The FASTON product line consists of two mating parts—the receptacle and the tab. Receptacles are available in both straight and flag configurations and come in a variety of sizes. They are designed numerically by a series number that corresponds to the width of the mating tab. There are six series of both straight-on and flag receptacles “312”, “250”, “205”, “187”, “125”, and “110”.

## The Products

### Product Styles

#### Flag Receptacles



The flag receptacle is a reliable termination for those applications where space is a critical factor. Connection with mating tab is at right-angle to axis of conductor. Typical installations include bussing switches in back-splashes of ranges or in similar heavy duty applications.

#### Straight Receptacles



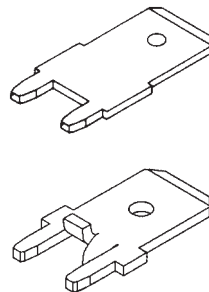
Straight receptacles are made with or without insulation support. Insulation diameters of .040-.230 are accommodated by the insulation support receptacle. Another feature of this type is a step-down insulation support barrel to compensate for insulation thickness to maintain axial alignment of the conductor strands. Over-insertion of shoulderless tabs is prevented by tapering walls at the rear of the receptacle.

#### Wire Crimp Tabs



The wire crimp tabs are designed for line splices and other special applications. They can be applied to 22-14 AWG wire with “F” crimp termination and include insulation support. The wire crimp tab is also available with AMPLIVAR connector type serrations for magnet wire applications.

#### Printed Circuit Board Tabs



These tabs are designed to be inserted into holes in PC boards, then attached permanently during the soldering operation. They can be hand inserted or machine inserted using TE application equipment.

#### Board Mount Tabs



Board mount tabs are available in all the series. These tabs are mounted using rivets or screws through stud holes. They are available in single 90 degree configurations, straight and angled versions, dual versions (90, 45 degree and straight), weld tab versions and special configurations.

#### Locking Action and Contact Area



Since corrosion and oxidation tend to affect performance by cutting down contact areas and increasing the constriction resistance of connections, maximum contact areas are incorporated in the design of FASTON receptacles and tabs. The design also includes a dimple detent and web section which not only increases contact surfaces but also locks in the tab and receptacles at proper insertion depth for firm retention.

**The Products** (Continued)

**Crimp Styles**

**The "F" Crimp**



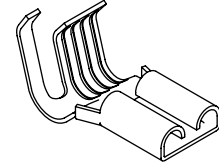
The standard crimp on all straight and certain flag type FASTON terminals is the "F" crimp. Experience over widespread segments of the industry has proved this crimp the most effective way of providing stable electrical and mechanical performance. Applied with match-mated tooling, the "F" crimp offers the optimum combination of mechanical strength and electrical conductivity. This method of termination also provides maximum resistance to vibration and corrosion.

**Tab-Lok Crimp for FASTON Flag Terminals**



In making this crimp, a tab on the wire barrel, is inserted through a slot in the terminal itself. The crimping action is continued by flattening the tab between two lances which in turn are locked over the tab. The wire connection is locked in to offer reliable electrical and mechanical performance. This receptacle design includes a lance-tab stop at its rear to avoid over-insertion of shoulderless tabs.

**The "C" Crimp**



A new style crimp with wrap-around barrel design with the standard, reliable FASTON receptacle. The special barrel design provides a maximum contact area and when applied with the matched tooling, will provide reliable electrical and mechanical performance at a minimum terminal profile.

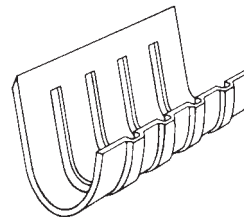
Available in the 187 series for both .020 and .032 thick tabs, brass or phosphorous bronze base materials in either plain or tin plated.

**TETRA-CRIMP Terminal Crimp**



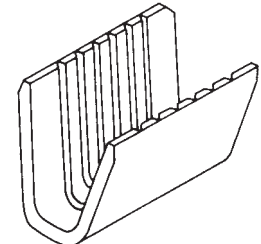
This reliable crimp is used on PIDG FASTON receptacles. The terminals feature nylon insulation fitted over a copper support sleeve. PIDG FASTON receptacles are of the straight variety only, and are available in strip form or tape mounted for high-speed application with automatic crimping machines, or in loose piece form for application with hand tools.

**Corrugated Keystone Barrel Serrations**



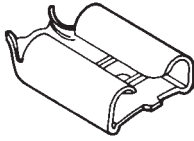
This special terminal wire barrel design provides maximum contact area between terminal and bare conductor. During the crimping process, bulk deformation forces the conductor into these serration channels creating a scrubbing action on oxide film on the wire. The termination is also resistant to vibration and shock.

**AMPLIVAR Terminal Crimp**



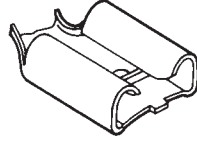
This crimp is designed for reliable, high-speed connection of magnet wire. The conductor(s) is automatically multiple-ring stripped and forced into sharp serrations with a single precision-controlled solderless crimp. This operation produces a strong, air-tight termination that is as resistant to corrosion and many other environmental effects as the insulated conductor itself.

## Receptacle Product Lines



### Premier

The receptacle configuration of the premier line, with its resilient rolls and double slot bottom allows maximum compliancy while retaining the high normal forces necessary to provide good wiping action and highly reliable interface. The basis to the resiliency of the premier line receptacle is in the *thermal stress relieving* each terminal receives. This extra processing step relieves the residual stresses the stamping process imparts and allows the receptacle to resist the effects of over-stressing, while retaining the normal forces which provide good cleaning action and low, stable resistance under a variety of operating conditions.



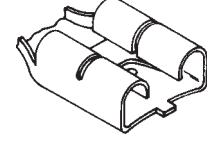
### Budget

The budget line receptacles are constructed similar to the premier line and are easily distinguished by the single slot. The single most important difference between the budget line and premier line is that the budget line does not receive the special processing of the premier line. In addition, in the .250 series, the budget line receptacles are constructed of lighter .016 brass.



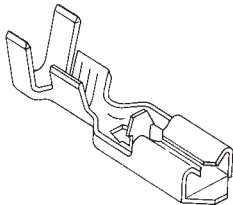
### Economy

The economy line receptacle is separated from its counterparts by the large lead-in provided by its flared, relatively low, roll construction. This roll construction and lead-in, with tab contact coming on the mill finish of the brass instead of a profiled edge, makes for lower average insertion forces at relatively high normal forces.



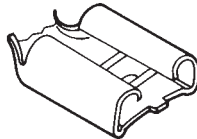
### Low Insertion Force

The Low Insertion Force (LIF) type receptacle offers lower insertion forces than the other receptacle styles thru the unique design features of a two-stage receptacle and a cantilever mounted locking dimple.



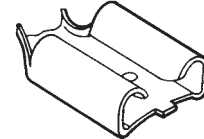
### Positive Lock

Positive Lock receptacles are designed with reduced mating forces, and a large locking dimple on a flexible latch. This locking feature acknowledges proper mating with an audible "snap" of the dimple into the mating hole. This enhances safety and reliability of the mated pair for isolated and hard to reach areas. Until the release latch is depressed manually the receptacle cannot be removed.



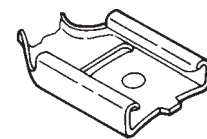
### Hermetic

The hermetic receptacle is a premier line receptacle which has been designed to mate with the posted header tabs in hermetic motor applications. This receptacle provides all the features and benefits of the premier line.



### Moldable

The moldable receptacle is available in many of the same configurations shown and is produced without slots or openings in the floor of the receptacle to facilitate over-molding.



### Commercial

The commercial receptacles, with their abbreviated roll construction, conserve stock, have generally higher insertion forces and somewhat lower tolerance for general abuse.

## Test Specifications

### Operating Temperatures of Materials and Finishes

FASTON terminals are made available in brass and phosphor bronze which can be plated with tin or silver. The line also includes a selection of nickel plated steel tabs and receptacles.

Certain products are available in either pre-tin or tin plated. Tin plate is the electro-depositing of tin on base metal over the entire surface of the terminal following the fabrication of

the terminal. Pre-tin plate is the plating of tin on base metal prior to fabrication which produces exposed base metal in the terminal edge areas after stamping.

#### Brass

##### Plain

Allowable connection temperature\* — 110°C.

Plain brass is used frequently, where applications have optimal environmental conditions.

##### Tin Plated

Allowable connection temperature — 110°C.

Tin plating of receptacle and tab improves operation at higher temperatures, and in addition helps to protect the connection against corrosion.

##### Silver Plated

Allowable connection temperature — 130°C.

Silver plated connections allow the highest operating temperature for brass and a higher current-carrying capacity.

\* Allowable connection temperature is the ambient temperature plus temperature rise of the terminal at normal operating conditions.

#### Phosphor Bronze

##### Plain

Allowable connection temperature — 110°C.

Phosphor bronze is used in applications where brass would normally be corroded, for example the various freezing mixtures and ammonias.

##### Tin Plated

Allowable connection temperature — 110°C.

Tin plating of receptacle and tab improves operation at higher temperatures, and in addition helps to protect the connection against corrosion.

##### Silver Plated

Allowable connection temperature — 130°C.

Silver plated connections allow the highest operating temperature for phosphor bronze and higher current-carrying capacity.

#### Steel

##### Nickel Plated

Allowable connection temperature — 250°C.

This combination allows a reliable connection at high temperatures, for example in stoves, cooking appliances, etc. For optimum performance, these nickel plated receptacles are used with compatible lead wires and tabs that can be welded to heating units.

#### Plastics (Insulation)

##### Material Temperature Rating —

The following list shows various plastics and their application temperatures.

High temp. polyamide (nylon) . . . . .	150°C
Polyamide, (nylon) . . . . .	125°C
Polypropylene . . . . .	105°C
Polyester. . . . .	90°C
Polyethylene. . . . .	75°C
A.B.S. . . . .	70°C
PVC. . . . .	60°C

**Note:** For information related to Glow Wire temperature ratings, contact TE Engineering.

### Stress Relieving of Brass or Steel Receptacles

The process of stress relieving is unique to TE quick connects and is most commonly used in the production of those receptacles designated as premier line, including Ultra-Fast, Ultra-Fast Plus FASTON and PIDG receptacles. Stress is introduced into copper alloy or steel terminals during the stamping process. When metal strip is formed into the receptacle,

the material is deformed beyond its yield stress to form it into its new shape. This forming operation leaves a residual stress in the grain structure. The orientations and magnitudes of the forming stresses are complex, but can exist in the same direction as the applied load. Thus, residual stresses can reduce the force necessary to open the receptacle during the tab

insertion. Stress relieving the terminal restores the elastic spring properties and improves receptacle performance by reducing the residual stresses. After stress relieving, the receptacle resists opening when a tab is inserted, especially where difficult or awkward mating situations may cause mechanical abuse.

**Test Specifications** (Continued)

**Test Specifications**

The following information and related charts are taken from the qualification requirements as defined in UL-310, the safety standard

for electrical Quick-Connect terminals. Throughout this catalog, when a reference is made to a part being UL listed, that part has been

qualified to the standards shown in these charts.

**Temperature Rise and Millivolt Drop**

The temperature rise and millivolt drop characteristics are the lowest in the industry. They comply with safety requirements and exhibit extreme stability during extended time tests.

When using FASTON terminals, the allowable connection temperatures can be adjusted, based on the application, by considering actual current(s) and related temperature rise,

time at this temperature, humidity, corrosion environment, vibration, base metal, plating (if any), and other environmental considerations.

**Test Parameters for FASTON Terminals (Based on UL-310 Temperature Rise and Current Requirements)**

	Contact Size	Wire Size (Strand Count)	Continuous Current	Intermittent Current	
250 Series	205 Series	10 (105)	24	48	
		12 (65)	20	40	
		14 (41)	15	30	
		16 (26)	10	20	
		18 (16)	7	14	
		20 (10)	4	8	
		22 (7)	3	6	
		110 Series	16 (26)	5	10
			18 (16)	4	8
			20 (10)	3	6
22 (7)	2		4		

**Note:** This information applies only to UL listed (UL) terminals. A part with a component recognition (CR) status deviates from the electrical or other requirements defined in the UL-310 safety standard.

This table can be used as a guide for selecting a characteristic such as contact size, wire size, or current (either continuous or intermittent operating current) when the other two are known. This table also identifies the possible receptacle sizes available for a given wire size. The continuous current column highlights the maximum current that should be applied to a given receptacle and wire combination to meet a 30°C maximum temperature rise. Intermittent current can be defined as a one hour cycle consisting of 45 minutes on and 15 minutes off. The temperature rise of the connector using the intermittent current on the corresponding wire size will be less than 85° C. The wire used in the testing to meet these electrical requirements is tin plated copper with stranding as indicated above in parentheses for terminals intended for internal wiring connections.

**Tensile Strength (forces for crimp pull-out)**

Maximum tensile strength of the wire to terminal connection does not insure reliable electrical performance. An acceptable compromise between maximum tensile strength and electrical stability is recommended.

Normally the tensile strength is much greater than the force required to disconnect the tab from the receptacle; therefore, no difficulties or hazards are encountered.

**Forces for Crimp Pull-out Test (UL-310 Specification)**

Wire Size		Minimum Force	
AWG	(mm²)	pounds	N
22	0.32	8	36
20	0.52	13	58
18	0.82	20	89
16	1.3	30	133
14	2.1	50	223
12	3.3	70	311
10	5.3	80	356

The forces shown for the crimp pull out test represent the minimum force required to separate the wire from the crimped terminal in an axis parallel to the wire exit direction from the contact. This force does not include the holding force of the insulation crimp (if applicable).



**Insertion and Withdrawal Forces for Engagement-Disengagement**

The UL-310 safety standard defines a broad range for the insertion and extraction value of each connector series. Many of the FASTON product families (such as premier line, budget line, low insertion force type, etc.) have been designed for specific applications and to address forces within the overall range as defined in the chart.

**Insertion and Withdrawal Forces for Engagement-Disengagement Test (UL-310 Specification)**

Tab Size	First Insertion, Maximum Individual	Force, pounds (N)				
		First withdrawal			Sixth withdrawal	
		Maximum	Minimum		Minimum	
		Average	Individual	Average	Individual	
<b>Test Tab and Unplated Connector</b>						
<b>.250</b> 6.30	18 (80)	18 (80)	6 (27)	4 (18)	5 (22)	4 (18)
<b>.205</b> 5.20	15 (67)	20 (89)	5 (22)	3 (13)	3 (13)	2 (9)
<b>.187</b> 4.80						
<b>.125</b> 3.20	12 (53)	14 (62)	3 (13)	2 (9)	2 (9)	1 (4)
<b>.110</b> 2.80						
<b>Test Tab and Tin Plated Connector</b>						
<b>.250</b> 6.30	17 (76)	17 (76)	5 (22)	3 (13)	4 (18)	3 (13)
<b>.205</b> 5.20	15 (67)	20 (89)	5 (22)	3 (13)	3 (13)	2 (9)
<b>.187</b> 4.80						
<b>.125</b> 3.20	12 (53)	14 (62)	3 (13)	2 (9)	2 (9)	1 (4)
<b>.110</b> 2.80						

This chart show the forces required to engage and disengage a connector from a **plain brass test tab** (tab for mechanical testing as shown in the tab section of this catalog). The force is measured with a testing device capable of holding the reading and providing accurate alignment with slow and steady engagement and disengagement of the connector and test tab.

**Vibration Resistance**

In applications where conductors are subjected to flexing at termination points, circuit failure is avoided because resistance to vibration is enhanced through TE insulation support, even on conductors with oversized insulation.

**Wire Range**

FASTON receptacles are available in various wire ranges from 26-10 AWG, depending on series size. The chart below is designed to show our recommended two-wire combinations. Specific wire and insulation combinations should be evaluated for suitability and not all combinations may be appropriate for high speed or automatic termination equipment.

**Recommended Two-Wire Combinations**

Wire Ranges																
8-10	12-10	14-10	14-12	16-12	16-14	18-12	18-14 (2) 16	(2) 18 (2) 16	18-14	18-16	20-14	20-16 (2) 18	20-16	20-18	22-16	22-18
Two-Wire Combinations																
10-22 <sup>1</sup>	12-22 <sup>1</sup>	14-14	18-16	16-22	18-18	18-18	16-16	16-16	22-18	18-22 <sup>1</sup>	20-22	18-18	20-18	20-20	18-22 <sup>1</sup>	22-20 <sup>1</sup>
10-20	12-20	14-16	18-14	16-20	18-20	18-16	16-22 <sup>1</sup>	18-18	20-18	18-20	20-20	18-20	20-20	20-22 <sup>1</sup>	18-20	22-22
10-18	12-18	14-18	16-16	16-18	16-22 <sup>1</sup>	18-14	16-20	16-18 <sup>1</sup>	18-18	18-18	20-18	20-20	22-18 <sup>1</sup>	22-22	20-20	
10-16	12-16	14-20	14-22 <sup>1</sup>	16-16	16-20	18-20	16-18		20-20	20-20	20-16	22-20	22-22		20-22	
10-14	14-16	14-22	14-20	18-18	18-22	18-18			20-16	18-22	18-22 <sup>1</sup>	22-20				
12-14	14-14	16-16		18-20	16-22	18-20			22-16 <sup>1</sup>		18-18					
	14-12	16-18		18-14	16-20	18-22					18-16					
		16-12		20-14	16-16	20-20					16-22 <sup>1</sup>					
		18-12			14-22 <sup>1</sup>	20-22										
		20-12		22-14 <sup>1</sup>	14-20											
		22-12 <sup>1</sup>														

<sup>1</sup> Min./max. wire size combinations

## FASTON Receptacles

### Product Facts

- Full line of premier, budget, LIF, moldable and hermetic uninsulated receptacles
- Straight, right-angle and receptacle and tab combinations available
- Receptacles available in .312, .250, .205, .187, .125 and .110 sizes
- Available in 8-30 AWG wire ranges
- Receptacles mate with .032 and .020 thick tabs
- Available with or without secondary wire support
- Base materials brass, phosphor bronze and steel available
- Tin, silver and nickel plated products available
- Products designed and manufactured to meet UL 310 specifications
- Products designed and manufactured to meet CSA C22.2 specifications



TE offers a full line of uninsulated quick connects. We offer products for a wide variety of applications in almost every market and industry we serve. It is important to choose the correct terminal for each application. The following is a list of application specific characteristics that must be considered when determining the best terminal for each individual application.

#### Mating Tab

Size (312, 250, 205, 187, 110, etc.)

#### Wire Type

Magnet or stranded

#### Wire Orientation

Straight or flag

#### Temperature/Environment

Base metal plating requirements

#### Insulator required

Pre-insulated housing required

#### Agency Approvals (UL/CSA)

#### Application

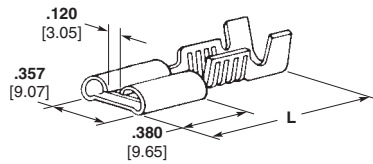
Continuous strip or loose piece

#### Special Applications

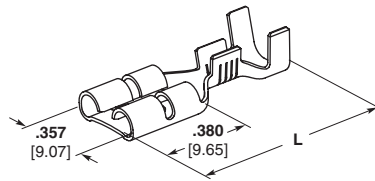
Moldable  
Hermetic  
Printed circuit board  
Piggyback (straight/flag)  
Reversible flags  
Center strip  
Positive locking

### 312 Series Receptacles

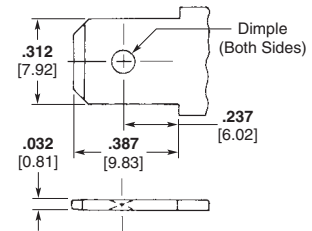
#### Straight Receptacles, Insulation Support



A — Premier Line



B — Low Insertion Force

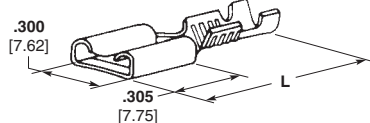


Mating 312 Series Tab Dimensions Dimple (Both Sides)

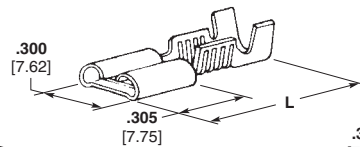
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
18-14	A	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.900 22.86	—	X	X	62092-1
	A	.032 0.81	.110-.210 2.79-5.33 or (2)	Brass, Tin Plated	.016 0.41	.900 22.86	—	X	X	61399-1
16-12	B	.032 0.81	.110-.210 2.79-5.33 or (2)	Brass, Tin Plated	.016 0.41	.900 22.86	—	X	X	63677-1
	B	.032 0.81	.110-.210 2.79-5.33 or (2)	Brass	.016 0.41	.900 22.86	—	X	X	63677-2
14-10	A	.032 0.81	.150-.200 3.81-5.08	Brass, Silver Plated	.018 0.46	.900 22.86	—	X	X	63820-1

### 250 Series Receptacles

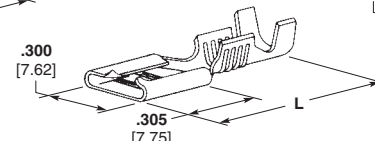
#### Straight Receptacles, Insulation Support



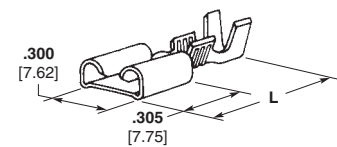
A — Premier Line



B — Budget Line



C — Economy Line



D — Moldable Line

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
26-22	C	.032 0.81	.040-.060 1.02-1.52	Brass	.016 0.41	.755 19.18	X <sup>1</sup>	—	X <sup>1</sup>	61202-1
24-20	A	.032 0.81	.030-.070 0.76-1.78	Brass, Tin Plated	.016 0.41	.755 19.18	X <sup>2</sup>	—	X <sup>2</sup>	61368-1
	A	.032 0.81	.060-.100 1.52-2.54	Brass	.016 0.41	.755 19.18	X	—	X	42640-1
	A	.032 0.81	.060-.100 1.52-2.54	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	42640-2
	A	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	X	—	X	41771
	A	.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	41772
22-18	B	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	X	—	X	42510-1
	B	.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	42510-2
	C	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	X	—	X	42743-1
	C	.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	42743-2
	D	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	—	—	—	63127-1

<sup>1</sup> UL listed and CSA certified for 22 AWG.

<sup>2</sup> UL listed and CSA certified for 22-20 AWG.

<sup>3</sup> Mates with a .020 [0.51] thick tab.

<sup>4</sup> 9,600 CMA max.

<sup>5</sup> UL/CSA - 10 AWG only.

<sup>6</sup> Stress relieved.

<sup>7</sup> Recommended for external use only.

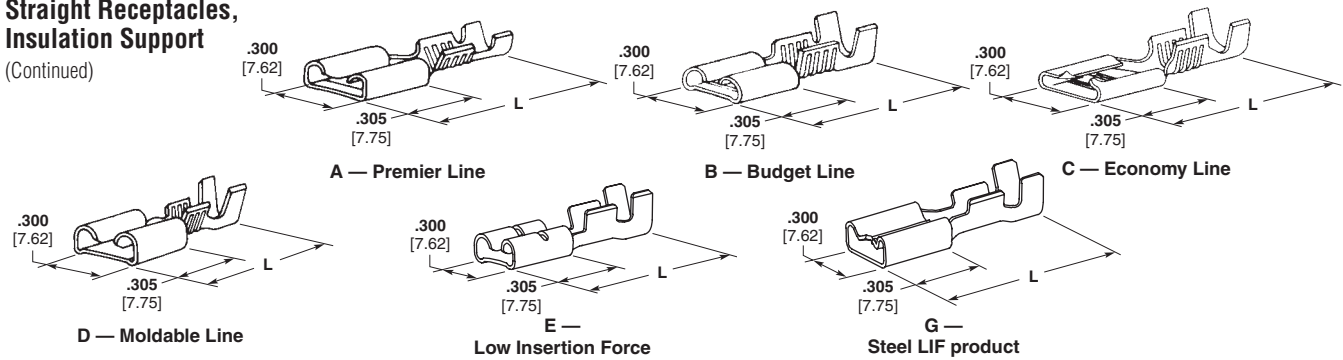
<sup>8</sup> Recommended for internal or external use.

**Note:** All part numbers are RoHS compliant.

**250 Series Receptacles** (Continued)

**Straight Receptacles, Insulation Support**

(Continued)



FASTON Receptacles

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number	
22-18	E	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	X	—	X	63693-1 <sup>6</sup>	
		.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.755 19.18	X	—	X	63609-1	
	A	.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	63609-2	
		.020 0.51	.120-.170 3.05-4.32	Brass, Tin Plated	.018 0.46	.755 19.18	X	—	X	63655-1 <sup>3</sup>	
		.032 0.81	.060-.110 1.52-2.79	Brass, Tin Plated	.018 0.46	.755 19.18	X	—	X	61375-1	
		.032 0.81	.060-.110 1.52-2.79	Steel, Nickel Plated	.016 0.41	.755 19.18	—	—	—	63688-1	
18-14	A	.032 0.81	.120-.170 3.05-4.32	Steel, Nickel Plated	.016 0.41	.755 19.18	—	X	X	42219-1	
		.032 0.81	.120-.170 3.05-4.32	Brass	.018 0.46	.755 19.18	X	—	X	41202	
	B	.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.018 0.46	.755 19.18	X	—	X	41274	
		.032 0.81	.120-.170 3.05-4.32	Brass	.016 0.41	.750 19.05	X	—	X	42400-1	
		.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.016 0.41	.750 19.05	X	—	X	42400-2	
	C	.032 0.81	.120-.170 3.05-4.32	Brass, Silver Plated	.016 0.41	.755 19.18	X	—	X	61107-1 <sup>6</sup>	
		.032 0.81	.120-.170 3.05-4.32	Brass	.016 0.41	.755 19.18	X	—	X	42660-1	
		.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	42660-2	
	D	C	.032 0.81	.120-.170 3.05-4.32	Brass	.016 0.41	.780 19.81	X	—	X	42692-1
			.032 0.81	.150-.210 3.81-5.33	Brass	.016 0.41	.780 19.81	X	—	X	42692-2
		D	.032 0.81	.120-.170 3.05-4.32	Brass	.016 0.41	.750 19.05	X	—	X	60650-1
			.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.016 0.41	.750 19.05	X	—	X	60650-2
E		.020 0.51	.120-.170 3.05-4.32	Brass, Tin Plated	.018 0.46	.775 19.69	X	—	X	63993-1 <sup>3,6</sup>	
		.032 0.81	.120-.170 3.05-4.32	Brass	.018 0.46	.755 19.18	X	—	X	63537-1 <sup>6</sup>	
	.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.018 0.46	.755 19.18	X	—	X	63537-2 <sup>6</sup>		
	.032 0.81	.120-.170 3.05-4.32	Steel, Nickel Plated	.016 0.41	.755 19.18	—	X	X	63674-1 <sup>6</sup>		
G	E	.032 0.81	.120-.170 3.05-4.32	Brass	.016 0.41	.755 19.18	X	—	X	63306-1	
		.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.016 0.41	.755 19.18	X	—	X	63306-2	
G	G	.032 0.81	.120-.170 3.05-4.32	Steel, Nickel Plated	.016 0.41	.755 19.18	—	X	—	1742198-1	

<sup>1</sup> UL listed and CSA certified for 22 AWG.

<sup>2</sup> UL listed and CSA certified for 22-20 AWG.

<sup>3</sup> Mates with a .020 [0.51] thick tab.

<sup>4</sup> 9,600 CMA max.

<sup>5</sup> UL/CSA - 10 AWG only.

<sup>6</sup> Stress relieved.

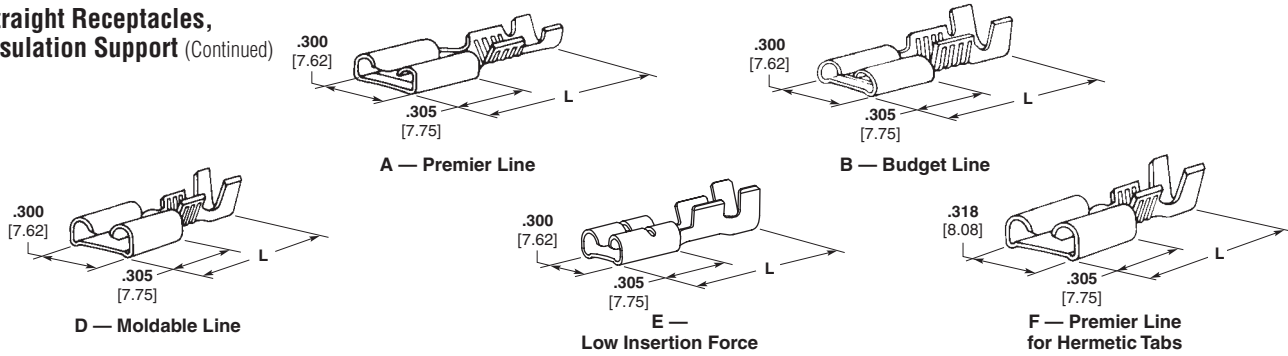
<sup>7</sup> Recommended for external use only.

<sup>8</sup> Recommended for internal or external use.

**Note:** All part numbers are RoHS compliant.

**250 Series Receptacles** (Continued)

**Straight Receptacles, Insulation Support** (Continued)



Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number		
18-14	F	.032	.120-.170	Brass	.018	.750	X	—	X	62500-1 <sup>7</sup>		
		0.81	3.05-4.32	Brass, Tin Plated	0.46	19.05	X	—	X	62500-2 <sup>7</sup>		
		.032	.120-.170	Phos Brz, Tin Plated	.018	.750	X	—	X	41774 <sup>8</sup>		
16-12 (2) 16	B	.032	.160-.210	Brass	.016	.750	X	—	X	63896-1		
		0.81	4.06-5.33 (2) .130 3.30									
16-12	A	.032	.210-.265	Steel, Nickel Plated	.018	.830	—	X	X	42579-1		
16-12 (2) 18	A	.032	.210-.265	Brass	.018	.820	X	—	X	41727		
				0.81	5.33-6.73 (2) .120 3.05 Max.	Brass, Tin Plated	0.46	20.93	X	—	X	41728
	E	.032	.210-.265	Brass	.018	.755	X	—	X	63757-1		
14-10	A	.032	.150-.200	Brass	.018	.770	X	—	X	41449 <sup>4</sup>		
				0.81	3.81-5.08	Brass, Tin Plated	0.46	19.56	X	—	X	41450 <sup>4</sup>
	B	.032	.150-.200	Brass, Silver Plated	.018	.750	X	—	X	61095-1 <sup>4</sup>		
				0.81	3.81-5.08	Brass, Silver Plated	0.46	19.05	X	—	X	63435-1 <sup>4,6</sup>
	E	.032	.150-.200	Brass	.018	.755	X	—	X	63365-1 <sup>4</sup>		
				0.81	3.81-5.08	Brass	0.46	19.18	X	—	X	63365-2 <sup>4</sup>
	F	.032	.150-.200	Brass, Tin Plated	.018	.775	X	—	X	63365-2 <sup>4</sup>		
				0.81	3.81-5.08	Brass, Tin Plated	0.46	19.69	X	—	X	42437-2 <sup>4,7</sup>
F	.032	.150-.200	Brass, Tin Plated	.018	.770	X	—	X	42437-2 <sup>4,7</sup>			
			0.81	3.81-5.08	Phos Brz, Tin Plated	0.46	19.56	X	—	X	42437-5 <sup>4,8</sup>	
14-10 (2) 14	A	.032	.225-.275	Brass, Tin Plated	.018	.775	X	—	X	60635-1 <sup>4</sup>		
				0.81	5.72-6.99 (2) .140 3.56	Brass, Silver Plated	0.46	19.69	X	—	X	60635-2 <sup>4</sup>
						Brass	0.46	19.69	X	—	X	60635-3 <sup>4</sup>
	D	.032	.225-.275	Brass, Tin Plated	.018	.750	—	—	—	63419-1 <sup>4,6</sup>		
				0.81	5.72-6.99 (2) .140 3.56	Brass, Tin Plated	0.46	19.05	—	—	—	
	E	.032	.225-.275	Brass, Tin Plated	.018	.755	X	—	X	63539-1 <sup>4,6</sup>		
0.81				5.72-6.99 (2) .140 3.56	Brass	0.46	19.18	X	—	X	63539-2 <sup>4,6</sup>	

<sup>1</sup> UL listed and CSA certified for 22 AWG.  
<sup>2</sup> UL listed and CSA certified for 22-20 AWG.  
<sup>3</sup> Mates with a .020 [0.51] thick tab.

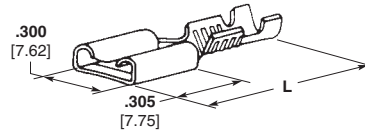
<sup>4</sup> 9,600 CMA max.  
<sup>5</sup> UL/CSA - 10 AWG only.  
<sup>6</sup> Stress relieved.

<sup>7</sup> Recommended for external use only.  
<sup>8</sup> Recommended for internal or external use.

**Note:** All part numbers are RoHS compliant.

**250 Series Receptacles** (Continued)

**Straight Receptacles, Insulation Support** (Continued)



A — Premier Line

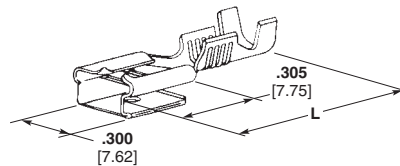
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SP	Terminal Part Number
12-10	A	.032	.150-.200	Brass,	.018	.775	X	—	X	62428-2
		0.81	3.81-5.08	Tin Plated	0.46	19.69				
12-10	A	.032	.150-.200	Phos Brz,	.018	.775	X	—	X	62428-3
		0.81	3.81-5.08	Tin Plated	0.46	19.69				
10-8	A	.032	.230-.280 <sup>1</sup>	Brass,	.018	.775	X	—	X	62998-2 <sup>5</sup>
		0.81	5.84-7.11 <sup>1</sup> or (2) .160 4.06							

<sup>1</sup> UL listed and CSA certified for 22 AWG.  
<sup>2</sup> UL listed and CSA certified for 22-20 AWG.  
<sup>3</sup> Mates with a .020 [0.51] thick tab.

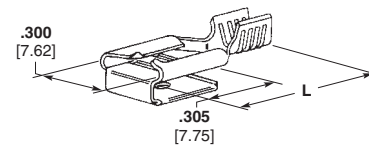
<sup>4</sup> 9,600 CMA max.  
<sup>5</sup> UL/CSA - 10 AWG only.  
<sup>6</sup> Stress relieved.

<sup>7</sup> Recommended for external use only.  
<sup>8</sup> Recommended for internal or external use.

**Receptacle and Tab Combinations**



A — Economy Line



B — Economy Line  
Non-Insulation Support

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SP	Terminal Part Number
22-18	A	.032	.060-.100	Brass	.015	.770	X	—	X	61988-1
		0.81	1.52-2.79		0.38	19.56				
		.032	.060-.100	Brass,	.015	.770	X	—	X	61988-2
		0.81	1.52-2.79	Tin Plated	0.38	19.56				
22-18	A	.032	.060-.100	Brass,	.015	.770	X	—	X	61988-3 <sup>2</sup>
		0.81	1.52-2.79	Tin Plated	0.38	19.56				
		.032	.120-.170	Brass	.015	.770	X	—	X	61944-1
		0.81	3.05-4.32		0.38	19.56				
22-18	A	.032	.120-.170	Brass,	.015	.770	X	—	X	61944-2
		0.81	3.05-4.32	Tin Plated	0.38	19.56				
		.032	.120-.170	Brass	.032-.016	.770	X	—	X	62109-1 <sup>1</sup>
		0.81	3.05-4.32		0.81-0.41	19.56				
18-14	A	.032	.120-.170	Brass,	.032-.016	.770	X	—	X	62109-2 <sup>1</sup>
		0.81	3.05-4.32	Tin Plated	0.81-0.41	19.56				
		.032	.120-.170	Brass	.015	.770	X	—	X	62223-1 <sup>2</sup>
		0.81	3.05-4.32		0.38	19.56				
18-14	A	.032	.120-.170	Brass,	.015	.770	X	—	X	62223-2 <sup>2</sup>
		0.81	3.05-4.32	Tin Plated	0.38	19.56				
18-14	B	.032	—	Pre-Tin Brass	.015	.610	X	—	X	62276-1
		0.81			0.38	15.49				
14-10	A	.032	.150-.200	Brass	.015	.770	X	—	X	62253-1 <sup>3</sup>
		0.81	3.81-5.08		0.38	19.56				
		.032	.150-.200	Brass,	.015	.770	X	—	X	62253-2 <sup>3</sup>
		0.81	3.81-5.08	Tin Plated	0.38	19.56				
14-10	A	.032	.150-.200	Brass,	.032-.016	.770	X	—	X	1217043-1 <sup>1,3</sup>
		0.81	3.81-5.08	Tin Plated	0.81-0.41	19.56				
14-10	B	.032	—	Pre-Tin Brass	.015	.610	X	—	X	62068-1 <sup>3</sup>
		0.81			0.38	15.49				

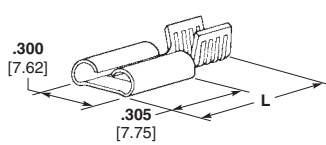
<sup>1</sup> Dual Thickness.  
<sup>2</sup> Stress relieved.  
<sup>3</sup> 9600 CMA Max.

**Note:** All part numbers are RoHS compliant.

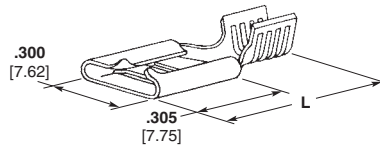
FASTON Receptacles

**250 Series Receptacles** (Continued)

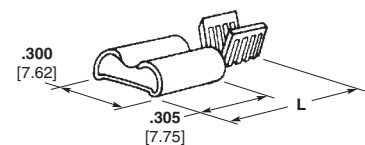
**Straight Receptacles,  
Non-Insulation Support**



A — Premier Line



B — Economy Line



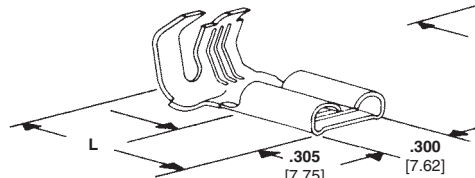
C — Moldable Line

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SP	Terminal Part Number
18-14	A	.032 0.81	—	Brass, Tin Plated	.018 0.46	.655 16.64	X	—	X	41194
		.032 0.81	—	Steel, Nickel Plated	.018 0.46	.655 16.64	—	X	X	41143-1
	B	.032 0.81	—	Brass	.016 0.41	.595 15.11	X	—	X	42845-1
		.032 0.81	—	Brass, Tin Plated	.016 0.41	.595 15.11	X	—	X	42845-2
	C	.032 0.81	—	Brass	.016 0.41	.655 16.64	X	—	X	60938-1
		.032 0.81	—	Brass, Tin Plated	.016 0.41	.655 16.64	X	—	X	60938-2
		.032 0.81	—	Brass, Tin Plated	.016 0.41	.655 16.64	—	—	—	63981-1 <sup>1</sup>

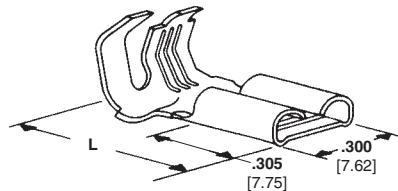
<sup>1</sup> No dimple.

**250 Series Tab-Lok Flags**

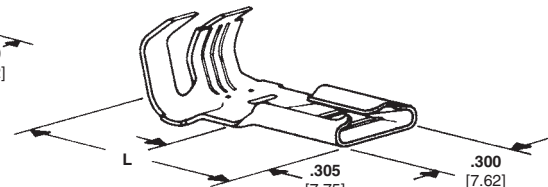
**Flag Receptacles,  
Insulation Support**



A — Premier Line



B — Budget Line



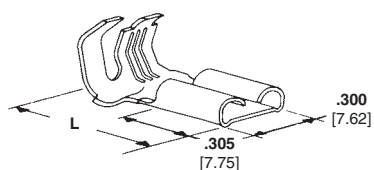
C — Economy Line

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SP	Terminal Part Number
22-16	C	.032 0.81	.070 - .130 1.78-3.30	Brass	.016 0.41	.670 17.02	X	—	X	63577-1
		.032 0.81	.110-210 2.79-5.33	Brass	.018 0.46	.670 17.02	X	—	X	41531
18-12	A	.032 0.81	.110-210 2.79-5.33	Brass, Tin Plated	.018 0.46	.670 17.02	X	—	X	41532
		.032 0.81	.110-210 2.79-5.33	Brass, Silver Plated	.018 0.46	.670 17.02	X	—	X	61156-1
	B	.032 0.81	.110-210 2.79-5.33	Steel, Nickel Plated	.018 0.46	.670 17.02	—	X	X	41531-1
		.032 0.81	.110-210 2.79-5.33	Steel, Nickel Plated	.016 0.41	.670 17.02	—	X	X	42404-1
	C	.032 0.81	.110-210 2.79-5.33	Brass	.016 0.41	.670 17.02	X	—	X	42511-1
		.032 0.81	.110-210 2.79-5.33	Brass, Tin Plated	.016 0.41	.670 17.02	X	—	X	42511-2
		.032 0.81	.110-210 2.79-5.33	Brass	.016 0.41	.670 17.02	X	—	X	42742-1
		.032 0.81	.110-210 2.79-5.33	Brass, Tin Plated	.016 0.41	.670 17.02	X	—	X	42742-2

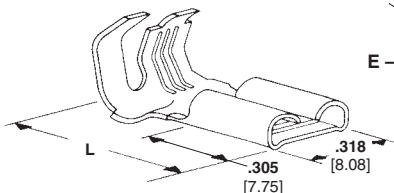
**Note:** All part numbers are RoHS compliant.

**250 Series Tab-Lok Flags** (Continued)

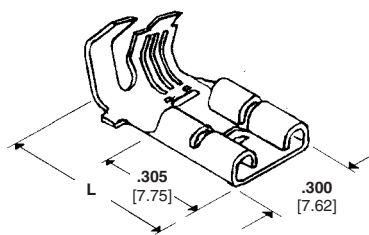
**Flag Receptacles, Insulation Support** (Continued)



**D — Moldable Line**



**F — Premier Line for Hermetic Tabs**



**E — Low Insertion Force (LIF)**



**G — Low Insertion Force (LIF)**

FASTON Receptacles

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	SA	SP	Terminal Part Number	
18-12	D	.032	.110-.210	Brass	.018	.670	X	—	X	60645-1 <sup>2</sup>	
		0.81	2.79-5.33		0.46	17.02					
		.032	0.81	.110-.210	Brass	.016	.670	X	—	X	60641-1
		.032	0.81	.110-.210	Brass	.016	.670	X	—	X	63445-1
		.032	0.81	.110-.210	Brass, Tin Plated	.016	.670	X	—	X	63445-2
		.032	0.81	.110-.210	Brass, Tin Plated	.016	.670	X	—	X	63445-4 <sup>2</sup>
		.032	0.81	.110-.210	Steel, Nickel Plated	.016	.670	—	X <sup>1</sup>	X <sup>1</sup>	63604-1 <sup>2</sup>
		.032	0.81	.110-.210	Brass	.018	.670	X	—	X	63555-1 <sup>2</sup>
	.032	0.81	.110-.210	Brass, Tin Plated	.018	.670	X	—	X	63555-2 <sup>2</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Tin Plated	.018	.670	X	—	X	41800 <sup>4</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Brass	.018	.670	X	—	X	41801 <sup>3</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Brass, Tin Plated	.018	.670	X	—	X	41802 <sup>3</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Silver Plated	.018	.670	X	—	X	42041 <sup>4</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Tin Plated	.018	.670	X	—	X	60274-2 <sup>4,5</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Tin Plated	.018	.670	X	—	X	63651-1 <sup>4,6</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Steel, Nickel Plated	.016	.670	—	X	—	1742543-1 <sup>7</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Brass, Tin Plated	.018	.670	X	—	X	60851-1 <sup>3</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Brass, Silver Plated	.018	.670	X	—	X	60851-2 <sup>3</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Brass	.018	.670	X	—	X	60851-4 <sup>3</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Silver Plated	.018	.670	X	—	X	42563-6 <sup>4</sup>	
											2.79-5.33
	.032	0.81	.110-.210	Steel, Nickel Plated	.018	.670	—	—	—	42563-9	
											2.79-5.33
	.032	0.81	.110-.210	Phos Bronze, Tin Plated	.018	.670	X	—	X	42563-8 <sup>4</sup>	
											2.79-5.33
	.032	0.81	.110-.265	Brass	.018	.670	X	—	X	63617-1 <sup>6</sup>	
											2.79-6.73

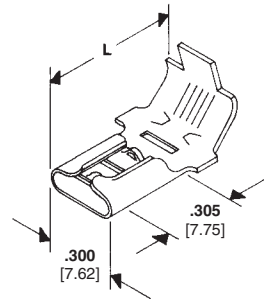
<sup>1</sup> 18 AWG only.  
<sup>2</sup> Stress relieved.  
<sup>3</sup> Recommended for external use only.  
<sup>4</sup> For internal or external use.  
<sup>5</sup> Left handed flag.  
<sup>6</sup> Non-stress relieved.  
<sup>7</sup> UL Recognized 14-18 AWG.

**Note:** All part numbers are RoHS compliant.

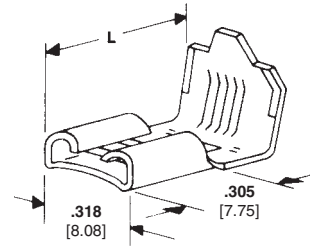


**250 Series Tab-Lok Flags** (Continued)

**Flag Receptacles,  
Non-Insulation Support**



**A — Economy Line**



**B — Premier Line  
for Hermetic Tabs**

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RoHS	SP	Terminal Part Number
18-12	A	.032 0.81	—	Brass, Pre-Tin Plated	.016 0.41	.600 15.24	X	—	X	61177-2 <sup>3</sup>
		.032 0.81	—	Brass, Pre-Tin Plated	.016 0.41	.600 15.24	X	—	X	61177-3 <sup>4</sup>
		.032 0.81	—	Brass	.016 0.41	.600 15.24	X	—	X	62091-1 <sup>5</sup>
		.032 0.81	—	Brass, Pre-Tin Plated	.016 0.41	.600 15.24	X	—	X	62091-2 <sup>5</sup>
	B	.032 0.81	—	Brass, Tin Plated	.018 0.46	.610 15.49	X	—	X	62021-3 <sup>5</sup>
		.032 0.81	—	Pho. Brz, Silver Plated	.018 0.46	.670 17.02	X	—	X	62056-1 <sup>1,3</sup>
		.032 0.81	—	Pho. Brz, Silver Plated	.018 0.46	.670 17.02	X	—	X	62056-2 <sup>1,2,4</sup>
		.032 0.81	—	Pho. Brz, Tin Plated	.018 0.46	.670 17.02	X	—	X	62056-6 <sup>2,3</sup>
		.032 0.81	—	Pho. Brz, Tin Plated	.018 0.46	.670 17.02	X	—	X	62056-7 <sup>1,2,4</sup>
		.032 0.81	—	Brass, Tin Plated	.018 0.46	.670 17.02	X	—	X	62056-3 <sup>2,3</sup>
12-10 or (2) 14	A	.032 0.81	—	Brass	.016 0.41	.670 17.02	X	—	X	62011-1 <sup>5</sup>
		.032 0.81	—	Brass, Pre-Tin Plated	.016 0.41	.670 17.02	X	—	X	62011-2 <sup>5</sup>
12-10	B	.032 0.81	—	Pho. Brz, Silver Plated	.018 0.46	.670 17.02	X	—	X	62057-1 <sup>1,3</sup>
		.032 0.81	—	Brass, Tin Plated	.018 0.46	.670 17.02	X	—	X	62057-3 <sup>3</sup>
		.032 0.81	—	Brass, Tin Plated	.018 0.46	.670 17.02	X	—	X	62057-4 <sup>4</sup>
		.032 0.81	—	Pho. Brz, Silver Plated	.018 0.46	.670 17.02	X	—	X	62057-7 <sup>4</sup>
		.032 0.81	—	Pho. Brz, Silver Plated	.018 0.46	.670 17.02	X	—	X	62022-1 <sup>5</sup>
		.032 0.81	—	Brass, Tin Plated	.018 0.46	.670 17.02	X	—	X	62022-2 <sup>5</sup>

<sup>1</sup> For internal or external use.

<sup>2</sup> Reverse reel.

<sup>3</sup> Right handed flag.

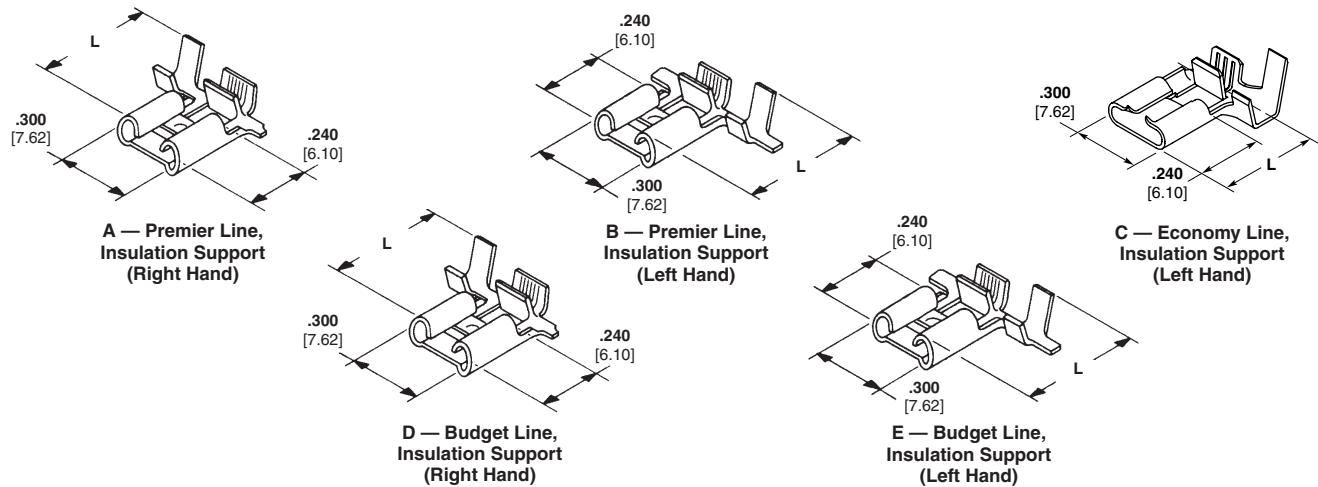
<sup>4</sup> Left handed flag.

<sup>5</sup> Right or left handed. Carrier out front for through splicing.

**Note:** All part numbers are RoHS compliant.

## 250 Series F-Crimp Flags

### Flag Receptacles



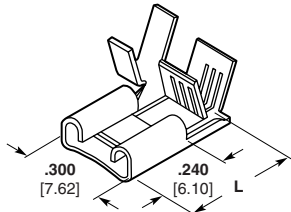
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RoHS	SR	Terminal Part Number
22-18	B	.032 0.81	.060 -.110 1.52-2.79	Brass	.016 0.41	.540 13.72	X	—	X	62813-1
		.032 0.81	.060 -.110 1.52-2.79	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	62813-2
	A	.032 0.81	.060 -.110 1.52-2.79	Brass	.016 0.41	.540 13.72	X	—	X	62814-1
		.032 0.81	.060 -.110 1.52-2.79	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	62814-2
	D	.032 0.81	.060 -.110 1.52-2.79	Brass	.016 0.41	.540 13.72	X	—	X	62718-1
		.032 0.81	.060 -.110 1.52-2.79	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	62718-2
18-14 or (2)18	B	.032 0.81	.110-.200 2.79-5.08	Brass	.016 0.41	.540 13.72	X	—	X	63538-1 <sup>1</sup>
		.032 0.81	.110-.200 2.79-5.08	Steel, Nickel Plated	.016 0.41	.540 13.72	—	X	—	63963-1
18-14	A	.032 0.81	.110-.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63901-1 <sup>1</sup>
		.032 0.81	.110-.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63901-2 <sup>1</sup>
	B	.032 0.81	.110 -.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63011-1
		.032 0.81	.110 -.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63011-2
	A	.032 0.81	.110 -.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63012-1
		.032 0.81	.110 -.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63012-2
	E	.032 0.81	.110 -.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63009-1
		.032 0.81	.110 -.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63009-2
	D	.032 0.81	.110 -.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63010-1
		.032 0.81	.110 -.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63010-2
	C	.032 0.81	—	Brass	.016 0.41	.430 10.92	X	—	X	63508-1 <sup>2</sup>
		.032 0.81	.110 -.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63096-1
.032 0.81		.110 -.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63096-2	
16-12	A	.032 0.81	.120 -.170 3.05-4.32	Brass, Tin Plated	.018 0.45	.700 17.78	X	—	X	1742718-1

<sup>1</sup> Low Insertion Force.  
<sup>2</sup> No insulation support.

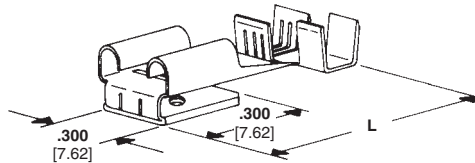
**Note:** All part numbers are RoHS compliant.

**250 Series F-Crimp Flags** (Continued)

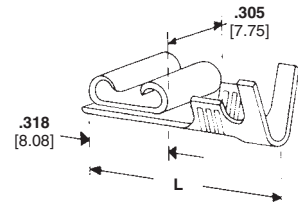
**Flag Receptacles** (Continued)



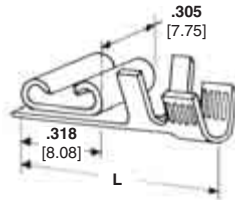
**A — Center Strip, F-Crimp**



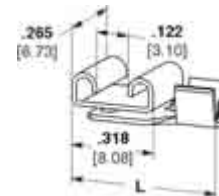
**B — Receptacle Tab Combination, F-Crimp**



**C — Reversible Flag, Straight End Feed**



**D — Reversible Flag for Hermetic Tabs, Side Feed**



**E — Reversible Flag for Hermetic Tabs, Side Feed**

FASTON Receptacles

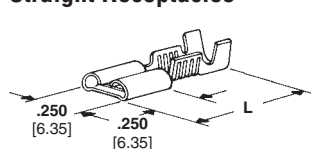
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	CS	Terminal Part Number	
20-16	D	.032 0.81	.085-150 2.16-3.81	Phos Brz, Tin Plated	.018 0.46	.640 16.26	X	—	X	63137-1	
		.032 0.81	—	Brass	.016 0.41	.430 10.92	X	—	X	63315-1 <sup>3</sup>	
	A	.032 0.81	—	Brass, Tin Plated	.016 0.41	.430 10.92	X	—	X	63315-2 <sup>3</sup>	
		.032 0.81	.110-.160 2.79-4.06	Brass	.016 0.41	.540 13.72	X	—	X	63314-1	
	B	.032 0.81	.110-.160 2.79-4.06	Brass, Tin Plated	.016 0.41	.540 13.72	X	—	X	63314-2	
		.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.016 0.41	.630 16.00	X	—	X	151321-4	
	18-14	C	.032 0.81	.090-.130 2.29-3.30	Brass	.016 0.41	.710 18.03	X	—	X	62048-1
			.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.016 0.41	.710 18.03	X	—	X	62048-2
		E	.032 0.81	.170-.220 4.32-5.59	Brass, Tin Plated	.016 0.41	.710 18.03	X	—	X	60764-2
			.032 0.81	—	Brass	.018 0.46	.640 16.26	—	—	—	63647-11 <sup>3</sup>
E		.032 0.81	—	Phos Brz, Tin Plated	.018 0.46	.640 16.26	—	—	—	63647-21 <sup>3</sup>	
		.032 0.81	—	Brass, Tin Plated	.018 0.46	.640 16.26	—	—	—	63647-31 <sup>3</sup>	
16-12	D	.032 0.81	.130-.170 3.30-4.32	Phos Brz, Tin Plated	.018 0.46	.640 16.26	X	—	X	61188-1 <sup>2</sup>	
12-10	D	.032 0.81	.130-.170 3.30-4.32	Phos Brz, Tin Plated	.018 0.46	.640 16.26	X	—	X	61187-1 <sup>2</sup>	

<sup>1</sup> No Dimple.  
<sup>2</sup> Bends terminal 90°. For 180° bend use applicator 687616-2 with Press 694234-7.  
<sup>3</sup> No insulation support.

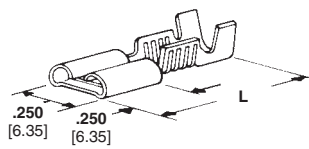
**Note:** All part numbers are RoHS compliant.

## 205 Series Receptacles

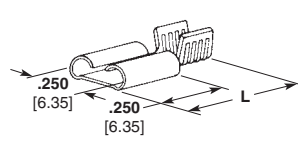
### Straight Receptacles



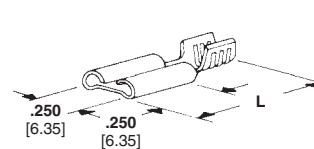
**A — Premier Line, Insulation Support**



**B — Economy Line, Insulation Support**



**C — Premier line Non-Insulation Support**



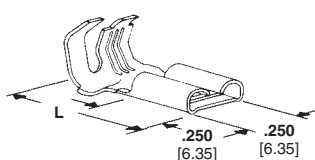
**D — Economy Line, Non-Insulation Support**

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
26-22	A	.020	.050-.070	Brass, Tin Plated	.012	.620	X	—	X	60674-1 <sup>1</sup>
		0.51	1.27-1.78	Brass	0.31	15.75	X	—	X	42198-1
	A	.020	.085-.125	Brass, Tin Plated	.012	.615	X	—	X	42198-2
		0.51	2.16-3.18	Brass, Tin Plated	0.31	15.62	X	—	X	42299-2
22-18	B	.020	.085-.125	Brass	.012	.615	X	—	X	42710-1
		0.51	2.16-3.18	Brass, Tin Plated	0.31	15.62	X	—	X	42710-2
	B	.032	.085-.125	Brass, Tin Plated	.012	.615	X	—	X	60904-2
		0.81	2.16-3.18	Brass, Tin Plated	0.31	15.62	X	—	X	42197-2 <sup>2</sup>
	C	.020	—	Brass, Tin Plated	.012	.470	X	—	X	42197-2 <sup>2</sup>
		0.51	—	Brass, Tin Plated	0.31	11.94	X	—	X	42233-2
18-14	A	.032	.130-.180	Brass, Tin Plated	.016	.615	X	—	X	42233-2
		0.81	3.30-4.57	Phos Brz, Tin Plated	0.41	15.62	X	—	X	42233-7
	B	.020	.130-.180	Brass, Tin Plated	.012	.615	X	—	X	42713-2
		0.51	3.30-4.57	Brass, Tin Plated	0.31	15.62	X	—	X	42781-2
	C	.020	.130-.180	Brass, Tin Plated	.016	.615	X	—	X	42781-2
		0.51	3.30-4.57	Brass, Tin Plated	0.41	15.62	X	—	X	42239-4
	C	.032	—	Phos Brz, Tin Plated	.016	.470	X	—	X	42239-4
		0.81	—	Phos Brz, Tin Plated	0.41	11.94	X	—	X	42712-2 <sup>2</sup>
D	.020	—	Brass, Tin Plated	.012	.470	X	—	X	42712-2 <sup>2</sup>	
	0.51	—	Brass, Tin Plated	0.31	11.94	X	—	X	42712-2 <sup>2</sup>	

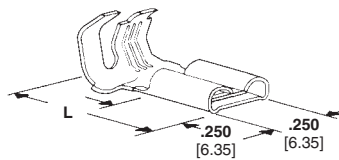
<sup>1</sup> UL listed and CSA certified for 22 AWG.

<sup>2</sup> Moldable.

### Flag Receptacles



**E — Premier Line, Tab-Lok Flag**



**F — Economy Line, Tab-Lok Flag**

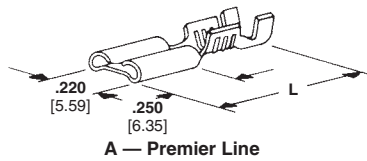
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
20-16	E	.020	.110-.170	Brass	.012	.530	X	—	X	42199-1
		0.51	2.79-4.32	Brass, Tin Plated	0.31	13.46	X	—	X	42199-2
	E	.020	.110-.170	Brass, Tin Plated	.016	.530	X	—	X	62354-1
		0.51	2.79-4.32	Brass, Tin Plated	0.41	13.46	X	—	X	42234-2
20-14	F	.032	.110-.170	Brass, Tin Plated	.016	.530	X	—	X	42234-2
		0.81	2.79-4.32	Brass, Tin Plated	0.41	13.46	X	—	X	60195-1 <sup>1</sup>
	F	.032	.110-.170	Brass	.016	.530	X	—	X	60195-1 <sup>1</sup>
		0.81	2.79-4.32	Brass, Tin Plated	0.41	13.46	X	—	X	60195-2 <sup>1</sup>

<sup>1</sup> Moldable.

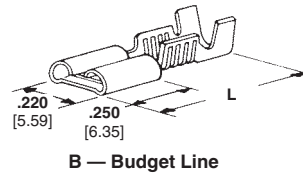
**Note:** All part numbers are RoHS compliant.

## 187 Series Receptacles

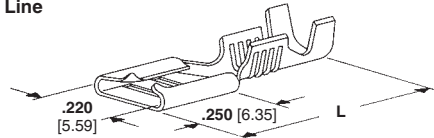
### Straight Receptacles



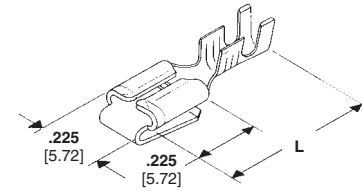
A — Premier Line



B — Budget Line



C — Economy Line



F — Commercial Line  
Receptacle & Tab Combination

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	CSA	Terminal Part Number		
24-20	A	.020	.040-.070	Brass, Tin Plated	.012	.590	UL	CSA	60573-1		
		0.51	1.02-1.78	Brass	0.31	14.99			X <sup>2</sup>	X <sup>2</sup>	60573-2
		.020	.040-.070	Phos Brz, Tin Plated	.012	.590			X	X	62187-2
		0.51	1.02-1.78	Brass, Tin Plated	.012	.585			X <sup>2</sup>	X <sup>2</sup>	62138-1
		0.51	1.52-2.79	Brass	0.31	14.86			X <sup>2</sup>	X <sup>2</sup>	62138-2
	B	.021	.060-.110	Brass, Tin Plated	.012	.590	—	—	1217129-1		
		0.53	1.52-2.79	Brass, Tin Plated	0.31	14.99	—	—	—		
		.032	.040-.070	Brass, Tin Plated	.012	.590	X <sup>2</sup>	X <sup>2</sup>	62181-1		
		0.81	1.02-1.78	Brass, Tin Plated	0.31	14.99	X	X	63931-1		
		.020	.090-.150	Brass, Tin Plated	.012	.585	X	X	63347-1		
22-18	C	0.51	2.29-3.30	Brass	0.31	14.99	X	X	63347-1		
		.020	.060-.100	Brass, Tin Plated	.014	.615	X	X	63873-1 <sup>5</sup>		
	F	0.51	1.52-2.54	Brass, Tin Plated	0.36	15.62	X	X	63873-1 <sup>5</sup>		
		.020	.090-.130	Brass, Tin Plated	.014	.615	X	X	1217084-1 <sup>5</sup>		
		0.51	2.29-3.30	Brass, Tin Plated	0.36	15.62	X	X	1217084-1 <sup>5</sup>		
20-16	A	.015	—	Brass, Tin Plated	.012	.470	—	—	42374-2 <sup>1</sup>		
		0.38	—	Brass, Tin Plated	0.31	11.94	—	—	—		
		.015	.090-.130	Brass, Tin Plated	.012	.590	—	—	42453-2		
		0.38	2.29-3.30	Brass, Tin Plated	0.31	14.99	—	—	—		
		.020	—	Brass, Tin Plated	.012	.470	X	X	42373-2 <sup>1</sup>		
		0.51	—	Steel, Nickel Plated	0.31	11.94	—	X	—		
		.020	.060-.110	Brass	.012	.585	X	X	62137-1		
		0.51	1.52-2.79	Brass, Tin Plated	0.31	14.86	X	X	62137-2		
		.020	.090-.130	Brass	.012	.590	X	X	42452-1		
		0.51	2.29-3.30	Brass, Tin Plated	0.31	14.99	X	X	42452-2		
		.020	.090-.130	Phos Brz, Tin Plated	.012	.590	X	X	42452-5		
		0.51	2.29-3.30	Steel, Nickel Plated	0.31	14.99	—	X	X	60621-1	
		.020	.090-.130	Steel, Nickel Plated	.012	.590	—	X	X	63850-1	
		0.81	2.29-3.30	Brass	0.31	14.99	—	X	X	63850-1	
.032	.090-.130	Brass	.012	.585	X	X	61758-1				
0.81	2.29-3.30	Brass, Tin Plated	0.31	14.86	X	X	61758-2				
.032	.090-.130	Brass, Tin Plated	.012	.585	X	X	61758-2				
0.81	2.29-3.30	Brass, Tin Plated	0.31	14.86	X	X	61758-2				

<sup>1</sup> No Insulation support.

<sup>2</sup> UL listed and CSA certified for 22- 20 AWG.

<sup>3</sup> Also capable of accepting (2) 20 AWG wires.

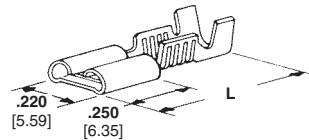
<sup>4</sup> Stress relieved.

<sup>5</sup> Tab stock thickness .020 [0.51].

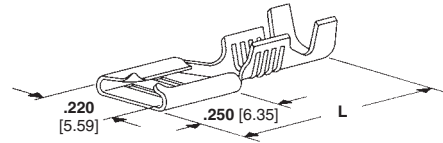
**Note:** All part numbers are RoHS compliant.

**187 Series Receptacles** (Continued)

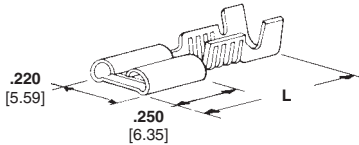
**Straight Receptacles** (Continued)



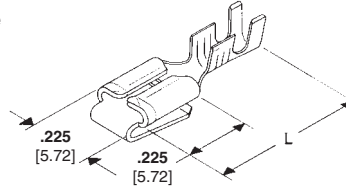
**B — Budget Line**



**C — Economy Line**



**E — Moldable Line**



**F — Commercial Line Receptacle & Tab Combination**

FASTON Receptacles

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number		
20-16	B	.020 0.51	.090-.130 2.29-3.30	Brass	.012 0.31	.585 14.86	X	—	X	42617-1		
		.020 0.51	.090-.130 2.29-3.30	Steel, Nickel Plated	.012 0.31	.585 14.86	—	X	X	63959-1		
		.020 0.51	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.31	.585 14.86	X	—	X	42617-2		
		.032 0.81	—	Brass	.012 0.31	.475 12.07	X	—	X	63785-1 <sup>1</sup>		
		.032 0.81	.090-.130 2.29-3.30	Brass	.012 0.31	.585 14.86	X	—	X	63477-1		
		.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.31	.585 14.86	X	—	X	63477-2		
		.020 0.51	—	Brass	.012 0.31	.475 12.07	X	—	X	42799-1 <sup>1</sup>		
		.020 0.51	—	Brass, Tin Plated	.012 0.31	.475 12.07	X	—	X	42799-2 <sup>1</sup>		
		.020 0.51	.090-.130 2.29-3.30	Brass	.012 0.31	.590 14.99	X	—	X	42801-1		
		.020 0.51	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.31	.590 14.99	X	—	X	42801-2		
	C	.020 0.51	.090-.130 2.29-3.30	.090 2.29	Brass	.012 0.31	.590 14.99	X	—	X	61892-1 <sup>3</sup>	
		.032 0.81	—	—	Brass, Tin Plated	.012 0.31	.475 12.07	X	—	X	61969-1 <sup>1</sup>	
		.032 0.81	.090-.130 2.29-3.30	—	Brass	.012 0.31	.590 14.99	X	—	X	60196-1	
		.032 0.81	.090-.130 2.29-3.30	—	Brass, Tin Plated	.012 0.31	.590 14.99	X	—	X	60196-2	
		.039 0.99	.090-.130 2.29-3.30	—	Brass, Tin Plated	.012 0.31	.590 14.99	—	—	—	63751-1	
		E	.020 0.51	.090-.130 2.29-3.30	—	Brass	.012 0.31	.585 14.86	X	—	X	60214-1
			.020 0.51	.090-.130 2.29-3.30	—	Brass, Tin Plated	.012 0.31	.585 14.86	X	—	X	60214-2
			.020 0.51	.060-.110 1.52-2.79	—	Brass, Tin Plated	.014 0.36	.615 15.62	X	—	X	62139-1 <sup>5</sup>
			.020 0.51	.090-.130 2.29-3.30	—	Brass, Tin Plated	.014 0.36	.615 15.62	X	—	X	62026-1 <sup>5</sup>
		F	.020 0.51	.090-.130 2.29-3.30	—	Brass	.014 0.36	.615 15.62	X	—	X	62026-2 <sup>5</sup>
.032 0.81	.090-.130 2.29-3.30		—	Brass	.014 0.36	.615 15.62	X	—	X	63646-1 <sup>5</sup>		
.032 0.81	.090-.130 2.29-3.30		—	Brass, Tin Plated	.014 0.36	.615 15.62	X	—	X	63646-2 <sup>5</sup>		

<sup>1</sup> No Insulation support.

<sup>2</sup> UL listed and CSA certified for 22- 20 AWG.

<sup>3</sup> Also capable of accepting (2) 20 AWG wires.

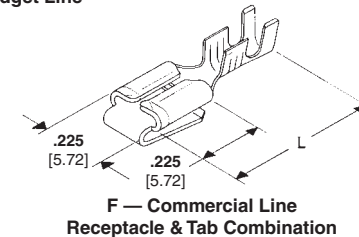
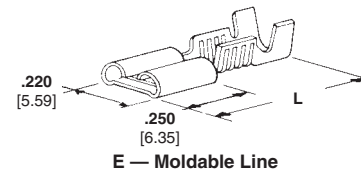
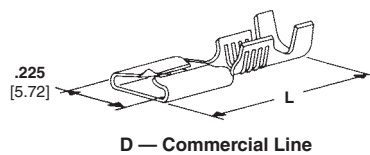
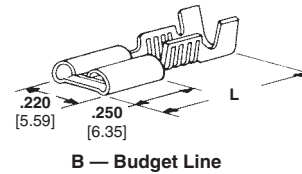
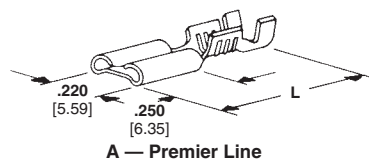
<sup>4</sup> Stress relieved.

<sup>5</sup> Tab stock thickness .020 [0.51].

**Note:** All part numbers are RoHS compliant.

**187 Series Receptacles** (Continued)

**Straight Receptacles** (Continued)



Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
18-16 or (2) 18	A	.020 0.51	.105-.210 2.67-5.33 (2) .105 Max.	Brass, Tin Plated	.012 0.31	.590 14.99	X	—	X	60487-2
			.105-.210 2.67-5.33 (2) .105 Max.	Brass	.012 0.31	.590 14.99	X	—	X	60487-1
		.032 0.81	.105-.210 2.67-5.33 (2) .105 Max.	Brass, Tin Plated	.012 0.31	.590 14.99	X	—	X	61945-1
	B	.032 0.81	.105-.210 2.67-5.33 (2) .105 Max.	Brass	.012 0.31	.590 14.99	X	—	X	63769-1
			.105-.210 2.67-5.33 (2) .105 Max.	Steel, Nickel Plated	.012 0.31	.590 14.99	—	X	X	61945-2
			.105-.210 2.67-5.33 (2) .105 Max.	Brass	.012 0.31	.590 14.99	X	—	X	63470-1
18-14 or (2) 16	D	.020 0.51	.180-.230 4.57-5.84 (2) .110 Max.	Brass	.014 0.36	.640 16.26	X	—	X	60742-1
			.180-.230 4.57-5.84 (2) .110 Max.	Brass, Tin Plated	.014 0.36	.640 16.26	X	—	X	60742-2
		.025 0.64	.180-.230 4.57-5.84 (2) .110 Max.	Brass, Tin Plated	.014 0.36	.640 16.26	X	—	X	63749-2 <sup>4</sup>
	D	.032 0.81	.180-.230 4.57-5.84 (2) .110 Max.	Brass	.014 0.36	.640 16.26	—	—	—	63832-1
			.180-.230 4.57-5.84 (2) .110 Max.	Brass	.014 0.36	.640 16.26	X	—	X	63596-1
			.180-.230 4.57-5.84 (2) .110 Max.	Brass, Pre-Tin	.014 0.36	.640 16.26	X	—	X	63596-2
18-14	A	.020 0.51	.110-.160 2.79-4.06	Brass, Tin Plated	.012 0.31	.590 14.99	X	—	X	1217149-1
	D	.020 0.51	.150-.190 3.81-4.83	Brass	.014 0.36	.640 16.26	X	—	X	62016-1
			.150-.190 3.81-4.83	Brass, Tin Plated	.014 0.36	.640 16.26	X	—	X	62016-2
		.032 0.81	.150-.190 3.81-4.83	Brass, Pre-Tin	.014 0.36	.640 16.26	X	—	X	63697-1
	F	.020 0.51	.110-.160 2.79-4.06	Brass, Tin Plated	.014 0.36	.615 15.62	—	—	—	1217151-1 <sup>5</sup>

<sup>1</sup> No Insulation support.

<sup>2</sup> UL listed and CSA certified for 22- 20 AWG.

<sup>3</sup> Also capable of accepting (2) 20 AWG wires.

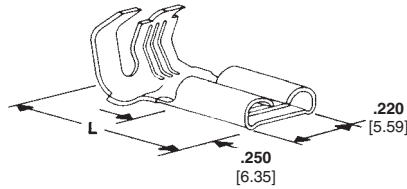
<sup>4</sup> Stress relieved.

<sup>5</sup> Tab stock thickness .020 [0.51].

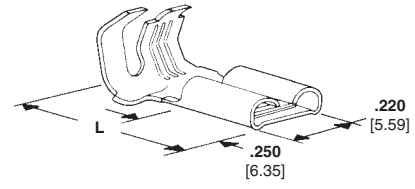
**Note:** All part numbers are RoHS compliant.

### 187 Series Tab-Lok Flags

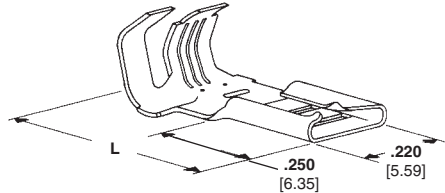
Flag Receptacles,  
Insulation Support



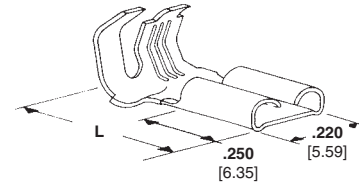
A — Premier Line



B — Budget Line



C — Economy Line



D — Moldable Line

Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SR	Terminal Part Number
20-16	A	.020 0.51	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	42486-1
		.020 0.51	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	42486-2
		.020 0.51	.110-.170 2.79-4.32	Steel, Nickel Plated	.012 0.31	.530 13.46	—	X	X	42486-3
		.020 0.51	.110-.170 2.79-4.32	Brass, Silver Plated	.012 0.31	.530 13.46	X	—	X	42486-4
		.032 0.81	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	62591-1
		.032 0.81	.110-.170 2.79-4.32	Steel, Nickel Plated	.012 0.31	.530 13.46	—	X	X	63696-1
	B	.020 0.51	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	42618-1
		.020 0.51	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	42618-2
		.020 0.51	.170-.225 4.32-5.72	Brass	.012 0.31	.575 14.61	X	—	X	62817-1
		.032 0.81	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	63748-1
	C	.020 0.51	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	42800-1
		.020 0.51	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	42800-2
		.032 0.81	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	60529-1
		.032 0.81	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	60529-2
	D	.020 0.51	.110-.170 2.79-4.32	Brass	.012 0.31	.530 13.46	X	—	X	61029-1
		.020 0.51	.110-.170 2.79-4.32	Brass, Tin Plated	.012 0.31	.530 13.46	X	—	X	61029-2
18-14 or (2) 18	A	.032 0.81	.110-.190 2.79-4.83 (2) .105 Max. 2.67	Brass, Tin Plated	.014 0.36	.530 14.36	X	—	X	1742422-1
	B	.032 0.81	.110-.190 2.79-4.83 (2) .105 Max. 2.67	Brass, Tin Plated	.014 0.36	.530 14.36	X	—	X	1217027-1

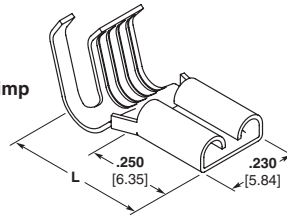
Note: All part numbers are RoHS compliant.



## 187 Series C-Crimp Flag Receptacles

### C-Crimp Line

A — 187 Series C-Crimp Flag Receptacles

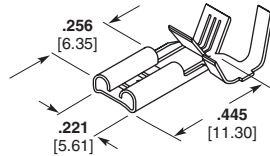


Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
20-16	A	.020 0.51	.090-.130 2.29-3.30	Brass	.014 0.36	.522 13.26	X	—	X	1217009-1
		.020 0.51	.090-.130 2.29-3.30	Brass, Tin Plated	.014 0.36	.522 13.26	X	—	X	1217009-2
		.032 0.81	.090-.130 2.29-3.30	Brass	.014 0.36	.522 13.26	X	—	X	1217010-1
		.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.014 0.36	.522 13.26	X	—	X	1217010-2
18-14	A	.032 0.81	.100-.155 2.54-3.94	Brass	.016 0.41	.535 13.59	X <sup>1</sup>	—	X <sup>1</sup>	1217244-1
		.032 0.81	.100-.155 2.54-3.94	Brass, Tin Plated	.016 0.41	.535 13.59	X	—	X	1217244-2

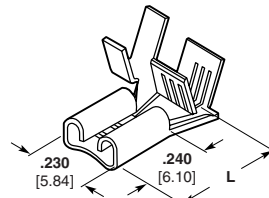
<sup>1</sup> 16 & 18 AWG only.

## 187 Series F-Crimp Flags

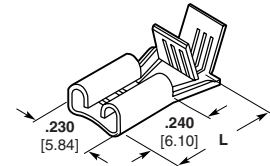
### F-Crimp Line



A — End of Wire with Insulation Support



B — Center Strip with Insulation Support



C — Center Strip with No Insulation Support

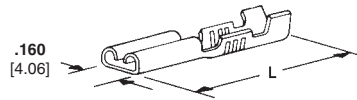
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
22-18	A	.020 0.51	.060-.110 1.52-2.79	Brass	0.012 0.31	0.445 11.30	X	—	X	1742086-1
		.020 0.51	.060-.110 1.52-2.79	Brass, Tin Plated	0.012 0.31	0.445 11.30	X	—	X	1742086-2
		.032 0.81	.060-.110 1.52-2.79	Brass	0.012 0.31	0.445 11.30	X	—	X	1742087-1
		.032 0.81	.060-.110 1.52-2.79	Brass, Tin Plated	0.012 0.31	0.445 11.30	X	—	X	1742087-2
20-16	B	.020 0.51	.090-.130 2.29-3.30	Brass	.012 0.31	.596 15.14	—	—	—	626412-1
		.020 0.51	.060-.150 1.52-3.81	Brass	.016 0.41	.430 10.92	X	—	X	63512-1
18-14	B	.032 0.81	.060-.150 1.52-3.81	Brass	.016 0.41	.430 10.92	X	—	X	63316-1
		.032 0.81	.060-.150 1.52-3.81	Brass, Tin Plated	.016 0.41	.430 10.92	X	—	X	63316-2
	C	.032 0.81	.060-.150 1.52-3.81	Steel, Nickel Plated	.016 0.41	.430 10.92	—	X	X	63316-3
		.032 0.81	.060-.150 1.52-3.81	Brass	.016 0.41	.430 10.92	X	—	X	63317-1
18-14 or (2) 18	A	.020 0.51	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Brass	0.012 0.31	0.445 11.30	X <sup>1</sup>	—	X <sup>1</sup>	1742088-1
		.020 0.51	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Brass, Tin Plated	0.012 0.31	0.445 11.30	X <sup>1</sup>	—	X <sup>1</sup>	1742088-2
		.032 0.81	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Brass	0.012 0.31	0.445 11.30	X <sup>1</sup>	—	X <sup>1</sup>	1742089-1
		.032 0.81	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Brass, Tin Plated	0.012 0.31	0.445 11.30	X <sup>1</sup>	—	X <sup>1</sup>	1742089-2
18 or (2) 18	A	.020 0.51	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Steel, Nickel Plated	0.012 0.31	0.445 11.30	—	X <sup>1</sup>	—	1742312-1
		.032 0.81	.110-.150 or 2-110 2.79-3.81 or 2-2.79 max	Steel, Nickel Plated	0.012 0.31	0.445 11.30	—	X <sup>1</sup>	—	1742049-1

<sup>1</sup> UL/CSA Approved for 18 & 16 AWG only

**Note:** All part numbers are RoHS compliant.

## 125 Series Receptacles

### Insulation Support

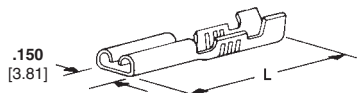


A - Receptacle with Insulation Support

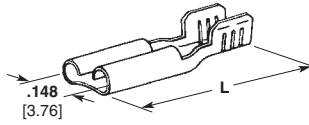
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
22-18	A	.020 0.51	.090-.110 2.29-2.79	Brass	.010 0.25	.635 16.13	—	—	—	63705-1

## 110 Series Receptacles

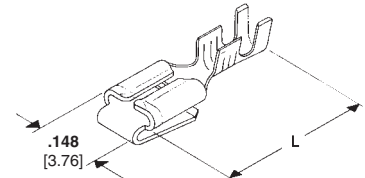
### Straight Receptacles



A — FASTON Receptacles with Insulation Support



B — FASTON Receptacles with No Insulation Support



C — Commercial Line Receptacle and Tab Combination

Wire Range AWG	Style	Fits Tab Type <sup>7</sup>	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
26-22	B	—	.020 0.51	—	Brass, Tin Plated	.010 0.25	.327 8.31	—	—	—	63837-1
		—	.016 0.41	—	Brass	.010 0.25	.327 8.31	—	—	—	61818-1
24-22	A	1	.016 0.41	.040-.060 1.02-1.52	Brass, Pre-Tin	.010 0.25	.635 16.13	—	—	—	42415-1
		1	.020 0.51	.040-.060 1.02-1.52	Brass, Pre-Tin	.010 0.25	.635 16.13	X <sup>1</sup>	—	X	42067-1
		1	.020 0.51	.040-.060 1.02-1.52	Brass, Pre-Tin	.010 0.25	.510 12.95	X	—	X	60089-2
		1	.032 0.81	.040-.060 1.02-1.52	Brass, Pre-Tin	.010 0.25	.635 16.13	X <sup>1</sup>	—	X	63634-1
22-20	A	2	.020 0.51	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	42236-1
22-18	A	1	.012 0.31	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	—	—	—	60415-1
		1	.016 0.41	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	—	—	—	60118-1
		2	.016 0.41	.090-.130 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	—	—	—	62523-1
		1	.020 0.51	.060-.100 1.52-2.54	Brass	.010 0.25	.635 16.13	X	—	X	42068
		1	.020 0.51	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	42068-1
		1	.020 0.51	.090-.130 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	62094-1
		1	.020 0.51	.090-.130 1.52-2.54	Brass	.010 0.25	.635 16.13	X	—	X	62094-2
		2	.020 0.51	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	60729-1
		1	.025 0.51	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	—	—	—	61158-1
		1	.032 0.81	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	60197-1
		3	.032 0.81	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	60577-1
		1	.032 0.81	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	63954-1

<sup>1</sup> UL listed 22 AWG wire only.

<sup>2</sup> No Dimple.

<sup>4</sup> Side feed.

<sup>3</sup> Dimple at special location.

<sup>5</sup> Tab Thickness .020 [0.51].

<sup>6</sup> Tab Thickness .032 [0.81].

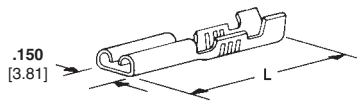
<sup>7</sup> Stress relieved.

<sup>8</sup> See page 28 for Mating Tab Designs.

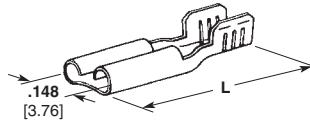
**Note:** All part numbers are RoHS compliant.

**110 Series Receptacles** (Continued)

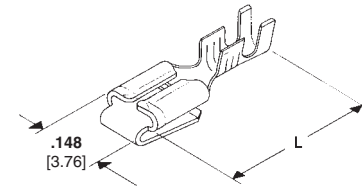
**Straight Receptacles** (Continued)



**A — FASTON Receptacles with Insulation Support**



**B — FASTON Receptacles with No Insulation Support**



**C — Commercial Line Receptacle and Tab Combination**

Wire Range AWG	Style	Fits Tab Type <sup>a</sup>	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RA	SP	Terminal Part Number
22-18	C	1	.018 0.46	.080-.120 2.03-3.05	Brass	.010 0.25	.630 16.00	—	—	—	63242-1 <sup>5</sup>
		1	.020 0.51	.060-.100 1.52-2.54	Brass	.010 0.25	.630 16.00	X	—	X	62003-1 <sup>5</sup>
		1	.020 0.51	.060-.100 1.52-2.54	Brass, Tin Plated	.010 0.25	.630 16.00	X	—	X	62003-2 <sup>5</sup>
		1	.032 0.81	.080-.120 2.03-3.05	Brass, Tin Plated	.010 0.25	.630 16.00	X	—	X	63961-1 <sup>5</sup>
		1	.032 0.81	.080-.120 2.03-3.05	Brass, Tin Plated	.010 0.25	.630 16.00	—	—	—	1217145-1 <sup>6</sup>
20-18 or (2) 20	B	1	.016 0.41	—	Brass, Pre-Tin	.010 0.25	.475 12.07	—	—	—	42398-1
		1	.020 0.51	—	Brass, Pre-Tin	.010 0.25	.475 12.07	X	—	X	42399-1
		1	.032 0.81	—	Brass, Pre-Tin	.010 0.25	.475 12.07	X	—	X	60601-1
20-18	B	—	.020 0.51	—	Brass, Pre-Tin	.010 0.25	.380 9.65	X	—	X	62850-1 <sup>2</sup>
		—	.020 0.51	—	Brass, Tin Plated	.010 0.25	.380 9.65	X	—	X	62850-2 <sup>2</sup>
20-16	A	1	.010 0.25	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.625 15.88	—	—	—	62968-1
		1	.020 0.51	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	61408-1
		1	.020 0.51	.060-.100 1.52-2.54	Steel, Nickel Plated	.010 0.25	.635 16.13	—	X	X	1217102-1
		1	.020 0.51	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	61400-1
		1	.020 0.51	.150-.170 3.81-4.32	Brass, Tin Plated	.010 0.25	.635 16.13	X	—	X	62191-1
		1	.032 0.81	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	62050-1
		1	.032 0.81	.120-.140 3.05-3.56	Steel, Nickel Plated	.010 0.25	.635 16.13	—	X	X	62050-2
		2	.032 0.81	.120-.140 3.05-3.56	Brass, Pre-Tin	.010 0.25	.635 16.13	X	—	X	63703-1
		1	.016 0.41	—	Brass, Pre-Tin	.010 0.25	.537 13.64	—	—	—	61457-1
		1	.032 0.81	—	Brass, Pre-Tin	.010 0.25	.415 10.54	X	—	X	63560-1
18-14	A	—	.032 0.81	.110-.190 2.79-4.83	Brass, Tin Plated	.012 0.30	.625 15.88	—	—	—	63093-1 <sup>2,7</sup>
		—	.020 0.51	—	Brass, Tin Plated	.010 0.25	.475 12.07	X	—	X	62474-1 <sup>3,4</sup>
		1	.020 0.51	—	Brass, Pre-Tin	.010 0.25	.475 12.07	X	—	X	62852-1 <sup>4</sup>

<sup>1</sup> UL listed 22 AWG wire only.  
<sup>2</sup> No Dimple.

<sup>3</sup> Side feed.  
<sup>4</sup> Dimple at special location.

<sup>5</sup> Tab Thickness .020 [0.51].  
<sup>6</sup> Tab Thickness .032 [0.81].

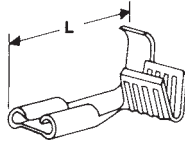
<sup>7</sup> Stress relieved.  
<sup>8</sup> See page 28 for Mating Tab Designs.

**Note:** All part numbers are RoHS compliant.

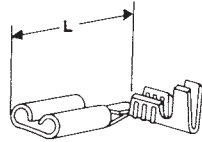
## 110 Series F-Crimp Flags

### Flag Receptacles

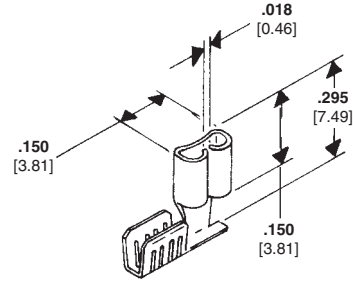
FASTON Receptacles



**A — FASTON Flag Receptacle with Insulation Support**



**B — FASTON Flag Receptacle with Insulation Support**



**C — FASTON Flag Receptacle with No Insulation Support**

Wire Range AWG	Style	Fits Tab Type <sup>2</sup>	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RoHS	Terminal Part Number	
26-22	B	*	.020 0.51	.040-.080 1.02-2.03	Brass, Pre-Tin	.010 0.25	.430 10.92	X <sup>3</sup>	—	X <sup>3</sup>	1742219-1
		*	.016 0.41	.065-.100 1.65-2.54	Brass, Pre-Tin	.010 0.25	.460 11.68	—	—	—	61459-1
		*	.020 0.51	.065-.100 1.65-2.54	Brass, Pre-Tin	.010 0.25	.460 11.68	X	—	X	61372-1
	A	*	.020 0.51	.065-.100 1.65-2.54	Brass, Tin Plated	.012 0.30	.460 11.68	X	—	X	60605-1
		*	.025 0.64	.065-.100 1.65-2.54	Brass, Pre-Tin	.010 0.25	.460 11.68	—	—	—	61530-1
		*	.032 0.81	.065-.100 1.65-2.54	Brass, Pre-Tin	.010 0.25	.460 11.68	X	—	X	61971-1
22-18	B	*	.020 0.51	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.430 10.92	X	—	X	61481-1
		*	.020 0.51	.060-.100 1.52-2.54	Brass, Tin Plated	.012 0.30	.430 10.92	X	—	X	61070-1
		*	.020 0.51	.060-.100 1.52-2.54	Brass	.012 0.30	.430 10.92	X	—	X	61070-2
	C	*	.025 0.64	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.430 10.92	—	—	—	1217138-1
		*	.032 0.81	.060-.100 1.52-2.54	Brass, Pre-Tin	.010 0.25	.430 10.92	X	—	X	62336-1
		*	.032 0.81	.060-.100 1.52-2.54	Steel, Nickel Plated	.010 0.25	.430 10.92	—	—	—	62336-2
22-16	C	—	.015 0.38	—	Brass, Pre-Tin	.010 0.25	.295 7.49	—	—	—	63990-1
		—	.020 0.51	—	Brass	.012 0.30	.295 7.49	X <sup>1</sup>	—	X	60991-1
		—	.020 0.51	—	Brass, Pre-Tin	.010 0.25	.295 7.49	X <sup>1</sup>	—	X	61549-1
		1	.020 0.51	—	Brass, Pre-Tin	.010 0.25	.295 7.49	X <sup>1</sup>	—	X	62321-1

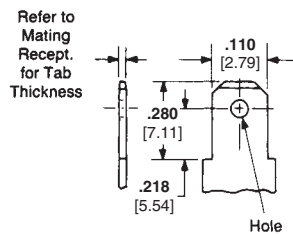
\* No Tab Type

<sup>1</sup> UL listed and CSA certified for 22-18 AWG.

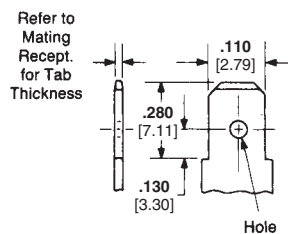
<sup>2</sup> See below for Mating Tab Designs.

<sup>3</sup> UL listed and CSA certified for 22 AWG wire only.

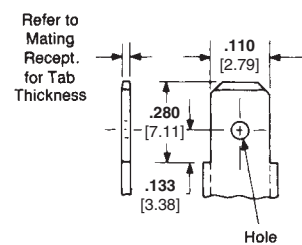
### Mating 110 Series Tab Designs



**Mating 110 Series Tab Dimension Type 1**



**Mating 110 Series Tab Dimensions Type 2**



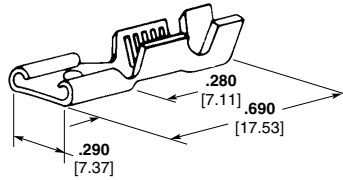
**Mating 110 Series Tab Dimensions Type 3**

**Note:** All part numbers are RoHS compliant.

## AMPLIVAR Receptacles

### 250 Series FASTON Receptacles

Stock Thickness — .016 [0.41]



Magnet Wire Range		Insulation Diameter	Mating Tab Thk.	Material	Material Thickness	Part Number
AWG	mm <sup>2</sup>					
24-19	0.23-0.70	.050-.080 1.30-2.00	.020 0.51	Brass Tin Plated Brass	.016 0.41	63623-1 <sup>1</sup> 63623-2 <sup>1</sup>
23-19 or (2) 24 or (2) 26	0.29-0.70 or (2) 0.23 or (2) 0.15	.050-.100 1.30-2.55	.025 0.64	Brass	.016 0.41	62069-1 <sup>3</sup>
20-16 or (2) 23 or (2) 20	0.57-1.39 or (2) 0.29 or (2) 0.57	.100-.140 2.55-3.55 or .060 (2) 1.52 Max.	.032 [0.81]	Brass Tin Plated Brass	.016 0.41	60384-1 60384-2
20-16	0.57-1.39	.100-.140 2.55-3.55	.020 0.51	Brass	.016 0.41	62080-1
18-14 or (2) 17	0.88-2.19 or (2) 1.11	.120-.170 3.05-4.30 or .060 (2) 1.52 Max.	.032 [0.81]	Tin Plated Brass	.016 0.41	60385-2
18-14 or (2) 19	0.88-2.19 or (2) 0.70	.120-.170 3.05-4.30	.020 0.51	Brass	.016 0.41	63622-1 <sup>1</sup>
18-14 or (2) 19	0.88-2.19 or (2) 0.70	.120-.170 3.05-4.30	.032 0.81	Brass	.016 0.41	1217835-1

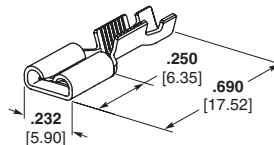
<sup>1</sup> Low insertion force

<sup>2</sup> Quick-Change Applicator for AMP-O-LECTRIC Machine 565435-5.

<sup>3</sup> Mates to .025 [0.64] thick tab.

### 187 Series FASTON Receptacle

Stock Thickness — .016 [0.41]



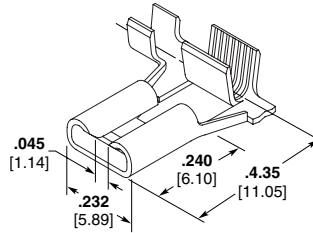
Magnet Wire Range		Insulation Diameter	Mating Tab Thk.	Material	Material Thickness	Part Number
AWG	mm <sup>2</sup>					
20-16	0.57-1.39	.050-.090 1.27-2.29	.032 0.81	Tin Plated Phosphor Bronze	.016 0.41	1742678-2

**Note:** All part numbers are RoHS compliant.

### AMPLIVAR Receptacles (Continued)

#### 187 Series FASTON Flag Receptacles

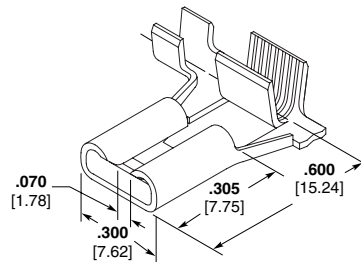
Stock Thickness — .016 [0.41]



Magnet Wire Range		Insulation Diameter	Mating Tab Thk.	Material	Material Thickness	Part Number
CMA	mm <sup>2</sup>					
500-1200	0.25-0.61	.020-.040 0.51-1.02	.020 0.51	Tin Plated Brass	.016 0.41	63942-1
24-20 AWG	0.2-0.5	.020-.040 0.51-1.02	.032 0.81	Tin Plated Brass	.016 0.41	1217624-1
20-16 AWG	0.57-1.39	.050-.090 1.27-2.29	.032 0.81	Tin Plated Phosphor Bronze	.016 0.41	1742679-2
1200-2350	0.61-1.19	.020-.040 0.51-1.02	.020 0.51	Tin Plated Brass	.016 0.41	63941-1
2000-4000	1.01-2.03	.020-.040 0.51-1.02	.032 0.81	Tin Plated Brass	.016 0.41	1217955-1
2000-4050	1.01-2.05	.020-.040 0.51-1.02	.020 0.51	Tin Plated Brass	.016 0.41	63940-1
2000-4050	1.01-2.05	.020-.040 0.51-1.02	.032 0.81	Tin Plated Brass	.016 0.41	1217417-1
3000-6000	1.52-3.04	.020-.040 0.51-1.02	.020 0.51	Tin Plated Brass	.016 0.41	1217899-1

#### 250 Series FASTON Flag Receptacles

Stock Thickness — .018 [0.45]

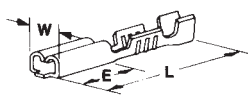


Magnet Wire Range		Insulation Diameter	Mating Tab Thk.	Material	Material Thickness	Part Number
CMA	mm <sup>2</sup>					
16-12	1.39-3.47	.120-.170 3.05-4.32	.032 0.81	Tin Plated Phos Bronze	.018 0.45	63944-1

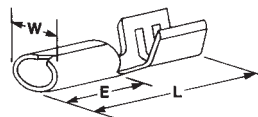
**Note:** All part numbers are RoHS compliant.

## Miscellaneous Tab Receptacles

### Tab Receptacles



A



B

Wire Range		Type	Insul. Dia. Range	Stock Thk.	Material and Finish	Fits Tab	Dimensions			Part No.
AWG	mm <sup>2</sup>						E	L	W	
26-22	0.12-0.4	A	.035-.065 0.89-1.65	.010 .025	Pre-Tin Brass	.031 x .093 0.79 x 2.36	.190 4.83	.475 12.06	.120 3.05	61813-1 <sup>5</sup>
24-20	0.2-0.6	A	.040-.080 1.02-2.03	.010 0.25	Tin Plated Brass	.031 x .062 0.79 x 1.57	.187 4.75	.462 11.73	.090 2.29	60900-1 <sup>1</sup>
		B								—
22-18	0.3-0.9	A	.050-.085 1.27-2.16	.010 0.25	Pre-Tin Brass	.010 x .093 0.25 x 2.36	.190 4.83	.480 12.19	.120 3.05	63391-1 <sup>3,4</sup> 63391-2 <sup>4</sup>
20-18	0.5-0.9	A	.080-.120 2.03-3.05	.010 0.25	Pre-Tin Brass	.032 x .103 0.81 x 2.62	.200 5.08	.480 12.19	.126 3.2	60252-1 <sup>6</sup>
					Pre-Tin Brass	.020 x .103 0.51 x 2.62	.200 5.08	.480 12.19	.126 3.2	60432-1 <sup>6</sup>

<sup>1</sup> Available in loose piece form, order Part Number 61454-1.

<sup>2</sup> Reverse reel of 60900-1.

<sup>3</sup> Loose piece form of Part Number 63391-2.

<sup>4</sup> Mechanically compliant base.

<sup>5</sup> No dimple.

<sup>6</sup> Dimple.

**Note:** All part numbers are RoHS compliant.

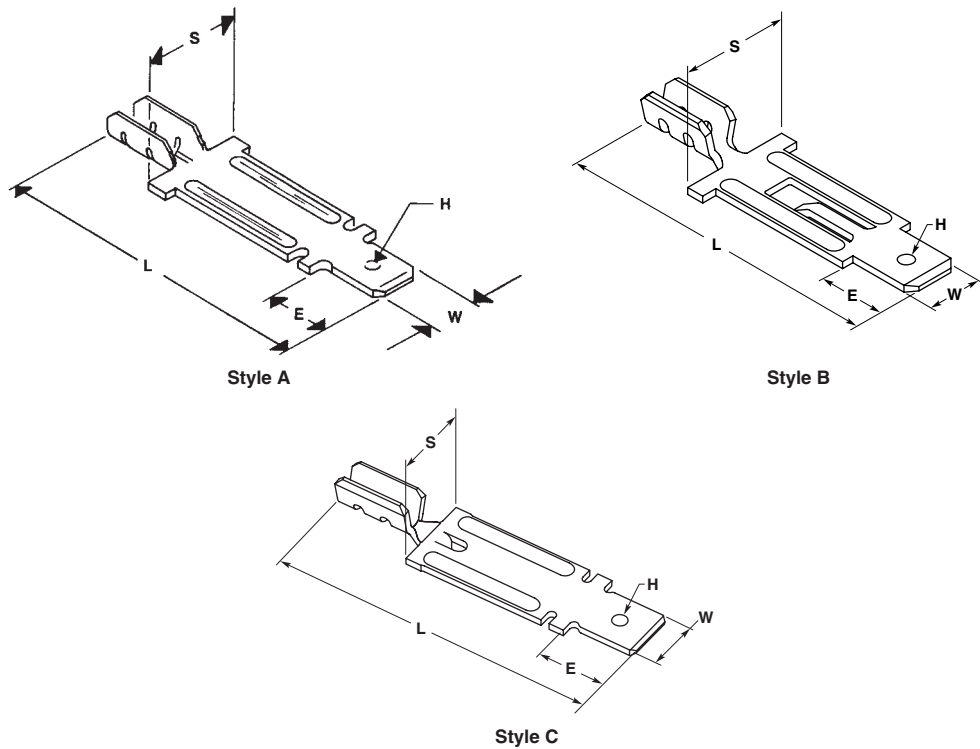
## FASTON Tabs

### 312 and 250 Series (High Temperature 700° F / 371° C Max.)

TE offers a variety of FASTON tabs in an assortment of configurations. The product line includes various weld type tabs, stud mounted tabs and wire crimp tabs. Also included in the product offering are high temperature tabs and test tabs.

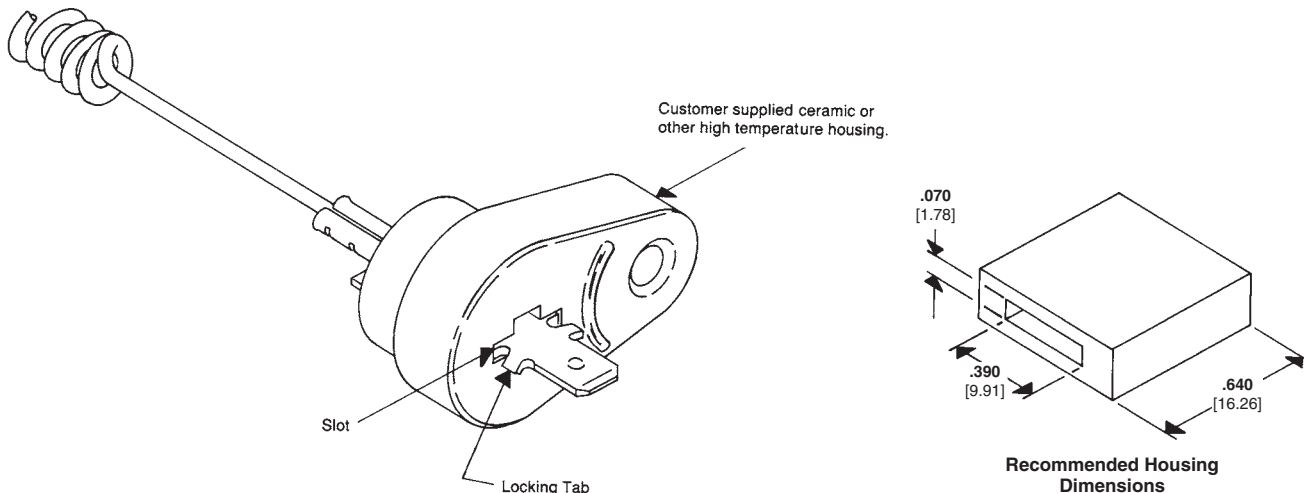
The TE high-temperature tab is designed to crimp to heating element wire. The tab end protrudes through a ceramic/high-temperature housing for mating with either a standard 250 or 312 FASTON receptacle.

**Stock Thickness** — .032 [0.81]



Series	Solid Wire Range AWG	Style	Tab Thickness	Dimensions					Material and Finish	Terminal Part No. <sup>1</sup>
				L	W	E	S	H		
312	22-15	A	.032 0.81	1.570 39.88	.312 7.92	.387 9.83	.500 12.70	Hole	Nickel Plated Steel	63300-1
		C	.032 0.81	1.570 39.88	.312 7.92	.375 9.53	Hole	Nickel Plated Steel	63390-1	
250	22-15	A	.032 0.81	1.500 38.10	.250 6.35	.312 7.92	.500 12.70	Dimple	Nickel Plated Steel	63301-1
		A	.032 0.81	1.500 38.10	.250 6.35	.312 7.92	.500 12.70	Hole	Nickel Plated Steel	63522-1
250	20-15	B	.032 0.81	1.500 38.10	.250 6.35	.312 7.92	.500 12.70	Dimple	Nickel Plated Steel	63104-1
		C	.032 0.81	1.500 38.10	.250 6.35	.312 7.92	.370 9.40	Dimple	Nickel Plated Steel	1217006-1

<sup>1</sup> Contact technical support for tooling application.

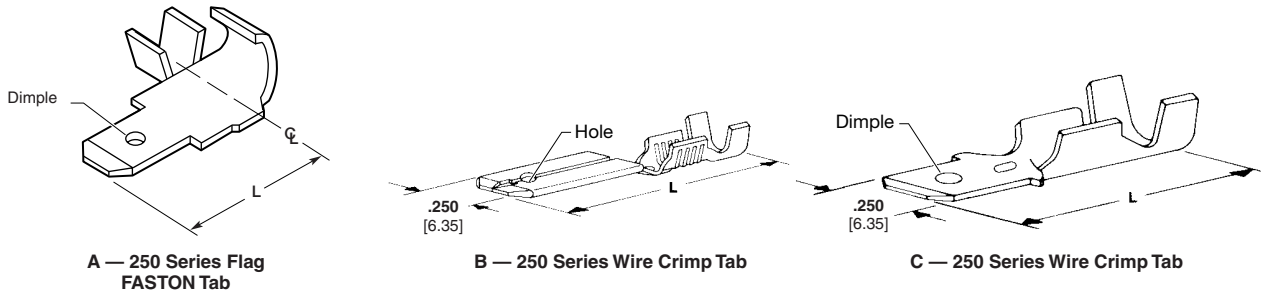


**Note:** All part numbers are RoHS compliant.



**FASTON Tabs** (Continued)

**250 Series Wire Crimp Tabs**

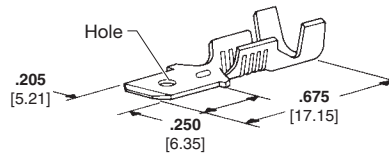


Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SF	Terminal Part No.
22-18	B	.032 0.81	.080-.120 2.03-3.05	Brass	.015 0.38	.815 20.70	—	X	X	42475-3
		.032 0.81	.080-.120 2.03-3.05	Brass, Tin Plated	.015 0.38	.815 20.70	—	X	X	42475-4
18-14	A	.032 0.81	.080-.125 2.03-3.18	Brass, Tin Plated	.032 0.81	.500 12.70	X	—	X	42770-2
	B	.032 0.81	.110-.150 2.79-3.81	Brass	.015 0.38	.810 20.57	—	X	X	42474-3
		.032 0.81	.110-.150 2.79-3.81	Brass, Tin Plated	.015 0.38	.810 20.57	—	X	X	42474-4
	C	.032 0.81	.120-.170 3.05-4.32	Brass	.032 0.81	.775 19.69	X	—	X	41411
		.032 0.81	.120-.170 3.05-4.32	Brass, Tin Plated	.032 0.81	.775 19.69	X	—	X	41412
		.032 0.81	.120-.170 3.05-4.32	Brass	.032 0.81	.775 19.69	X	—	X	63761-1 <sup>1</sup>
14-12	B	.032 0.81	.110-.170 2.79-4.32	Brass, Tin Plated	.015 0.38	.810 20.57	—	X	X	61281-3
		.032 0.81	.110-.170 2.79-4.32	Brass, Silver Plated	.015 0.38	.810 20.57	—	X	X	61362-2

<sup>1</sup> Hole.

**205 Series Wire Crimp Tabs**

Stock Thickness — .020 [0.51]



A — 205 Series Wire Crimp Tab

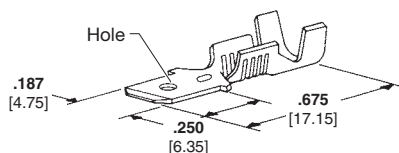
Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	UL	RU	SF	Terminal Part No.
18-14	A	.020 0.51	.120-.150 3.05-3.81	Brass, Tin Plated	X	—	X	62531-1
		.020 0.51	.120-.150 3.05-3.81	Brass, Tin Plated	X	—	X	63223-1 <sup>1</sup>

<sup>1</sup> No hole.

**Note:** All part numbers are RoHS compliant.

**FASTON Tabs** (Continued)

**187 Series Wire Crimp Tabs**

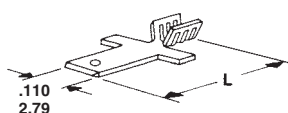


A — 187 Series Wire Crimp Tab

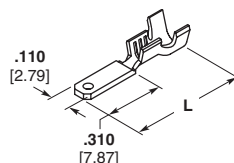
Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	Stock Thickness	UL	RU	SP	Terminal Part No.
22-18	A	.020 0.51	.080-.120 2.03-3.05	Brass, Tin Plated	.020 0.51	X	—	X	42490-3
		.020 0.51	.080-.120 2.03-3.05	Brass	.020 0.51	X	—	X	42490-4
18-14	A	.020 0.51	.120-.150 3.05-3.81	Brass	.020 0.51	X	—	X	60850-1
		.020 0.51	.120-.150 3.05-3.81	Brass, Tin Plated	.020 0.51	X	—	X	60850-2
		.032 0.81	.120-.150 3.05-3.81	Brass, Tin Plated	.032 0.81	X	—	X	61687-2 <sup>1</sup>

<sup>1</sup> Premilled dual stock thickness, tab .032 [0.81], body .020 [0.51].

**110 Series Wire Crimp Tabs**



A — 110 Series Wire Crimp Tab



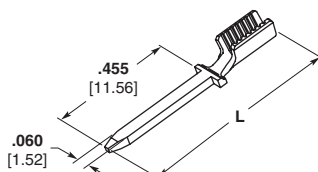
B — 110 Series Wire Crimp Tab  
with Insulation Support

Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	RU	SP	Terminal Part No.
26-22	A	.020 0.51	—	Brass, Tin Plated	.020 0.51	.490 12.45	X	—	X	62887-1
		.020 0.51	—	Brass, Tin Plated over Copper	.020 0.51	.490 12.45	X	—	X	62887-2
22-18	B	.032 0.81	—	Brass, Tin Plated	.020 0.51	.490 12.45	X	—	X	63932-1 <sup>2</sup>
		.020 0.51	—	Brass, Pre-Tin Plated	.020 0.51	.485 12.32	X	—	X	62122-1
	A	.020 0.51	—	Brass, Pre-Tin Plated	.020 0.51	.570 14.48	X	—	X	62384-1
		.032 0.81	.070-.130 1.78-3.30	Brass, Tin Plated	.032 0.81	.625 15.88	X	—	X	63138-1
20-16	A	.020 0.51	—	Brass, Pre-Tin Plated	.020 0.51	.570 14.48	—	—	—	1217118-1 <sup>1</sup>

<sup>1</sup> .052 [1.32] dia. hole.  
<sup>2</sup> No insulation support.

**.060 Series Wire Crimp Tabs**

Stock Thickness — .032 [0.81]



A - .060 Series Wire Crimp Tab

Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	L (Overall Length)	UL	RU	SP	Terminal Part No.
23-19	A	.032 0.81	—	Brass, Tin Plated	.740 18.80	X	—	X	63497-1 <sup>1</sup>
22-16	A	.032 0.81	—	Brass, Tin Plated	.740 18.80	X	—	X	63893-1

<sup>1</sup> AMPLIVAR connector type serrations for magnet wire.

**Note:** All part numbers are RoHS compliant.

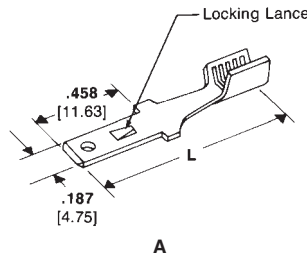
**FASTON Tabs** (Continued)

**AMPLIVAR Tabs**  
(For Use with Magnet Wire)

**187 Series FASTON Tabs**

Board Thickness —  
A = .062-.072 [1.57-1.83]

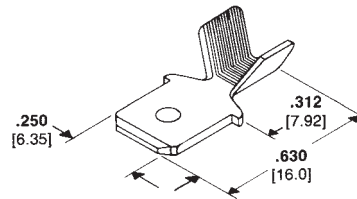
Stock Thickness —  
A = .020 [0.51]  
B = .032 [0.81]



Style	Wire Range		Material	Dim. L	UL	SP	Part Number
	AWG	mm <sup>2</sup>					
A	22-16	0.3-1.4	Tin Plated Brass	1.015 25.78	—	—	62447-1
	15-12	1.6-3.0	Tin Plated Brass	1.015 25.78	—	—	62445-1

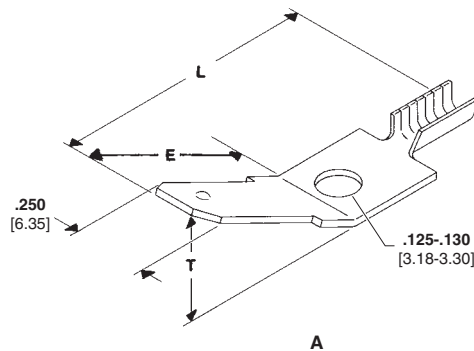
**250 Series FASTON Tabs**

Stock Thickness — .032 [0.81]



Style	Wire Range		Material	UL	SP	Part Number
	AWG	mm <sup>2</sup>				
18-14	1.0-1.7	Tin Plated Brass	—	—	63349-1 <sup>1</sup>	
16-12	1.3-3.0	Tin Plated Brass	—	—	62922-1 <sup>1</sup>	

<sup>1</sup> Varnish resistant coating.



Style	Wire Range			Material	Dimensions			UL	SP	Part Number
	CMA	AWG	mm <sup>2</sup>		L	E	T			
A	200-566	27.5-23	—	Tin Plated Brass	.580 14.73	.342 8.69	45°	—	—	63136-1

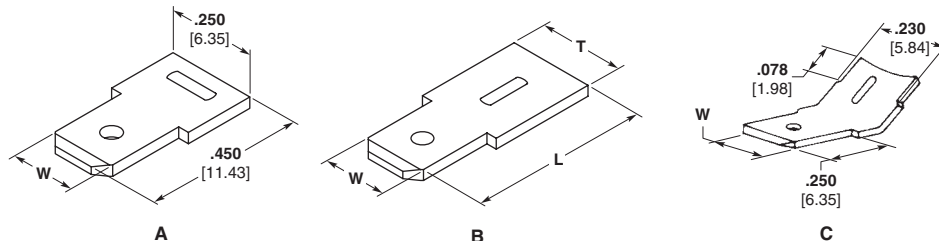
**Note:** All part numbers are RoHS compliant.

**FASTON Tabs** (Continued)

**250, 205 and 187 Series FASTON Tabs**

(Mates with all 250, 205 and 187 Series FASTON Receptacles)

**250 and 187 Series Weld Type Tabs**

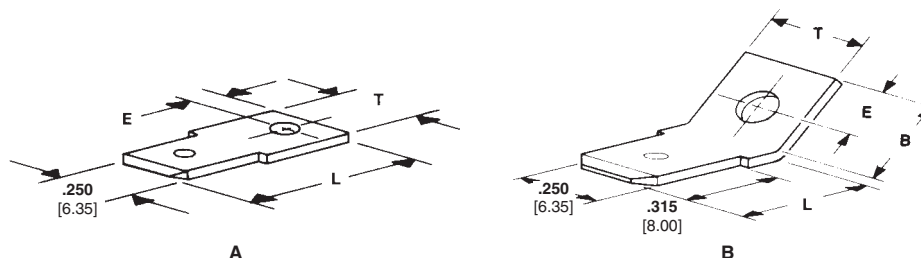


Style	Dimensions			Stock Thickness	Material and Finish	Terminal Part No.	UL	SP
	W	L	T					
A	.250 6.35	.635 16.13	.295 7.49	.032 0.81	Nickel Plated Steel	42559-1 <sup>1</sup>	X	X
	.187 4.75	.450 11.43	.250 6.35	.032 0.81	Nickel Plated Steel	63771-1	—	—
B	.250 6.35	.825 20.96	.375 9.53	.032 0.81	Nickel Plated Steel	1217002-1	—	—
C	.187 4.75	.250 6.35	.230 5.84	.020 0.51	Nickel Plated Steel	61960-1	X	X

<sup>1</sup> No weld rib.

**250 Series Stud Mount Type Tabs**

Stock Thickness — .032 [0.81]  
Dimple (Both Sides)



Style	Stud Diameter	Dimensions				Material and Finish	Terminal Part No.	UL	SP
		B	L	E	T				
A	.177 4.50	—	.715 18.16	.170 4.32	.295 7.49	Brass	63038-2	X	—
			.715 18.16	.170 4.32	.295 7.49	Tin Plated Brass	63038-1	X	X
	.171 4.34	—	.940 23.88	.125 3.18	.280 7.11	Brass	1217558-1	—	—
			.940 23.88	.125 3.18	.280 7.11	Tin Plated Brass	1217558-2	—	—
B	.130 3.30	.300 7.62	.400 10.16	.170 4.32	.295 7.49	Tin Plated Brass	42822-2	X	X
	.145 3.68	.300 7.62	.400 10.16	.170 4.32	.295 7.49	Tin Plated Brass	42822-4	X	X
	.171 4.34	.330 8.38	.375 9.53	.170 4.32	.295 7.49	Brass	60465-1	X	X
						Tin Plated Brass	60465-2	X	X
	.203 5.16	.330 8.38	.375 9.53	.170 4.32	.295 7.49	Tin Plated Brass	61365-1	X	X
	.197 5.00	.330 8.38	.375 9.53	.170 4.32	.295 7.49	Tin Plated Brass	61499-1	X	X

**Note:** All part numbers are RoHS compliant.

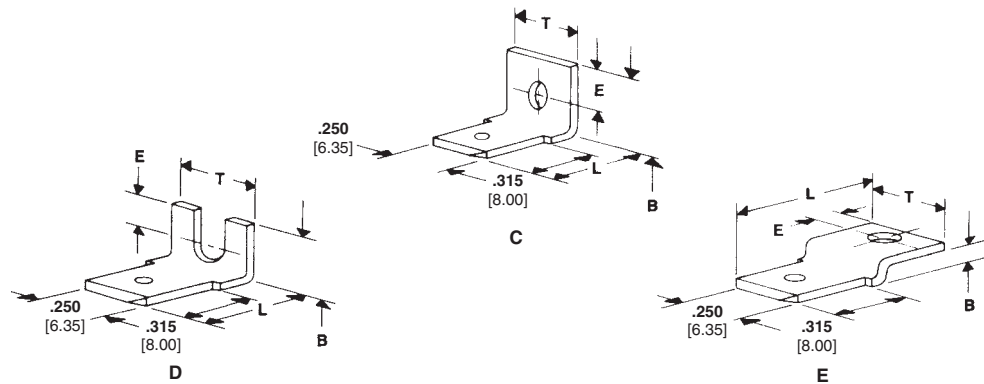
**FASTON Tabs** (Continued)

**250 Series  
Stud Mount Type Tabs**

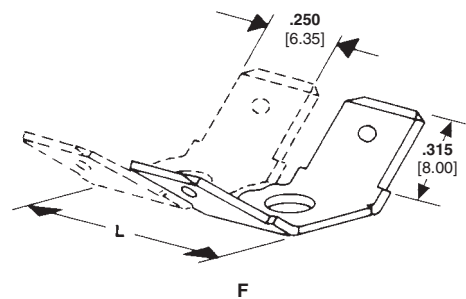
(Continued)

**Stock Thickness** — .032 [0.81]

Dimple (Both Sides)



Style	Stud Diameter	Dimensions				Material and Finish	Terminal Part No.	UL	SP
		B	L	E	T				
C	.097 2.46	.250 6.35	.440 11.18	.093 2.36	.295 7.49	Brass	41339	X	X
	.130 3.30	.330 8.38	.440 11.18	.170 4.32	.295 7.49	Tin Plated Brass	42095-1	X	X
		.270 6.86	.440 11.18	.110 2.79	.295 7.49	Tin Plated Brass	42117-2	X	X
	.171 4.34	.330 8.38	.440 11.18	.170 4.32	.295 7.49	Brass	42214-1	X	X
		.313 7.95	.656 16.67	.125 3.18	.250 6.35	Tin Plated Brass	42214-2	X	X
			.472 11.99	.394 10.00	—	.295 7.49	Tin Brass	63971-1	—
D	.125 3.18	.235 5.97	.440 11.18	.125 3.18	.295 7.49	Brass	41398	X	X
	.171 4.34	.330 8.38	.440 11.18	.120 3.05	.205 5.20	Brass	62166-1	X	X
		.130 3.30	.068 1.73	.615 15.62	.093 2.36	.295 7.49	Tin Plated Brass	42506-2	X



Style	Pairs	Stud Diameter	Dim. L	Material and Finish	Terminal Part No.	UL	SP
F	2	.130 3.30	.690 17.53	Tin Plated Brass	41478	X	X
		.171 4.34	.690 17.53	Brass	41617	X	X
	4	.130 3.30	1.455 36.96	Tin Plated Brass	41484	X	X

**Note:** All part numbers are RoHS compliant.

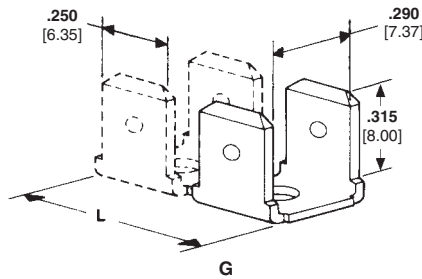
**FASTON Tabs** (Continued)

**250 Series Stud Mount Type Tabs**

(Continued)

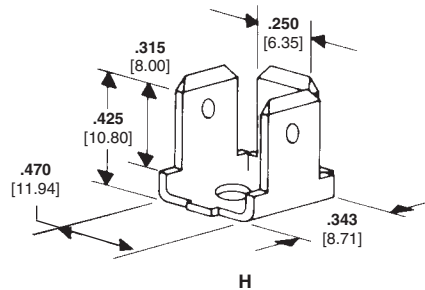
Stock Thickness — .032 [0.81]

Dimple (Both Sides)



Style	Pairs	Stud Diameter	Dim. L	Material and Finish	Terminal Part No.		
G	1	.130 3.30	.315 8.00	Brass	41290	X	X
	2	.130 3.30	.690 17.53	Brass	41291	X	X
	3	.130 3.30	1.065 27.05	Brass	41292	X	X
	4	.130 3.30	1.440 36.58	Brass	41370	X	X
	1	.130 3.30	.315 8.00	Tin Plated Brass	41480	X	X
	2	.130 3.30	.690 17.53	Tin Plated Brass	41481	X	X
	3	.130 3.30	1.065 27.05	Tin Plated Brass	41482	X	X
	—	.130 3.30	—	Tin Plated Brass	42115-4 <sup>1</sup>	X	X
				Brass	42115-6 <sup>1</sup>	X	X
	1		.171 4.34	.315 8.00	Brass	41619	X
		.097 2.46	.315 8.00	Tin Plated Brass	42802-1	X	X
				Tin Plated Brass	60080-2	X	X

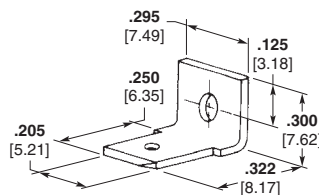
<sup>1</sup> In continuous strip-form.



Style	Stud Diameter	Material and Finish	Terminal Part No.		
H	.130 3.30	Brass	62261-1	X	X

**205 Series Stud Mount Type Tabs**

Tab Thickness — .032 [0.81]

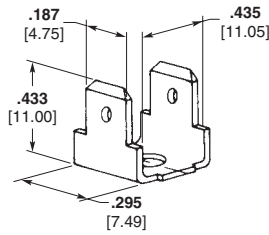


Stud Diameter	Material and Finish	Terminal Part No.		
.145 3.68	Brass	62168-1	X	X
.130 3.30	Brass	61836-1	X	X

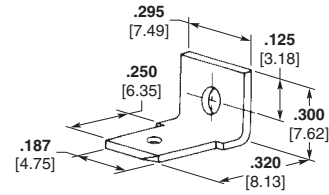
**Note:** All part numbers are RoHS compliant.

**FASTON Tabs** (Continued)

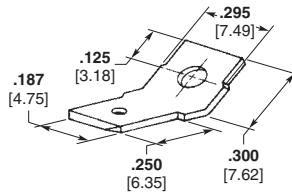
**187 Series  
Stud Mount Type Tabs —  
Hole in Tab**



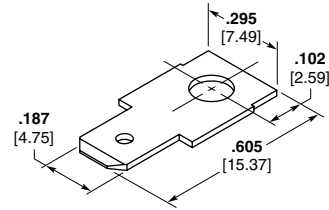
A



B



C



D

Style	Stud Diameter	Stock Thickness	Material and Finish	Terminal Part No.	UL	CSF
A	.130 3.30	.020 0.51	Tin Plated Brass	61951-1	X	X
	.197 5.00	.020 0.51	Tin Plated Brass	61914-1	X	X
B	.145 3.68	.020 0.51	Tin Plated Brass	61407-3	X	X
C	.130 3.30	.020 0.51	Tin Plated Brass	61761-2 <sup>2</sup>	X	X
	.145 3.68	.020 0.51	Brass	62576-1 <sup>2</sup>	X	X
	.171 4.34	.020 0.51	Tin Plated Brass	61664-1 <sup>2</sup>	X	X
D	.130 3.30	.020 0.51	Tin Plated Brass	63946-1	—	—
	.145 3.68	.020 0.51	Tin Plated Brass	1742041-1	—	—

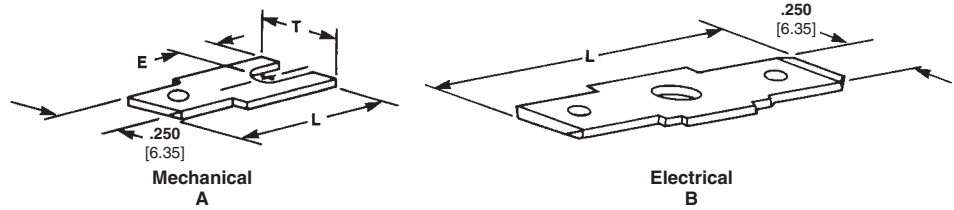
<sup>1</sup> Weld tab.  
<sup>2</sup> Bent 45°.

**Note:** All part numbers are RoHS compliant.

**FASTON Tabs** (Continued)

**250 Series Test Tabs**  
(Mate with all "250" Series FASTON Receptacles)

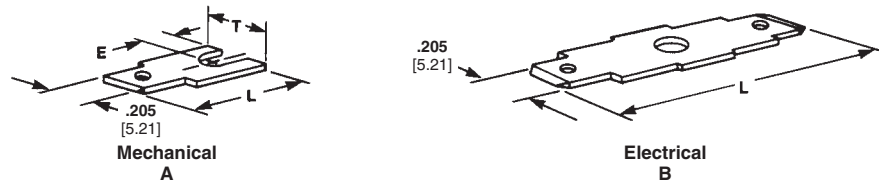
The mechanical tab is mounted onto TE gauge 100505 for testing of receptacle insertion/extraction requirements. Double-ended test tabs are also available for electrical and temperature rise testing. TE has readily available a variety of UL 310 constructed tabs for mechanical testing of FASTON, Ultra-Fast FASTON and Positive Lock receptacles. These tabs are designed for electrical test setups as outlined in UL 310 (See instruction sheet 408-7432 for recommended procedure mechanical test).



Style	Stud Diameter	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.
			L	E	T				
A	.125 3.18	.032 0.81	.625 15.88	.125 3.18	.295 7.49	Brass	X	X	60447-1 <sup>1,3</sup>
		.020 0.51	.635 16.13	.125 3.18	.295 7.49	Brass	—	—	63633-1 <sup>2</sup>
		.032 0.81	.625 15.88	.125 3.18	.295 7.49	Brass	—	—	63274-1 <sup>2</sup>
B	.145 3.68	.032 0.81	1.010 25.65	—	—	Tin Plated Steel	—	—	62627-1 <sup>3</sup>
						Brass	—	—	62627-2 <sup>3</sup>
						Brass	—	—	62627-3 <sup>2</sup>

<sup>1</sup> Mechanical test tab for use with TE gauge number 100505.  
<sup>2</sup> Test tab with hole for Positive Lock.  
<sup>3</sup> Dimple.

**205 Series Test Tabs**



Style	Hole Diameter	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
			B	L	E					T
A	.125 3.18	.020 0.51	—	.605 15.37	.090 2.29	.295 7.49	Brass	X	X	60613-1 <sup>1</sup>
		.032 0.81	—	.605 15.37	.090 2.29	.295 7.49	Brass	X	X	60613-2 <sup>1</sup>
B	.145 3.68	.020 0.51	—	1.276 32.41	—	—	Tin Plated Steel	—	—	60921-4
		.032 0.81	—	1.276 32.41	—	—	Brass	—	—	60922-1
		.020 0.51	—	1.276 32.41	—	—	Brass	—	—	60921-1
		.032 0.81	—	1.276 32.41	—	—	Tin Plated Steel	—	—	60922-5

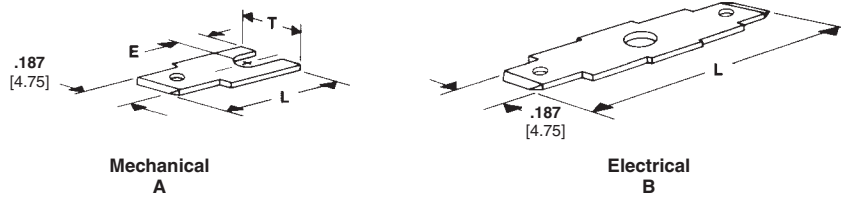
<sup>1</sup> Mechanical test tab for use with TE gauge number 100505.

**Note:** All part numbers are RoHS compliant.



**FASTON Tabs** (Continued)

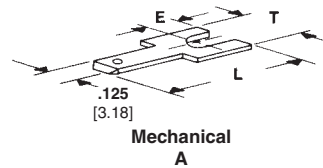
**187 Series Test Tabs**  
(Mates with all "187" Series Receptacles)



Style	Pairs	Stud Diameter	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
				L	E	T					
A	—	.125 3.18	.020	.605	.090	.295	Brass	X	X	60443-1 <sup>1</sup>	
			0.51	15.37	2.29	7.49	Tin Plated Brass	—	—	60443-5 <sup>1</sup>	
			.032	0.81	15.37	2.29	7.49	Brass	—	—	63248-1 <sup>1</sup>
								Brass	X	X	60443-2 <sup>1</sup>
								Tin Plated Brass	X	X	60443-6
								Brass	—	—	63248-2
B	1	.145 3.68	.020	1.276	—	—	Tin Plated Steel	X	X	60920-4	
			0.51	32.41	—	—	Tin Plated Brass	—	—	60920-5	
			.032	0.81	32.41	—	—	Brass	X	X	62298-1
								Tin Plated Steel	X	X	62298-2

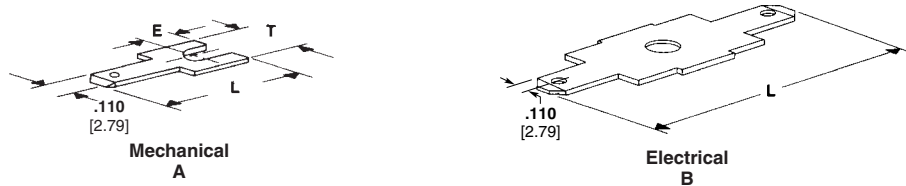
<sup>1</sup> Test tab with hole.

**125 Series Test Tabs**  
(Mates with all "125" Series Receptacles)



Style	Pairs	Stud Diameter	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.
				L	E	T				
A	—	.125 3.18	.020 0.51	.570 14.48	.090 2.29	.295 7.49	Brass	—	—	63747-1

**110 Series Test Tabs**  
(Mates with all "110" Series Receptacles)



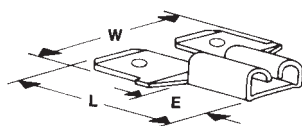
Style	Stud Diameter	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
			L	E	T					
A	.125 3.18	.020	.570	.090	.295	Brass	X	X	62061-1	
		0.51	14.48	2.29	7.49	Brass	—	—	62061-2	
		.032	0.81	14.48	2.29					7.49
		0.41	14.48	2.29	7.49	Brass	—	—	62061-3	
		B	.145 3.68	.020	1.151	—	—	Tin Plated Steel	X	X
0.51	29.24			—	—	Brass	X	X	62628-2	
.020	1.151	—	—							
0.51	29.24	—	—							

**Note:** All part numbers are RoHS compliant.

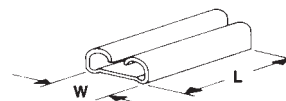
## FASTON Tab Adapters

### 250 Series

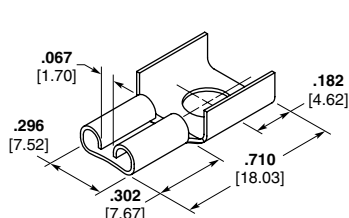
Fits Tab — .032 [0.81]



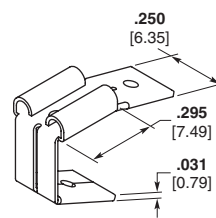
A



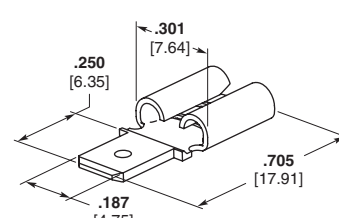
B



C



D



E

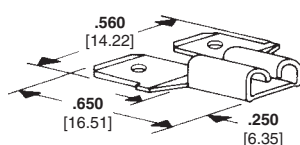
Style	Stock Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.
		W	L	E				
A	.018 0.46 Recpt.	.650 16.51	.770 19.56	.305 7.75	Brass	X	X	61765-1
	.032 0.81 Tabs				Tin Plated Brass	X	X	61765-2 <sup>1</sup>
B	.018 0.46	.300 7.62	.700 11.78	—	Tin Plated Brass	X	X	61810-2
						X	X	63918-1 <sup>2</sup>
C	.016 0.41	—	—	—	Nickel Plated Steel	—	—	151302-2
	.016 0.41	—	—	—	Brass (90°)	—	—	152422-1
D	.016 Recpt. 0.41	—	—	—	Brass	—	—	726308-1
	.032 Tabs 0.81							
E	.018 Recpt. 0.46	.301 7.65	.705 17.91	.305 7.75	Brass	X	X	1742597-1 <sup>3</sup>
	.032 Tabs 0.81							

<sup>1</sup> No tab stop on receptacle.

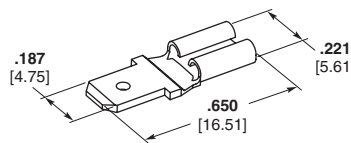
<sup>2</sup> Fits .025 [0.64] thick tab.

<sup>3</sup> .187 [4.75] tab — .250 [6.35] receptacle.

### 187 Series



A



E

Style	Stock Thickness	Receptacle Fits Tab	Material and Finish	UL	SP	Terminal Part No.
A	.013 Recpt. 0.33	.020 0.51	Tin Plated Brass	X	X	61045-2
	.020 Tabs 0.51					
	.013 Recpt. 0.33	.032 0.81	Tin Plated Brass	X	X	63699-1
	.032 Tabs 0.81					
E	.013 Recpt. 0.33	.032 0.81	Tin Plated Brass	X	X	1217933-1
	.032 Tabs 0.81					

**Note:** All part numbers are RoHS compliant.

## FASTON Printed Circuit Board Tabs and Receptacles

### Product Facts

- Full line of PCB tabs and receptacles
- Straight and right-angle tabs available in .250, .187 and .110 series
- Receptacles produced in .250/.205 x .032 or .025. Standard or low insertion force receptacles available
- Strip product for automatic insertion
- Compatible with industry insertion equipment or full line of equipment available from TE



TE now offers a complete line of printed circuit board tabs and receptacles. TE PCB product can be found in switches and on control boards around the world. Our product offering includes .250, .187 and .110 series vertical tabs, .250 and .187 right-angle tabs and .250/.205 vertical receptacles. Product is available in loose piece and strip form. In a short time, our product offering has grown from a handful of part numbers to dozens of parts. We continue to add to our product family as design changes, innovation and customers' requirements expand.

Insertion equipment is available for our entire strip product line. TE currently has an entry level semi-automatic, air-powered bench machine under development for customers with moderate insertion requirements. The compact, fully automatic AccuSserter 2 machine is available for applications where larger volumes will be inserted and where programmable, microprocessor controlled equipment is desired. TE also offers the P300 and P350 series machines for even higher automation. Capabilities include: servo drive, force monitoring, up to three heads. This machine is available in stand-alone or in-line configurations.

The TE product has been designed to be compatible with industry insertion equipment. In many cases, this product will work as a "drop in" replacement for existing product. In some cases, slight modifications or minor tooling changes are necessary. Please consult technical support or the global application tooling group for more details.

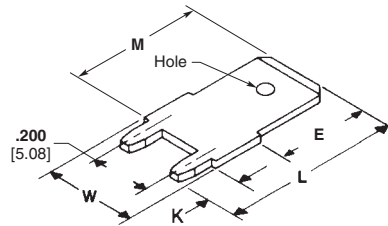
TE is one of the only companies that offers printed circuit board tabs and receptacles as well as the crimp to wire receptacles and tabs that offer a complete solution for your packaging needs.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**250 Series Printed Circuit Board Tabs**

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



Dimensions					Material and Finish	Ⓡ	Ⓢ	Terminal Part No.	
W	L	K	E	M				Strip <sup>2</sup>	Loose Piece <sup>1</sup>
	.502 12.75	.125 3.18	.312 7.92	.377 9.58	Tin Plated Brass	X	X	63839-1 <sup>3</sup>	—
.312 7.92	.547 13.89	.157 3.99	.312 7.92	.400 10.16	Tin Plated Brass	X	X	63986-1	—
	.552 14.02	.150 3.81	.312 7.92	.402 10.21	Tin Plated Brass	X	X	1217566-1	—
.295 7.49	.622 15.80	.125 3.18	.312 7.92	.497 12.62	Tin Plated Brass	—	—	—	62409-1 <sup>3</sup>
								—	1217056-1
	.487 12.37	.125 3.18	.312 7.92	.362 9.19	Tin Plated Brass	X	X	62650-1 <sup>3</sup>	—
.280 7.11	.532 13.51	.175 4.45	.312 7.92	.357 9.07	Tin Plated Brass	X	X	63650-1 <sup>3</sup>	—
	.622 15.80	.125 3.18	.452 11.48	.497 12.62	Tin Plated Brass	X	X	—	63900-1
						X	X	63755-1 <sup>3</sup>	—

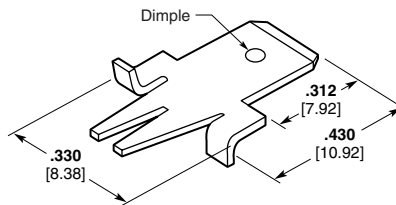
<sup>1</sup> Board hole size: .060/.053 [1.52/1.35] dia.

<sup>2</sup> Insertion equipment available.

<sup>3</sup> Dimple.

Stock Thickness — .032 [0.81]

Board Hole Size —  
.100 ± .002 [2.54 ± 0.05] Dia.



Material and Finish	Ⓡ	Ⓢ	Terminal Part No.	
			Strip <sup>1</sup>	Loose Piece
Tin Plated Brass	X	X	63066-1	63067-1

<sup>1</sup> Insertion equipment available.

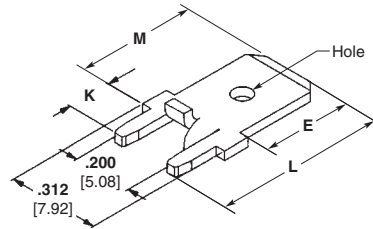
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**250 Series Printed Circuit Board Tabs** (Continued)

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



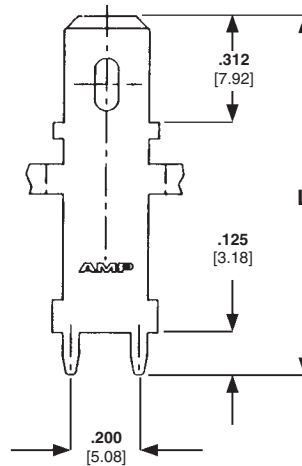
Dimensions				Material and Finish	UL	SP	Terminal Part No.	
L	K	E	M				Strip <sup>1</sup>	Loose Piece
<b>.552</b> 14.02	<b>.150</b> 3.81	<b>.312</b> 7.92	<b>.402</b> 10.21	Tin Plated Brass	X	X	63862-1 <sup>2</sup>	1742188-1 <sup>2</sup>
<b>.582</b> 14.78	<b>.180</b> 4.57	<b>.312</b> 7.92	<b>.402</b> 10.21	Tin Plated Brass	X	X	1217136-1	1217421-1
<b>.650</b> 16.51	<b>.150</b> 3.81	<b>.410</b> 10.41	<b>.500</b> 12.70	Tin Plated Brass	X	X	1217126-1 <sup>2</sup>	—
<b>.710</b> 18.03	<b>.150</b> 3.81	<b>.470</b> 11.94	<b>.560</b> 14.22	Tin Plated Brass	X	X	1217125-1	1217169-1
<b>.780</b> 26.18	<b>.150</b> 3.81	<b>.540</b> 13.72	<b>.630</b> 16.00	Tin Plated Brass	X	X	1217127-1	1217167-1

<sup>1</sup> Insertion equipment available.

<sup>2</sup> Dimple.

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



Dimension L	Material and Finish	UL	SP	Terminal Part No.
<b>1.062</b> 26.97	Tin Plated Brass	X	X	63949-1
<b>1.207</b> 30.66	Tin Plated Brass	X	X	63950-1

**Note:** All part numbers are RoHS compliant.

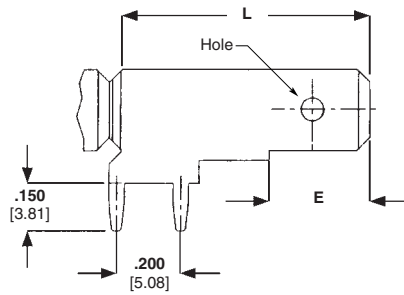
**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**250 Series Printed Circuit Board Tabs** (Continued)

**Right-Angle Printed Circuit Board Tabs**

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



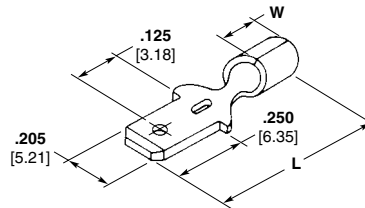
Dimensions		Material and Finish	UL	SP	Terminal Part No.	
E	L				Strip <sup>1</sup>	Loose Piece
.312 7.92	.800 20.32	Tin Plated Brass	X	X	63951-1	1217754-1
.358 9.09	.630 16.00	Tin Plated Brass	—	—	—	928814-1
.662 16.83	1.00 25.40	Tin Plated Brass	—	—	63952-1	—

<sup>1</sup> Insertion equipment available.

**205 Series Printed Circuit Board Only**

Stock Thickness — .020 [0.51]

Board Hole Size —  
.100 – .095 [2.54 – 2.41] Dia.

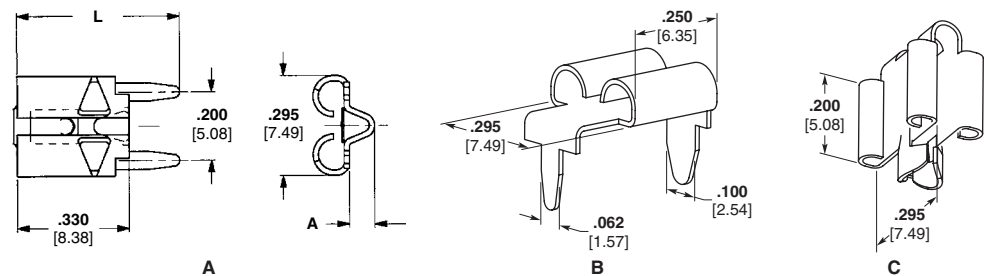


Dimensions		Material and Finish	UL	SP	Terminal Part No.
L	W				
.525 13.34	.070 1.78	Tin Plated Brass	X	X	62411-1 <sup>1</sup>
.545 13.84	.160 4.06	Tin Plated Brass	X	X	60284-2 <sup>1</sup>

<sup>1</sup> Loose piece only.

**.250/.205 Printed Circuit Board Receptacles**

Stock Thickness — .016 [0.41]



Style	Fits Tab	Dimensions		Material and Finish	UL	SP	Part No.	
		A	L				Strip	Loose Piece
A	.032 0.81 (LIF)	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63968-1	—
	.032 0.81	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63969-1	1217080-1
	.025 0.64 (LIF)	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63994-1	—
	.025 0.64	.075 1.91	.510 12.95	Tin Plated Brass	—	—	1217137-1 <sup>2</sup>	—
	.025 0.64	.075 1.91	.480 12.19	Tin Plated Brass	—	—	1217180-1	—
B	.020 0.51	—	—	Tin Plated Phos Bronze	—	—	1217107-1 <sup>1</sup>	—
C	.250 x .016 6.35 x 0.41 Spade	—	—	Tin Plated Brass	—	—	62751-1	62806-1

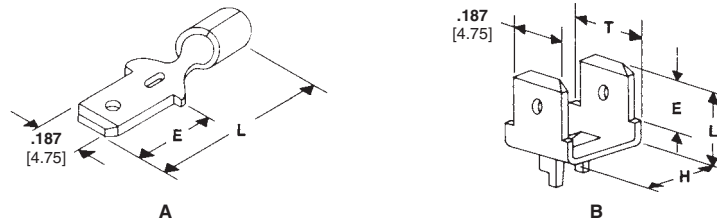
**Note:** All part numbers are RoHS compliant.

<sup>1</sup> Horizontal mount.  
<sup>2</sup> .180 [4.57] length — solder legs.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

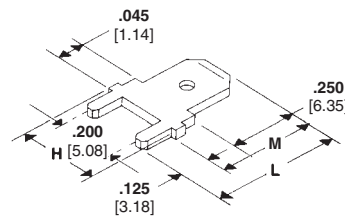
**187 Series  
Printed Circuit Board Tabs**

Stock Thickness — .020 [0.51]



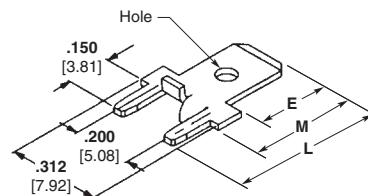
Type	Board Thickness	Dimensions				Material and Finish	UL	SP	Terminal Part No.
		T	L	E	H				
A	.062 1.57	—	.545 13.84	.250 6.35	—	Tin Plated Brass	X	X	61907-1 <sup>1</sup>
B	.062 1.57	.250 6.35	.332 8.43	.250 6.35	.303 7.70	Pre-Tin Brass	X	X	62221-1 <sup>2</sup>

<sup>1</sup> Loose piece only.  
<sup>2</sup> Insertion equipment available.



Tab Thickness	Board Hole Size	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
		L	M	H				Strip <sup>2</sup>	Loose Piece
.032 0.81	.053-.057 1.35-1.45	.487 12.37	.362 9.19	.280 7.11	Tin Plated Brass	X	X	63525-1 <sup>1</sup>	1217057-1 <sup>1</sup>
		.487 12.37	.362 9.19	.285 7.24	Tin Plated Brass	X	X	63603-1	1217131-1
.020 0.51	.050-.054 1.27-1.37	.440 11.18	.315 8.00	.312 7.92	Tin Plated Brass	X	X	63838-1	—

<sup>1</sup> Dimple.  
<sup>2</sup> Insertion equipment available.



Tab Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
	L	E	M				Strip <sup>3</sup>	Loose Piece
.032 0.81	.490 12.45	.250 6.35	.340 8.64	Tin Plated Brass	X	X	63860-1 <sup>1</sup>	—
	.510 12.95	.250 6.35	.370 9.40	Tin Plated Brass	X	X	1217133-1	—
	.710 18.03	.470 11.94	.560 14.22	Tin Plated Brass	X	X	1217124-1	—
	.635 16.13	.395 10.03	.485 12.32	Tin Plated Brass	X	X	—	1217332-1 <sup>2</sup>
.020 0.51	.490 12.45	.250 6.35	.340 8.64	Tin Plated Brass	X	X	63823-1	63892-1
	.510 12.95	.250 6.35	.370 9.40	Tin Plated Brass	X	X	1742362-1	—

<sup>1</sup> Dimple.  
<sup>2</sup> No hole or dimple.  
<sup>3</sup> Insertion equipment available.

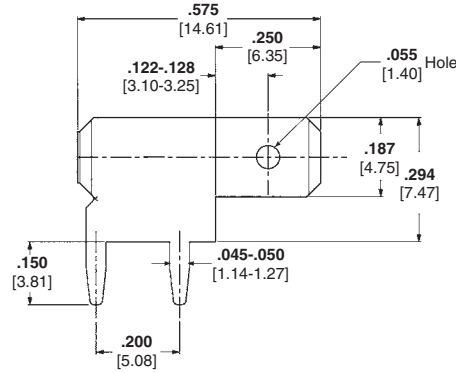
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**187 Series  
Printed Circuit Board Tabs**

(Continued)

**Right-Angle Printed Circuit  
Board Tabs**

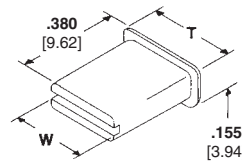


Stock Thickness	Board Hole Size	Material and Finish	UL	CS	Terminal Part No.
.032 0.81	.053-.057 1.35-1.45	Tin Plated Brass	X	X	1217061-1
			—	—	1217756-1 <sup>1</sup>
.020 0.51	.050-.054 1.27-1.37	Tin Plated Brass	X	X	1217062-1
			—	—	1217156-1 <sup>1</sup>

<sup>1</sup> Loose piece.

Printed Circuit Board  
Tabs and Receptacles

**Tab Caps 187 and 250  
Series**



Tab Size	Material	UL 94 <sup>1</sup>	Color	Dimensions		Insulator Part No.
				T	W	
"187" Series .020 [0.51] Thick	Nylon	V2	Natural	.320 8.13	.260 6.60	360041-1
"250" Series .032 [0.81] Thick	Nylon	V2	Natural	.380 9.65	.320 8.13	360042-1

<sup>1</sup> Flammability rating.

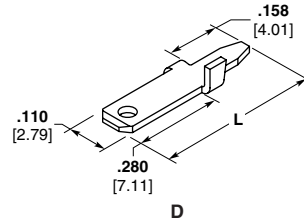
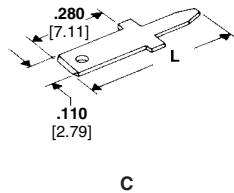
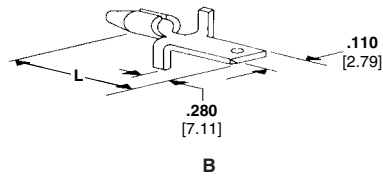
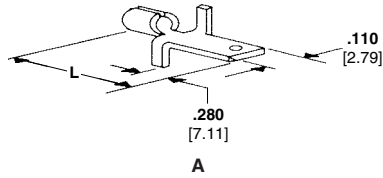
**Note:** All part numbers are RoHS compliant.



**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**.110 Series Printed Circuit Board Tabs**

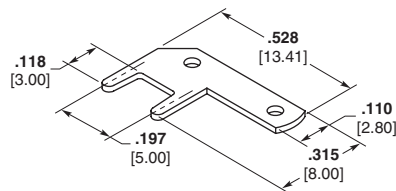
Stock Thickness — .020 [0.51]



Style	Mating Hole Diameter	Dim. L	Material and Finish	Ⓜ	Ⓢ	Terminal Part No.
A	.060-.055 1.52-1.40	.490 12.45	Tin Plated Brass	X	X	61134-3 <sup>1</sup>
B	.067-.063 1.70-1.60	.485 12.32	Tin Plated Brass	X	X	61968-1 <sup>2</sup>
				X	X	62437-1 <sup>1</sup>
C	.044-.048 1.12-1.22	.490 12.45	Tin Plated Brass	X	X	62395-1 <sup>2</sup>
				X	X	63756-1 <sup>2,3</sup>

<sup>1</sup> Loose piece only.  
<sup>2</sup> Insertion machine available.  
<sup>3</sup> .032 [0.81] stock.  
<sup>4</sup> .060 [1.52] tab width.

**Right-Angle Printed Circuit Board Tabs**



Tab Thickness	PCB Hole Dia. +0/-0.01 [+0/-0.03]	Material and Finish	Ⓜ	Ⓢ	Terminal Part No.
.032 0.81	.055 1.40	Tin Plated Brass	—	—	725963-2
.020 0.51	.051 1.30	Tin Plated Brass	—	—	725996-2

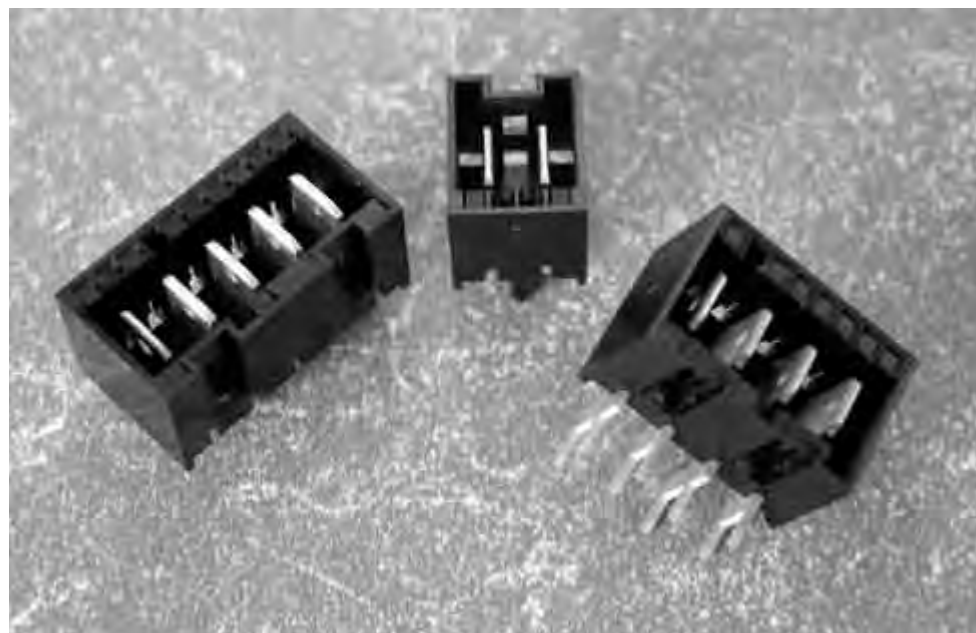
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**FASTON RAST 5 Tab Header Assembly, 250 Series**

**Product Facts**

- **.250 x .032 [6.3 x 0.8]**  
FASTON Tabs built on 5 mm centerlines
- **Shrouded header assembly that conforms to the European RAST 5 Standard**
- **Mating TE connector families include Positive Lock RAST 5 connector system, AMP standard timer RAST 5, AMP multifitting, AMP multifitting MKII, AMP MONO-SHAPE TAB MKI, and AMP MONO-SHAPE MKII**
- **Vertical and right-angle versions available in 2 through 8 positions**
- **Tin plated brass tabs are standard, silver plated tab versions are available upon request**
- **Lead free design is RoHS and ELV compliant**
- **UL 94 V-0 housing meets Glow Wire IEC 60695-1 Section 30.2.3 – 750° No Flame**
- **Component recognition USR and CSR under file no. E28476**
- **VDE tested according to DIN EN61984 (VDE0627): 2002-09; EN61984: 2001 VDE reg. no. B718**



The FASTON RAST 5 Tab header assembly system is designed to provide a RAST 5 interface to a printed circuit board. The RAST 5 standard defines and standardizes the connector mating interface. 250 series tabs are placed on 5mm center lines with a plastic shroud that has keying, polarization, and locking features that help prevent mismatching of the corresponding RAST 5 female receptacle housing. The header assembly is

designed to accept any RAST 5 compliant female receptacle system or individual quick connects.

The most common application for this product is for household appliance controls where OEMs want to minimize the possibility of crossed wires. It is also suited for other applications such as gaming, vending, and exercise equipment controls as well as residential, commercial and industrial HVAC and light industrial equipment. The

system comes fully assembled and is easily press fit into the board for the soldering operation. Preassembly of the tabs into the header ensures tab perpendicularity to the board. The solder leg PCB layout is based on the industry standard for similar systems available on the market. To further enhance correct placement onto the board, the vertical system includes a plastic post which allows header placement to be polarized.

**Material**

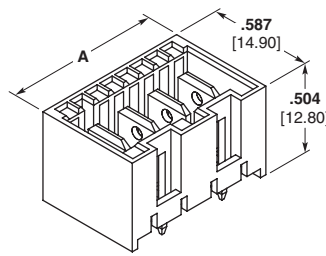
UL 94 V-0, 6/6 Nylon

See TE Catalog 1654742 for the complete line of RAST products.

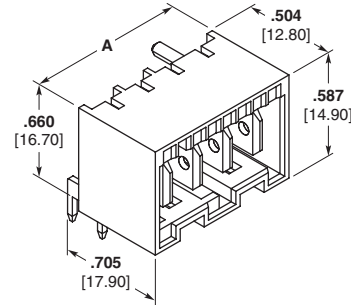
**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**FASTON RAST 5 Tab Header Assembly, 250 Series**

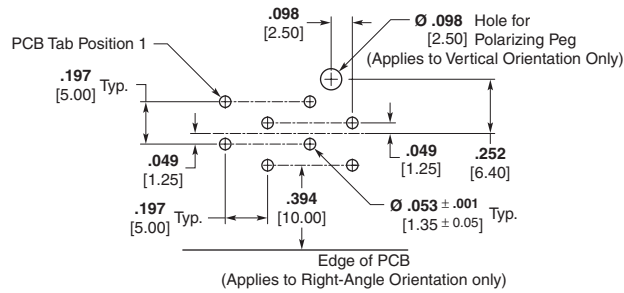
(Continued)



Vertical Orientation



Right-Angle Orientation



PCB Layout  
(Ref.) from Component Side

No. of Positions	RAST 5 Configuration	Dim. A	Part Numbers	
			Vertical	Right-Angle
2	02-A	.484 [12.30]	521382-2	521384-2
	02-C	.484 [12.30]	2-521382-2	2-521384-2
	02-E	.484 [12.30]	3-521382-2	3-521384-2
	02-I	.484 [12.30]	5-521382-2	5-521384-2
3	03-A	.681 [17.30]	521382-3	521384-3
	03-B	.681 [17.30]	1-521382-3	1-521384-3
	03-D	.681 [17.30]	2-521382-3	2-521384-3
	03-K	.681 [17.30]	4-521382-3	—
4	04-A	.878 [22.30]	521382-4	521384-4
	04-B	.878 [22.30]	1-521382-4	1-521384-4
	04-F	.878 [22.30]	3-521382-4	3-521384-4
	04-G	.878 [22.30]	4-521382-4	4-521384-4
5	05-B	1.075 [27.30]	521382-5	521384-5
6	06-A	1.272 [32.30]	521382-6	521384-6
	06-D	1.272 [32.30]	1-521382-6	1-521384-6
7	07-C	1.469 [37.30]	521382-7	521384-7
8	08-D	1.665 [42.30]	521382-8	521384-8
	08-C	1.665 [42.30]	2-521382-8	2-521384-8

Refer to the TE Customer Drawing for additional details and specific keying patterns.  
For more information related to the RAST 5 Standard, see TE Literature Distribution no. 1308243.

Available variations include: silver plated tabs, DIN style tabs, and Glow Wire housings.

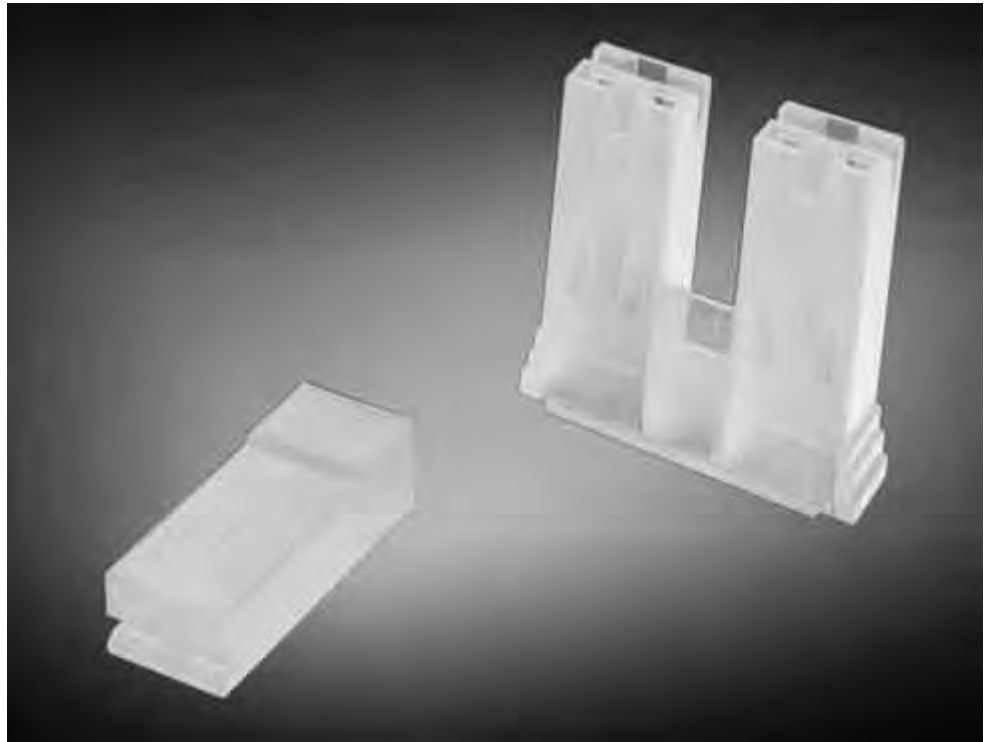
RAST 5 headers mate to the following product families: AMP multifitting MKII, RAST 5 Positive Lock MKIII, AMP Standard Timer and AMP Standard Power Timer.

**Note:** All part numbers are RoHS compliant.

## FASTON Housings

### Product Facts

- Straight, right-angle, multiple position and special application housings available
- Various materials and temperature ratings available
- Accept FASTON receptacles
- Special application housings include microswitch, gas valve, wax motor and water valve housings
- Available in .312, .250, .205, .187 and .110 Series
- Translucent plastic insulating sleeves in both straight and flag configurations

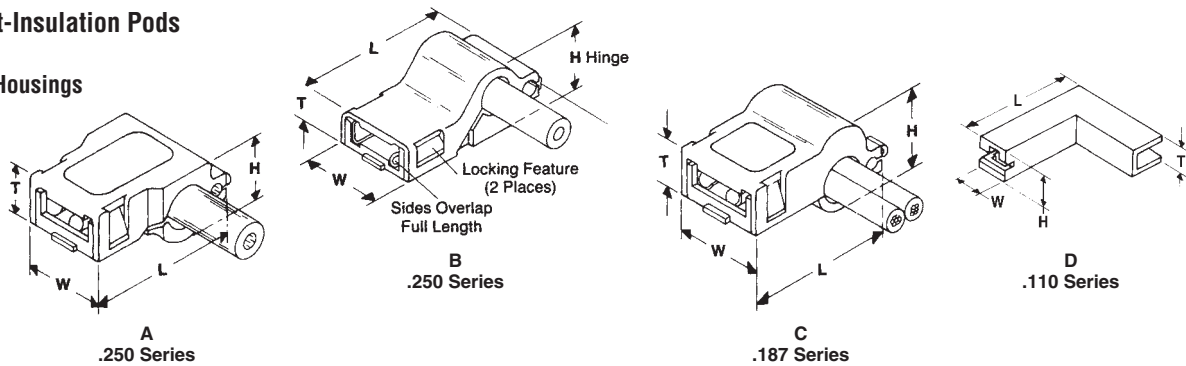


FASTON housings are designed to be used with the FASTON terminal line. They come in sizes ranging from .312, .250, .205, .187 and .110 and are available in multiple positions and configurations. Included in this line are special connectors, including water valve connectors,

microswitch connectors, gas valve connectors, and various other special application connectors. Many of these housings are available in both V-2 and V-0 rated materials. Translucent plastic insulating sleeves are available for use with FASTON receptacles and flags.

**FASTON Housings** (Continued)

**AMPIP Post-Insulation Pods**  
**Flag Style**  
**Receptacle Housings**



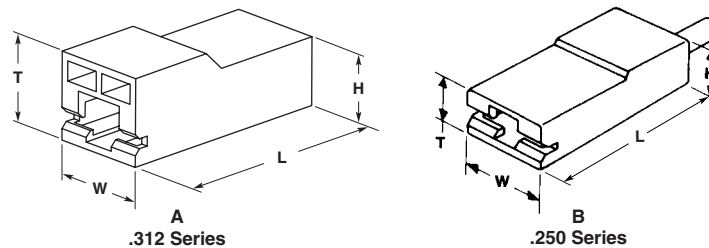
Style	Material	UL 94 <sup>1</sup>	Color	Insulation Dia. Max.	Dimensions				Part Number	Type	Accepts Terminal	UL	CS
					L	T	W	H					
A	Nylon	V2	Natural	.210 5.33	.787 19.99	.266 6.76	.448 11.38	.360 9.14	1-480298-0	Continuous Strip	"250" Series Flag FASTON Tab-Lok Receptacles 41531, 41532, 42511, 61156, 63445	X	X
			V0 Natural						1-480307-1	Loose Piece			
			V2 Nat. 150°						1-480307-7				
			V2 Natural						1-480307-6				
								1-480307-8 <sup>3</sup>					
B	Nylon	V2	Natural	.140 3.56 (2) .110 2.79	.732 18.59	.180 4.57	.460 11.68	.315 8.00	1-480296-0	Continuous Strip	"250" Series Flag FASTON Commercial Receptacle 60290, 60736, 62418	X	X
									1-480306-1	Loose Piece			
C	Nylon	V2	Natural	.175 4.45	.699 17.75	.230 5.84	.430 10.92	.320 8.13	1-480487-2	Loose Piece	"187" Series Tab-Lok Flag FASTON <sup>2</sup>	X	X
			V Natural						1-480487-4 <sup>3</sup>				
D	Nylon	V2	Natural	—	.550 13.97	.205 5.21	.225 5.72	.200 5.08	360040-1	Loose Piece	"110" Series FASTON 61070, 61481, 62336	X	X

<sup>1</sup> Flammability rating of plastic material.

<sup>2</sup> Does not accept commercial series.

<sup>3</sup> Material according to IEC 60335-1.

**Straight Style**  
**Receptacle Housing**



Style	Type	Material	UL 94 <sup>1</sup>	Color	Insulation Dia. Max.	Dimensions				Part Number	Accepts Terminal	UL	CS
						L	T	W	H				
A	Loose Piece	Nylon	V0	Black	.200 5.08	1.035 26.29	.400 10.16	.440 11.18	.310 7.87	1969186-1	"312" Series FASTON Receptacles	X	X
			V2	Natural						1969186-2			
			V2	Natural	.260 6.60	.961 24.40	.181 4.60	.358 9.10	.314 8.00	171706-1	X	X	
			V2	Natural	.224 5.69	1.03 26.20	.225 6.70	.490 12.40	.285 7.20	521053-1	—	—	
			V2	Natural	.200 5.08	.920 23.37	.280 6.60	.390 9.91	.298 7.57	1-480416-0	"250" Series FASTON Receptacles <sup>3</sup>	X	X
			V0	Natural						1-480416-7			
B	Loose Piece	Nylon	V2	Natural 150°	.200 5.08	.920 23.37	.280 6.60	.390 9.91	.298 7.57	1-480416-8	"250" Series FASTON Receptacles <sup>3</sup>	—	—
				Black						1-480416-1			
				Natural						2-480416-2 <sup>2</sup>			
				V2						Natural			
			V0	Natural	.187 4.75	.995 25.30	.193 4.90	.354 9.00	.252 6.40	280232-6	—	—	
			V2	Natural	.169 4.30	.960 24.40	.181 4.60	.366 9.30	.209 5.30	336369-1	X	—	
		Polypropylene	HB	Clear	.161 4.10	.960 24.40	.181 4.60	.362 9.20	.209 5.30	735075	X	—	

<sup>1</sup> Flammability rating of plastic material.

<sup>2</sup> Material according to IEC 60335-1.

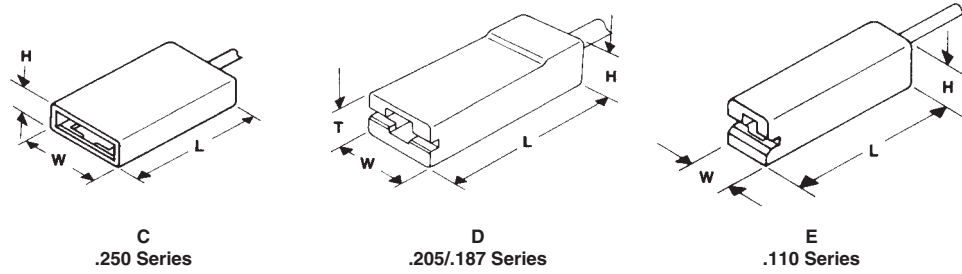
<sup>3</sup> Contact product engineering for terminal recommendations when using these insulators with 10 AWG.

**Note:** All part numbers are RoHS compliant.

**FASTON Housings** (Continued)

**AMPIP Post-Insulation Pods** (Continued)

**Straight Style Receptacle Housing** (Continued)



FASTON Housings

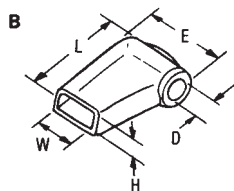
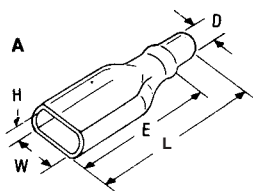
Style	Type	Material	UL 94 <sup>1</sup>	Color	Insulation Dia. Max.	Dimensions				Part Number	Accepts Terminal	UL	CS
						L	T	W	H				
C	Loose Piece	Nylon	V2	Natural	.125 3.18	.955 24.26	—	.570 14.48	.190 4.83	1-480458-0	"250" Series FASTON Economy Receptacles 42660, 42743, 42845, 61202	X	X
					.180 4.57	.775 19.69	.225 5.72	.338 8.59	.245 6.22				
D	Loose Piece	Nylon	V2	Natural	.170 4.32	.775 19.69	.215 5.46	.308 7.82	.235 5.97	1-480435-0  1-480435-5 <sup>2</sup>	"187" Series FASTON Receptacles 42373, 42374, 42452, 42453, 42617, 60487, 60573, 62137, 62138, 62187, 63475, 63477	X	X
					.150 3.81	.790 20.07	—	.235 5.97	.240 6.10				
E	Loose Piece	Nylon	V2	Black	.150 3.81	.790 20.07	—	.235 5.97	.240 6.10	1-480417-1	"110" Series FASTON Receptacles 42067, 42068, 42236, 42398, 42399, 42415, 60118, 60197, 60577, 60601, 60729, 61158, 61400, 61457, 61818, 62050, 62094, 62191, 62345	X	X

<sup>1</sup> Flammability rating of plastic material.

<sup>2</sup> Material according to IEC 60335-1.

**Insulation Sleeves For FASTON Receptacle**

Material — Soft Vinyl Chloride Cloudy



Style	FASTON Series	Dimensions					Part Number
		D	E	L	W	H	
A	250	.079 2.00	.748 19.00	.945 24.00	.315 8.00	.138 3.50	170823-3
		.098 2.50					
		.126 3.20	.866 22.00	1.06 27.00	.315 8.00	.138 3.50	1-170823-8
		.787 20.00	.984 25.00	.315 8.00	.138 3.50	1-170823-5	
		.138 3.50	1.18 30.00			1.38 35.00	1-170823-9
		1.38 35.00	1.57 40.00	2-170823-0			
	205	.189 4.80	.787 20.00	.984 25.00	.315 8.00	.138 3.50	170823-6
		.098 2.50	.709 18.00	.906 23.00	.256 6.50	.118 3.00	4-170823-1
		.087 2.20	.709 18.00	.906 23.00	.228 5.80	.087 2.20	1-170823-3
							.098 2.50
		.071 1.80	.300 16.00	.827 21.00	.157 4.00	.083 2.10	170823-9
							.098 2.50
.126 3.20	.571 14.50	.728 18.50	.335 8.50	.177 4.50	170891-1		
					.189 4.80	170891-2	
.126 3.20	.488 12.40	.587 14.90	.256 6.50	.118 3.00	3-170823-8		

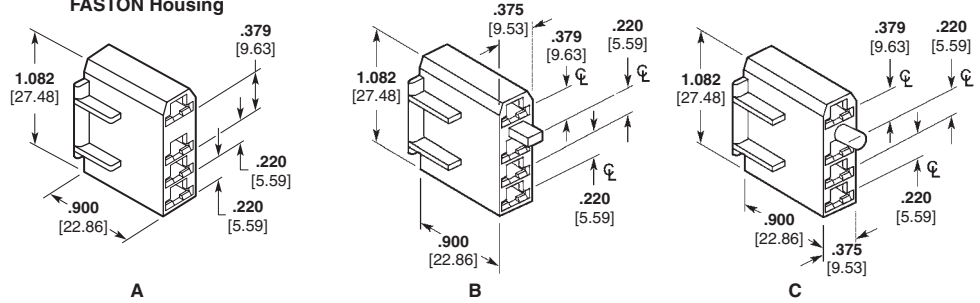
**Note:** All part numbers are RoHS compliant.

**FASTON Housings** (Continued)

**Multi-Position Housings**

**.250 [6.35] Series**

4 Circuit  
.250 Series  
FASTON Housing

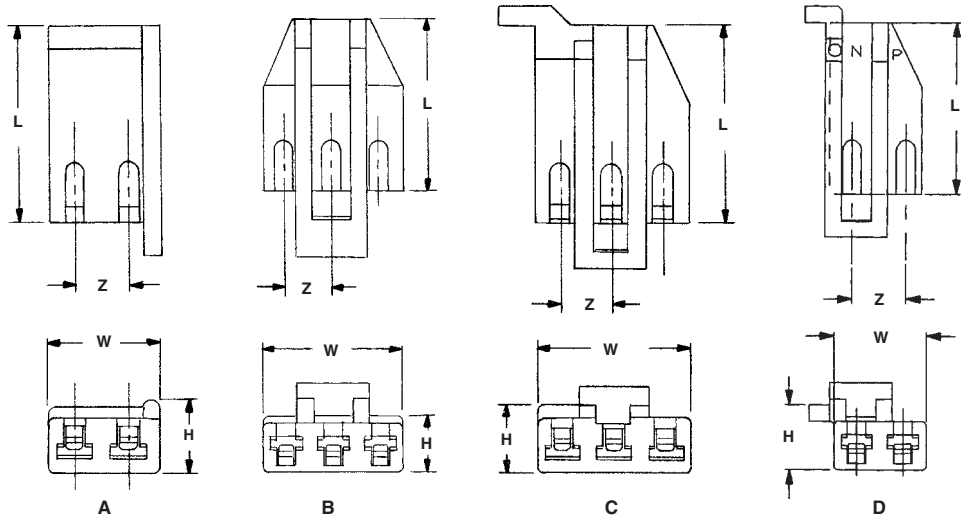


Style	Material	UL 94 <sup>1</sup>	Color	Part Number	Accepts Terminals		
A	Nylon	V2	Black	520987-1	.250 Low Insertion Terminals	—	—
			Natural	520987-2			
			Black	520987-4			
			Natural	520987-5			
B	Nylon	V2	Black	521065-1	.250 Low Insertion Terminals	X	X
C	Nylon	V2	Black	521066-1	.250 Low Insertion Terminals	X	X

<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> Material according to IEC 60335-1.

**Multi-Position Housings**

**.110 [2.79] Series  
Ignition Connectors**



Style	Material	UL 94 <sup>1</sup>	Color	Dimensions				Part Number	Accepts Terminal <sup>2</sup>		
				Z	W	H	L				
A	Nylon	V2	Black	.224 5.69	.470 11.94	.305 7.75	.825 20.96	520206-2	62942, 63021, 63093	X	X
D	Nylon	V2	Black	.224 5.69	.444 11.28	.315 8.00	.827 21.01	520217-2	62942, 63021, 63093	X	X
			Yellow					520217-3			
	Polyester	HB	Natural	520217-4							
B	Nylon	V2	Natural	.224 5.69	.668 16.97	.235 5.97	.825 20.96	520219-1	62942, 63021, 63093	X	X
			Black					520219-2			
	Polyester	HB	Black	.224 5.69	.668 16.97	.235 5.97	.825 20.96	520219-4			
C	Nylon	V2	Black	.224 5.69	.444 11.28	.315 8.00	.866 22.00	520220-2	63093	X	X

<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> For dimensions see TE customer drawing.

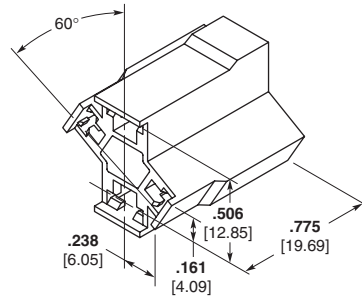
**Note:** All part numbers are RoHS compliant.

**FASTON Housings** (Continued)

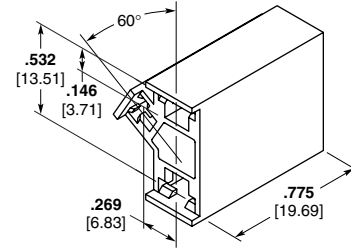
**Housings for Special Applications**

**Appliance Connectors  
Door Interlock Switch**

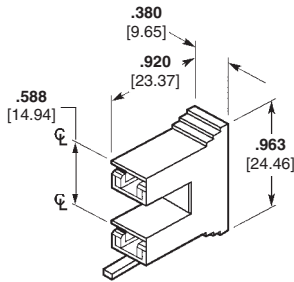
FASTON Housings



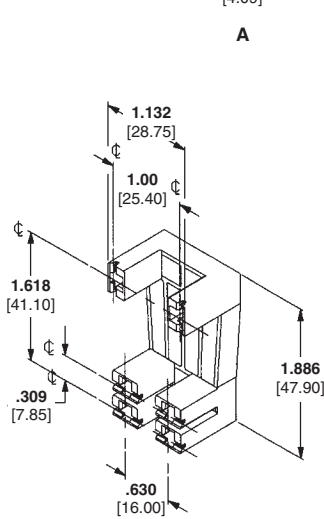
A



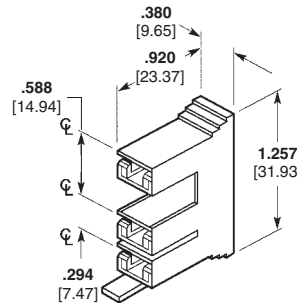
B



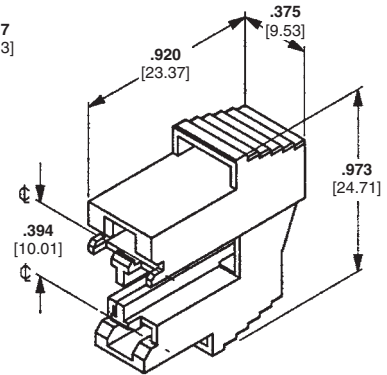
C  
T-Motor Connector



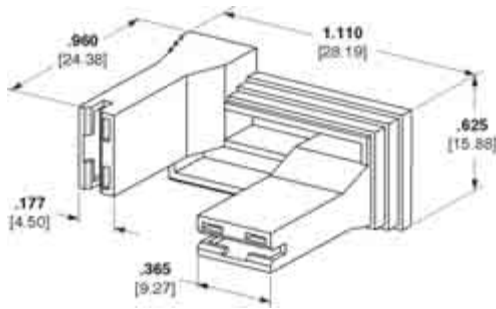
E  
Potter & Brumfield Relay Connector



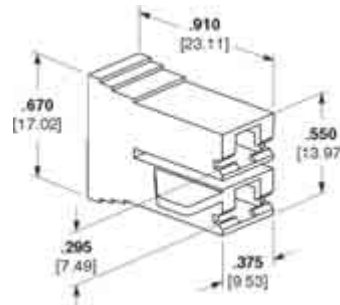
D  
T-Motor Connector



F  
Pressure Switch



G  
T9A Relay Connector



H  
RF Relay Connector

Style	Material	UL 94 <sup>1</sup>	Color	Part Number	Accepts Terminals		
A	Nylon	V2	Natural 150°C	521251-1	110/187	X	—
			Natural	520978-1	110/187	X	X
B	Nylon	V2	Natural 150°C	520978-2	110/187	X	X
			Natural	521069-1	250 LIF	X	X
C	Nylon	V2	Natural	521069-1	250 LIF	X	X
D	Nylon	V2	Black	521070-1	250 LIF	X	X
E	Nylon	V2	Black	521140-1	63981-1	X	X
F	Nylon	V2	Black	521148-1	187 LIF/ 250 LIF	X	X
G	Nylon	V0	Natural	521785-1	250 LIF	X	X
H	Nylon	V0	Natural	521771-1	250 LIF	X	X

<sup>1</sup> Flammability rating of plastic material.

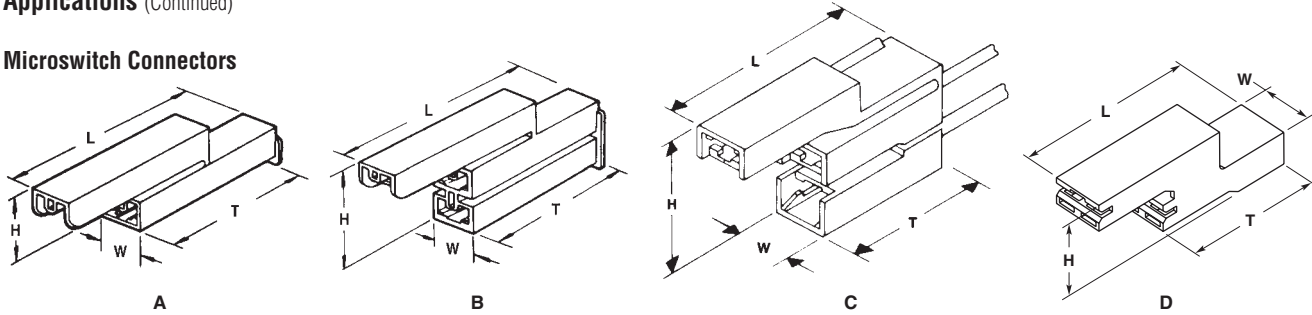
**Note:** All part numbers are RoHS compliant.



**FASTON Housings** (Continued)

**Housings for Special Applications** (Continued)

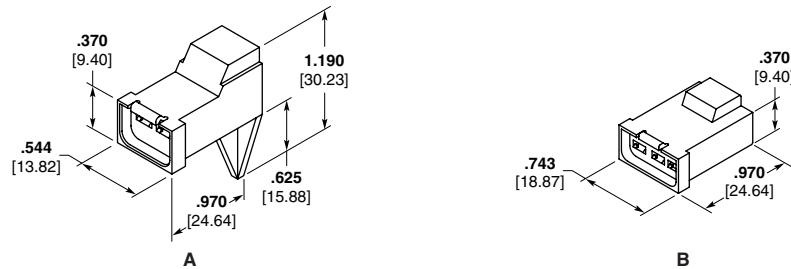
**Microswitch Connectors**



Style	Type	Material	UL 94 <sup>1</sup>	Color	Insulation Dia. Max.	Dimensions				Part Number	Accepts Terminal	UL	SP
						L	T	W	H				
A	Loose Piece	Nylon	V2	Natural	.157 4.00	1.720 43.70	1.035 26.30	.307 7.80	.520 13.20	174712-1	187 Series MK II Positive Lock Receptacles 170324, 170325, 170326	X	X
			V0	Natural	.157 4.00	1.720 43.70	1.035 26.30	.307 7.80	.520 13.20	1-174712-1			
B	Loose Piece	Nylon	V2	Natural	.157 4.00	1.720 43.70	1.035 26.30	.307 7.80	.770 19.50	172075-1	187 Series MK II Positive Lock Receptacles 170324, 170325, 170326	X	X
			V0	Natural	.157 4.00	1.720 43.70	1.035 26.30	.307 7.80	.770 19.50	1-172075-1			
C	Loose Piece	Nylon	V2	Natural	.170 4.32	1.655 42.04	.845 21.46	.317 8.05	.875 22.23	520212-1	187 Series FASTON Receptacles 42373, 42374, 42452, 42453, 42617, 60487, 60573, 62137, 62187	X	X
			V0	Natural						520212-2			
					520212-3								
			V2	Natural	.170 4.32	1.405 35.69	.845 21.46	.317 8.05	.875 22.23	360010-1			
			V0	Natural						360010-5 <sup>2</sup>			
								360010-2			X	X	
D	Loose Piece	Nylon	V0	Natural	.195 4.95	1.500 38.10	.981 24.92	.370 9.40	.536 13.61	521955-1	250 Series MK III Positive Lock Receptacles 63993, 63854, 1217092	X	X

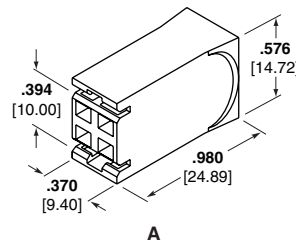
<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> Material according to IEC 60335-1.

**Gas Valve Connectors**



Style	Material	UL 94	Color	Part Number	Accepts Terminal	UL	SP
A	Nylon	V2	Natural	521306-1	1217345-1	X	X
B	Nylon	V2	Natural	521307-1	1217345-1	X	X

**Wax Motor Connector**



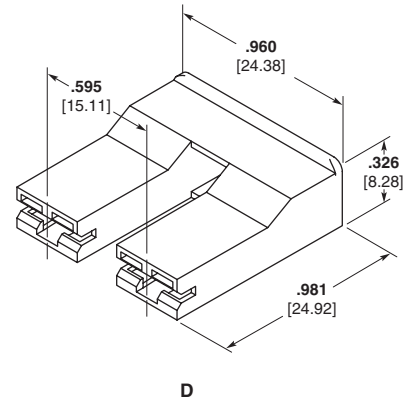
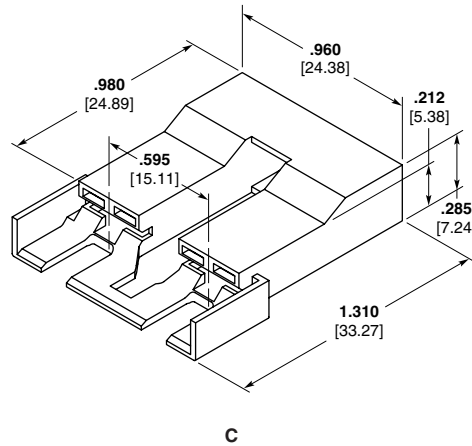
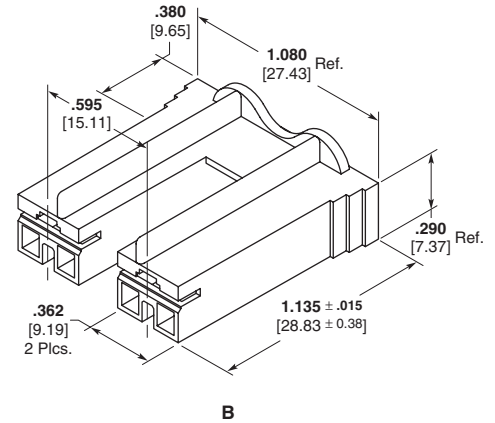
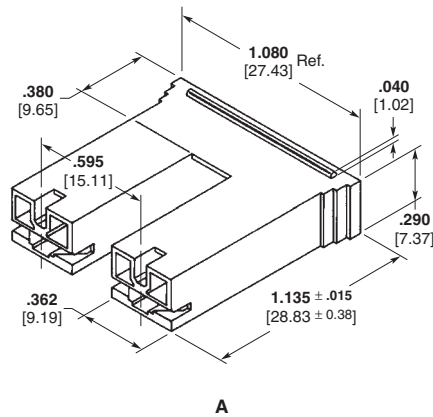
Style	Material	UL 94	Color	Part Number	Accepts Terminal	UL	SP
A	Nylon	V0	Natural	521766-1	250 Series FASTON and Positive Lock Mark III Terminals. Examples include 63306 and 63854.	X	X

**Note:** All part numbers are RoHS compliant.

**FASTON Housings** (Continued)

**250 Series Water Valve Coil Connector**

This connector is designed to mate with the appliance industry's standard water valve coil. The connector is suitable for such applications as washing machine mixing valves, dishwasher fill valves, and refrigerators with automatic ice makers. The housing has a unique internal cavity design to accommodate either two Positive Lock or two budget and LIF FASTON receptacles.



**Product Facts**

- Helps prevent terminal back-out of housing through plastic retention feature
- Higher disengagement forces possible with Positive Lock or Low Insertion Force (LIF) FASTON receptacles (hole required in mating tab)
- Recognized under the Component Program of Underwriters Laboratories, Inc., File Nos. E28476 and E13288.



Style	Material	UL 94 <sup>2</sup>	Color <sup>4</sup>	Part Number	Accepts			
A	Nylon	V2	Natural	520935-1	250 Series FASTON and Positive Lock Mark II Terminals. Examples Include 42400, 42510, 63306, 63097 <sup>1</sup> , 63119 <sup>1</sup> , 63239 <sup>1</sup> , and 170328 <sup>1</sup>	X	X	
			Red	520935-2				
			Black	520935-3 <sup>3</sup>				
			Green	520935-4				
			Blue	520935-5				
			Yellow	520935-6				
			Brown	520935-7				
V0	Natural	1-520935-1	X	X				
	Red	1-520935-2						
B	Nylon	V0	Natural	521229-1		X	—	
			Red	521229-2				
C	Nylon	V2	Natural	521253-1		250 Series FASTON and Positive Lock Mark III Terminals. Examples Include 63306 and 63854	X	X
			Red	521253-2				
		V0	Red	1-521253-2			X	X
			Green	1-521253-3				
			Blue	1-521253-7				
D	Nylon	V2	Natural	521119-1	X		X	
			Putty	521119-2				
			Blue	521119-4				

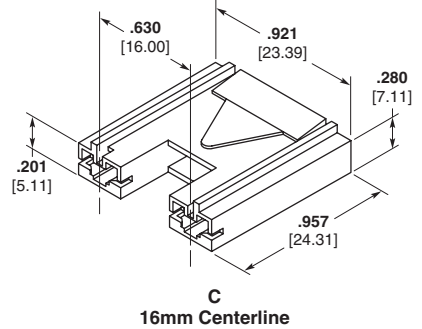
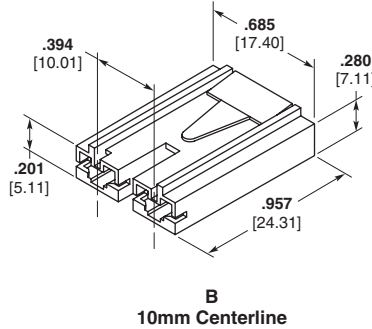
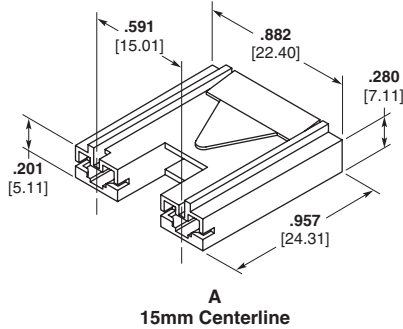
<sup>1</sup> For Positive Lock mark II receptacles, refer to pages 78-83.  
<sup>2</sup> Flammability rating of plastic material.  
<sup>3</sup> Weather resistant material.  
<sup>4</sup> Additional colors available.

**Note:** All part numbers are RoHS compliant.

FASTON Housings

**FASTON Housings** (Continued)

**187 Series Connector**



Style	Material	UL 94	Color	Part Number	Accepts Terminals
A	Nylon	V0	Natural	176498-1	170324, 170325, 170326
			Black	176498-2	
			Yellow	176498-4	
			Blue	176498-6	
B	Nylon	V0	Natural	179720-1	170324, 170325, 170326
			Black	179720-2	
			Yellow	179720-4	
			Blue	179720-6	
			Red	179720-7	
C	Nylon	V0	Natural	353148-1	170324, 170325, 170326
			Yellow	353148-4	
			Green	353148-5	
			Blue	353148-6	

**Note:** All part numbers are RoHS compliant.

## FASTIN-FASTON Product Line

### Product Facts

- Used for single and multiple connections
- Receptacles and tabs available for 6.3, 4.8 and 2.8 mm size (.250 – .187 and .110 Series)
- Receptacles mate with 0.5 and 0.8 thick tabs
- IEC 60335-1, Glow Wire 750° No Flame housings available
- RoHS Compliant

### Material and Finish

**Contacts** — Brass, and phosphor bronze base material. Tin and nickel plated products available

**Housings** — Polyamide UL 94 V2 and UL 94 V0

### Technical Documents

#### Application Specifications

114-2025 FASTIN-FASTON Product Line



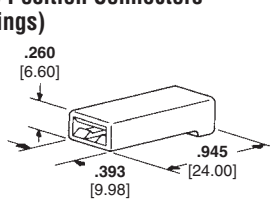
TE FASTIN-FASTON connectors offer the advantage of the FASTON receptacles technology in multiple applications. In wiring harnesses, they are mainly used as multiposition and coupling connectors. Up to 8 position connectors can be mated in one operation with a maximum of 20 leads terminated.

### Locking Contacts

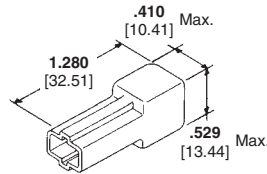
Receptacles and tabs in this version comply fully with the FASTON receptacles product technology. The only difference is the addition of a locking lance, which helps ensure firm retention of contacts when snapped into housings. Wiring harnesses prefabricated with male or female connectors can be easily connected to mating counterparts, even if manufacturing occurred at a different site. Any application of this technology leads to essential time savings in final assembly.

**FASTIN-FASTON Product Line** (Continued)

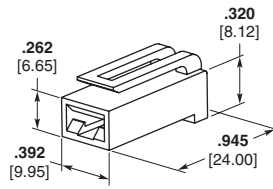
**250 Series (6.3 mm)**  
**Single Position Connectors**  
**(Housings)**



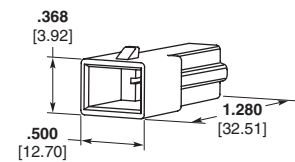
A — Receptacle Housing



B — Tab Housing



C — Receptacle Housing

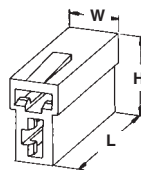


D — Tab Housing

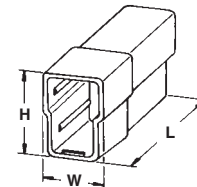
Style	Material	Color	UL 94	Note	Part Number	UL	SP
A	Nylon	Natural	V2	—	480054-3	X	X
		Black	V2	—	480054-4	X	X
		Red	V2	—	480054-5	X	X
B	Nylon	Natural	V0	—	521290-1	X	X
		Natural	V2	—	480053-3	X	X
		Black	V2	—	480053-4	X	X
C	Nylon	Red	V2	—	480053-5	X	X
		Natural	V0	—	521289-1	X	X
C	Nylon	Natural	V2	—	521743-1	X	X
D	Nylon	Natural	V2	—	521744-1	X	X

<sup>1</sup> Flammability rating.

**250 Series (6.3 mm)**  
**2 Position Connectors**



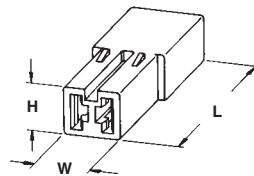
D — Receptacle Housing



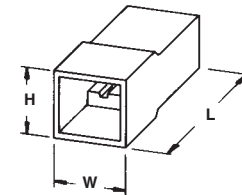
E — Tab Housing

Style	Material	Color	UL 94	Note	Dimensions (mm)			Part Number	UL	SP
					W	L	H			
D	Nylon	Natural	V2	—	.402	.902	.654	180907-0	—	—
		Black	V2	—	10.2	22.9	16.6	180907-5	—	—
		Natural	V0	GWT 750° No Flame	—	—	—	1-180907-0	—	—
E	Nylon	Natural	V2	—	.500	1.224	.791	180908-0	—	—
		Black	V2	—	12.7	31.1	20.1	180908-5	—	—
		Natural	V0	GWT 750° No Flame	—	—	—	880310-8	—	—

**250 Series (6.3 mm)**  
**2 Position Connectors**



F — Receptacle Housing



G — Tab Housing

Style	Material	Color	UL 94	Note	Dimensions (mm)			Part Number	UL	SP
					W	L	H			
F	Nylon	Natural	V2	—	.492	.902	.394	180923-0	X	—
		Black	V2	—	12.50	22.9	10.0	180923-5	X	—
		Natural	V0	—	—	—	—	4-180923-0	X	—
G	Nylon	Natural	V2	—	.598	1.240	.520	180924-0	X	—
		Black	V2	—	15.2	31.5	13.2	180924-5	X	—
		Natural	V0	—	—	—	—	4-180924-0	X	—

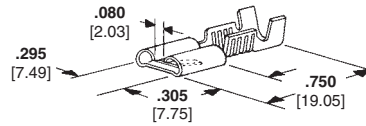
**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

**250 Series**

**Receptacles with Mating Dimple**  
(For use with single circuit connectors)

Fits Tab — .032 [0.81]  
Stock Thickness — .016 [0.41]



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part Number	UL	CS	Quick-Change Applicator No. <sup>2</sup>
18-14	.100-.170 2.54-4.32	Brass	42281-1	X	X	687940-2
		Tin Plated Brass	42281-2	X	X	687940-2
		Brass	60634-1 <sup>1</sup>	X	X	687940-2
16-12 (2) 16	.160-.210 4.06-5.33 (2) .130 Max. 3.30	Brass	60249-1	X	X	466057-2
		Tin Plated Brass	60249-2	X	X	466057-2
11-10	.157-.205 3.99-5.21	Brass	160914-1	—	—	—
		Tin Plated Brass	160914-2	—	—	—

<sup>1</sup> No front slot.

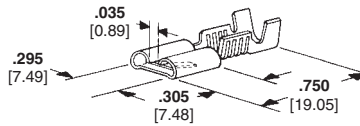
<sup>2</sup> Quick-change applicator for AMP-O-LECTRIC machine 565435-5.  
For AMPOMATOR machine and other machines not listed, contact TE.

FASTIN-FASTON Product Line

**250 Series**

**Receptacles without Mating Dimple**  
(For use with multiple circuit connectors)

Fits Tab — .032 [0.81]  
Stock Thickness — .012 [0.30]

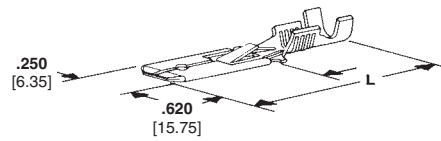


Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part Number	UL	CS	Quick-Change Applicator No. <sup>1</sup>
22-18	.085-.125 2.16-3.18 .060-.100 1.52-2.54	Tin Plated Brass	60295-2	X	X	687981-2
		Tin Plated Brass	60413-1	X	X	687979-3
18-14	.100-.170 2.54-4.32	Brass	42100-1	X	X	687932-2
		Tin Plated Brass	42100-2	X	X	687932-2
16-12 or (2) 16	.160-.210 or 4.06-5.33 or (2) .130 Max. 3.30	Tin Plated Brass	60253-2	X	X	466058-2
12-10	.134-.200 3.40-5.08	Brass	180351-1	—	—	—
		Pre-Tin Plated Brass	180351-2	—	—	—

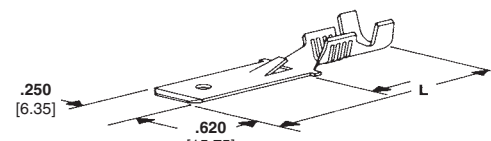
<sup>1</sup> Quick-change applicator for AMP-O-LECTRIC machine 565435-5.  
For AMPOMATOR machine and other machines not listed, contact TE.

**250 Series**

**Tabs**  
(For use with single or multiple circuit connectors)  
Stock Thickness — .015 [0.38]



A



B

Wire Range AWG	Style	Tab Thk.	Insulation Diameter	Dim. L	Material and Finish	Terminal Part No.	UL	CS	Quick-Change Applicator No. <sup>2</sup>
22-18	A	.032 0.81	.085-.125 2.16-3.18	1.105 28.07	Brass	62553-1	X	X	687982-2
					Tin Plated Brass	62553-3	X	X	687982-2
18-14	A	.032 0.81	.100-.170 2.54-4.32	1.105 28.07	Brass	42460-1	X	X	687839-2
					Tin Plated Brass	42460-2	X	X	687839-2
14-10	B	.016 0.41	.120-.145 3.05-3.68	1.100 27.94	Tin Plated Brass	42580-2 <sup>1</sup>	X	X	687839-2
					A	.032 0.81	.120-.170 3.05-4.32	1.105 28.07	Tin Plated Brass

<sup>1</sup> Used for back-to-back with a combined thickness of .032 [0.81].

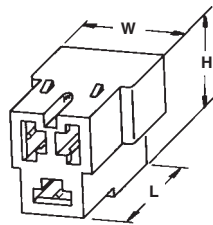
<sup>2</sup> Quick-change applicator for AMP-O-LECTRIC machine 565435-5.  
For AMPOMATOR machine and other machines not listed, contact TE.

<sup>3</sup> 9600 cma max.

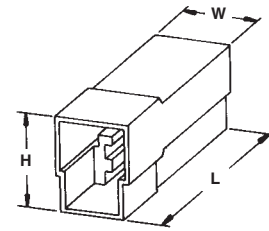
**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

**250 Series (6.3 mm)**  
**3 Position Connectors**



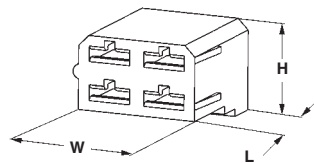
G — Receptacle Housing



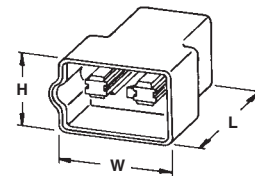
H — Tab Housing

Style	Material	Color	UL 94	Note	Dimensions (mm)			Part Number	UL	SP
					W	L	H			
G	Polyamide	Natural	V2	—	.598	.902	.705	180941-0	—	—
		Black	V2	—	15.2	22.9	17.9	180941-5	—	—
		Natural	V2	GWT 750° No Flame	—	—	—	2-180941-0	—	—
E	Polyamide	Natural	V2	—	.598	1.252	.783	180940-0	—	—
		Black	V2	—	15.2	31.8	19.9	180940-5	—	—
		Natural	V2	GWT 750° No Flame	—	—	—	2-180940-0	—	—

**250 Series (6.3 mm)**  
**4 Position Connectors**



L — Receptacle Housing



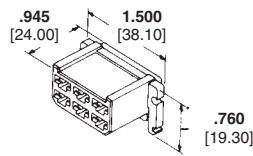
M — Tab Housing

Style	Material	Color	UL 94	Note	Dimensions (mm)			Part Number	UL	SP
					W	L	H			
L	Polyamide	Natural	V2	—	.909	.949	.606	180900-0	X	—
		Black	V2	—	23.1	24.1	15.4	180900-5	X	—
		Natural	V0	GWT 750° No Flame	—	—	—	2-880110-0	—	—
M	Polyamide	Natural	V2	—	1.031	1.240	.650	180901-0	X	—
		Black	V2	—	26.2	31.5	16.5	180901-5	X	—
		Natural	V0	GWT 750° No Flame	—	—	—	2-626541-0	—	—

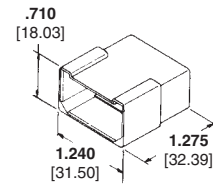
**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

**250 Series  
6 Circuit Connectors  
(Housings)**



Receptacle Housing



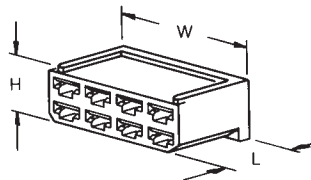
Tab Housing

Material	UL 94 <sup>1</sup>	Color	Part Numbers		UL	SP
			Receptacle	Tab		
Nylon	V2	Natural	480003-5	480004-5	X	X
		Black	1-480281-0 <sup>2</sup>	1-480282-0	X	X

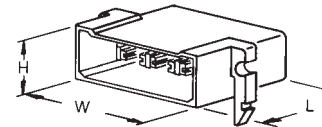
<sup>1</sup> Flammability rating.  
<sup>2</sup> No mounting ears.

FASTIN-FASTON Product Line

**250 Series (6.3 mm)  
8 Position Connectors**



Q — Receptacle Housing



R — Tab Housing

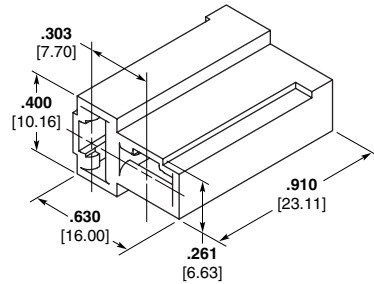
Style	Material	Color	UL 94	Note	Dimensions (mm)			Part Number	UL	SP
					W	L	H			
Q	Polyamide	Natural	V2	—	1.484 37.7	.949 24.1	.654 16.6	163007-0	—	—
R	Polyamide	Natural	V2	—	1.579 40.1	1.283 32.6	.720 18.3	163008-0	—	—

**Note:** All part numbers are RoHS compliant.

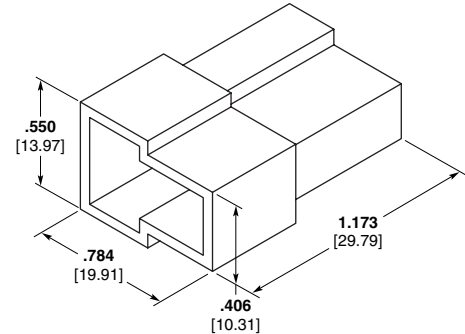


**FASTIN-FASTON Product Line** (Continued)

**250 Series**  
**2 Circuit "T" Housing**



Receptacle Housing

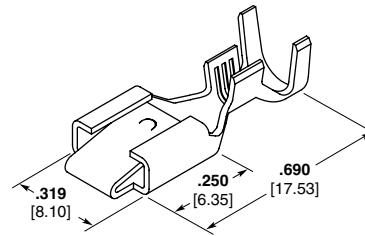


Tab Housing

Material	UL 94 <sup>1</sup>	Color	Part Numbers		UL	CS®
			Receptacle	Tab		
Nylon	V2	Black	480115-3	—	—	—
			—	480116-3 <sup>2</sup>	X	X

<sup>1</sup> Flammability rating.  
<sup>2</sup> For use only with packard style tabs.

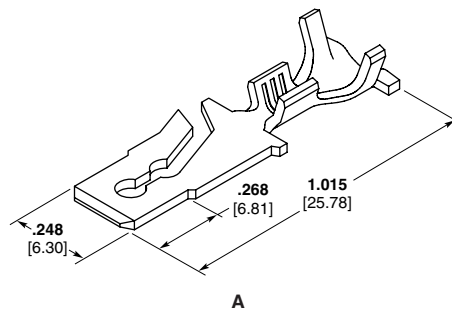
**Packard Style Receptacles**



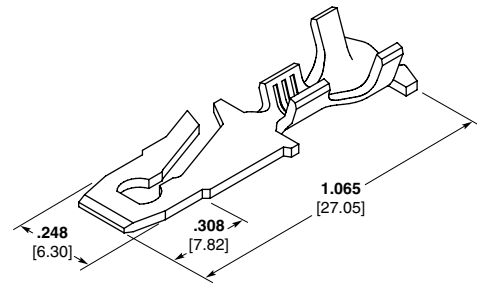
Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part Number	UL	CS®	Applicator No.
20-16	.145 3.68 Max.	Brass	640841-1	—	—	466791-2
		Brass	640417-1	—	—	466704-2
18-14	.154 3.91 Max.	Pre-Tin Plated Brass	640417-2	—	—	466704-2
		Brass	640418-1 <sup>1</sup>	—	—	466704-2
		Pre-Tin Plated Brass	640418-2 <sup>1</sup>	—	—	466704-2

<sup>1</sup> No Dimple.

**Packard Style Tabs**



A



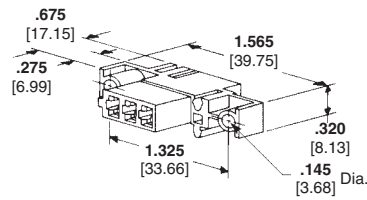
B

Wire Range AWG	Style	Stock Thk.	Insulation Diameter	Material and Finish	Terminal Part Number	UL	CS®	Applicator No.
18-14	A	.032 0.81	.100-.142 2.54-3.61	Brass	640416-1	—	—	466707-4
		.032 0.81	.110-.142 2.79-3.61	Tin Plated Brass	640416-2	—	—	466707-4
16-14	B	.032 0.81	.090-.130 2.29-3.30	Tin Plated Brass	60794-2	—	—	687888-6
14-12	A	.032 0.81	.140-.175 3.56-4.45	Tin Plated Brass	1217148-1	—	—	680808-2

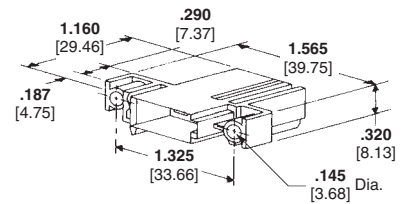
**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

**187 Series  
Modular Connector  
Housings**



Receptacle Housing



Tab Housing

Material	UL 94 <sup>1</sup>	Color	Part Numbers		UL	SP
			Receptacle	Tab		
Nylon	V2	Natural	1-480252-0	1-480251-0	X	X

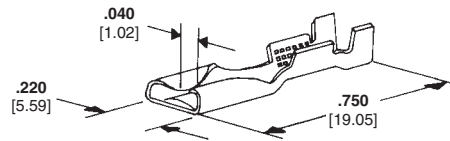
<sup>1</sup> Flammability rating.

<sup>2</sup> Special mounting mates with all receptacle housings listed above.

FASTIN-FASTON Product Line

**187 Series  
Modular Connector  
Receptacles**

**Fits Tab** — .016 [0.41]  
**Insulation Diameter** —  
.090-.130 [2.29-3.30] or  
(2) .110 [2.79] Max.



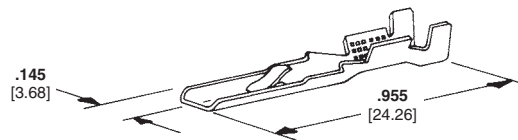
Wire Range AWG	Stock Thickness	Material and Finish	Terminal Part No.	UL	SP	Quick-Change Applicator No. <sup>1</sup>
20-16 or (2) 20	.012 0.30	Pre-Tin Brass	60435-1	X	X	687993-2

<sup>1</sup> Quick-change applicator for AMP-O-LECTRIC machine 565435-5.

For AMPOMATOR machine and other machines not listed, contact TE.

**187 Series  
Modular Connector Tabs**

**Tab Thickness** — .016 [0.41]  
**Insulation Diameter** —  
.090-.130 [2.29-3.30]  
or (2) .110 [2.79] Max.



Wire Range AWG	Stock Thickness	Material and Finish	Terminal Part No.	UL	SP	Quick-Change Applicator No. <sup>1</sup>
20-16 or (2) 20	.016 0.41	Pre-Tin Brass	60434-1	X	X	687995-2

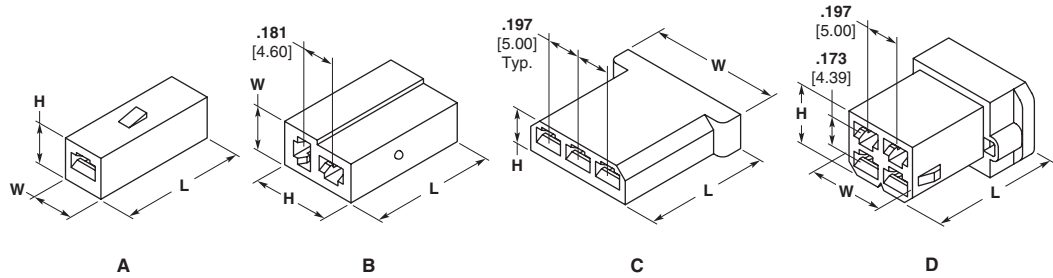
<sup>1</sup> Quick-change applicator for AMP-O-LECTRIC machine 565435-5.

For AMPOMATOR machine and other machines not listed, contact TE.

**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

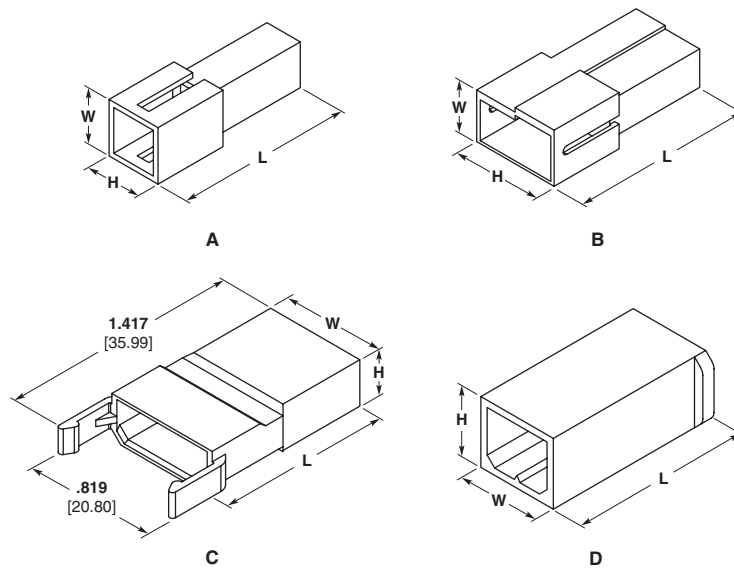
**110 Series Receptacle Housings**



Type	Number of Positions	Material	Color	Dimensions			Part Number	UL	SP
				W	H	L			
A	1	Nylon	Natural	.236 5.99	.236 5.99	.710 18.01	626062-0	—	—
B	2	Nylon	Natural	.248 6.30	.442 11.23	.710 18.01	626064-0	—	—
				.551 14.00	.200 5.00	.710 18.03			
C	3	Nylon	Natural	.748 19.00	.200 5.00	.710 18.03	925015-0	—	—
				.945 24.00	.200 5.00	.710 18.03			
D	4	Nylon	Natural	.423 10.74	.344 8.74	.708 17.98	626056-0	—	—

<sup>1</sup> Not shown.

**110 Series Tab Housings**

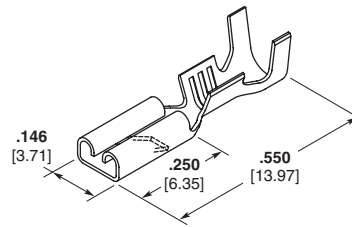


Type	Number of Positions	Material	Color	Dimensions			Part Number	UL	SP
				W	H	L			
A	1	Nylon	Natural	.327 8.31	.327 8.31	1.00 25.43	626063-0	—	—
B	2	Nylon	Natural	.264 6.71	.516 13.11	1.00 25.43	626065-0	—	—
				.629 15.98	.284 7.21	1.08 27.48			
C	3	Nylon	Natural	.629 15.98	.284 7.21	1.08 27.48	925475-1	—	—
				.629 15.98	.284 7.21	1.08 27.48			
D	4	Nylon	Natural	.512 13.00	.433 11.00	1.08 27.33	626057-0	—	—

**Note:** All part numbers are RoHS compliant.

**FASTIN-FASTON Product Line** (Continued)

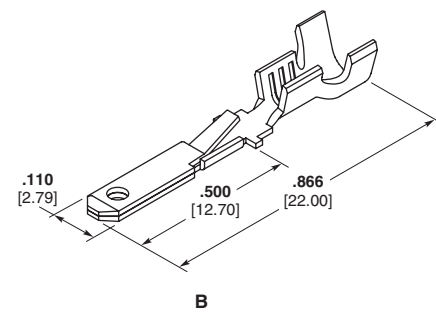
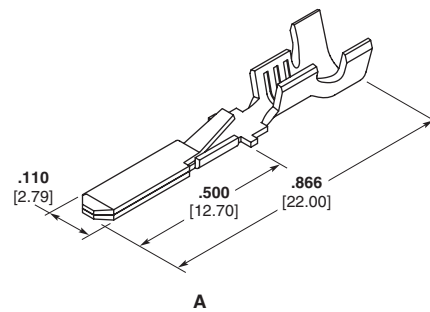
**110 Series  
Receptacles**



Wire Range AWG	Tab Fit	Insulation Diameter	Material and Finish	Terminal Part No.		
24-20	.032 0.81	.050-.080 1.27-2.03	Pre-Tin Brass	1217281-2	—	—
22-18	.020 0.51	.080-.120 2.03-3.05	Pre-Tin Brass	63241-3	—	—
20-16	.032 0.81	.080-.120 2.03-3.05	Pre-Tin Brass	62572-6	—	—
18-14	.032 0.81	.060-.110 1.52-2.79	Pre-Tin Brass	1217321-2	—	—

FASTIN-FASTON Product Line

**110 Series  
Tabs**



Wire Range AWG	Style	Tab Thk.	Insulation Diameter	Material and Finish	Terminal Part No.		
20-16	A	.032 0.81	.090-.120 2.30-3.05	Tin Plated Brass	160743-4	X	X
	B	.032 0.81	.090-.120 2.30-3.05	Tin Plated Brass	160762-4	—	—

**Note:** All part numbers are RoHS compliant.

## FASTIN-FASTON Product Line — Tab Housings RAST 5

### Product Facts

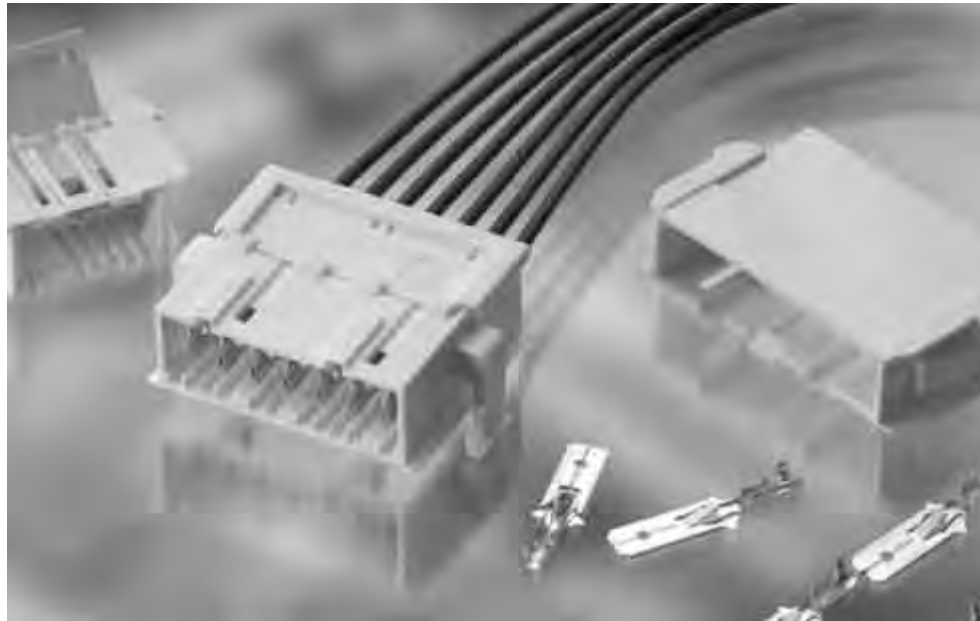
- Meets IEC 60335-1, Glow Wire 750° No Flame
- Accepts TE FASTIN-FASTON tabs 6.3 x 0.8 mm size
- Mating TE connector families include AMP MONO-SHAPE, AMP multifitting, AMP standard timer and Positive Lock RAST 5 connector system
- Available in different keying and locking versions, from 2 to 10 positions
- Available for panel and motor mounting
- Provided with secondary locking
- RoHS compliant

### Technical Documents

#### Product Specifications

108-20256 Panel Mount Housings

108-20247 Panel Mount Housings



The RAST 5 Standard defines and standardizes the connector mating interface. FASTIN-FASTON product line 6.3 mm size tabs are placed into 5 mm centerline cavities and the housings are provided with keying, polarization, and locking features that help prevent mismatching of the corresponding RAST 5 interfaces.

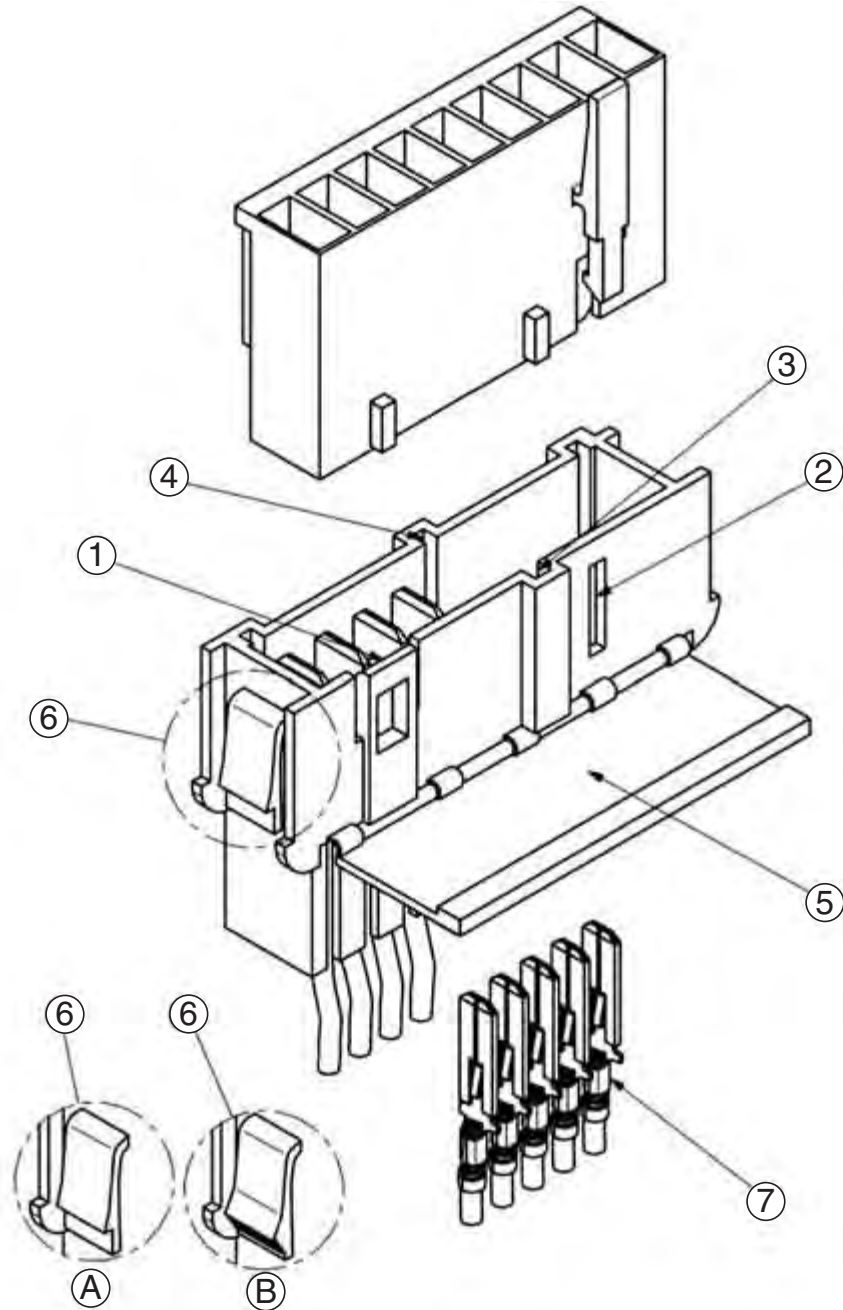
The FASTIN-FASTON RAST 5 system is designed to accept the most common TE RAST 5 connector families including AMP MONO-SHAPE, AMP multifitting, AMP standard timer and Positive Lock RAST 5 connector system. The Positive Lock RAST 5 connector system requires the use of a FASTIN-FASTON tab with a special detent hole location to engage the positive locking feature.

The most common application for this product is for household appliance components (motors for washing machines, dishwashers, dryers, refrigerators...) where OEM's want to minimize the possibility of crossed wires.

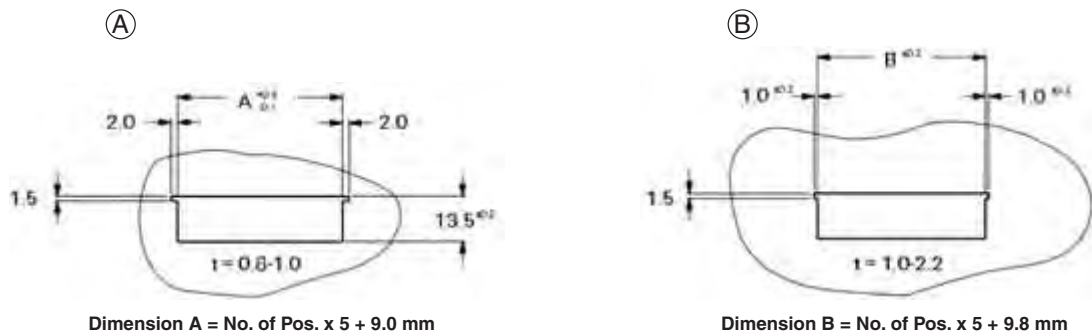
**FASTIN-FASTON Product Line — Tab Housings RAST 5 (Continued)**

**Technical Features**

- ① Locking tongue locks with the keying rib of the counter part (see table)
- ② Locking window locks with locking latches of the counter part (see table)
- ③ Keying groove
- ④ Polarization groove
- ⑤ Cover (secondary locking)
- ⑥ Panel locking
  - Ⓐ For panel thickness from 0.8 up to 1.0 mm
  - Ⓑ For panel thickness from 1.0 up to 2.2 mm
- ⑦ Tabs 6.3 x 0.8 mm (see table)



**Panel Cut-Outs**

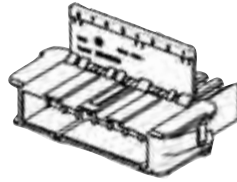


FASTIN-FASTON Product Line

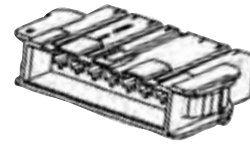
**FASTIN-FASTON Product Line — Tab Housings RAST 5 (Continued)**

**Panel Mount Housings**

**Material** — Polyamide  
**Color** — Natural



**C — with Secondary Locking**



**D — without Secondary Locking**

Positions	RAST 5 Polarizations	Panel Cut-Out	Style	UL 94	Note	Part Number
2		A	C	V2	GWT 750° No Flame	9-927742-2
				V0	—	927742-2
			V2	—	5-927742-2	
		B	C	V2	—	5-293035-2
				V0	—	964492-2
			V0	—	5-964492-2	
3		A	C	V2	GWT 750° No Flame	293008-1
				V0	—	928230-3
		A	C	V2	GWT 750° No Flame	9-927742-3
				V0	—	927742-3
4		A	C	V2	GWT 750° No Flame	293009-1
				V0	—	293009-2
		A	C	V2	GWT 750° No Flame	9-927742-4
				V0	—	927742-4
		A	C	V2	GWT 750° No Flame	293011-1
				V0	—	927742-5
5		B	C	V2	GWT 750° No Flame	5-964492-5
				V0	—	964492-5
		A	C	V2	GWT 750° No Flame	293010-1
				V0	—	293010-2
B	C	V2	—	1241857-5		
		V0	—	293161-1		

FASTIN-FASTON Product Line

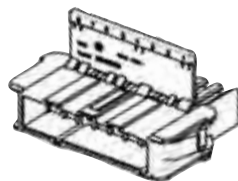
**FASTIN-FASTON Product Line — Tab Housings RAST 5 (Continued)**

**Panel Mount Housings**

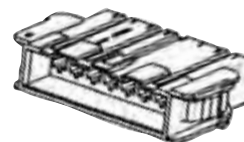
(Continued)

**Material** — Polyamide

**Color** — Natural



C — with Secondary Locking



D — without Secondary Locking

Positions	RAST 5 Polarizations	Panel Cut-Out	Style	UL 94	Note	Part Number		
6		A	C	V2	—	927742-6		
				V0	—	5-927742-6		
		B	D	V2	GWT 750° No Flame	5-1241967-6		
7		A	C	V2	GWT 750° No Flame	293034-1		
				V2	GWT 750° No Flame	293044-1		
				V2	—	927742-7		
				V2	GWT 750° No Flame	284985-1		
				V2	—	928309-7		
8		A	C	V2	GWT 750° No Flame	284986-1		
				V2	—	928309-8		
				B	C	V2	GWT 750° No Flame	293043-1
					D	V2	GWT 750° No Flame	5-1241967-8
				A	D	V2	—	1241967-8
9		B	D	V2	GWT 750° No Flame	5-1241969-8		
				V2	—	1241969-8		
10		A	D	V2	GWT 750° No Flame	293033-1		
				V2	—	1-1241968-5		
					—	1-1241968-0		

FASTIN-FASTON Product Line

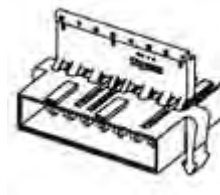


**FASTIN-FASTON Product Line — Tab Housings RAST 5** (Continued)

**Motor Mount Housings**

**Material** — Polyamide

**Color** — Natural



E

Positions	RAST 5 Polarizations	Panel Cut-Out	Style	UL 94	Note	Part Number
7		—	E	V2	GWT 750° No Flame	293014-1
		—	E	V2	GWT 750° No Flame	293015-1
		—	E	V2	GWT 750° No Flame	1-293015-1
8		—	E	V2	GWT 750° No Flame	284861-1
				V0	—	284861-3

FASTIN-FASTON Product Line

## FASTON Uninsulated Terminals — Loose Piece

### FASTON Terminals Strip/Loose Piece Cross Reference

FASTON terminals have been designed for speed of application using selected terminating machines; however, hand tools are also available for those terminals listed.

#### RECEPTACLES 250 Series

Wire Range AWG	Strip Part No.	Loose Piece Part No.	Description	Hand Tool Part No.
22-18	41772	60878-2	Premier Receptacle	91514-1
	61988-2	62274-1	Receptacle/Tab Combination	91514-1
18-14	41274	41729	Premier Receptacle	90165-1
	41774	42025-1	Hermetic Receptacle	90165-1
	42219-1	60705-1	Premier Receptacle	90165-1
	61944-1	60279-1	Piggyback Receptacle	189508-1
	61944-2	60279-2	Piggyback Receptacle	189508-1
	42100-1	42238-1	FASTIN-FASTON	720725-1 or 91557-1
	42100-2	42238-2	FASTIN-FASTON	—
	42281-1	42282-1	FASTIN-FASTON	90165-1
	42281-2	42282-2	FASTIN-FASTON	—
	60290-2	60419-2	"F" Crimp Flag	90045
18-12	41532	41898	Tab-Lok Flag	47417
	42742-1	60102-1	Tab-Lok Flag	47417
16-12	41728	42021	Premier Receptacle	47094
14-10	41450	61227-1	Premier Receptacle	90120
	62049-2	62090-1	Piggyback	—
12-10	60851-1	60851-3	Hermetic Flag	—

#### Receptacles 187 Series

Wire Range AWG	Strip Part No.	Loose Piece Part No.	Description	Hand Tool Part No.
20-16	42452-1	42566-1	Premier Receptacle	91509-1
	42452-2	42566-2	Premier Receptacle	91509-1
	42373-2	42638-2	Premier (No Insulation)	—
	60435-1	60520-1	FASTIN-FASTON	90088
	62026-1	62228-1	Piggyback Receptacle	—

#### Receptacles 110 Series

Wire Range AWG	Strip Part No.	Loose Piece Part No.	Description	Hand Tool Part No.
22-18	42068-1	42470-1	Receptacle	91511-1
	62003-2	62112-2	Receptacle/Tab Combination	—
	60900-1	61454-1	Tab Receptacle	—



#### 250 Series Tabs

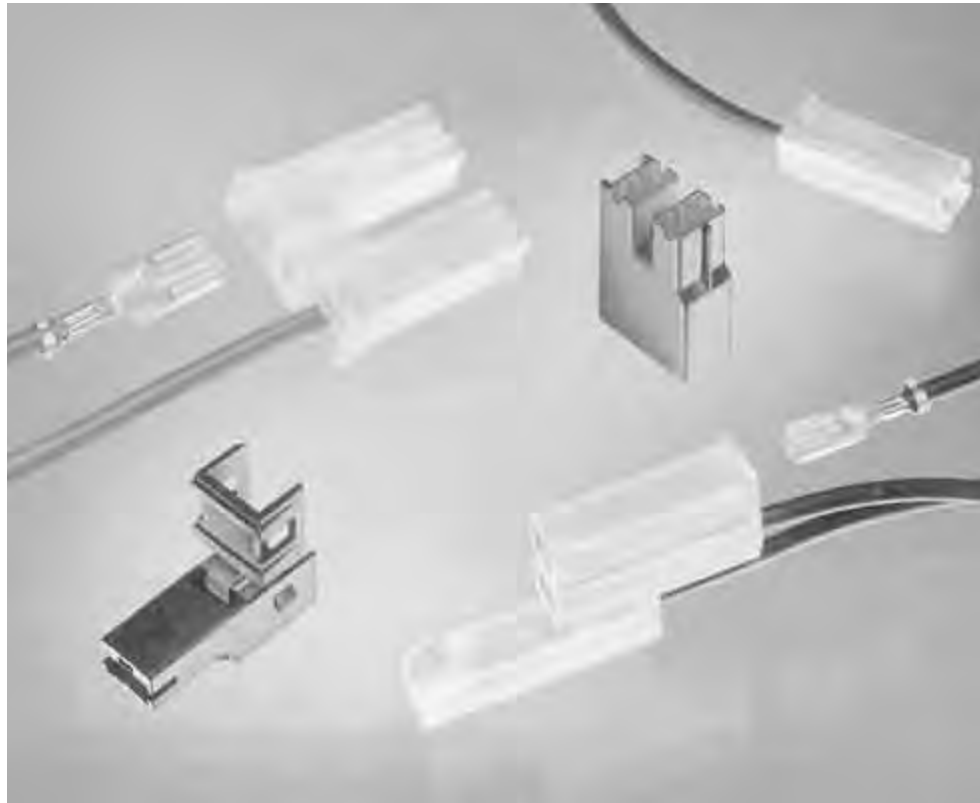
Wire Range AWG	Strip Part No.	Loose Piece Part No.	Description	Hand Tool Part No.
22-18	60294-1	61316-1	FASTIN-FASTON	91514-1
18-14	41412	41778	Crimp Type	—
	42460-2	42565-2	FASTIN-FASTON	90165-1

**Note:** All part numbers are RoHS compliant.

## Positive Lock Receptacles

### Product Facts

- Reduced insertion force
- Locks onto tabs containing holes
- Housing insulates and serves as a removal tool
- “Snap” action tells assembler receptacle is mated properly
- Terminated by automatic or semi-automatic equipment
- Single and multiple circuit housings available
- Recognized under the Component Program of Underwriters Laboratories Inc., File Nos. E66717 and E28476 
- Certified by Canadian Standards Association File No. LR7189A 



Positive Lock receptacles are specifically designed to provide ease of assembly and secure retention to mating tabs. These unique features are attainable by the reduced insertion force of the product and the locking dimple. The receptacle locks onto mating tabs containing holes and is removable only by deflecting an integrally designed depressor prior to withdrawal. The depressor can be deflected manually by thumb pressure, or automatically by a cam inside a specially designed nylon housing. If the housing is employed,

removal of the terminal from the tab is performed by simply applying withdrawal force to the housing. In addition to providing a means of disconnecting the terminal, the housing performs its traditional insulating function.

Aside from reduced insertion forces, Positive Lock receptacles give the assembler a definite mechanical “snap” when the terminal is correctly seated over the mating tab. This facilitates correct assembly in hard-to-reach areas such as under dashboards, recessed switch tabs, etc.

Safety is enhanced by the locking capability of the product. Unless the depressor is deliberately deflected, either manually or by withdrawal force applied directly to the optional housing, a terminal will not easily come off of the tab. Thus, the potential of exposed live parts or disruption of critical circuitry due to improperly seated or accidentally removed terminals is greatly reduced.

**Positive Lock Receptacles** (Continued)

**Mark I**

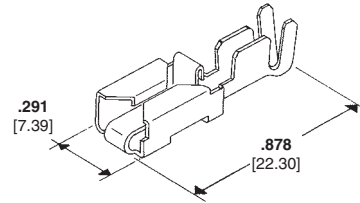
**250 Series Receptacles**

**Stock Thickness** — .016 [0.41]

**Fits Tab** — .032 [0.81]

Recognized under the Component Program of Underwriters Laboratories Inc.,

UL File No. E28476



Wire Range AWG	Insulation Diameter	Material and Finish	Part Numbers				
			Receptacle			Quick Change Applicator No. <sup>2</sup>	Hand Tool
20-16	.090-.130 2.29-3.30	Brass/Pre-Tin	1-160759-1	X	X	567181-2	654174-1
18-14	.135-.195 3.43-4.95	Brass/Tin	63812-1 <sup>1</sup>	X	X	680140-2	—
	.095-.155 2.41-3.94	Brass/Tin	154718-3	X	—	466542-3	525651
14-11	.140-.170 3.56-4.32	Brass/Tin	154717-3	X	—	466883-2	525651
12-10	.135-.200 3.43-5.08	Brass/Pre-Tin	790319-3	—	—	567417-2	—

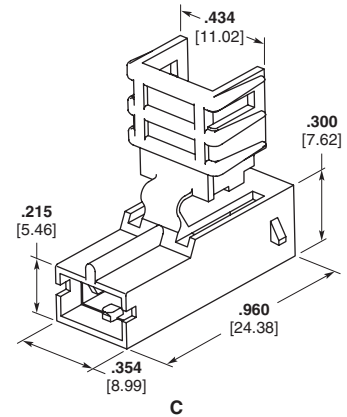
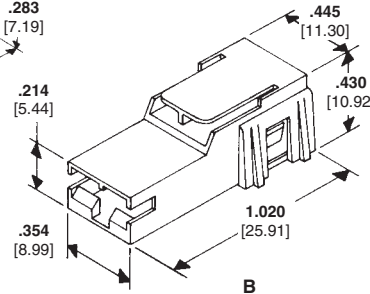
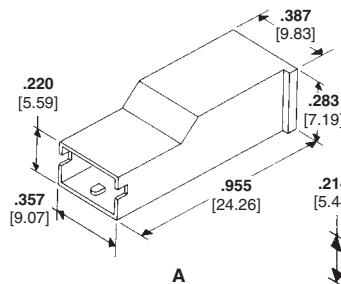
<sup>1</sup> "A" Style Housing only.

<sup>2</sup> Quick-Change Applicator for AMP-O-LECTRIC Machine 565435-5.  
For AMPOMATOR Machine and other machines not listed, contact TE.

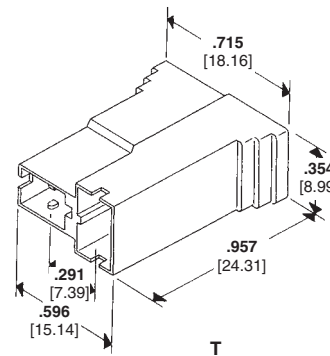
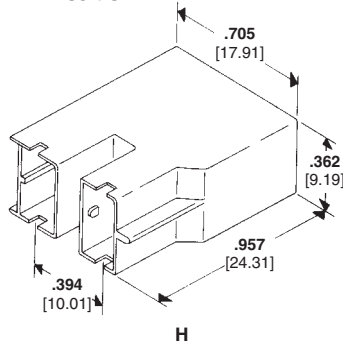
**Receptacle Housings**

**Material** — 94 V-2, 6/6 Nylon

**1 Position**



**2 Position**



Style	Color	Part No.
A	Black	154719-0
	Natural	154719-1
B	Black	520961-1 <sup>1</sup>
C	Black	520895-1 <sup>2</sup>
H	Black	926521-2
T	Black	926522-1
	Natural	926522-2

<sup>1</sup> Press-to-release with secondary lock.

<sup>2</sup> Secondary lock.

**Note:** All part numbers are RoHS compliant.

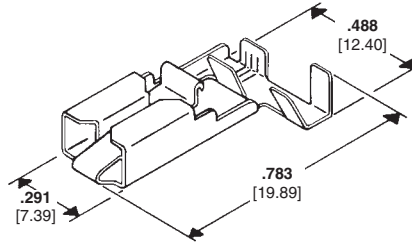
**Positive Lock Receptacles** (Continued)

**Mark I**

**250 Series Flag Receptacle**

Stock Thickness — .016 [0.41]

Fits Tab — .032 [0.81]

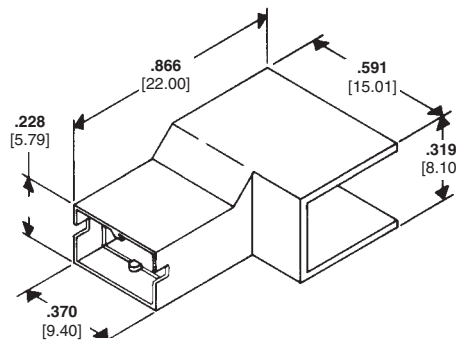


Wire Range AWG	Insulation Diameter	Material and Finish	Part Number
20-15	.087-.130 2.21-3.30	Brass/Pre-Tin	926820-4
17-13	.130-.170 3.00-4.30	Brass/Pre-Tin	926790-4

**Mark I**

**250 Series  
Receptacle Housings**

Material — 94 V-2, 6/6 Nylon

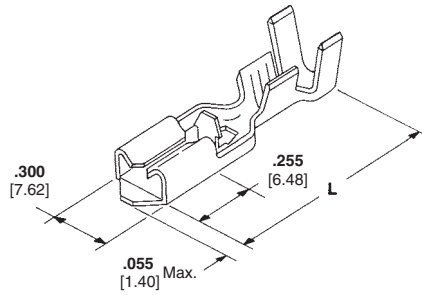


Color	Part Number
Black	926291-1

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles** (Continued)

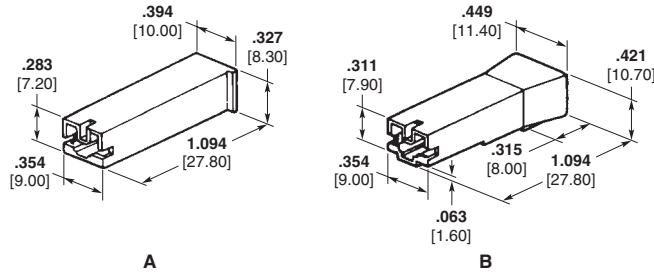
**Mark II  
250 Series  
Straight Receptacles**



Wire Range AWG	Tab Thickness	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
22-18	.032 0.81	.059-.122 1.50-3.10	Pre-Tin Brass	.016 0.41	.976 24.80	X	X	170327-1
18-16 (2) 18, (2) 20	.032 0.81	.105-.210 2.67-5.33 or (2) .105 2.67 Max.	Brass	.016 0.41	.886 22.50	—	—	1742354-1
18-14	.032 0.81	.090-.155 2.29-3.94	Brass	.016 0.41	.886 22.50	X	X	63097-2
	.025 0.64	.090-.155 2.29-3.94	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63809-1
	.020 0.51	.090-.155 2.29-3.94	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63442-1
15-10	.032 0.81	.090-.135 2.29-3.43	Pre-Tin Brass	.016 0.41	1.015 25.80	X	X	170328-1
	.032 0.81	.110-.200 2.79-5.08	Pre-Tin Brass	.016 0.41	1.015 25.80	X	X	170329-1
12-10	.032 0.81	.150-.200 3.81-5.08	Brass, Tin Plated	.018 0.46	.913 23.20	X	X	63239-1

Positive Lock Receptacles

**Mark II  
250 Series  
Receptacle Housings  
1 Circuit**

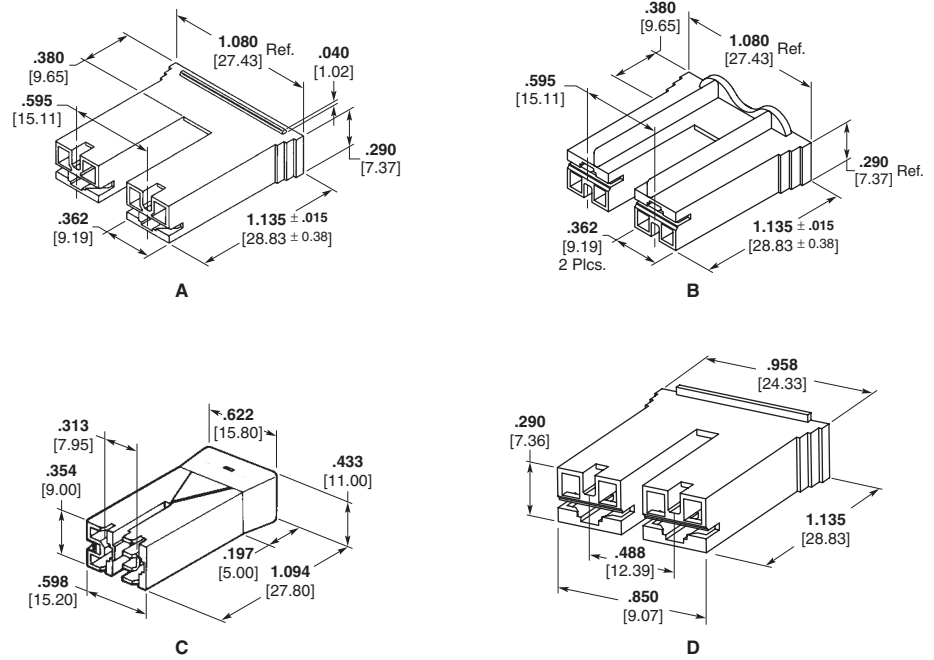


Style	Material	UL 94	Color	UL	SP	Part Number
A	6/6 Nylon	V2	Natural	—	—	172076-1
			Black	—	—	172076-2
			Yellow	—	—	172076-4
			Green	—	—	172076-5
			Blue	—	—	172076-6
		V0	Red	—	—	172076-7
			Natural	—	—	2-172076-1
			Black	—	—	2-172076-2
			Yellow	—	—	2-172076-4
			Green	—	—	2-172076-5
B	6/6 Nylon	V0	Blue	—	—	2-172076-6
			Red	—	—	2-172076-7
			Natural	X	X	177627-1
			Yellow	X	X	177627-4
			Green	—	—	177627-5
			Blue	—	—	177627-6
			Red	—	—	177627-7
Black	—	—	177627-9			

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles (Continued)**

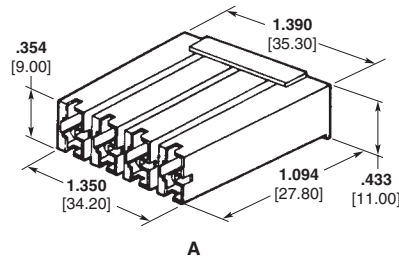
**Mark II  
250 Series  
Receptacle Housings  
2 Circuit**



Style	Material	UL 94	Color			Part Number
A	6/6 Nylon	V2	Natural	X	X	520935-1
			Red	X	X	520935-2
			Black	—	—	520935-3
			Green	—	—	520935-4
			Blue	—	—	520935-5
			Yellow	—	—	520935-6
			Brown	—	—	520935-7
B	6 Nylon	V0	Natural	—	—	1-520935-1
			Red	—	—	1-520935-2
			Blue	—	—	1-520935-5
C	6/6 Nylon	V2	Natural	—	—	1-521229-1 <sup>1</sup>
			Red	X	X	521229-1
D	6/6 Nylon	V0	Natural	—	—	521229-2
			Red	—	—	178833-1
D	6/6 Nylon	V0	Natural	X	X	1969332-2

<sup>1</sup> Housing material to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.

**Mark II  
250 Series  
Receptacle Housings  
4 Circuit**

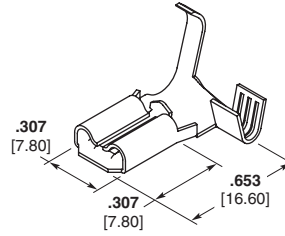


Style	Material	UL 94	Color			Part Number
A	6/6 Nylon	V2	Natural	X	X	174429-1

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles** (Continued)

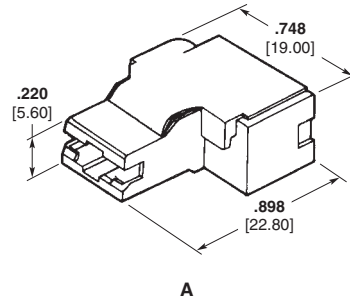
**Mark II**  
**250 Series**  
**Flag Receptacles**  
**Stock Thickness** — .016 [0.41]  
**Fits Tab** — .032 [0.81]



Wire Range AWG	Insulation Diameter	Material and Finish	UL	RU	SP	Terminal Part No.
22-18	0.59-.110 1.50-2.80	Pre-Tin Brass	X	—	X	172761-1
18-14	.110-.205 2.80-5.20	Pre-Tin Brass	X	—	X	172763-1
12-10	.110-.205 2.80-5.20	Pre-Tin Brass	X	—	X	172765-1

Positive Lock Receptacles

**Mark II**  
**250 Series**  
**Flag Style Receptacle Housing**  
**1 Circuit**



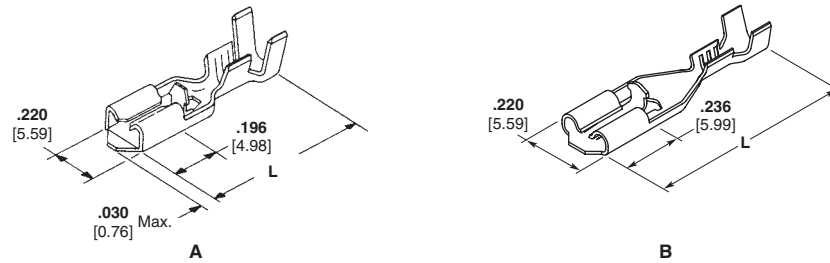
Style	Material	UL 94	Color	RU	SP	Part Number
		V2	Natural	X	X	172469-1
A	6/6 Nylon	V0	Natural	—	—	1-172469-1
			Blue	—	—	1-172469-2

**Note:** All part numbers are RoHS compliant.



**Positive Lock Receptacles** (Continued)

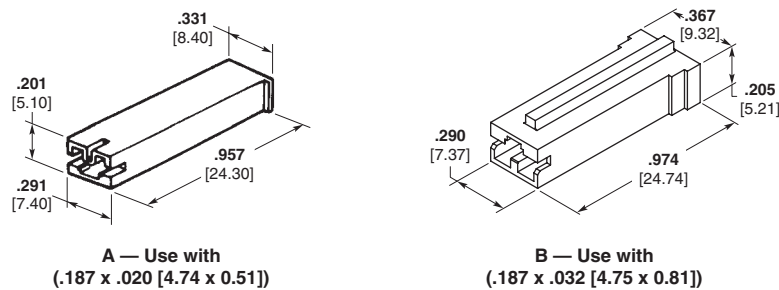
**Mark II  
187 Series  
Straight Receptacles**



Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
24-20	B	.020 0.51	.060-.105 1.52-2.67	Pre-Tin Brass	.012 0.30	.850 21.60	X	X	170324-1
		.020 0.51	.060-.105 1.52-2.67	Phos. Bronze, Nickel Plated	.012 0.30	.850 21.60	X	X	170324-2
	A	.020 0.51	.060-.105 1.52-2.67	Pre-Tin Phos. Bronze	.012 0.30	.850 21.60	—	—	170324-5
20-16	B	.020 0.51	.060-.110 1.52-2.79	Pre-Tin Brass	.012 0.30	.755 19.17	X	X	63407-2 <sup>1</sup>
		.020 0.51	.074-.134 1.87-3.40	Pre-Tin Brass	.012 0.30	.850 21.60	X	X	170325-1
	A	.020 0.51	.074-.134 1.87-3.40	Pre-Tin Phos. Bronze	.012 0.30	.850 21.60	—	—	170325-3
		.020 0.51	.090-.130 2.29-3.30	Brass, Pre-Tin	.012 0.30	.755 19.17	X	X	63232-1 <sup>1</sup>
	B	.032 0.81	.060-.110 1.52-2.79	Brass, Tin Plated	.012 0.30	.740 18.80	X	X	63498-1 <sup>2</sup>
		.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.30	.755 19.17	X	X	63313-1 <sup>1</sup>
18-14 (2) 18	B	.020 0.51	.083-.142 2.11-3.61 (2) .216 5.49	Brass, Pre-Tin	.012 0.30	.850 21.60	—	—	170326-1

<sup>1</sup> Low profile — not for use in housing.  
<sup>2</sup> For use with housing 521125.

**Mark II  
187 Series  
Receptacle Housings  
1 Circuit**

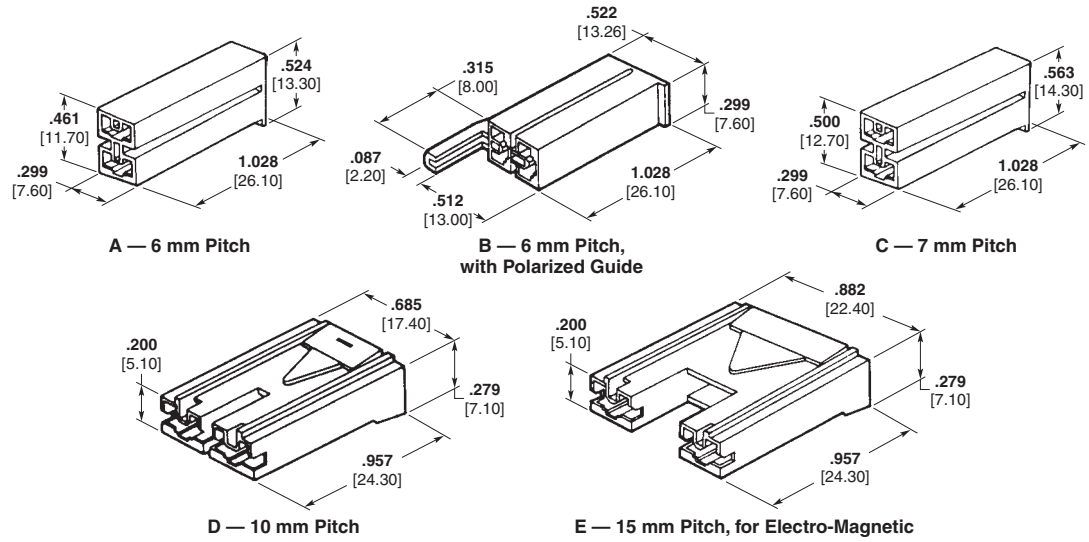


Style	Material	UL 94	Color	UL	SP	Part Number		
A	6/6 Nylon	V2	Natural	X	X	172074-1		
			Black	—	—	172074-2		
			Yellow	—	—	172074-4		
			Green	—	—	172074-5		
			Blue	—	—	172074-6		
			Red	—	—	172074-7		
			V0	Natural	X	X	173974-1	
		Black		—	—	173974-2		
		Yellow		—	—	173974-4		
		Green		—	—	173974-5		
		Blue		—	—	173974-6		
		Red		—	—	173974-7		
		B		6/6 Nylon	V2	Natural	—	—

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles (Continued)**

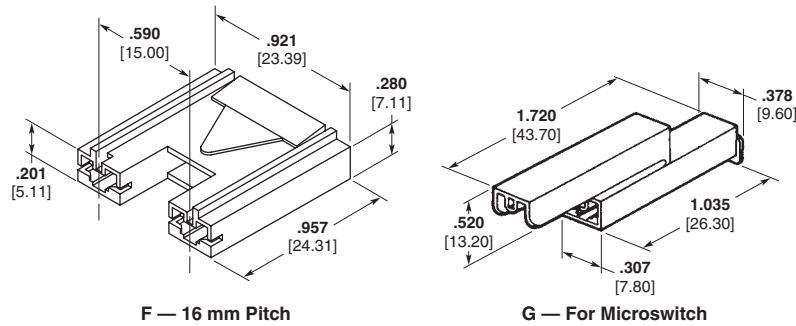
**Mark II  
187 Series  
Receptacle Housings  
2 Circuit**



Style	Material	UL 94	Color	UL	CS	Part Number
A	6/6 Nylon	V2	Natural	—	—	172210-1
			Black	—	—	172210-2
			Yellow	—	—	172210-4
			Blue	—	—	172210-6
		V0	Natural	X	X	1-172210-1
			Black	X	X	1-172210-2
			Yellow	—	—	1-172210-4
			Green	—	—	1-172210-5
			Blue	—	—	1-172210-6
			Red	—	—	1-172210-7
B	6/6 Nylon	V2	Natural	X	X	174587-1
			Natural	—	—	1-174587-1
		V0	Yellow	—	—	1-174587-4
			Green	—	—	1-174587-5
			Blue	—	—	1-174587-6
			Red	—	—	1-174587-7

Style	Material	UL 94	Color	UL	CS	Part Number		
C	6/6 Nylon	V2	Natural	X	X	175578-1		
			Black	—	—	175578-2		
		V0	Natural	—	—	1-175578-1		
			Black	—	—	1-175578-2		
D	6/6 Nylon	V0	Yellow	—	—	1-175578-4		
			Blue	—	—	1-175578-6		
			Red	—	—	1-175578-7		
			Natural	—	—	17920-1		
			Black	—	—	17920-2		
			Yellow	—	—	17920-4		
			Blue	—	—	17920-6		
E	6/6 Nylon	V0	Natural	X	X	176498-1		
			Black	—	—	176498-2		
			Yellow	—	—	176498-4		
			Blue	—	—	176498-6		
			6 Nylon	V2	Yellow	—	—	3-176498-4 <sup>1</sup>

<sup>1</sup> Housing material to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.



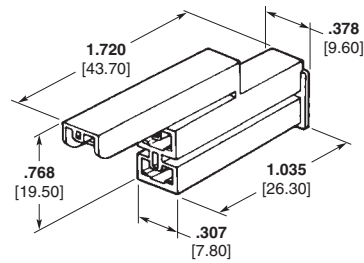
Style	Material	UL 94	Color	UL	CS	Part Number
F	6/6 Nylon	V0	Yellow	—	—	353148-4
			Green	—	—	353148-5
			Blue	—	—	353148-6
G	6/6 Nylon	V0	Natural	X	X	174712-1
			Natural	—	—	1-174712-1
			Blue	—	—	1-174712-6
			Red	—	—	1-174712-7

**Note:** All part numbers are RoHS compliant.

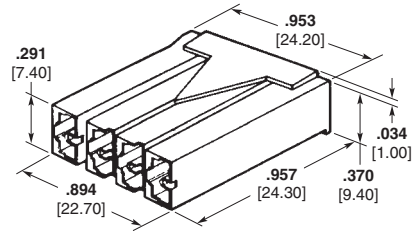
Positive Lock Receptacles

**Positive Lock Receptacles (Continued)**

**Mark II  
187 Series  
Receptacle Housings  
3 Circuit and  
4 Circuit**



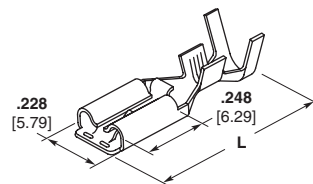
**A — 3 Circuit  
For Micro-Switch**



**B — 4 Circuit  
For Timer**

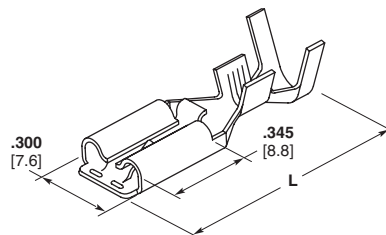
Style	Material	UL 94	Color	UL	SP	Part Number
A	6/6 Nylon	V2	Natural	X	X	172075-1
			Yellow	X	X	172075-4
			Blue	—	—	172075-6
		V0	Natural	—	—	1-172075-1
			Yellow	—	—	1-172075-4
B	6/6 Nylon	V0	Natural	X	X	174513-1

**Positive Lock EX  
187 Series  
Straight Receptacles**



Wire Range AWG	Tab Thickness	Insulation Diameter	Material	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
26-20 0.14-0.53	.020 0.50	.050-.140 1.3-3.6	Stainless Steel	.012 0.30	.675 17.2	—	—	175032-1
26-16 0.50-1.30	.020 0.50	.090-.140 2.3-3.6	Stainless Steel	.012 0.30	.675 17.2	X	—	1742669-1
20-14 0.50-2.20	.020 0.50	.075-.173 1.9-4.4	Stainless Steel	.012 0.30	.675 17.2	—	X	175034-1

**Positive Lock EX  
250 Series  
Straight Receptacles**



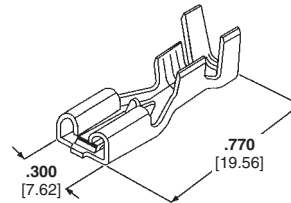
Wire Range AWG	Tab Thickness	Insulation Diameter	Material	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
18-14 0.76-2.09	.032 0.80	.085-.135 2.2-3.4	Stainless Steel	.016 0.41	.835 21.2	—	—	175164-1

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles** (Continued)

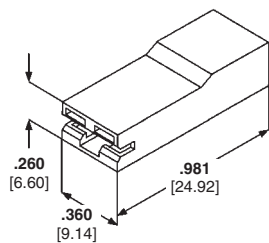
**Mark III  
250 Series  
Receptacles**

Stock Thickness — .016  
Accepts .032 Tab

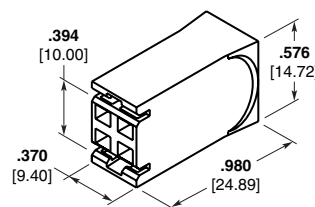


Wire Range AWG	Insulation Diameter	Material and Finish	UL	SP	Part Number
22-18	.060-.110 1.52-2.79	Brass	X	X	63933-1
		Brass/Tin	X	X	63933-2
18-14	.090-.155 2.28-3.93	Brass	X	X	63854-1
		Brass/Tin	X	X	63854-2
16-12 or (2) 18 or (2) 16 or (1) 18 and (1) 16	.120-.170 3.04-4.31	Brass	X	X	1217092-1
		Brass/Tin	X	X	1217092-2

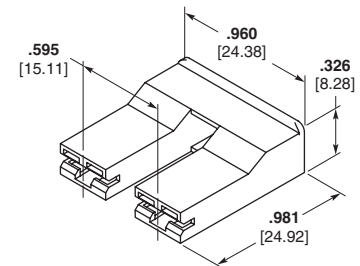
**Mark III  
Receptacle Housings**



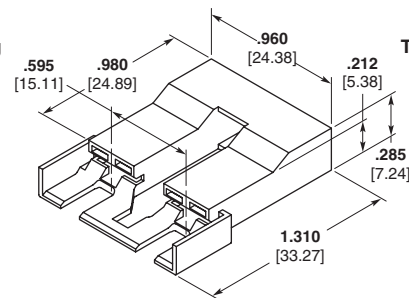
**One Circuit Housing**  
A



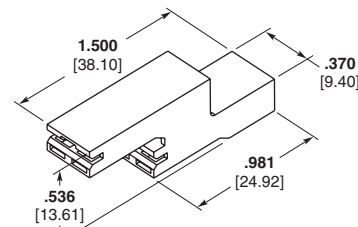
**Two Circuit Wax Motor Housing**  
B



**Two Circuit Water Valve Housing**  
C



**Two Circuit Water Valve Housing with Latch**  
D



**Two Circuit Housing**  
E

Style	Material	UL 94 <sup>1</sup>	Color <sup>2</sup>	Part Number	Accepts	UL	SP
A	Nylon	V2	Natural	521120-1	250 Series Positive Lock Mark III Terminals.	X	X
B	Nylon	V0	Natural	521766-1	250 Series FASTON and Positive Lock Mark III Terminals. Examples include 63306 and 63854.	X	X
			Natural	2-521253-1 <sup>1</sup>			
			Natural	521253-1			
			Natural	521253-2			
D	Nylon	V2	Red	521253-2	250 Series FASTON and Positive Lock Mark III Terminals. Examples Include 63306 and 63854	X	X
			Red	1-521253-2			
			Green	1-521253-3			
			Blue	1-521253-7			
			Blue	1-521253-7			
C	Nylon	V2	Natural	521119-1		X	X
E	Nylon	V0	Natural	521955-1	250 Series MK III Positive Lock Receptacles 63993, 63854, 1217092	X	X

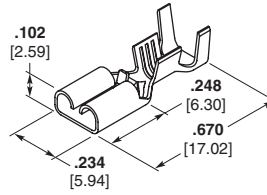
**Note:** All part numbers are RoHS compliant.

<sup>1</sup> Housing material to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.

Positive Lock Receptacles

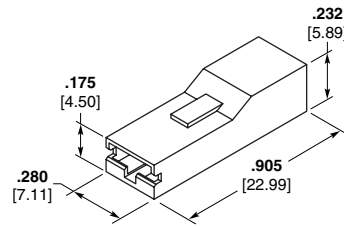
**Positive Lock Receptacles** (Continued)

**Mark III  
187 Series Receptacles**

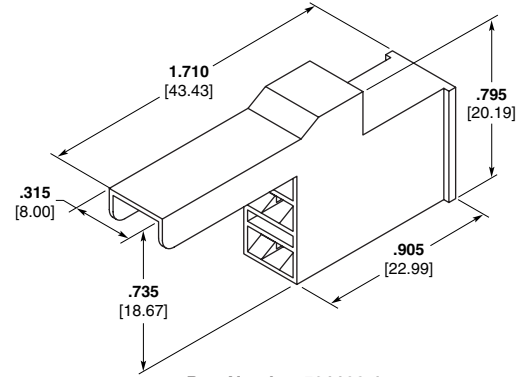


Wire Range AWG	Insulation Dia.	Mating Tab Thickness	Material and Finish	Terminal Part No.	UL	CS	Applicator
22-18	.090-.130 2.29-3.30	.020 0.51	Tin Plated Brass	1217113-2	—	—	680645-2
		.032 0.81	Tin Plated Brass	1217097-2	—	—	680645-2
18-14	.150-.200 3.81-5.08	.020 0.51	Brass	1217114-1	—	—	680652-2
		.020 0.51	Tin Plated Brass	1217114-2	—	—	680652-2
18-14 (2) 18	.150-.200 3.81-5.08	.032 0.81	Brass	1217096-1	X	X	680652-2

**Mark III  
187 Series  
Receptacle Housings**



Part Number 521187-1

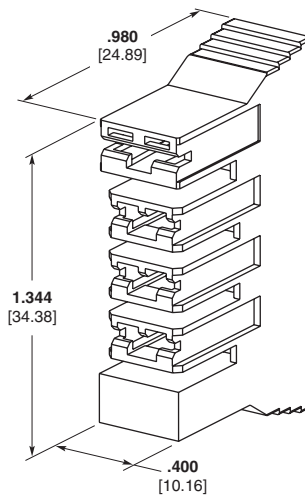


Part Number 521198-1

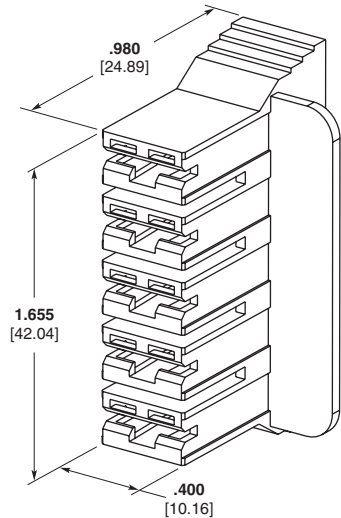
Material	UL 94	Color	UL	CS	Part Number
Nylon	V2	Natural	X	X	521187-1
Nylon	V2	Natural	X	—	521198-1

**Mark III  
HVAC Motor  
Receptacle Housings**

Material	Color	UL	CS	Part Number
Nylon	Natural	X	X	521780-1
Nylon	Natural	X	X	521781-1



Part Number 521781-1  
4-Position

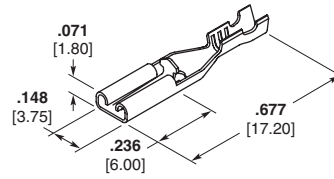


Part Number 521780-1  
5-Position

**Note:** All part numbers are RoHS compliant.

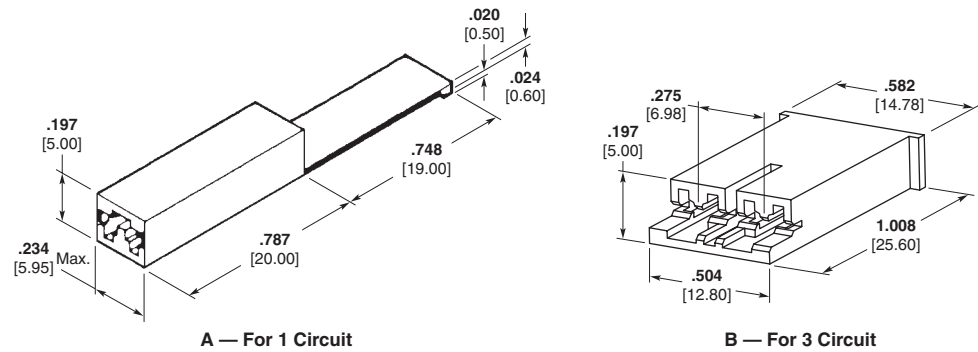
**Positive Lock Receptacles** (Continued)

**110 Series  
Straight Receptacles**



Wire Range AWG	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	UL	CS	Terminal Part No.
24-20	.020 0.51	.040-.070 1.02-1.78	Pre-Tin Brass	.010 0.25	—	—	175411-1
20-16	.020 0.51	.080-.122 2.03-3.10	Pre-Tin Brass	.010 0.25	—	—	174777-1

**Receptacle Housing  
Applicable Contact  
Part Number 175411, 174777**



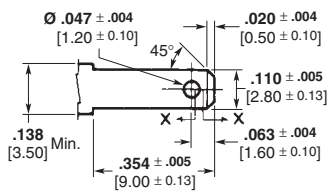
Style	Material	UL 94	Color	UL	CS	Part Number
A	6/6 Nylon	V2	Natural	X	X	174779-1
B	4/6 Nylon	V2	Black	—	—	1969227-1

Positive Lock Receptacles

**Tab Dimension  
For Signal Circuit**

**For 1 Circuit**

**Top View**



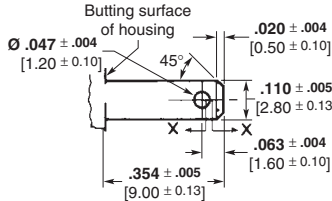
**Side View**



**Type A**

(When using tab shoulder for butting)

**Top View**



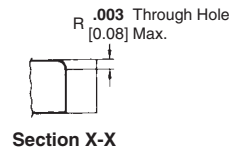
**Side View**



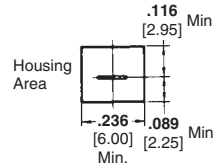
**Type B**

(When using resin, etc., for butting)

Sagging of the tab's hole must not exceed 0.08 mm.

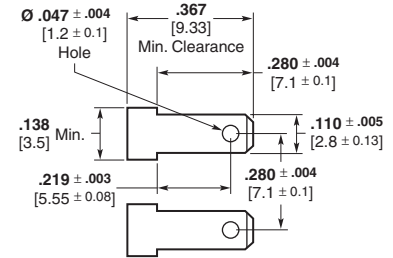


**Section X-X**



**Housing Outline**



**For 2 Circuit**

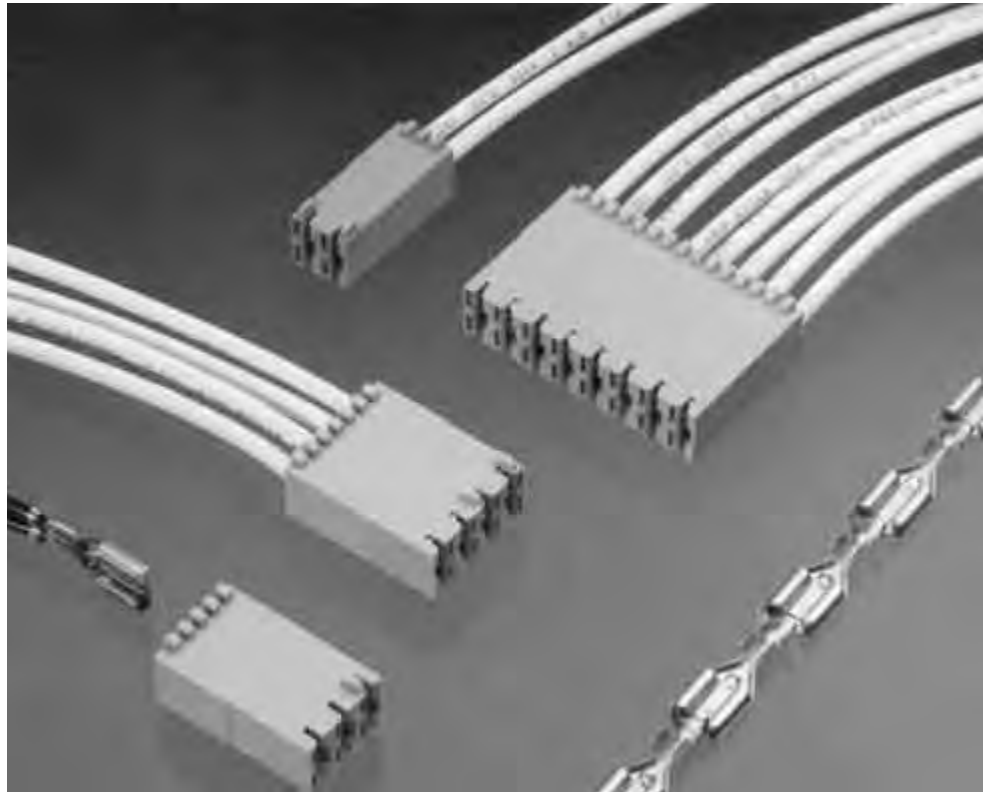


**Note:** All part numbers are RoHS compliant.

## Positive Lock RAST 5 Connector System

### Product Facts

- Mates with .250 x .032 [6.35 x 0.81] tabs built on 5 mm centerlines
- Keying and polarization features
- Utilizes Positive Lock Mark III Receptacles
- Terminals available for 22-18 AWG, 18-14 AWG single wire or 18-16 AWG double wire applications
- Plain brass and tin plated terminals available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association File No. LR7189 



The Positive Lock RAST 5 connector system has been designed to mate with a control, switch or printed circuit board that has .250 x .032 [6.35 x 0.81] thick tabs built on 5 mm centerlines. This system utilizes our popular Positive Lock Mark III Receptacles and a series of housings to provide customers with a reliable solution to their wire management needs. This line of connectors offers keying and polarization features built into the housings that eliminate mismatching and crossed wires. Two through eight circuit housings facilitate improved assembly

operations and the Positive Lock Terminal provides excellent retention of the connector.

The acronym RAST 5 in the title is a reference to the European design standard for appliance wiring and component design, "Raster Anschluss Steck Technik 5 mm". This standard outlines a system of keying, polarization and latching that is popular in Europe and other parts of the world. The Positive Lock RAST 5 system has been designed to mate with many of the components built with a RAST 5 standard interface. This system is an excellent way for OEMs or their

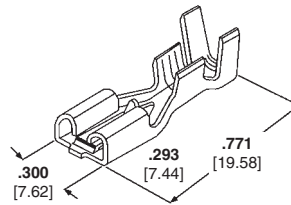
subcontractors to use existing lead makers and termination equipment to produce connectors that mate to controls with RAST interfaces.

While the origins of this product are in the appliance industry, many other industries are embracing this style of connector. Marine, exercise equipment and hand tool manufacturers are recent examples of customers beginning to use this system. Any application where .250 x .032 [6.35 x 0.81] tabs are built on 5 mm centerlines is a potential candidate for this popular connector system.

See TE catalog 296599 for additional RAST products.

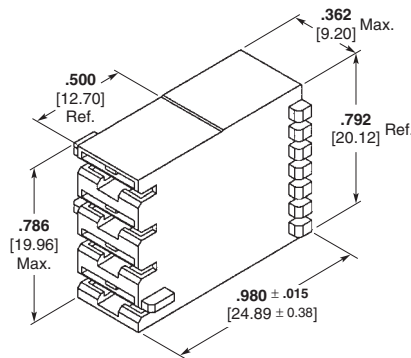
**Positive Lock RAST 5 Connector System** (Continued)

**Mark III**  
**250 Series Receptacles**  
**Stock Thickness** — .013 [0.33]  
**Tab size** — .032 [0.81]

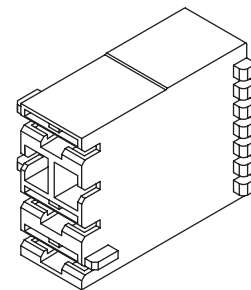


Wire Range AWG	ID	Material and Finish	Part Number			Applicator No.
22-18	.060-.110 1.52-2.79	Brass	1217378-1	X	X	1852165-2
		Tin Plated Brass	1217378-2	X	X	1852165-2
(2) 18	.090-.155 2.29-3.94	Brass	1217094-1	X	X	680653-2
		Tin Plated Brass	1217094-2	X	X	680653-2
(2) 18	.120-.170 3.04-4.32	Brass	1217095-1	X	X	680654-2
		Tin Plated Brass	1217095-2	X	X	680654-2
(2) 16	(2) .120 Max. 3.05	Tin Plated Brass	1217095-2	X	X	680654-2

**Receptacle Housings**  
**Material** — 94 V-0, 6/6 Nylon



Standard Version



Blocked Circuit Version

Description			Part Number	
			Standard Version <sup>4</sup>	Blocked Circuit Version <sup>5</sup>
2 Position	X	X	521204	—
3 Position	X	X	521205	521782
4 Position	X	X	521206	521295
5 Position	X	X	521207	521267
6 Position	X	X	521208	521435
7 Position	X	X	521209	521935
8 Position	X	X	521210	—
9 Position	X	X	521746	521936
10 Position	X	X	521792	521836
11 Position	X	X	521699	1969335

- Notes:**
1. All part numbers are RoHS compliant.
  2. Housing base part number provided.
  3. Standard colors are natural and blue.
  4. Keying patterns determined by part dash number. Refer to the customer drawing for pattern options.
  5. Blocking patterns determined by part dash number. Refer to the customer drawing for pattern options.

**Note:** All part numbers are RoHS compliant.



## Ultra-Fast Fully Insulated FASTON Receptacles and Tabs

### Product Facts

- One-piece Fully Insulated Premier Line FASTON Receptacle crimp helps prevent shock and short hazards
- Designed for correct lead-in of tab
- Designed for full mating with a variety of tab styles including those with shoulders
- Funnel wire entry
- Wire Stop
- Visual inspection of crimp and wire brush
- Assemblies are color-coded by wire size
- Assemblies contain wire size and tab size designation
- Mating tab thickness marked on terminal and visible through housing (.110, .187 and .205 Series)
- Application tooling available to meet production requirements
- Tin plated copper alloy terminals
- UL rated at + 105°C
- Terminates 26-10 AWG solid, fused and stranded wire (Flags terminate stranded wire only)

### Performance Capabilities

- Meets UL-310 specification for quick connect terminals; UL listed under File No. E-66717 
- Meets CSA C22.2, No. 153 specification for quick connect terminals; CSA Certified under File No. LR 7189 
- 600-volt application capability (1,000 volts for signs and fixtures)



The Ultra-Fast Fully Insulated FASTON Receptacle and Tab offers the advantage of a completely protected terminal and a wire crimp with comparable electromechanical performance to open barrel "F" crimp FASTON Terminals. The "User-Friendly" design combines easy mating with rounded corners. The .187 and .250 series receptacles incorporate a two-stage roll configuration and a cantilever mounted dimple which provides easy insertion and multiple independent points of contact for reduced tab interface resistance.

Ultra-Fast Fully Insulated FASTON Receptacles, Flag Receptacles and Tabs preclude the need for costly electrical safety interlocks or special protective shields to help prevent shock hazards. In addition, electrical short circuits from exposed leads are eliminated, even in equipment requiring close contact spacing.

The Ultra-Fast FASTON Receptacle, Flag Receptacle

and Tab are preinsulated assemblies featuring a housing molded from type 6/6 nylon material with a +130°C UL temperature rating.

The Ultra-Fast FASTON Receptacle housing completely encloses a tin plated copper alloy Premier FASTON receptacle which has been stress-relieved for increased durability and resistance to abuse. The FASTON receptacle is recessed sufficiently within the housing to allow its use in 600-volt applications. The receptacle portion of the terminal is designed for positive mating with a variety of tabs, including those with shoulders. The housing has a slotted membrane which is displaced by two tab shoulders allowing proper engagement of tab and receptacle while maintaining the fully insulated characteristic.

Positive entry and lead-in of the tab is provided by the inner housing wall and the lead-in on the terminal rolls.

This permits positive engagement, even in blind mating locations.

The Ultra-Fast FASTON Tab housing completely encloses a tin plated copper alloy FASTON tab. The FASTON tab is recessed sufficiently within the housing to allow its use in 600-volt applications. The housing is designed to completely encapsulate the tab and receptacle when the two are mated.

Quality control is easily maintained. The nylon housing is translucent, allowing visual inspection of the termination. In addition, a crimp code on the platform hand tool is indented into the housing during the crimping operation which identifies that the proper crimp dies were used.

Depending on production requirements, TE provides a complete selection of terminating equipment from hand tools to automatic lead makers.

**Ultra-Fast Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Test Specifications**

The following information and accompanying graphs are taken from TE Product Qualification Testing of Ultra-Fast FASTON product. Tests were conducted on representative production samples, and all values shown are averages of group results. The values shown are typical results and may vary due to differences in processing, application and methods of testing.

**Current vs. Temperature Rise (16 AWG)**



The heat generated by the current passing through a termination is a primary limit to the load-carrying capabilities of the application. A low termination resistance will produce a lower temperature rise as current is applied. In order to evaluate this characteristic, UL has established current ratings for each wire size and set a maximum temperature rise to assure safe operation. For example, 16 AWG stranded wire has a UL 310 maximum temperature rise of 30°C above ambient temperature at the rated current of 10 amps. In the testing of the Ultra-Fast FASTON product applied to 16 AWG wire, the temperature rise was found to be below 10°C at the rated current. In fact, the temperature rise did not exceed 30°C until the current was above 20 amps, more than twice the rated current.

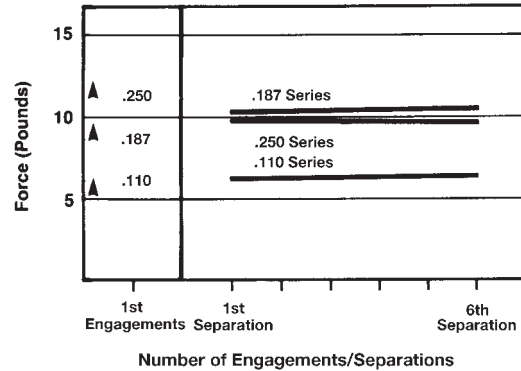
**Current Cycling vs. Temperature Rise (16 AWG)**



Maintaining a safe temperature rise during cyclic applications of excessive current is the toughest challenge for the crimp-thru-plastic concept. The ability of the Ultra-Fast FASTON product line to meet this goal sets it apart from other preinsulated terminations. TE's experience in crimp development results in a termination that exhibits stable heating characteristics which are well within the safety requirements of the industry.

To test a product, it must be subjected to 500 on and off cycles at twice the rated current for the particular wire size. The temperature rise is measured on the 24th cycle and the 500th cycle. The maximum temperature rise is limited to 85°C above ambient temperature with a maximum of 15°C increase on any sample between the 24th and 500th cycles. Our testing of 16 AWG wire application indicated a 25.5°C maximum temperature rise up to 500 cycles, with a maximum increase of 0.8°C from the 24th to the 500th cycle for one sample in the test group.

**Engagement/Separation**



The forces caused by the rolls of FASTON style terminals determine the contact interface integrity of a mated receptacle and tab. These forces must be high enough to prevent oxidation and corrosion from forming inside the contact area. As these forces are raised to increase the electrical performance, the engagement and separation forces for mating the contacts are significantly increased. For this reason, the Premier Low Insertion Force FASTON concept of receptacle design has been carried over to the Ultra-Fast FASTON products. This feature provides consistent engagement and separation forces while maintaining a high standard of electrical reliability.

**Crimp Tensile**



<sup>1</sup> UL does not have requirements for wire gauges below 22 AWG. **Note:** Minimum requirements are per TE specifications.

The crimp tensile strength of a wire-to-terminal connection is important in guarding against such hazards as wire flexing, vibration and wire strain. However, maximum tensile strength does not insure maximum electrical performance. An acceptable compromise between tensile strength and electrical performance must always be reached, using recommended crimp heights.

**Ultra-Fast Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Ultra-Fast Fully Insulated FASTON Receptacles**

**Material**

- Housing** — Nylon Type 6/6
- Flammability** — UL 94 V-2
- Terminal** — Tin plated, copper alloy
- Color Code (Translucent)**
- Violet** — 26-22 AWG
- Red** — 22-18 AWG
- Blue** — 16-14 AWG
- Yellow** — 12-10 AWG



Description	Wire Range AWG	Ins. Dia. Max.	Dimensions				Mating Tab	Terminal Base Material	Part Numbers			
			A	B	C	D			Strip	Loose Piece		
.110/.125 Series	26-22	.100 2.54	.145	.275	.138	.735	.020 x .110/.125 0.51 x 2.79/3.18	Brass	7-520365-2 <sup>1</sup>	7-520366-2 <sup>1</sup>		
			3.68	6.99	3.51	18.67	.016 x .110/.125 0.41 x 2.79/3.18	Brass	2-520080-2 <sup>1</sup>	2-520081-2 <sup>1</sup>		
	22-18	.120 3.05	.160 4.06	.275	.167	.735	.020 x .110/.125 0.51 x 2.79/3.18	Brass	2-520083-2	2-520084-2		
				6.99	4.24	18.67	.032 x .110/.125 0.81 x 2.79/3.18	Brass	2-520272-2 <sup>3</sup>	2-520273-2		
				.230	.155	.275	.295	.865	.020 x .110/.125 0.51 x 2.79/3.18	Brass	2-520306-2	—
				5.84	3.94	6.99	7.49	21.97	.032 x .110/.125 0.81 x 2.79/3.18	Brass	2-520310-2	—
	16-14	.260 6.60	.175 4.45	.275	.325	.865	.020 x .110/.125 0.51 x 2.79/3.18	Brass	3-520370-2 <sup>2</sup>	—		
				6.60	8.26	21.97	.020 x .187 0.51 x 4.75	Brass	2-520181-2 <sup>3</sup>	2-520182-2		
	.187 Series	22-18	.135 3.43	.165	.336	.200	.855	.032 x .187 0.81 x 4.75	Phos. Brz.	2-520181-4	—	
				4.19	8.53	5.08	21.72	.020 x .187 0.51 x 4.75	Brass	2-520193-2 <sup>3</sup>	2-520194-2	
22-18		.230 5.84	.165 4.19	.336	.295	.935	.020 x .187 0.51 x 4.75	Brass	2-520261-2 <sup>3</sup>	2-520262-2		
				8.53	7.49	23.75	.032 x .187 0.81 x 4.75	Brass	2-520274-2	2-520275-2		
16-14		.160 4.06	.185 4.70	.336	.225	.855	.020 x .187 0.51 x 4.75	Brass	3-350815-2	3-350816-2		
				8.53	5.72	21.72	.032 x .187 0.81 x 4.75	Brass	3-520124-2 <sup>3</sup>	3-520125-2		
				.260	.185	.336	.325	.935	.020 x .187 0.51 x 4.75	Brass	3-520150-2	3-520151-2
				6.60	4.70	8.53	8.26	23.75	.032 x .187 0.81 x 4.75	Brass	3-520276-2 <sup>3</sup>	—
.205 Series		22-18	.135 3.43	.195	.409	.200	.855	.020 x .205 0.81 x 5.21	Brass	2-521406-2	—	
				4.95	10.39	5.08	21.72	.032 x .205 0.81 x 5.21	Brass	2-521308-2	—	
.250 Series	22-18	.135 3.43	.195	.409	.200	.855	.032 x .250 0.81 x 6.35	Brass	2-520183-2 <sup>3</sup>	2-520184-2		
			4.95	10.39	5.08	21.72	.032 x .250 0.81 x 6.35	Phos. Brz.	2-520183-4	2-520184-4		
	22-18	.230 5.84	.195 4.95	.409	.295	.935	.032 x .250 0.81 x 6.35	Brass	2-520263-2	2-520264-2		
				10.39	7.49	23.75	.032 x .250 0.81 x 6.35	Phos. Brz.	2-520263-4	—		
	16-14	.160 4.06	.195 4.95	.409	.225	.855	.032 x .250 0.81 x 6.35	Brass	3-350819-2	3-350820-2		
				10.39	5.72	21.72	.032 x .250 0.81 x 6.35	Phos. Brz.	3-520116-2	3-520117-2		
12-10	.260 6.60	.195 4.95	.409	.325	.935	.032 x .250 0.81 x 6.35	Brass	3-520140-2	3-520141-2			
			10.39	8.26	23.75	.032 x .250 0.81 x 6.35	Phos. Brz.	3-520140-4	—			
12-10	.320 8.13	.250 6.35	.409	.388	.935	.032 x .250 0.81 x 6.35	Brass	4-520447-2 <sup>3</sup>	4-520448-2			
			10.39	9.86	23.75							

<sup>1</sup> UL Recognized, CSA Certified.  
<sup>2</sup> UL Recognized 8 AMPS Max. CSA Certified.  
<sup>3</sup> Available with black insulator — Part Number 9-XXXXXX-2.

**Note:** All part numbers are RoHS compliant.

**Ultra-Fast Fully Insulated FASTON Receptacles and Tabs (Continued)**

**Ultra-Fast Fully Insulated FASTON Tabs**

**Material**

- Housing** — Nylon Type 6/6
- Flammability** — UL 94 V-2
- Terminal** — Tin plated, copper alloy
- Color Code (Translucent)**
- Red** — 22-18 AWG
- Blue** — 16-14 AWG
- Yellow** — 12-10 AWG



Description	Wire Range AWG	Ins. Dia. Max.	Dimensions				Tab Size	Terminal Base Material	Part Numbers	
			A	B	C	D			Strip	Loose Piece
.250 Series	22-18	.135	.290	.522	.205	.855	.032 x .250	Brass	2-520102-2	2-520103-2
		3.43	7.37	13.26	5.21	21.72	0.81 x 6.35			
		.230	.290	.522	.295	.935	.032 x .250			
	16-14	5.84	7.37	13.26	7.49	23.75	0.81 x 6.35	Brass	2-521144-2	2-521192-2
		.160	.290	.522	.230	.855	.032 x .250			
		4.06	7.37	13.26	8.26	23.75	0.81 x 6.35			
12-10	.260	.290	.522	.325	.935	.032 x .250	Brass	3-521142-2	3-521191-2	
	6.60	7.37	13.26	8.26	23.75	0.81 x 6.35				
.187 Series	22-18	.320	.352	.522	.388	.935	.032 x .250	Brass	4-521097-2	4-521098-2
		8.13	8.94	13.26	9.86	23.75	0.81 x 6.35			
		.135	.250	.448	.205	.793	.020 x .187			
		3.43	6.35	11.38	5.21	20.14	0.51 x 4.75			
						.032 x .187		2-521102-2	2-521103-2	
						0.81 x 4.75		2-521104-2	2-521105-2	

**Ultra-Fast Fully Insulated FASTON Flag Receptacles**

**Material**

- Housing** — Nylon Type 6/6
- Flammability** — UL 94 V-2
- Terminal** — Tin plated, copper alloy
- Color Code (Translucent)**
- Red** — 22-18 AWG
- Blue** — 16-14 AWG
- Yellow** — 12-10 AWG



Description	Wire Range <sup>1</sup> AWG	Ins. Dia. Max.	Dimensions					Mating Tab	Terminal Base Material	Part Numbers	
			A	B	C	D	E			Strip	Loose Piece
.187 Series	22-18	.165	.187	.320	.235	.636	.515	.020 x .187	Brass	2-520334-2 <sup>2</sup>	2-520335-2
		4.19	4.75	8.13	5.97	16.15	13.08	0.51 x 4.75			
		.032 x .187	0.81 x 4.75								
	16-14	.185	.187	.320	.255	.632	.515	.020 x .187	Brass	3-520338-2	3-520339-2
		4.70	4.75	8.13	6.48	16.05	13.08	0.51 x 4.75			
		.032 x .187	0.81 x 4.75								
.205 Series	22-18	.260	.187	.320	.325	.668	.565	.020 x .187	Brass	3-520340-2 <sup>2</sup>	—
		6.60	4.75	8.13	8.26	16.97	14.35	0.51 x 4.75			
	22-18	.165	.187	.385	.235	.636	.580	.032 x .205	Brass	3-520997-2	—
		4.19	4.75	9.78	5.97	16.15	14.73	0.81 x 5.21			
.250 Series	22-18	.165	.187	.385	.235	.636	.580	.032 x .250	Brass	2-520128-2	2-520129-2
		4.19	4.75	9.78	5.97	16.15	14.73	0.81 x 6.35			
		.230	.187	.385	.295	.665	.630	.032 x .250			
	16-14	5.84	4.75	9.78	7.49	16.89	16.00	0.81 x 6.35	Brass	2-520856-2	—
		.185	.187	.385	.255	.632	.580	.032 x .250			
		4.70	4.75	9.78	6.48	16.05	14.73	0.81 x 6.35			
22-18	.260	.187	.385	.325	.668	.630	.032 x .250	Brass	3-520132-2 <sup>2</sup>	3-520133-2	
	6.60	4.75	9.78	8.26	16.97	16.00	0.81 x 6.35				

<sup>1</sup> Stranded wire only.  
<sup>2</sup> Available with black insulator — Part Number 9-XXXXXX-2.

**Note:** All part numbers are RoHS compliant.

Ultra-Fast Fully Insulated FASTON Receptacles and Tabs

## Ultra-Fast Plus Fully Insulated FASTON Receptacles and Tabs

### Product Facts

- One-piece fully insulated premier line FASTON receptacle with insulation crimp helps prevent shock and short hazards
- Designed for correct lead-in of tab
- Designed for full mating with a variety of tab styles including those with shoulders
- Funnel wire entry
- Wire stop
- Visual inspection of crimp and wire brush
- Assemblies are color-coded by wire size
- Assemblies contain wire size and tab size designation
- Mating tab thickness marked on terminal and visible through housing (110 and 187 series)
- Application tooling available to meet production requirements
- Tin plated copper alloy terminals
- UL rated at +105°C
- Terminates 22-14 AWG solid, fused and stranded wire
- Complies with the IEC 380, 601, 950, and UL 1950 requirements for a secondary means of insulation fixing

### Performance Capabilities

- Meets UL-310 specification for quick connect terminals; UL listed under File No. E-66717 
- Meets CSA C22.2, No.153 specification for quick connect terminals; CSA certified under File No. LR 7189 
- 600-volt application capability (1,000 volts for signs and fixtures)

- Tested by TUV File No. E9071003 as suitable for end product certification to the following standards:

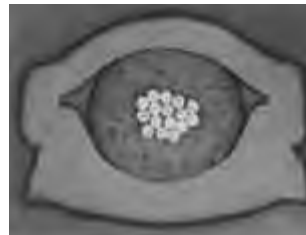
EN 60 950/09.87

DIN IEC 380/VDE 0806/08.81

DIN IEC 601-1 Part 1/VDE 0750 T1/05.82

DIN VDE 0700 T1/02.81

Ultra-Fast Plus fully insulated FASTON receptacles and tabs offer all the advantages of the standard Ultra-Fast product plus an insulation crimp.



Insulation Crimp Cross Section

Ultra-Fast Plus fully insulated FASTON receptacles and tabs preclude the need for costly electrical safety interlocks or special protective shields to help prevent shock hazards. In addition, electrical short circuits from exposed leads are eliminated, even in equipment requiring close contact spacing.

Ultra-Fast Plus FASTON receptacles and tabs are preinsulated assemblies featuring a co-molded housing produced from two different nylon materials. The receptacle/ tab and wire barrel portions of the



housing are molded from type 6/6 nylon material with a +130°C UL temperature rating. The insulation barrel is molded from a premium grade nylon selected to retain the insulation crimp shape. This premium nylon exhibits minimal springback, thus providing actual insulation crimp tensile strength as well as strain relief for applications where extreme wire dressing and/or vibration are present.

The Ultra-Fast Plus FASTON receptacle housing completely encloses a tin plated copper alloy premier FASTON receptacle which has been stress relieved for increased durability and resistance to operator abuse. The FASTON receptacle is recessed sufficiently within the housing to allow its use in 600-volt applications. The receptacle portion of the terminal is designed for positive mating with a variety of tabs, including those with shoulders. The housing has a slotted membrane which is displaced by two tab shoulders allowing proper

engagement of tab and receptacle while maintaining the fully insulated characteristics.

Positive entry and lead-in of the tab is provided by the inner housing wall and the lead-in on the terminal rolls. This permits positive engagement, even in blind mating locations.

The Ultra-Fast Plus FASTON tab housing completely encloses a tin plated copper alloy FASTON tab. The FASTON tab is recessed sufficiently within the housing to allow its use in 600-volt applications. The housing is designed to completely encapsulate the tab and receptacle when the two are mated.

Quality control is easily maintained. The nylon housing is translucent, allowing visual inspection of the termination.

Depending on production requirements, TE provides a complete selection of terminating equipment from hand tools to automatic lead makers.

**Ultra-Fast Plus Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Ultra-Fast Plus Fully Insulated FASTON Receptacles**

**Material**

**Housing** — Nylon

**Flammability** — UL 94 V-2

**Terminal** — Tin plated, copper alloy

**Color Code (Translucent)**

**Red** — 22-18 AWG

**Blue** — 16-14 AWG



Description	Wire Range AWG	Ins. Dia. Range	Dimensions				Mating Tab	Terminal Base Material	Part Numbers	
			A	B	C	D			Strip	Loose Piece
.110/.125 Series	22-18	.060-.120 1.52-3.05	.160	.275	.167	.735	.020 x .110/.125 0.51 x 2.79/3.18	Brass	2-520932-2	—
			4.06	6.99	4.24	18.67	.032 x .110/.125 0.81 x 2.79/3.18	Brass	2-520979-2	—
.187 Series	22-18	.060-.135 1.52-3.43	.165	.336	.200	.855	.020 x .187 0.51 x 4.75	Brass	2-520401-2	2-520409-2
			4.24	8.53	5.08	21.72	.032 x .187 0.81 x 4.75	Brass	2-520403-2	2-520411-2
	16-14	.090-.160 2.29-4.06	.185	.336	.225	.855	.020 x .187 0.51 x 4.75	Brass	3-520402-2	3-520410-2
			4.70	8.53	5.72	21.72	.032 x .187 0.81 x 4.75	Brass	3-520404-2	3-520412-2
.250 Series	22-18	.060-.135 1.52-3.43	.195	.409	.200	.855	.032 x .250 0.81 x 6.35	Brass	2-520405-2	2-520407-2
			4.95	10.39	5.08	21.72	.032 x .250 0.81 x 6.35	Brass	3-520406-2	3-520408-2
	16-14	.090-.160 2.29-4.06	.195	.409	.225	.855	.032 x .250 0.81 x 6.35	Brass	3-520406-2	3-520408-2

**Ultra-Fast Plus Fully Insulated FASTON Tabs**

**Material**

**Housing** — Nylon

**Flammability** — UL 94 V-2

**Terminal** — Tin plated, copper alloy

**Color Code (Translucent)**

**Red** — 22-18 AWG

**Blue** — 16-14 AWG



Description	Wire Range AWG	Ins. Dia. Range	Dimensions				Mating Tab	Terminal Base Material	Part Numbers	
			A	B	C	D			Strip	Loose Piece
.187 Series	22-18	.060-.135 1.52-3.43	.250	.488	.205	.793	.020 x .187 0.51 x 4.75	Brass	2-521360-2	—
			6.35	11.38	5.21	20.14	.032 x .187 0.81 x 4.75	Brass	2-521361-2	—
.250 Series	22-18	.060-.135 1.52-3.43	.290	.522	.205	.855	.032 x .250 0.81 x 6.35	Brass	2-521055-2	—
			7.37	13.26	5.21	21.72	.032 x .250 0.81 x 6.35	Brass	3-521057-2	—
	16-14	.090-.160 2.29-4.06	.290	.522	.230	.855	.032 x .250 0.81 x 6.35	Brass	3-521057-2	—
			7.37	13.26	5.84	21.72				

**Note:** All part numbers are RoHS compliant.

## Ultra-Pod Fully Insulated FASTON Receptacles and Tabs

### Product Facts

- Reduced insertion force
- Designed for correct lead-in of tab
- Mates with typical 110, 187 and 250 series tab styles including those with shoulders
- 110 series accepts 22-18 AWG [0.3–1 mm<sup>2</sup>], 187 series accepts 20-16 AWG [0.5–1.4mm<sup>2</sup>] wire and 250 series accepts 22-10 AWG [0.3–5 mm<sup>2</sup>] wire
- Visual inspection of crimp and wire brush
- Terminated by automatic or semi-automatic equipment to meet production requirements
- Complies with the IEC 380, 601 and 950 and UL 1950 requirements for a secondary means of insulation fixing
- Listed by Underwriters Laboratories Inc., File No. E66717 
- CSA certified, File No. LR 7189 

### Technical Documents

#### Product Specification

108-1285  
108-2215

#### Application Specification

114-2124

### Hand Tools — Insertion

250 Series—314916-1  
250 Series Flag—314919-1

### Hand Tools — Extraction

250 Series—314917-1



Ultra-Pod fully insulated FASTON receptacles offer the newest in one-step automatic application of insulated quick connects. The unique integral plastic carrier designed specifically for this product allows insulated F-Crimp terminations to be produced quickly and easily. Applied cost savings are attainable with either bench or high-speed automatic termination equipment and the elimination of any secondary insulation operations. Both the crimping of the terminal and the terminal insulating occur in a single stroke of the press and applicator — the crimping on the down-stroke and the insulating on the up-stroke.

The receptacles contained within the Ultra-Pod FASTON receptacle assemblies are tested and customer qualified and can be used in existing applications where insulation has been accomplished by other means. The low insertion force design provides easier tab insertion, reduces operator fatigue and improves the productivity and reliability of the end assembly operation.

The insulating housing is produced by a unique molding process which provides an integral carrier and eliminates the crimp location problems related to secondary carriers. This housing, produced from 130°C rated 6/6 nylon,

covers the FASTON receptacle sufficiently to provide for use in 600-volt applications. Most importantly, this insulating system helps eliminate the workplace hazards and labor costs of chemically expanded or heat shrink tubing.

Depending on production requirements, TE provides a complete selection of terminating equipment from bench press to automatic lead maker.

**Ultra-Pod Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Insulation Support**



Description	Wire Range	Ins. Dia. Range	Dimensions				Mating Tab	UL 94 <sup>1</sup>	Color	Material and Finish	Part Numbers
			A	B	C	D					
.110 Series	22-18	.080-.120 2.03-3.05	.151 3.83	.224 5.69	.205 5.21	.805 20.45	.020 0.51	V-2	Natural	Brass	521228-1
										Tin Plated Brass	521228-2
										Tin Plated Brass	521408-2 <sup>4</sup>
										Brass	521436-1 <sup>4</sup>
										Tin Plated Brass	521436-2
										Brass	521437-1 <sup>4</sup>
Tin Plated Brass	521437-2 <sup>2,4</sup>										
.187 Series	20-16	.090-.130 2.29-3.30	.170 4.32	.295 7.49	.200 5.08	.775 19.68	.020 0.51	V-2	Natural	Brass	520973-1
										Tin Plated Brass	520973-2
										Brass	521225-1
										Tin Plated Brass	521225-2
										Brass	520982-1
										Tin Plated Brass	520982-2
	18-16 or 2-18	(2) .105 Max. 2.67	.170 5.33	.295 7.49	.200 5.08	.775 19.68	.020 0.51	V-2	Natural	Tin Plated Brass	521284-1
										Brass	521284-2
										Brass	521293-1
										Tin Plated Brass	521293-2
										Brass	521995-2 <sup>4,5</sup>
										Tin Plated Brass	521586-1
.250 Series	22-18	.090-.130 2.29-3.30	.195 4.95	.370 9.40	.225 5.72	.945 24.00	.032 0.81	V-2	Natural	Brass	520988-1
										Tin Plated Brass	520988-2
										Brass	521368-1
										Tin Plated Brass	521368-2
										Brass	521997-1 <sup>4,5</sup>
										Tin Plated Brass	520963-1
	18-14	(2) .105 Max. 3.05-4.32	.195 4.95	.370 9.40	.225 5.72	.945 24.00	.032 0.81	V-0	Natural	Brass	521367-1
										Tin Plated Brass	521367-2
										Tin Plated Brass	521011-2 <sup>2</sup>
										Nickel Plated Steel	521011-1 <sup>2,3</sup>
										Brass	521113-2 <sup>3</sup>
										Brass	521637-1
18-14 or 2-18	(2) .105 Max. 4.95	.195 4.95	.370 9.40	.225 5.72	.945 24.00	.032 0.81	V-2	Natural	Tin Plated Brass	521637-2	
									Brass	521998-2 <sup>4,5</sup>	
									Brass	521632-1	
									Tin Plated Brass	521632-2	
									Brass	520974-1	
									Tin Plated Brass	520974-2	
14-10	.130-.180 3.30-4.57	.195 4.95	.370 9.40	.225 5.72	.945 24.00	.032 0.81	V-2	Natural	Brass	521366-1	
									Tin Plated Brass	521366-2	

<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> 150°C rated nylon.  
<sup>3</sup> UL recognized.  
<sup>4</sup> No UL or CSA approvals.  
<sup>5</sup> VDE certified to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.

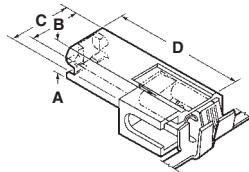
**Note:** All part numbers are RoHS compliant.

Ultra-Pod Fully Insulated FASTON Receptacles



**Ultra-Pod Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Flag Insulation Support**



Description	Wire Range	Ins. Dia. Range	Dimensions				Mating Tab	UL 94 <sup>1</sup>	Color	Material and Finish	Part Numbers
			A	B	C	D					
.187 Series	22-18	.060-.110 1.52-2.79	.170 4.32	.295 7.49	.485 12.32	.680 17.27	.020 0.51	V-2	Natural	Brass	521470-1 <sup>4</sup>
										Tin Plated Brass	521470-2 <sup>4</sup>
										1969106-2 <sup>3,5</sup>	
										Brass	521596-1 <sup>4</sup>
										Tin Plated Brass	521596-2 <sup>4</sup>
										521598-1 <sup>3</sup>	
	18-14 or (2) 20 or (2) 18	(2) .105 Max. 2.66	.170 4.32	.295 7.49	.485 12.32	.680 17.27	.032 0.81	V-2	Natural	Brass	521598-1 <sup>3</sup>
										Tin Plated Brass	521598-2 <sup>3</sup>
										Brass	521600-1 <sup>4</sup>
										Tin Plated Brass	521600-2 <sup>4</sup>
										521471-1 <sup>4</sup>	
										521471-2 <sup>4</sup>	
.250 Series	22-18	.050-.100 1.27-2.54	.200 5.08	.370 9.40	.585 14.86	.680 17.27	.032 0.81	V-2	Natural	Brass	521050-1
										Tin Plated Brass	521050-2
										521411-1	
										Brass	521411-2
										1969109-1 <sup>3,5</sup>	
										1969109-2 <sup>3,5</sup>	
	18-14	(2) .105 Max. 2.79-4.06	.200 5.08	.370 9.40	.585 14.86	.680 17.27	.032 0.81	V-2	Natural	Brass	520971-1
										Tin Plated Brass	520971-2
										Tin Plated Brass	520971-4
										Nickel Plated Steel	521087-1 <sup>3</sup>
										521282-1	
										521282-2	
18-14 or (2) 20 or (2) 18	(2) .105 Max. 2.66	.200 5.08	.370 9.40	.585 14.86	.680 17.27	.032 0.81	V-2	Natural	Brass	521112-1	
									Tin Plated Brass	1969110-2 <sup>3,5</sup>	
									521633-1		
									521633-2		

<sup>1</sup>Flammability rating of plastic material.  
<sup>2</sup>UL pending for double wire terminations.  
<sup>3</sup>No UL or CSA approvals.  
<sup>4</sup>No CSA approvals.  
<sup>5</sup>VDE certified to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.

**Note:** All part numbers are RoHS compliant.

**Ultra-Pod Fully Insulated FASTON Receptacles and Tabs** (Continued)

**Positive Lock  
Insulation Support**



Description	Wire Range	Ins. Dia. Range	Dimensions				Mating Tab	UL 94 <sup>1</sup>	Color	Material and Finish	Part Numbers		
			A	B	C	D							
.187 Series	18-14	.110-.180 2.79-4.57	.186	.307	.265	.812	.020	V-2	Natural	Brass	521271-1 <sup>2</sup>		
			4.72	7.80	6.73	20.62	0.51			Tin Plated Brass	521271-2 <sup>2</sup>		
.250 Series	18-14	.110-.180 2.79-4.57	.205	.370	.245	.950	.032	V-2	Natural	Brass	521213-1 <sup>2</sup>		
			5.21	9.40	6.22	24.13	0.81			Tin Plated Brass	521213-2 <sup>2</sup>		
			.032	0.81	5.21	9.40	6.22	24.13	0.81	V-0	Natural	Brass	521317-1 <sup>2</sup>
												Tin Plated Brass	521317-2 <sup>2</sup>

<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> UL Recognized, CSA Certified

**Tabs  
Insulation Support**



Description	Wire Range	Ins. Dia. Range	Dimensions				Tab	UL 94 <sup>1</sup>	Color	Material and Finish	Part Numbers
			A	B	C	D					
.250 Series	18-14	.130-.180 3.30-4.57	.275	.450	.310	1.120	.032	V-2	Natural	Brass	521217-1
			6.99	11.43	7.87	28.45	0.81			Tin Plated Brass	521217-2
	12-10	.150-.200 3.81-5.08	.275	.450	.310	1.120	.032	V-0	Natural	Brass	521451-1
										6.99	11.43
12-10	.150-.200 3.81-5.08	.275	.450	.310	1.120	.032	V-2	Natural	Brass	521227-1 <sup>2</sup>	
									6.99	11.43	7.87

<sup>1</sup> Flammability rating of plastic material.  
<sup>2</sup> No UL or CSA approvals

**Note:** All part numbers are RoHS compliant.

## PIDG FASTON Receptacles and Tabs

### Product Facts

- Pre-insulated terminal designed for complete and uniform reliability in the most difficult circuit environment
- Consists of an unplated or tin plated brass body or a tin plated phosphor bronze body with a specially designed copper sleeve and insulation sleeve fitted over the terminal barrel
- Design of the tool dies and construction of the terminal insures uniform insulation thickness under crimping pressure, transmitting this pressure evenly to the center of the crimp area

### The TE Mated Tool/Terminal Concept

- TE compression crimping produces crimps for a given size wire and terminal that are precisely alike in appearance and performance
- Terminal and the crimping tool are designed as precisely matched devices
- Dies are precision-engineered from the finest hard-metal alloys
- Crimping pressure is controlled by a ratchet device on the hand tool or a corresponding pre-calibration in the crimping jaws of TE automated crimping machines

### The Crimp

- Crimping pressure does not overstress nor understress the terminal barrel — machined dies fully bottom to the precise crimp height
- Resulting termination is free of contamination
- Resistant to most shock and critical environments
- Tensile strength approaches that of the wire itself



Here is a pre-insulated terminal designed for complete and uniform reliability in most difficult circuit environments. Each PIDG Terminal consists of a tin plated brass body with a specially designed copper sleeve and insulation sleeve fitted over the terminal barrel. The design of the tool dies and the construction of the terminal promotes uniform insulation thickness under crimping pressure, transmitting this pressure evenly to the center of the crimp area.

TE compression crimping produces crimps for a given size wire and terminal that are precisely alike in appearance and performance. This is a calculated result made possible by designing the terminal and the crimping tool as precisely matched devices. The dies are precision-engineered from the finest hard-metal alloys. Crimping pressure is controlled by a ratchet device on the hand tool or a corresponding pre-calibration in the crimping

jaws of TE automated crimping machines.

Crimping pressure can neither over-stress nor understress the terminal barrel — machined dies fully bottom to the precise crimp height required.

The resulting termination is free of contamination, is resistant to shock and critical environments, and its tensile strength approaches that of the wire itself.

### Temperature Rating: 105° C

Wire Range	E66717 Recognized	LR7189 Certified
22-16	22-16 Stranded	300 V Max., 105°C Max. <sup>1</sup>
16-14	16-14 Stranded	
12-10	12-10 Stranded	

<sup>1</sup> UL and CSA — Nylon.

**PIDG FASTON Receptacles and Tabs** (Continued)

**Receptacles**

**Receptacle Style**

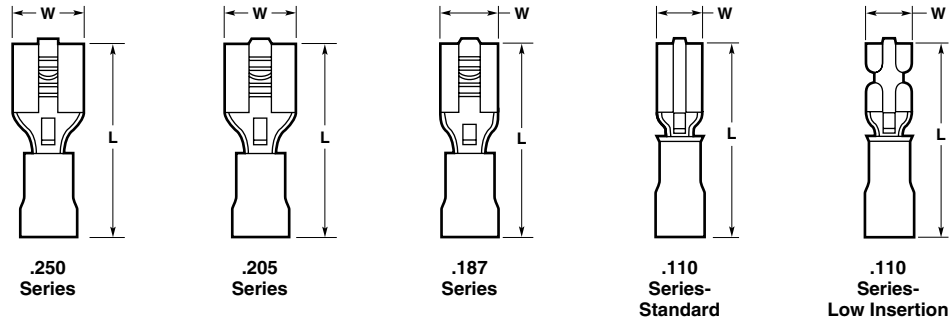
- A** — No dimple with wire stop
- B** — Dimple with wire stop
- C** — No dimple, no wire stop

**Material**

- Insulation** — Nylon
- Receptacle Body** — Brass per ASTM B-36 or phosphor bronze per ASTM B-139
- Plating** — Tin per MIL-T-10727 except where noted.
- Metallic Sleeve** — Copper per ASTM B-152
- Plating** — Tin per MIL-T-10727

**Related Product Data**

**Application Tooling** — reference Catalog 82042 for tooling



Series	Wire Size Circular Mils [mm <sup>2</sup> ]	Style	Dimensions		Terminal Insulation Color	Wire Insulation Diameter Max.	Recept. Matl.	Stock Thk.	Fits Tab Thk.	Part Numbers		
			W Nom.	L Max.						Loose Piece	Tape Mounted	Strip Form
.250	22-18 509-1,900 [0.26-0.96]	B	.300 7.62	.900 22.86	Red	.140 3.56	Brass	.018 0.46	.032 0.81	640903-1*	640903-2	640902-1
	Red				.140 3.56	Brass	.018 0.46	.032 0.81	55675-1 <sup>2</sup>	55675-2 <sup>2</sup>	—	
	16-14 2,050-5,180 [1.04-2.62]	B	.300 7.62	.900 22.86	Blue	.170 4.32	Brass	.018 0.46	.032 0.81	640905-1*	640905-2	640904-1
	Green				.250 6.35	Brass	.018 0.46	.032 0.81	42844-1**	42844-3†	60544-3†	
	14-12 3,831-6,470 <sup>1</sup> [1.94-3.28]	B	.300 7.62	1.012 25.70	Green	.250 6.35	Phos. Brz.	.018 0.46	.032 0.81	42844-2**	—	—
	Yellow				.250 6.35	Brass	.018 0.46	.032 0.81	640907-1*	640907-2	640906-1	
12-10 5,180-13,100 [2.62-6.64]	B	.300 7.62	1.012 25.70	Yellow	.250 6.35	Phos. Brz.	.018 0.46	.032 0.81	61198-2 <sup>3†</sup>	61198-4 <sup>4†</sup>	61197-2	
Yellow				.250 6.35	Phos. Brz.	.018 0.46	.032 0.81	61198-2 <sup>3†</sup>	61198-4 <sup>4†</sup>	61197-2		
.250 Low Insertion	22-18 509-1,900 [0.26-0.96]	B	.300 7.62	.900 22.86	Red	.145 3.68	Brass	.016 0.41	.032 0.81	184262-1†	184262-2†	184261-1†
	Blue				.173 4.39	Brass	.016 0.41	.032 0.81	184265-1†	184265-2†	184264-1†	
.205 Low Insertion	22-18 509-1,900 [0.26-0.96]	B	.250 6.35	.800 20.32	Red	.135 3.43	Brass	.016 0.41	.020 0.51	696018-1†	696018-2†	—
	Red				.140 3.56	Brass	.016 0.41	.020 0.51	640909-1*	640909-2	640908-1	
.205	22-18 509-1,900 [0.26-0.96]	B	.250 6.35	.800 20.32	Red/Black	.140 3.56	Brass	.016 0.41	.020 0.51	640174-1	—	—
					Red	.140 3.56	Brass	.016 0.41	.032 0.81	640911-1*	640911-2	—
	16-14 2,050-5,180 [1.04-2.62]	B	.250 6.35	.800 20.32	Blue	.170 4.32	Brass	.016 0.41	.020 0.51	640913-1*	640913-2	—
					Blue	.170 4.32	Brass	.016 0.41	.032 0.81	640915-1*	640915-2	—
.187	26-24 238-475 [0.12-0.24]	B	.230 5.84	.700 17.78	Yellow	.082 2.08	Brass	.016 0.41	.020 0.51	641321-1**	641321-2†	641320-1†
	22-18 509-1,900 [0.26-0.96]				B	.230 5.84	.800 20.32	Red	.140 3.56	Brass	.016 0.41	.020 0.51

† Not UL or CSA approved or listed.

\* Available in small packaging quantities.

<sup>1</sup> Wire range is limited as noted.

<sup>2</sup> Unplated receptacle body.

<sup>3</sup> Requires tool 90276-2

<sup>4</sup> Requires die 58541-1

**Note:** All part numbers are RoHS compliant.

**PIDG FASTON Receptacles and Tabs** (Continued)

**Receptacles** (Continued)

Series	Wire Size Circular Mils [mm <sup>2</sup> ]	Style	Dimensions		Terminal Insulation Color	Wire Insulation Diameter Max.	Recept. Matl.	Stock Thk.	Fits Tab Thk.	Part Numbers			
			W Nom.	L Max.						Loose Piece	Tape Mounted	Strip Form	
.187	16-14 2,050-5,180 [1.04-2.62]	B	.230	.800	Blue	.170	Brass	.016	.020	640919-1*	640919-2	640918-1	
			5.84	20.32	Blue	4.32	0.41	0.51	640919-1*	640919-2	640918-1		
.187 Low Insertion	22-18 509-1,900 [0.26-0.96]	B	.230	.900	Blue	.250	Brass	.016	.032	696108-1†	696108-2†	—	
			5.84	22.86	Blue	6.35	0.41	0.81	696108-1†	696108-2†	—		
.187 Low Insertion	22-18 509-1,900 [0.26-0.96]	B	.235	.800	Blue	.170	Brass	.016	.032	184235-1†	184235-2†	—	
			5.84	20.32	Blue	4.32	0.41	0.81	184235-1†	184235-2†	—		
.110 Standard	22-18 509-1,900 [0.26-0.96]	B	.148	.734	Natural	.110	Brass	.012	.016	61048-1**	61048-2†	—	
			3.76	18.64	Natural	2.79	0.30	0.41	61048-1**	61048-2†	—		
			.148	.734	Natural	.110	Brass	.012	.020	61060-1**	61060-2†	61059-2†	
.110 Low Insertion	26-24 238-475 [0.12-0.24]	A	.160	.700	Yellow	.082	Brass	.016	.020	641324-1†	641324-2†	—	
			4.06	17.78	Yellow	2.08	0.41	0.51	641324-1†	641324-2†	—		
.110 Low Insertion	22-18 509-1,900 [0.26-0.96]	A	.160	.796	Red	.140	Brass	.016	.012	—	—	350871-1†	
			4.06	20.22	Red	3.56	0.41	0.30	—	—	350871-1†		
.110 Low Insertion	22-18 509-1,900 [0.26-0.96]	A	.160	.800	Red	.140	Brass	.016	.016	.016	640921-1	640921-2	—
			4.06	20.32	Red	3.56	0.41	0.41	0.51	0.51	640921-1	640921-2	—
.110 Low Insertion	22-18 509-1,900 [0.26-0.96]	A	.160	.800	Red	.140	Brass	.016	.020	.020	640923-1*	640923-2	640922-1
			4.06	20.32	Red	3.56	0.41	0.41	0.51	0.51	640923-1*	640923-2	640922-1
.110 Low Insertion	22-18 509-1,900 [0.26-0.96]	A	.160	.800	Red	.140	Brass	.016	.032	.032	640925-1*	640925-2	640924-1
			4.06	20.32	Red	3.56	0.41	0.41	0.81	0.81	640925-1*	640925-2	640924-1
.110 Low Insertion	16-14 2,050-5,180 [1.04-2.62]	A	.160	.800	Blue	.170	Brass	.016	.020	.020	640929-1*	640929-2	—
			4.06	20.32	Blue	4.32	0.41	0.41	0.51	0.51	640929-1*	640929-2	—
.110 Low Insertion	16-14 2,050-5,180 [1.04-2.62]	B	.160	.800	Blue	.170	Brass	.016	.032	.032	640931-1*	640931-2	—
			4.06	20.32	Blue	4.32	0.41	0.41	0.81	0.81	640931-1*	640931-2	—
.110 Low Insertion	16-14 2,050-5,180 [1.04-2.62]	B	.160	.800	Blue	.170	Brass	.016	.016	.016	640927-1	640927-2	—
			4.06	20.32	Blue	4.32	0.41	0.41	0.41	0.41	640927-1	640927-2	—

†Not UL or CSA approved or listed.

\*Available in small packaging quantities.

**Tooling for Insulated FASTON Receptacles and Tabs — 26 to 10 AWG Wire Range**

Wire Size	Hand Tool	Tools for Tape Mounted Terminations			Tools for Strip Form Terminations
		Tape Dies for 69875 AMP-TAPETRONIC No Applicator Required	Tape Dies for AMP-O-LECTRIC <sup>1</sup> Model "G" Applicator 567200-3	Tape Dies for AMPOMATOR CLS III G, CLS IV Applicator 687658-1	AMPOMATOR CLS III G, CLS IV Applicators
26-24	48518-2	69877-2	69877-2	69877-2	—
22-18	59824-1	59826-1	59826-1*	59826-1	466788-3 <sup>2</sup>
22-18 (Natural)	90185-1	90248-2	90248-2	90248-2	466554-3
16-14	59824-1	59827-1	59827-1*	59827-1	466789-3 <sup>2</sup>
14-12	90246-1	90240-2	90240-2	90240-2	—
12-10	59824-1	59828-1	59828-1*	59828-1	466790-4 <sup>2</sup>

<sup>1</sup>Only UL and CSA approved.

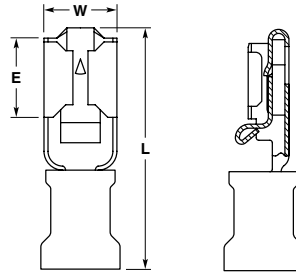
<sup>1</sup>AMP-O-LECTRIC model "K" 565435-5 uses applicator 567200-2.

<sup>2</sup>Die included with applicator.

**Note:** All part numbers are RoHS compliant.

**PIDG FASTON Receptacles and Tabs** (Continued)

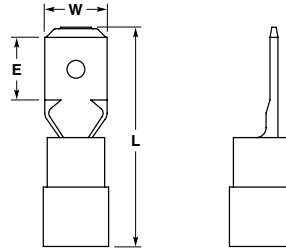
**Positive Lock Receptacle**  
**Low Insertion Force with**  
**Locking Device**



Description	Wire Range	Ins. Dia. Max.	Dimensions			Material and Finish	Part Number
			W	L	E		
For Tab .250 x .032	16-14	.190 4.83	.362 9.19	.850 21.59	.315 8.00	Tin Plated Brass	165536-1†

†Not UL or CSA approved or listed.

**Tab**



Description	Wire Range	Ins. Dia. Max.	Dimensions			Material and Finish	Part Number
			W	L	E		
For Receptacle .250 x .032	22-18	.157 3.99	.250 6.35	.866 22.00	.300 7.62	Tin Plated Brass	696362-1
	16-14	.197 5.00	.250 6.35	.866 22.00	.300 7.62	Tin Plated Brass	696369-1
	12-10	.256 6.50	.250 6.35	.950 24.13	.300 7.62	Tin Plated Brass	696372-1

**PIDG FASTON**  
**Flag Receptacles**



Description	Wire Range	Ins. Dia. Max.	Dimensions			Material and Finish	Part Number
			W	L	E		
For Tab .250 x .032	22-18	.134 3.40	.300 7.62	.720 18.29	.610 15.49	Tin Plated Brass	156667-1
	16-14	.157 3.99	.300 7.62	.720 18.29	.610 15.49	Tin Plated Brass	156666-1

**Note:** All part numbers are RoHS compliant.

**PIDG FASTON Receptacles and Tabs** (Continued)

**Fully Insulated Receptacles**

Insulation Sleeve — Nylon



Description	Wire Range	Ins. Dia. Range	Dimensions		Material and Finish	Part Number
			W	L		
For Tab .250 x .032	22-18	.128 3.25	.375 9.53	.891 22.63	Tin Plated Brass	696357-1
	16-14	.165 4.19	.375 9.53	.881 22.38	Tin Plated Brass	696366-1
	12-10	.225 5.72	.375 9.53	.998 25.35	Tin Plated Brass	696371-1

**Budget Line PIDG FASTON Receptacles**

**Material**

Insulation — PVC, UL 94V-0

Receptacle Body — Brass

Plating — Tin

Metallic Sleeve — Copper

Plating — Tin



Series	Wire Size Circular Mills [mm <sup>2</sup> ]	Dimensions		Terminal Color	Wire Insulation Diameter Max.	Fits Tab Thk.	Part Numbers	
		W Nom.	L Nom.				Loose Piece	Tape Mounted
.250	22-18	.300 7.62	.819 20.80	Red	.150 3.81	.032 0.81	696301-1	696301-2
	16-14	.300 7.62	.819 20.80	Blue	.185 4.70	.032 0.81	696302-1	696302-2

**Note:** All part numbers are RoHS compliant.

## Application Tooling

### AMP-O-LECTRIC Model "G" Termination Machines



A totally new design of our most popular machine for bench-top operation. It features a quiet and highly-reliable direct motor drive, electronic controls for ease of setup and operation, and improved guarding and lighting for operator convenience and safety. All versions also include either manual or automatic precision adjustment for crimp height. For use with miniature style applicators only.

#### Specifications

**Weight** — Approximately 240 lb [110 kg]

**Height** — 20 [508] without reel

**Width** — 18.7-25.3 [475-643] depending on type of applicator used

**Depth** — 21.5-28.1 [546-713] depending on type of applicator used

**Electrical** — 120 or 220 VAC, 50 or 60 Hz

**Air** — 90-110 psi [6.21-7.59 bar] when required for use with air-feed applicators

For complete information, request Catalog 65828.

### AMP-3K/40 and AMP-5K/40 Terminating Machines



The AMP-3K/40 and AMP-5K/40 terminators are designed for customers that require the increased output and quality of a semiautomatic machine at a competitive price. By incorporating the most commonly requested features as standard and offering a long list of optional equipment, these terminators offer flexibility to meet the specific needs of various applications at the lowest possible cost.

- 3,000 lb [1361 kg] max. crimp force (AMP-3K/40)
- 5,000 lb [2268 kg] max. crimp force (AMP-5K/40)

- Tool-less removal of applicators and guards
- Jog capability
- Quiet, fast operation — 80/76 dBA and cycle time less than 0.400 seconds
- Accepts heavy duty mini style applicators
- Wide range of optional equipment such as tool-less precision crimp height adjust, batch counter, CQM capability and work light
- Order Catalog 1654856 for specs and part numbers

#### Specifications

**Height** — 20 [510] (without reel support)

**Weight** — Approx. 150 lb [68 kg]

#### Capacity

AMP-3K/40 — 3,000 lb [1361 kg] max. crimp force; AMP-5K/40 — 5,000 lb [2268 kg] max. crimp force

**Noise** — 76 dBA maximum at 3,000 lb [1361 kg] full capacity; 80 dBA maximum at 5,000 lb [2268 kg] full capacity

**Electrical** — 100-240 VAC, 50/60 Hz (6A) • Average <1 A at 120 VAC when used as a bench-top unit at 2 000 cycles per hour operating rate

**Air** — 90-100 psi [6.21-6.90 bar], 6 scfm [0.00282 m<sup>3</sup>/s] (when required for use with air-feed applicators)

*Note: Optional Air Feed Valve Assembly required.*



**Application Tooling** (Continued)

**Optional Stripping Module for the AMP-3K/40, AMP-5K/40 and AMP-O-LECTRIC Model G**



The combination of the stripping module with the AMP-O-LECTRIC model G terminator or the AMP 3-K/40, AMP 5-K/40 provides an economical, proficient method of stripping wire and crimping terminals on the same machine. Wires are stripped moments before crimping,

meaning there is virtually no chance of damaging wire conductors during handling or storage. Once the wire is fed into the start sensor the stripping module does the rest, improving placement accuracy.

For more information, request Catalog 1309085.

**Crimp Quality Monitor (CQM)**



**Product Features**

- Real-time monitoring of every crimp
- Effective for monitoring the wire barrel crimp of open barrel, uninsulated contacts and terminals
- Calculation and display of actual crimp height, force and position graphs
- Touch screen graphical user interface
- Network access with web interface

- Automatic adjustment of crimp height on enabled terminators
- Multiple language support

Crimp height is the accepted method for the most accurate and precise, non-destructive testing of crimp quality. The Crimp Quality Monitor is a convenient, automatic, easy-to-use tool for measuring crimp height as part of a comprehensive quality management program.

On-screen programmability allows flexible determination of crimp parameters and quality ranges. These monitors are compatible with several machines, including the AMP-O-LECTRIC model G terminating machine and the 3K/40 and 5K/40 terminators.

The TE CQM units utilize a technology which is constantly measuring both ram position and force throughout the crimp cycle. As many as 3,000 data points are gathered at a 5kHz sampling rate and analyzed on every crimp in real time. The CQM then compares the measured force/displacement curve to the base line to ensure that the forces and distances are within specification, thereby indicating a good crimp. Other systems make a force vs. time measurement.

For more information, request Catalog 82275.

**AMP-TAPETRONIC Machine, Part Number 69875**



The AMP-TAPETRONIC machine is an AMP-O-LECTRIC model "K" terminating machine with a permanently-mounted applicator that accepts interchangeable die sets to apply a variety of tape-mounted terminals and splices. Many of the die sets can also be used in AMP-O-LECTRIC terminating machines with a tape applicator.

For more information, contact TE.

**Note:** All part numbers are RoHS compliant.

**Application Tooling** (Continued)

**Gamma 333 PC  
Lead-Making Machine,  
Three Stations**



With its capacity to accommodate an additional processing station on side 1, the Gamma 333 PC can perform a number of new processes. It can produce two-ended crimp leads, process double crimp connections with three different terminals or apply seals on one end of the wire. Tinning and ink jet marking are two further options. Process monitoring is integrated into the system, ensuring perfect trimming and stripping of the wires.

**Specifications**

- Length** — 125 [3137]
  - Width** — 54.2 [1377]
  - Height** — 70.5 [1790]
  - Length Range** — 2.36 in-32.8 ft [60-10,000] (optional 30mm)
  - Cross-Section Range** — AWG 26-AWG 10 [0.125mm<sup>2</sup>-5mm<sup>2</sup>]
  - Noise Level** — <76dB (without crimping modules)
  - Electrical** — 3x208 - 480V, 50-60Hz; 6kVA
  - Compressed Air** — 5-6 bar
  - Air Consumption** — 6.5m<sup>3</sup>/h
  - Weight** — 1850 lbs [840 kg] with two crimping modules
- For more information, request Catalog 1307901.

**AMPOMATOR System III  
Leadmaker**



**Specifications**

- Length Range** — 60mm - 650m [2.36-2133"] Optional from 35mm [1.38"]
  - Length Accuracy** — ± 1mm [0.04"] or < 0.2% depending on wire length
  - Stripping Lengths** — 0.1-15mm [0.004-0.591"]
  - Wire Sizes** — 24-10 AWG [0.20 -6mm<sup>2</sup>]
  - Wire Draw-In Speed** — 10 m/s max.
  - Electrical Power** — 3 phase, 208-480 V / 50-60 Hz
  - Weight** — 1080 kg [2,381 lb]
  - Dimensions** — 3988 x 1702 x 2006 mm [157 x 67 x 79"] L x W x H
  - Air Pressure** — 5-6 bar [73-87 PSI]
  - Air Volume** — 9 m<sup>3</sup>/hr [5.3ft<sup>3</sup>/min]
  - Noise** — < 75 db without crimping modules
- For more information, request Catalog 1654956-5.

- Flexible and efficient terminating system
- Single and double wire applications
- User friendly & proven subsystems and accessories
- Meets the demanding requirements of the automotive and appliance industries
- Available with the new AMP-O-LECTRIC ST III terminator
- Accepts various accessories
- SLE crimp quality monitoring
- Choose either Komax or PAWOMAT seal application module

**Application Tooling** (Continued)

**P300 and P350 Automatic Insertion Machines**



Automatic insertion machines for the application of reeled pins, tabs and receptacles. Available with up to 3 insertion heads to apply different products. The PCB is positioned by an XY table powered by stepper-motors (optional servo drives for higher insertion rates). Available in stand-alone or inline (SMEMA) configuration for fully automatic operation. Optional equipment includes insertion force monitoring, vision system, board thickness measurement and adjustable lower anvil.

**Specifications**

- Width** — 57.5 [1,460]
- Depth** — 64.5 [1,640]
- Height** — 60 [1,520]
- Weight** — Depending on configuration
- Electrical** — 110 V, 60 Hz
- Air** — 87 psi [6 bar]
- Insertable Area** — 24 x 16 [600 x 400]

For more information, contact TE.

**AccuSserter 2 Pin Insertion Machine**



**Product Features**

- Board capacity of 305 x 450 mm [12 x 18"]
- X/Y-Table with stepper motors
- Database driven software for simple programming and automatic setup
- "Quick change" tooling packs allow easy and fast setup
- Wide range of tooling packs for TE and non TE products available
- Easy-to-use operator interface

Designed and manufactured with a focus on mid-volume level production, the AccuSserter 2 machine provides a broad range of features at a very competitive price. It uses a pneumatic power unit together with product

specific "quick change" tooling packs. The insertion heads can be equipped with a rotary insertion finger that can apply products at different angles without decreasing the insertion rate. The tooling packs can be exchanged within 30 minutes to meet your full range of application requirements.

The lower support tool is equipped with an electrical continuity or pin penetration check to assure that each product was correctly inserted into the PCB and remained there in real time. There is no additional quality check required and all QC data can be stored via the system PC for 100% future traceability.

**Note:** The AccuSserter 2 machine is not CE approved.

**Application Tooling** (Continued)

**BT3500 Battery Hydraulic Hand Tool, Part Number 2031400-x**



**Product Facts**

- Highly Portable
- Lightweight
- Ergonomic
- Compatible with SDE dies and CERTI-CRIMP II heads
- New “quick take-up” feature
- Approximately 250 crimps per charge
- Generates up to 3500 lbs of crimp force.

The BT3500 battery-hydraulic hand tool kit is designed to provide the ultimate in flexibility, modularity, and powered efficiency in a lightweight, ergonomic, powerful crimp unit powered by a superior lithium ion battery.

The BT3500's flexibility begins with the many user options for the power unit. It can be used with two shoulder strap options (including a 4-point harness or a single shoulder strap) or a belt option, or by using the shoulder strap on the BT case, or used as a portable bench top termination device positioned in the tool case. These six combinations allow you to tailor portable, powered crimping to your manufacturing needs.

For more information, request Catalog 1773381-5.

**Options**



**4-point Harness**  
(for use with padded belt)



**Shoulder Strap**



**Belt**



**Shoulder Strap with Case**

**Double Action Hand Tool (DAHT)**

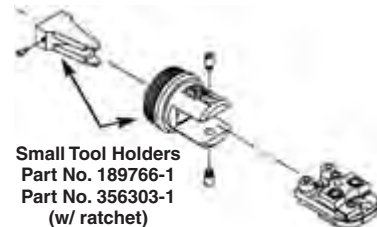


- Dies travel in arc-like path
- Locator on tools for FASTON, MATE-N-LOK, PIDG and PLASTI-GRIP terminals
- Insulation adjustment on tools for FASTON, MATE-N-LOK, PIDG and PLASTI-GRIP terminals
- Approximate weight 1.2 lb [0.54 kg]

**Double Action Hand Tool Adapter, Part Number 2119483-1 (For use with BT3500 Battery Tool)**



**626 Pneumatic**



**Small Tool Holders**  
Part No. 189766-1  
Part No. 356303-1 (w/ ratchet)

**2614 Series (CE)**

**Note:** All part numbers are RoHS compliant.

**Application Tooling** (Continued)

**SDE Hand Tool Frames**



**PRO-CRIMPER III,**  
Part Number 354940-1  
(Frame Only)

**C-Head Assembly for Closed Barrel Terminals (Shoulder Dies),**  
Part Number 2031450-1 (for use with BT3500 Battery Tool)



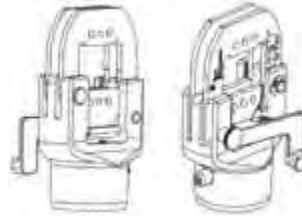
**SDE C-Head,**  
Part Number 2031450-1

**626 Pneumatic**



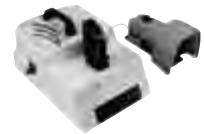
**6-26 SDE Kit**  
Part Number 1213855-1

**Closed Head Assembly for Open Barrel Terminals (Pin & Shoulder Dies),**  
Part Number 2031460-1 (for use with BT3500 Battery Tool)



**SDE Closed Head,**  
Part Number 2031460-1

**SDE Electric Terminator**



**Part Number**  
1490076-2

**Platform Die Hand Tool,**  
Part Number 58078-3  
Frame Only



- Same frame configuration as TETRA-CRIMP hand tool
- Dies are interchangeable
- Adjustable terminal locator
- Approximate weight 1.4 lb [0.64 kg]
- For use with Ultra-Fast and Ultra-Fast Plus product (Die set required to terminate contacts)

**626 Pneumatic**



**Large Tool Holders**  
Part No. 189767-1  
Part No. 356302-1  
(w/ ratchet)

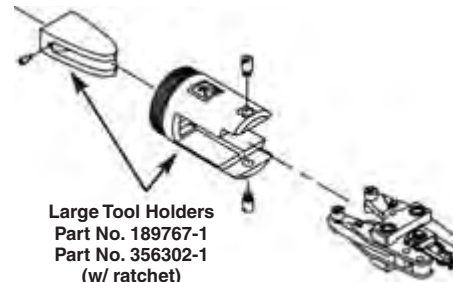
**Platform Die Set Adapter**  
Part No. 679992-1

**TETRA-CRIMP Hand Tool,**  
Part Number 59824-1



- Dies travel in arc-like path
- Multiple color-coded crimping cavities
- Terminal locator and wire stop
- Ratchet control release
- Approximate weight 1.4 lb [0.64 kg]
- For use with closed barrel FASTON product

**626 Pneumatic**



**Large Tool Holders**  
Part No. 189767-1  
Part No. 356302-1  
(w/ ratchet)

**TETRA-CRIMP Die Set Adapter**  
Part No. 679305-1

**Note:** All part numbers are RoHS compliant.

**Application Tooling** (Continued)

**Universal Handle,  
Part Numbers  
465629-1 (Short) and  
465629-2 (Long)**



This tool with interchangeable tips is used to mate standard and tab-lok flag FASTON receptacles to tabs. It features an adjustable strap. The short tip holder is 1.87 [47.5], the long is 5.87 [149]. For further information, request Instruction Sheet 408-7141.

**Model 626 Pneumatic Tool**



This modular system consists of a hand- or foot-actuated power unit plus interchangeable tool holders, crimp head assemblies, and die sets, when applicable. It is light weight, and features an optional positive-cycle control that helps eliminate partial crimps. The tool can be easily held or bench mounted.

**Specifications**

- Weight** — 2.3-3.3 lb [1.0-1.5 kg]
- Length** — 11.6-12.9 [295-327]
- Outside Diameter** — 1.83 [46.5]
- Grip Span** — 2.19 [55.6] over button or handle
- Air** — 90-100 psi [6.21-6.89 bar], 11.4 in<sup>3</sup> [0.00018 m<sup>3</sup>] displacement
- Cycle Time** — 0.7-0.8 sec (16-14 AWG [1.3-2 mm<sup>2</sup>] PIDG Terminals)

For further information, request Catalog 124208.

**Note:** All part numbers are RoHS compliant.

## Technical Documents

**Various technical documents are available for your use:**

**Production Specifications** describe technical performance, characteristics and verification tests. They are intended for the Design, Component and Quality Engineer.

108-1285	Ultra-Pod Fully Insulated FASTON Receptacles
108-1706	250/205 Srs FASTON PCB Receptacles
108-2000	.250 Hermetic
108-2002	.187 Modular FASTIN-FASTON
108-2017	Ultra-Fast FASTON Tabs
108-2043	Ultra-Fast FASTON Receptacles
108-2044	Ultra-Fast Plus FASTON Receptacles
108-2086	187 Srs AMPLIVAR FASTON Flag Receptacles
108-2183	RAST 5 Headers
108-2215	Ultra-Pod Fully Insulated .187 Flag FASTON Receptacles
108-3017	Positive Lock Mark I
108-5126	.187 Positive Lock Mark II
108-5127	.250 Positive Lock Mark II

**Application Specifications** describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging Design Engineer and the Machine Setup Person

114-1002	Pre-Insulated Diamond Grip (PIDG) FASTON Receptacle Contacts
114-2025	FASTIN-FASTON Receptacle and Tab Contacts, 250 Series
114-2028	Flag Receptacle Contacts, .110 Series
114-2032	Reversible Flag, 250 Series
114-2036	FASTON Receptacle Contacts, All Series (110, 187, 205, 250 and 312)
114-2065	FASTIN-FASTON Receptacle Contacts, All Series (110, 187, 205, 250 and 312)
114-2070	AMPLIVAR FASTON Tab Contact
114-2074	Positive Lock Receptacle Connectors — Series 187 MK II and MK III Series 250 MK II, MK III, and RAST 5
114-2078	FASTON Tab-Lok Contacts, 187, 205 and 250 Series
114-2079	F-Crimp Flag Receptacle
114-2082	Piggyback Flag Tab, All Series
114-2097	High-temperature FASTON Tab
114-2115	FASTON 110, 187, 205, 250, and 312 Series Tab Contacts for Printed Circuit (PC) Board Applications
114-2123	Ultra-Fast, Ultra Fast Flag and Ultra-Fast Plus FASTON Terminals
114-2124	Ultra-Pod FASTON Fully Insulated Receptacles and Tabs
114-2126	Center Strip Flag FASTON
114-2144	AMPLIVAR Receptacles, All Series
114-2146	AMPLIVAR F-F Tabs
114-2152	187 Srs AMPLIVAR FASTON Flag Receptacles
114-2153	Positive Lock Mark I Receptacle Connectors, .250 Series
114-2155	187 Srs FASTON C-Crimp Receptacles
114-2156	250/205 Srs FASTON PCB Receptacles
114-35000	Wire Preparation and Crimp Inspection Guide

**Instruction Sheets** provide instruction for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

**Instruction Material** covering operation, setup, maintenance, repair, etc. is included with each machine, tool or die set. If this material is required prior to receiving your tooling, call the TE Customer Service Hotline 800-722-1111 for the applicable document.

## Part Number Index

**Note:** This index lists all cataloged parts by base no. only. Complete part nos. (with prefixes and/or suffixes) are shown on the page(s) indicated.

Part No.	Page	Part No.	Page	Part No.	Page
41143	15	42415	26	60415	26
41194	15	42437	13	60419	74
41202	12	42452	21, 74	60432	31
41274	12, 74	42452	21	60434	66
41290	38	42453	21	60435	66, 74
41291	38	42460	62, 74	60443	41
41292	38	42470	74	60447	40
41339	37	42474	33	60465	36
41370	38	42475	33	60487	23
41398	37	42486	24	60520	74
41411	33	42490	34	60529	24
41412	33, 74	42506	37	60544	100
41449	13	42510	11	60573	21
41450	13, 74	42511	15	60577	26
41478	37	42559	36	60601	27
41480	38	42563	16	60605	28
41481	38	42565	74	60613	40
41482	38	42566	74	60621	21
41484	37	42579	13	60634	62
41531	15	42580	62	60635	13
41532	15, 74	42617	22	60641	16
41617	37	42618	24	60645	16
41619	38	42638	74	60650	12
41727	13	42640	11	60674	20
41728	13, 74	42660	12	60701	62
41729	74	42692	12	60705	74
41771	11	42710	20	60729	26
41772	11, 74	42712	20	60742	23
41774	13, 74	42713	20	60764	19
41778	74	42742	15, 74	60794	65
41800	16	42743	11	60850	34
41801	16	42770	33	60851	16, 74
41802	16	42781	20	60878	74
41898	74	42799	22	60893	101
42021	74	42800	24	60894	101
42025	74	42801	22	60900	31, 74
42041	16	42802	38	60904	20
42067	26	42822	36	60920	41
42068	26, 74	42844	100	60921	40
42095	37	42845	15	60922	40
42100	62, 74	42845	15	60938	15
42115	38	55675	100	60991	28
42117	37	60080	38	61029	24
42197	20	60089	26	61045	42
42198	20	60102	74	61048	101
42199	20	60118	26	61059	101
42214	37	60195	20	61060	101
42219	12, 74	60196	22	61070	28
42233	20	60197	26	61095	13
42234	20	60214	22	61107	12
42236	26	60249	62	61134	49
42238	74	60252	31	61156	15
42239	20	60253	62	61158	26
42281	62, 74	60274	16	61177	17
42282	74	60279	74	61187	19
42299	20	60284	46	61188	19
42373	21, 74	60290	74	61197	100
42374	21	60294	74	61198	100
42398	27	60295	62	61202	11
42399	27	60384	29	61227	74
42400	12	60385	29	61281	33
42404	15	60413	62	61316	74



**Part Number Index** (Continued)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
61362	33	62168	38	63138	34	63697	23
61365	36	62181	21	63223	33	63699	42
61368	11	62187	21	63232	81	63703	27
61372	28	62191	27	63239	78	63705	26
61375	12	62221	47	63241	68	63747	41
61399	11	62223	14	63242	27	63748	24
61400	27	62228	74	63248	41	63749	23
61407	39	62253	14	63274	40	63751	22
61408	27	62261	38	63300	32	63755	44
61454	31, 74	62274	74	63301	32	63756	49
61457	27	62276	14	63306	12	63757	13
61459	28	62298	41	63313	81	63761	33
61481	28	62314	37	63314	19	63769	23
61499	36	62321	28	63315	19	63771	36
61530	28	62336	28	63315	19	63785	22
61549	28	62352	31	63316	25	63809	78
61664	39	62354	20	63317	25	63812	76
61687	34	62384	34	63347	21	63820	11
61758	21	62395	49	63349	35	63823	47
61761	39	62409	44	63365	13	63824	45
61765	42	62411	46	63365	13	63832	23
61810	42	62428	14	63390	32	63837	26
61813	31	62437	49	63391	31	63838	47
61818	26	62445	35	63407	81	63839	44
61836	38	62447	35	63419	13	63849	45
61892	22	62474	27	63435	13	63850	21
61907	47	62500	13	63442	78	63854	84
61914	39	62523	26	63445	16	63860	47
61944	14, 74	62531	33	63445	16	63862	45
61945	23	62553	62	63470	23	63873	21
61951	39	62572	68	63477	22	63892	47
61960	36	62576	39	63497	34	63893	34
61968	49	62591	24	63498	81	63896	13
61969	22	62627	40	63508	18	63900	44
61971	28	62628	41	63512	25	63901	18
61988	14, 74	62650	44	63522	32	63918	42
62003	27, 74	62718	18	63525	47	63931	21
62011	17	62751	46	63537	12	63932	34
62016	23	62806	46	63538	18	63933	84
62021	17	62813	18	63539	13	63940	30
62022	17	62814	18	63555	16	63941	30
62026	22, 74	62817	24	63560	27	63942	30
62048	19	62850	27	63577	15	63944	30
62049	74	62852	27	63596	23	63946	39
62050	27	62887	34	63603	47	63949	45
62056	17	62922	35	63604	16	63950	45
62057	17	62968	27	63609	12	63951	46
62061	41	62998	14	63617	16	63952	46
62068	14	63009	18	63622	29	63954	26
62069	29	63010	18	63623	29	63959	22
62080	29	63011	18	63633	40	63961	27
62090	74	63012	18	63634	26	63963	18
62091	17	63038	36	63646	22	63968	46
62092	11	63066	44	63647	19	63969	46
62094	26	63067	44	63650	44	63971	37
62109	14	63093	27	63651	16	63981	15
62112	74	63096	18	63655	12	63986	44
62122	34	63097	78	63674	12	63990	28
62137	21	63104	32	63677	11	63993	12
62138	21	63127	11	63688	12	63994	46
62139	22	63136	35	63693	12	151302	42
62166	37	63137	19	63696	24	151321	19

**Part Number Index** (Continued)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
152422	42	280232	53	520133	92	520982	96
154717	76	284861	73	520140	91	520987	55
154718	76	284985	72	520141	91	520988	96
154719	76	284986	72	520150	91	520997	92
156666	102	293008	71	520151	91	521011	96
156667	102	293009	71	520181	91	521013	92
160743	68	293010	71	520182	91	521050	97
160759	76	293011	71	520183	91	521053	53
160762	68	293014	73	520184	91	521055	94
160914	62	293015	73	520193	91	521057	94
163007	64	293033	72	520194	91	521065	55
163008	64	293034	72	520206	55	521066	55
165536	102	293035	71	520212	57	521069	56
170324	81	293043	72	520217	55	521070	56
170325	81	293044	72	520219	55	521087	97
170326	81	293161	71	520220	55	521097	92
170327	78	336369	53	520261	91	521098	92
170328	78	350815	91	520262	91	521102	92
170329	78	350816	91	520263	91	521103	92
170823	54	350819	91	520264	91	521104	92
170891	54	350820	91	520272	91	521105	92
171706	53	350871	101	520273	91	521112	97
172074	81	353148	59, 82	520274	91	521113	96
172075	57, 83	360010	57	520275	91	521119	58, 84
172076	78	360040	53	520276	91	521120	84
172210	82	360041	48	520306	91	521125	81
172469	80	360042	48	520310	91	521140	56
172761	80	480003	64	520334	92	521142	92
172763	80	480004	64	520335	92	521144	92
172765	80	480053	61	520336	92	521148	56
173974	81	480054	61	520337	92	521164	92
174429	79	480115	65	520338	92	521187	85
174513	83	480116	65	520339	92	521191	92
174587	82	480251	66	520340	92	521192	92
174712	57, 82	480252	66	520365	91	521198	85
174777	86	480281	64	520366	91	521204	88
174779	86	480282	64	520370	91	521205	88
175032	83	480296	53	520401	94	521206	88
175034	83	480298	53	520402	94	521207	88
175164	83	480306	53	520403	94	521208	88
175411	86	480307	53	520404	94	521209	88
175578	82	480416	53	520405	94	521210	88
176498	59, 82	480417	54	520406	94	521212	98
177627	78	480418	54	520407	94	521213	98
178833	79	480435	54	520408	94	521217	98
179720	59, 82	480458	54	520409	94	521225	96
180351	62	480487	53	520410	94	521227	98
180900	63	520080	91	520411	94	521228	96
180901	63	520081	91	520412	94	521229	58, 79
180907	61	520083	91	520447	91	521247	92
180908	61	520084	91	520448	91	521251	56
180923	61	520102	92	520856	92	521253	58, 84
180924	61	520103	92	520895	76	521267	88
180940	63	520106	92	520932	94	521271	98
180941	63	520107	92	520935	58, 79	521282	97
184235	101	520116	91	520961	76	521284	96
184261	100	520117	91	520963	96	521289	61
184262	100	520124	91	520971	97	521290	61
184264	100	520125	91	520973	96	521293	96
184265	100	520128	92	520974	96	521295	88
184267	101	520129	92	520978	56	521306	57
184268	101	520132	92	520979	94	521307	57

**Part Number Index** (Continued)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
521308	91	626412	25	925014	67	1217169	45
521317	98	626541	63	925015	67	1217180	46
521360	94	640174	100	925016	67	1217244	25
521361	94	640416	65	925475	67	1217281	68
521366	96	640417	65	926291	77	1217321	68
521367	96	640418	65	926521	76	1217332	47
521368	96	640841	65	926522	76	1217378	88
521382	51	640902	100	926790	77	1217417	30
521384	51	640903	100	926820	77	1217421	45
521406	91	640904	100	927742	71, 72	1217539	44
521408	96	640905	100	928230	71	1217558	36
521411	97	640906	100	928309	72	1217566	44
521435	88	640907	100	928814	46	1217624	30
521436	96	640908	100	964492	71	1217754	46
521437	96	640909	100	1217002	36	1217756	48
521451	98	640911	100	1217006	32	1217835	29
521470	97	640913	100	1217009	25	1217899	30
521471	97	640915	100	1217010	25	1217933	42
521586	96	640916	100	1217027	24	1217955	30
521596	97	640917	100	1217043	14	1241857	71
521597	97	640918	101	1217056	44	1241967	72
521598	97	640919	101	1217057	47	1241968	72
521599	97	640921	101	1217061	48	1241969	72
521600	97	640922	101	1217062	48	1742041	39
521601	97	640923	101	1217080	46	1742049	25
521632	96	640924	101	1217084	21	1742086	25
521633	97	640925	101	1217092	84	1742087	25
521637	96	640927	101	1217094	88	1742088	25
521699	88	640929	101	1217095	88	1742089	25
521743	61	640931	101	1217096	85	1742188	45
521744	61	641320	100	1217097	85	1742198	12
521746	88	641321	100	1217102	27	1742219	28
521766	57, 84	641324	101	1217107	46	1742312	25
521771	56	696018	100	1217113	85	1742354	78
521780	85	696108	101	1217114	85	1742361	47
521781	85	696301	103	1217118	34	1742362	47
521782	88	696302	103	1217124	47	1742422	24
521785	56	696357	103	1217125	45	1742543	16
521792	88	696362	102	1217126	45	1742597	42
521836	88	696366	103	1217127	45	1742669	83
521935	88	696369	102	1217129	21	1742678	29
521936	88	696371	103	1217131	47	1742679	30
521955	57, 84	696372	102	1217133	47	1742718	18
521995	96	696776	101	1217136	45	1969106	97
521997	96	696777	101	1217137	46	1969107	97
521998	96	725963	49	1217138	28	1969109	97
626056	67	725996	49	1217145	27	1969110	97
626057	67	726308	42	1217148	65	1969133	97
626062	67	735075	53	1217149	23	1969186	53
626063	67	790319	76	1217151	23	1969227	86
626064	67	880110	63	1217156	48	1969332	79
626065	67	880310	61	1217167	45	1969335	88

### Tooling Part Number Index

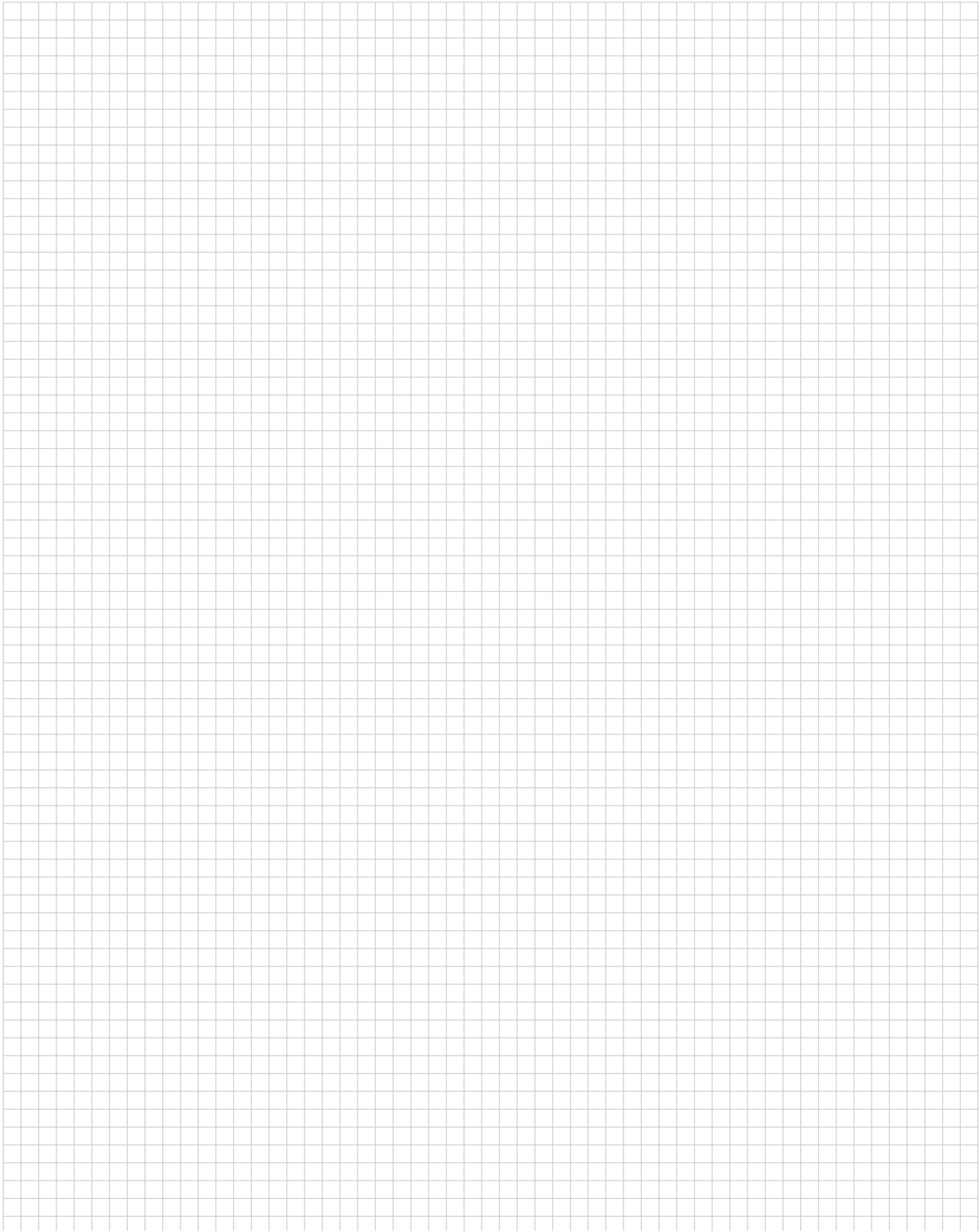
**Note:** This index lists all cataloged parts by base no. only. Complete part nos. (with prefixes and/or suffixes) are shown on the page(s) indicated.

Part No.	Page	Part No.	Page	Part No.	Page
47094	74	314917	95	680645	85
47417	74	314919	95	680652	85
48518	101	354940	109	680653	88
58078	109	356302	109	680654	88
59824	101, 109	356303	108	680808	65
59826	101	465629	110	687839	62
59827	101	466057	62	687888	65
59828	101	466058	62	687932	62
69875	105	466092	62	687940	62
69877	101	466542	76	687979	62
90045	74	466554	101	687981	62
90088	74	466704	65	687982	62
90120	74	466707	65	687993	66
90165	74	466788	101	687995	66
90185	101	466789	101	720725	74
90240	101	466790	101	1213805	108
90246	101	466791	65	1213855	109
90248	101	466883	76	1213860	108
90276	100	525651	76	1490076	109
91509	74	565435	62, 66, 101	1583527	108
91511	74	567181	76	1852165	88
91514	74	567200	101	2031400	108
91557	74	567417	76	2031450	109
189508	74	654174	76	2031460	109
189766	108	679305	109	2119483	108
189767	109	679992	109		
314916	95	680140	76		

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## Engineering Notes

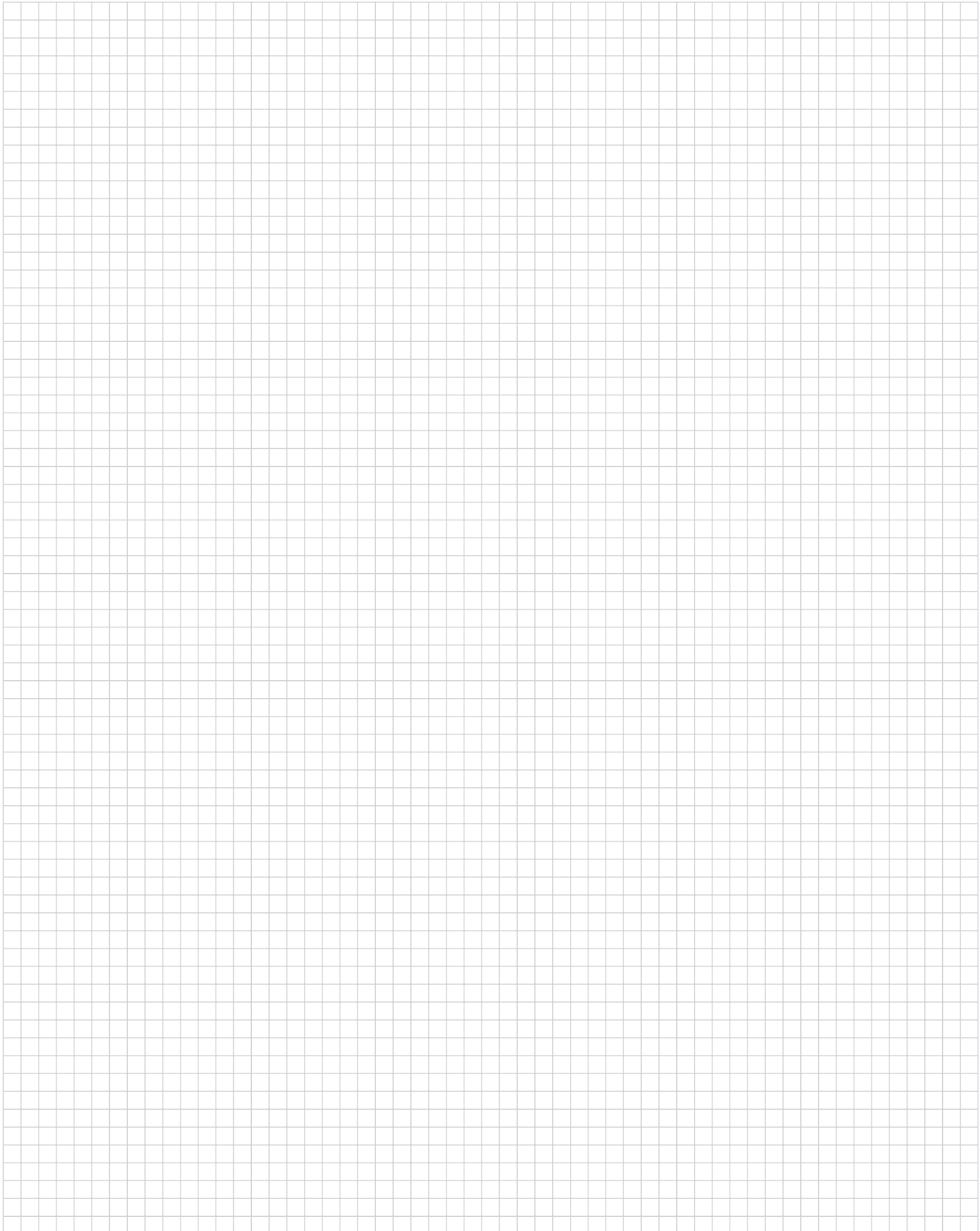
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## Engineering Notes

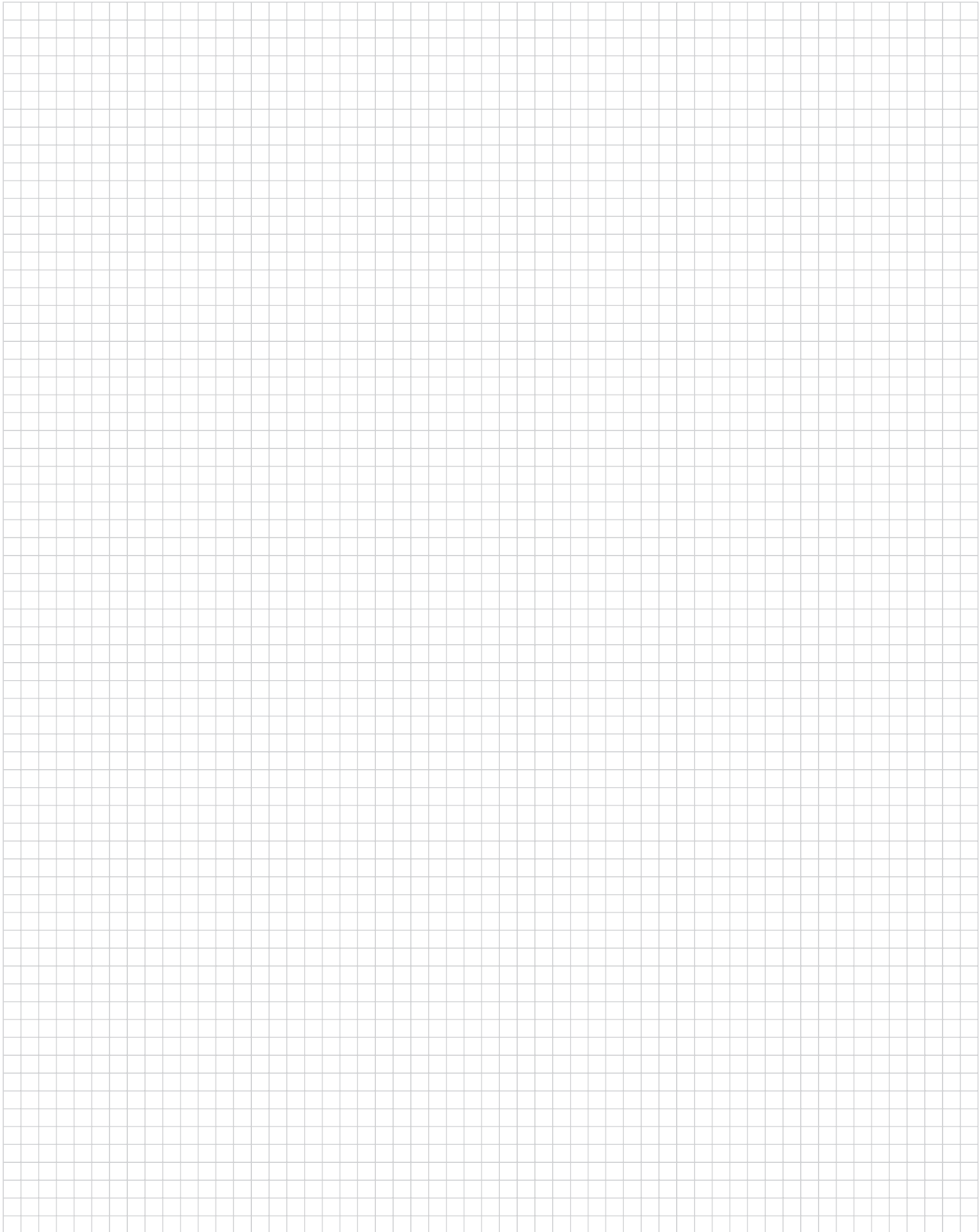
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## Engineering Notes

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