



# ULTRA-POD FULLY INSULATED FASTON RECEPTACLES AND TABS

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Quick Reference Guide

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Ultra-Pod fully insulated FASTON receptacles offer 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.

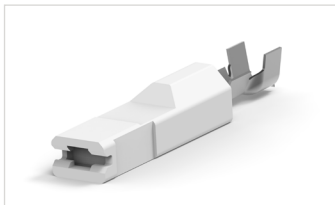
## FEATURES AND BENEFITS

- One-step applicator assembly of fully insulated receptacles and tabs helps prevent shock and short hazards and provides high automatic production rates
- Available contact materials include brass, tin plated brass, and nickel plated steel
- Meets UL 94 V-2, UL 94 V-0, and glow wire test (GWT) flammability standards
- F-Crimp termination for 22-10AWG
- Supports standard and large insulation diameter products
- 600V application approval allows application flexibility

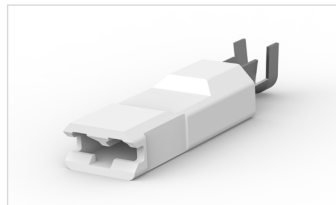
## PRODUCT APPLICATIONS

- Household appliances
- Lawn and garden equipment
- HVAC equipment
- Industrial machinery
- Vending machines
- Motorcycles, cars, trucks, marine and off-highway vehicles
- Computers, consumer electronics and home entertainment

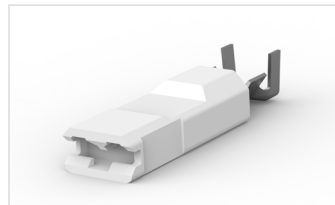
## STRAIGHT RECEPTACLES



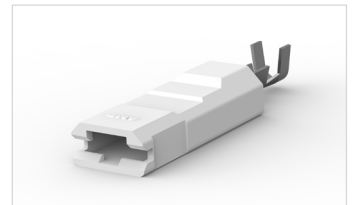
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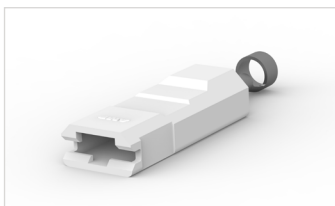
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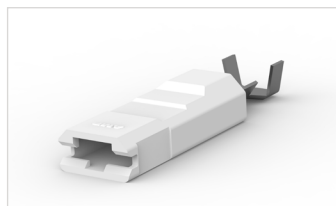
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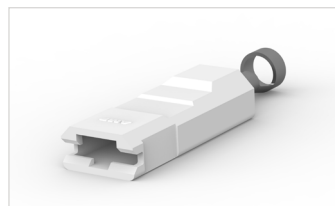
PART NUMBER 521368-2



PART NUMBER 521367-2



PART NUMBER 521632-2



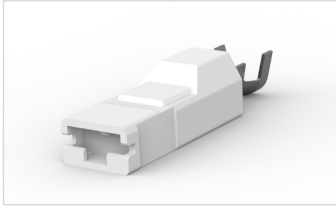
PART NUMBER 521366-2

Description	Wire Range (AWG)	Ins. Diam. Range [in.(mm)]	Mating Tab [in.(mm)]	UL 94 <sup>1</sup>	Color	Material and Finish	Part Number
.110 Series	22-18	.080-.120 (2.03-3.05)	.020 (0.51)	V-2	Natural	Brass	521228-1
.110 Series	22-18	.080-.120 (2.03-3.05)	.020 (0.51)	V-2	Natural	Tin Plated Brass	521228-2
.110 Series	22-18	.080-.120 (2.03-3.05)	.020 (0.51)	V-0	Natural	Tin Plated Brass	521408-2 <sup>4</sup>
.110 Series	22-18	.080-.120 (2.03-3.05)	.032 (0.81)	V-2	Natural	Brass	521436-14
.110 Series	22-18	.080-.120 (2.03-3.05)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521436-2
.110 Series	22-18	.080-.120 (2.03-3.05)	.032 (0.81)	V-0	Natural	Brass	521437-1 <sup>4</sup>
.110 Series	22-18	.080-.120 (2.03-3.05)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521437-2 <sup>2,4</sup>
.187 Series	20-16	.090-.130 (2.29-3.30)	.020 (0.51)	V-2	Natural	Brass	520973-1
.187 Series	20-16	.090-.130 (2.29-3.30)	.020 (0.51)	V-2	Natural	Tin Plated Brass	520973-2
.187 Series	20-16	.090-.130 (2.29-3.30)	.020 (0.51)	V-0	Natural	Brass	521225-1
.187 Series	20-16	.090-.130 (2.29-3.30)	.020 (0.51)	V-0	Natural	Tin Plated Brass	521225-2
.187 Series	20-16	.090-.130 (2.29-3.30)	.032 (0.81)	V-2	Natural	Brass	520982-1
.187 Series	20-16	.090-.130 (2.29-3.30)	.032 (0.81)	V-2	Natural	Tin Plated Brass	520982-2
.187 Series	20-16	.090-.130 (2.29-3.30)	.032 (0.81)	V-0	Natural	Brass	521284-1
.187 Series	20-16	.090-.130 (2.29-3.30)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521284-2
.187 Series	18-16 or 2-18	(2) .105 (2.67) Max.	.020 (0.51)	V-2	Natural	Brass	521293-1
.187 Series	18-16 or 2-18	(2) .105 (2.67) Max.	.020 (0.51)	V-2	Natural	Tin Plated Brass	521293-2
.187 Series	18-16 or 2-18	(2) .105 (2.67) Max.	.020 (0.51)	V-2	Natural	Tin Plated Brass	521995-2 <sup>4,5</sup>
.187 Series	18-16 or 2-18	(2) .105 (2.67) Max.	.020 (0.51)	V-0	Natural	Brass	521586-1
.187 Series	18-16 or 2-18	(2) .105 (2.67) Max.	.020 (0.51)	V-0	Natural	Tin Plated Brass	521586-2
.250 Series	22-18	.090-.130 (2.29-3.30)	.032 (0.81)	V-2	Natural	Brass	520988-1
.250 Series	22-18	.090-.130 (2.29-3.30)	.032 (0.81)	V-2	Natural	Tin Plated Brass	520988-2
.250 Series	22-18	.090-.130 (2.29-3.30)	.032 (0.81)	V-0	Natural	Brass	521368-1
.250 Series	22-18	.090-.130 (2.29-3.30)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521368-2
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Natural	Brass	521997-1 <sup>4,5</sup>
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Natural	Brass	520963-1
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Natural	Tin Plated Brass	520963-2
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-0	Natural	Brass	521367-1
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521367-2
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Black	Tin Plated Brass	521011-2 <sup>2</sup>
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Black	Nickel Plated Steel	521011-1 <sup>2,3</sup>
.250 Series	18-14	.120-.170 (3.05-4.32)	.032 (0.81)	V-2	Black	Nickel Plated Steel	521113-2 <sup>3</sup>
.250 Series	18-14 or 2-18	(2) .105 (2.67) Max.	.032 (0.81)	V-2	Natural	Brass	521637-1
.250 Series	18-14 or 2-18	(2) .105 (2.67) Max.	.032 (0.81)	V-2	Natural	Tin Plated Brass	521637-2
.250 Series	18-14 or 2-18	(2) .105 (2.67) Max.	.032 (0.81)	V-2	Natural	Tin Plated Brass	521998-2 <sup>4,5</sup>
.250 Series	18-14 or 2-18	(2) .105 (2.67) Max.	.032 (0.81)	V-0	Natural	Brass	521632-1
.250 Series	18-14 or 2-18	(2) .105 (2.67) Max.	.032 (0.81)	V-0	Natural	Tin Plated Brass	521632-2
.250 Series	14-10	.130-.180 (3.30-4.57)	.032 (0.81)	V-2	Natural	Brass	520974-1
.250 Series	14-10	.130-.180 (3.30-4.57)	.032 (0.81)	V-2	Natural	Tin Plated Brass	520974-2
.250 Series	14-10	.130-.180 (3.30-4.57)	.032 (0.81)	V-0	Natural	Brass	521366-1
.250 Series	14-10	.130-.180 (3.30-4.57)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521366-2

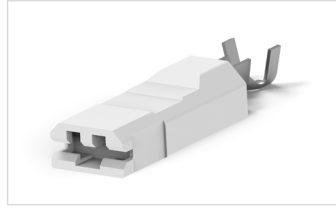
<sup>1</sup> Flammability rating of plastic material <sup>2</sup> 150°C rated nylon. <sup>3</sup> UL Recognized. <sup>4</sup> No UL or CSA approvals.

<sup>5</sup> VDE certified to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.

## STRAIGHT POSITIVE LOCK RECEPTACLES



PART NUMBER 521212-2



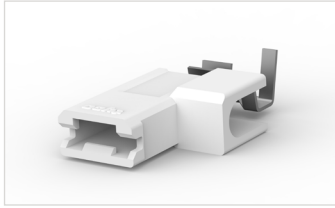
PART NUMBER 521317-2

Description	Wire Range (AWG)	Ins. Diam. Range [in.(mm)]	Mating Tab [in.(mm)]	UL 94 <sup>1</sup>	Color	Material and Finish	Part Number
.187 Series	18-14	.110-.180 (2.79-4.57)	.020 (0.51)	V-2	Natural	Brass	521271-12
.187 Series	18-14	.110-.180 (2.79-4.57)	.020 (0.51)	V-2	Natural	Tin Plated Brass	521271-2 <sup>2</sup>
.187 Series	18-14	.110-.180 (2.79-4.57)	.020 (0.51)	V-0	Natural	Tin Plated Brass	521212-2 <sup>2</sup>
.250 Series	18-14	.110-.180 (2.79-4.57)	.032 (0.81)	V-2	Natural	Brass	521213-12
.250 Series	18-14	.110-.180 (2.79-4.57)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521213-2 <sup>2</sup>
.250 Series	18-14	.110-.180 (2.79-4.57)	.032 (0.81)	V-0	Natural	Brass	521317-1 <sup>2</sup>
.250 Series	18-14	.110-.180 (2.79-4.57)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521317-2 <sup>2</sup>

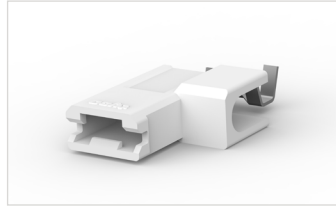
<sup>1</sup> Flammability rating of plastic material. <sup>2</sup> UL Recognized, CSA Certified



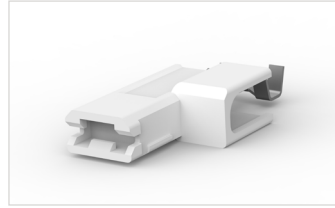
## FLAG RECEPTACLES



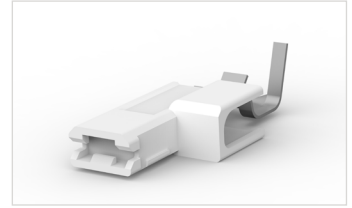
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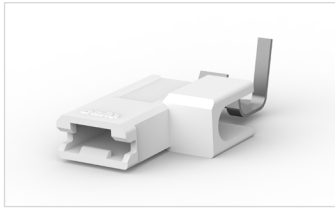
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PART NUMBER 521596-2



PART NUMBER 521597-2



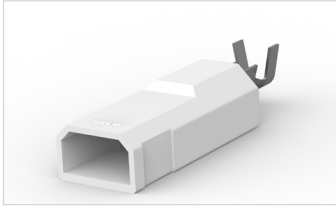
PART NUMBER 521633-2

Description	Wire Range (AWG)	Ins. Diam. Range [in.(mm)]	Mating Tab [in.(mm)]	UL 94 <sup>1</sup>	Color	Material and Finish	Part Number
.187 Series	22-18	.060-.110 (1.52-2.79)	.020 (0.51)	V-2	Natural	Brass	521470-1 <sup>4</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.020 (0.51)	V-2	Natural	Tin Plated Brass	521470-2 <sup>4</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.020 (0.51)	V-2	Natural	Tin Plated Brass	1969106-2 <sup>3,5</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.020 (0.51)	V-0	Natural	Brass	521596-1 <sup>4</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.020 (0.51)	V-0	Natural	Tin Plated Brass	521596-2 <sup>4</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.032 (0.81)	V-2	Natural	Brass	521598-1 <sup>3</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521598-2 <sup>3</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.032 (0.81)	V-0	Natural	Brass	521600-1 <sup>4</sup>
.187 Series	22-18	.060-.110 (1.52-2.79)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521600-2 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.020 (0.51)	V-2	Natural	Brass	521471-1 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.020 (0.51)	V-2	Natural	Tin Plated Brass	521471-2 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.020 (0.51)	V-2	Natural	Tin Plated Brass	1969133-2 <sup>3,5</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.020 (0.51)	V-0	Natural	Brass	521597-1 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.020 (0.51)	V-0	Natural	Tin Plated Brass	521597-2 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-2	Natural	Brass	521599-1 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-2	Natural	Tin Plated Brass	521599-2 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-2	Natural	Tin Plated Brass	1969107-2 <sup>3,5</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-0	Natural	Brass	521601-1 <sup>4</sup>
.187 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-0	Natural	Tin Plated Brass	521601-2 <sup>4</sup>
.250 Series	22-18	.050-.100 (1.27-2.54)	.032 (0.81)	V-2	Natural	Brass	521050-1
.250 Series	22-18	.050-.100 (1.27-2.54)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521050-2
.250 Series	22-18	.050-.100 (1.27-2.54)	.032 (0.81)	V-0	Natural	Brass	521411-1
.250 Series	22-18	.050-.100 (1.27-2.54)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521411-2
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Natural	Brass	1969109-1 <sup>3,5</sup>
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Natural	Tin Plated Brass	1969109-2 <sup>3,5</sup>
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Natural	Brass	520971-1
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Natural	Tin Plated Brass	520971-2
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Black	Tin Plated Brass	520971-4
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-2	Black	Nickel Plated Steel	521087-1 <sup>3</sup>
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-0	Natural	Brass	521282-1
.250 Series	18-14	.110-.160 (2.79-4.06)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521282-2
.250 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-2	Natural	Brass	521112-1
.250 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-2	Natural	Tin Plated Brass	1969110-2 <sup>3,5</sup>
.250 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-0	Natural	Brass	521633-1
.250 Series	18-14 or (2) 20 or (2) 18	(2) .105 (2.66) Max.	.032 (0.81)	V-0	Natural	Tin Plated Brass	521633-2

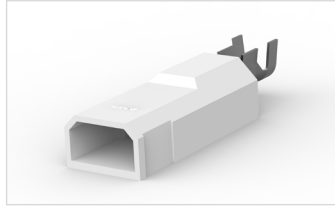
<sup>1</sup> Flammability rating of plastic material. <sup>2</sup> UL pending for double wire terminations. <sup>3</sup> No UL or CSA approvals.

<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.

## TABS



PART NUMBER 521451-2



PART NUMBER 521227-2

Description	Wire Range (AWG)	Ins. Diam. Range [in.(mm)]	Tab [in.(mm)]	UL 94 <sup>1</sup>	Color	Material and Finish	Part Number
.250 Series	18-14	.130-.180 (3.30-4.57)	.032 (0.81)	V-2	Natural	Brass	521217-1
.250 Series	18-14	.130-.180 (3.30-4.57)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521217-2
.250 Series	18-14	.130-.180 (3.30-4.57)	.032 (0.81)	V-0	Natural	Brass	521451-1
.250 Series	18-14	.130-.180 (3.30-4.57)	.032 (0.81)	V-0	Natural	Tin Plated Brass	521451-2
.250 Series	12-10	.150-.200 (3.81-5.08)	.032 (0.81)	V-2	Natural	Brass	521227-1 <sup>2</sup>
.250 Series	12-10	.150-.200 (3.81-5.08)	.032 (0.81)	V-2	Natural	Tin Plated Brass	521227-2 <sup>2</sup>

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



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## Questions that will help you better select the product that you need:

**1. What is the mating tab size in your application?**

The Ultra-Pod FASTON receptacles are available in .110, .187 and .250 series receptacles. The .110 and .187 series receptacles are available for both .020in and .032in tab thicknesses.

**2. What are the wire type and size requirements?**

The Ultra-Pod FASTON product family is available in wire sizes from 22 AWG to 10 AWG (depending on series size) with wire and insulation crimp options for either heavy wall insulation or double wire combinations.

**3. What are the operating temperature requirements for your application?**

The Ultra-Pod FASTON product has an operating temperature range of -40 to 105°C. Some portions of the family are available in base metal, plating and resin options for higher temperatures.

**4. Does your application require agency approvals?**

The Ultra-Pod FASTON insulation product is listed by Underwriters Laboratories Inc., File No. E66717 and CSA certified, File No. LR 7189.

**5. How is the product applied to wire?**

The Ultra-Pod FASTON product is offered in plastic and metal carrier strip form. TE Connectivity offers a range of application tooling to apply The Ultra-Pod FASTON product in both semi-automatic and automatic applications.

**6. What are some of the benefits of the Ultra-Pod FASTON product family over other methods of insulating quick connect terminals?**

The Ultra-Pod FASTON system permits fast, one-step crimp and insulation of the quick connect in the applicator while the F-Crimp wire barrel format permits either manual or automatic crimp inspection.

**7. Is this product only used to connect to components?**

No, the Ultra-Pod FASTON family also includes tabs in the 250 series which permit fully insulated in-line separable wire-to-wire connections.

Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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### TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015