

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.

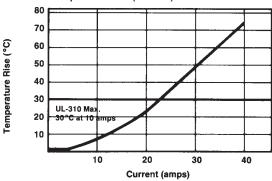


Ultra-Fast Fully Insulated FASTON Receptacles and Tabs (Continued)

Test Specifications

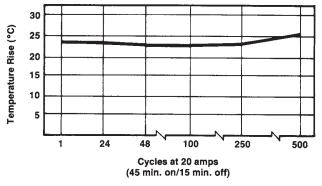
The following information and accompanying graphs are taken from TE Product Qualification Testing of Ultra-Fast FASTON product. Tests were conducted on representative production samples, and all values shown are averages of group results. The values shown are typical results and may vary due to differences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

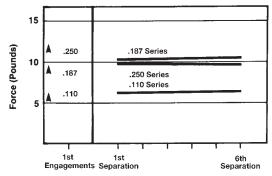
Current Cycling vs. Temperature Rise (16 AWG)



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.

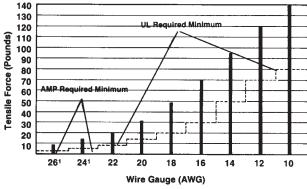
Engagement/Separation



Number of Engagements/Separations

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



¹ 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.



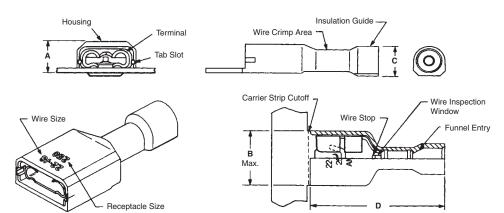
Ultra-Fast Fully Insulated FASTON Receptacles and Tabs (Continued)

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



Loose Piece 7-520366-2¹ 2-520081-2¹ 2-520084-2 2-520273-2 —
2-520081-2 ¹ 2-520084-2
2-520084-2
2-520273-2 — —
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2-520182-2
2-520194-2
2-520262-2
2-520275-2
3-350816-2
3-520125-2
3-520151-2
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2-520184-2
2-520184-4
2-520264-2
3-350820-2
3-520117-2
3-520141-2
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¹ UL Recognized, CSA Certified.

UL Recognized 8 AMPS Max. CSA Certified.
 Available with black insulator — Part Number 9-XXXXXX-2.

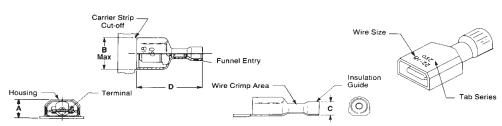


Ultra-Fast Fully Insulated FASTON Receptacles and Tabs (Continued)

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



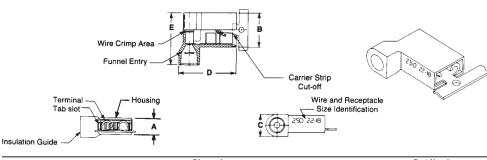
Description	Wire Range	Ins. Dia		Dimen	sions		Tab Te	rminal Base	Part	Numbers
Description	AWG	Max.	Α	В	С	D	Size	Material	Strip	Loose Piece
	22-18	.135 3.43	.290 7.37	.522 13.26	.205 5.21	.855 21.72	.032 x .250 0.81 x 6.35	Brass	2-520102-2	2-520103-2
.250	22-16	.230 5.84	.290 7.37	.522 13.26	.295 7.49	.935 23.75	.032 x. 250 0.81 x 6.35	Brass	2-521144-2	2-521192-2
Series	16-14	.160 4.06	.290 7.37	.522 13.26	.230 5.84	.855 21.72	.032 x. 250 0.81 x 6.35	Brass	3-520106-2	3-520107-2
	10-14	.260 6.60	.290 7.37	.522 13.26	.325 8.26	.935 23.75	.032 x. 250 0.81 x 6.35	Brass	3-521142-2	3-521191-2
	12-10	.320 8.13	.352 8.94	.522 13.26	.388 9.86	.935 23.75	.032 x .250 0.81 x 6.35	Brass	4-521097-2	4-521098-2
.187	22-18	.135	.250	.448	.205	.793	.020 x .187 0.51 x 4.75	Brass	2-521102-2	2-521103-2
Series		3.43	6.35	11.38	5.21	20.14	.032 x .187 0.81 x 4.75	Brass	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

Red — 22-18 AWG **Blue** — 16-14 AWG **Yellow** — 12-10 AWG



Description	Wire Range ¹	Ins. Dia.)imensi	ions		Mating	Terminal Base	Part I	Numbers
Description	AWG	Max.	Α	В	С	D	E	Tab	Material	Strip	Loose Piece
	22-18	.165	.187	.320	.235	.636	.515	.020 x .187 0.51 x 4.75	Brass	2-520334-22	2-520335-2
	22-10	4.19	4.75	8.13	5.97	16.15	13.08	.032 x .187 0.81 x 4.75	Brass	2-520336-22	2-520337-2
.187		.185	.187	.320	.255	.632	.515	.020 x .187 0.51 x 4.75	Brass	3-520338-2	3-520339-2
Series	16-14	4.70	4.75	8.13	6.48	16.05	13.08	.032 x .187 0.81 x 4.75	Brass	3-520340-22	_
	10-14	.260	.187	.320	.325	.668	.565	.020 x .187 0.51 x 4.75	Brass	3-520997-2	_
		6.60	4.75	8.13	8.26	16.97	14.35	.032 x .187 0.81 x 4.75	Brass	3-521247-2	_
.205 Series	22-18	.165 4.19	.187 4.75	.385 9.78	.235 5.97	.636 16.15	.580 14.73	.032 x .205 0.81 x 5.21	Brass	2-521164-2	
	22-18	.165 4.19	.187 4.75	.385 9.78	.235 5.97	.636 16.15	.580 14.73	.032 x .250 0.81 x 6.35	Brass	2-520128-2	2-520129-2
	22-10	.230 5.84	.187 4.75	.385 9.78	.295 7.49	.665 16.89	.630 16.00	.032 x .250 0.81 x 6.35		2-520856-2	
.250 Series	16-14	.185 4.70	.187 4.75	.385 9.78	.255 6.48	.632 16.05	.580 14.73	.032 x .250 0.81 x 6.35	Brass	3-520132-22	3-520133-2
	10-14	.260 6.60	.187 4.75	.385 9.78	.325 8.26	.668 16.97	.630 16.00	.032 x .250 0.81 x 6.35	Brass	3-521013-2	_

¹ Stranded wire only.

Note: All part numbers are RoHS compliant.

UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

² Available with black insulator — Part Number 9-XXXXXX-2.



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
- **■** Complies with the IEC 380, 601, 950, and UL 1950 requirements for a secondary means of insulation fixing

Performance Capabilities

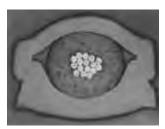
- Meets UL-310 specification for quick connect terminals: UL listed under File No. E-66717
- Meets CSA C22.2, No.153 specification for quick connect terminals: **CSA** certified under File No. LR 7189
- 600-volt application capability (1,000 volts for signs and fixtures)

■ 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.

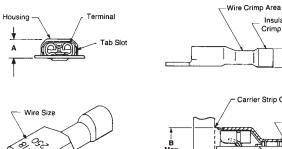


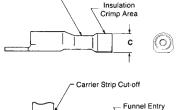
Ultra-Fast Plus Fully Insulated FASTON Receptacles and Tabs (Continued)

Ultra-Fast Plus Fully Insulated FASTON Receptacles

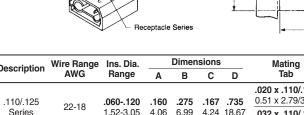
Material

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





Wire Stop



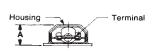
Description	Wire Range	Ins. Dia.		Dimen	sions		Mating	Terminal Base	Part N	umbers
Description	AWG	Range	Α	В	С	D	Tab	Material	Strip	Loose Piece
.110/.125	22-18	.060120	.160	.275	.167	.735	.020 x .110/.125 0.51 x 2.79/3.18	Brace	2-520932-2	_
Series	22-10	1.52-3.05	4.06 6.99 4.24		4.24	18.67	.032 x .110/.125	Brass	2-520979-2	_
	22-18	.060135	.165	.336	.200	.855	.020 x .187 0.51 x 4.75	Brass	2-520401-2	2-520409-2
.187	22-10	1.52-3.43	4.24	8.53	5.08	21.72	.032 x .187 0.81 x 4.75	7 Brass 2-520403-2		2-520411-2
Series	16-14	.090160	.185	.336	.225	.855	.020 x .187 0.51 x 4.75	Brass	3-520402-2	3-520410-2
	10-14	2.29-4.06	4.70	8.53	5.72	21.72	.032 x .187 0.81 x 4.75	Brass	3-520404-2	3-520412-2
.250	22-18	.060135 1.52-3.43	.195 4.95	.409 10.39	.200 5.08	.855 21.72	.032 x .250 0.81 x 6.35		2-520405-2	2-520407-2
Series	16-14 1000 1100 1100 1200 1000 1000 1000 X	.032 x .250 0.81 x 6.35	Brass	3-520406-2	3-520408-2					

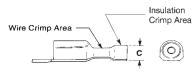
Ultra-Fast Plus Fully Insulated FASTON Tabs

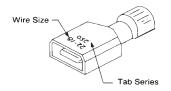
Material

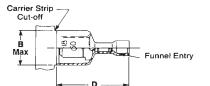
Housing — Nylon Flammability — UL 94 V-2 **Terminal** — Tin plated, copper alloy Color Code (Translucent)

Red — 22-18 AWG **Blue** — 16-14 AWG









Description	Wire Range			Dimen	sions		Mating	Terminal Base	Part Numbers	
Description	AWG	Range	Α	В	С	D	Tab	Material	Strip	Loose Piece
.187			.488	.205	.793	.020 x .187 0.51 x 4.75	Brass	2-521360-2	_	
Series	22-10	1.52-3.43	6.35	11.38	5.21	20.14	.032 x .187 0.81 x 4.75	Brass	2-521361-2	_
.250	22-18	.060135 1.52-3.43	.290 7.37	.522 13.26	.205 5.21	.855 21.72	.032 x .250 0.81 x 6.35	Brass	2-521055-2	_
Series	16-14	.090160 2.29-4.06	.290 7.37	.522 13.26	.230 5.84	.855 21.72	.032 x .250 0.81 x 6.35	Brass	3-521057-2	_



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 mm²], 187 series accepts 20-16 AWG [0.5-1.4mm²] wire and 250 series accepts 22-10 AWG [0.3-5 mm²] 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

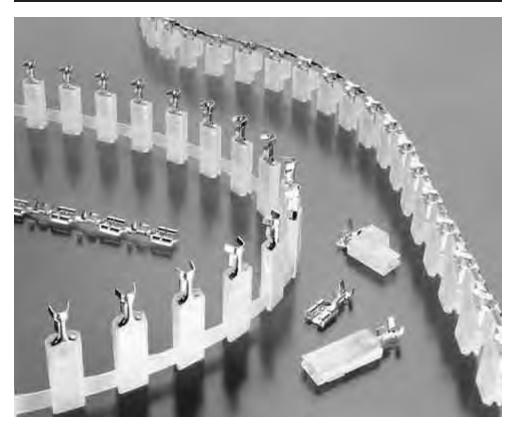
Application Specification 114-2124

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 downstroke 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,

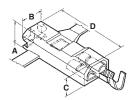
covers the FASTON receptacle sufficiently to provide for use in 600-volt applications. Most importantly, this insulating system helps eliminate the workplace hazards and labor costs of chemically expanded or heat shrink tubina.

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	Ins. Dia.		Dime	nsions		Mating	111 041	Cala	Material	Doub Number
Description	Range	Range	Α	В	С	D	Tab	UL 941	Color	and Finish	Part Numbers
							200	V-2	Natural	Brass	521228-1
							.020 0.51		Ivaluiai	Tin Plated Brass	521228-2
							0.0.	V-0	Natural	Tin Plated Brass	521408-24
.110 Series	22-18	.080120 2.03-3.05	.151 3.83	.224 5.69	.205 5.21	.805 20.45		V-2	Natural	Brass	521436-14
COLIGO		2.00 0.00	0.00	0.00	0.21	20.10	.032	V-Z	ivaturai	Tin Plated Brass	521436-2
							0.81	V-0	Natural	Brass	521437-14
								V-U	ivaturai	Tin Plated Brass	521437-22,4
								V-2	Natural	Brass	520973-1
							.020	V-Z	ivaturai	Tin Plated Brass	520973-2
							0.51	V-0	Natural	Brass	521225-1
	20-16	.090130	.170	.295	.200	.775		V-U	ivaturai	Tin Plated Brass	521225-2
	20-16	2.29-3.30	4.32	7.49	5.08	19.68		V-2	Motural	Brass	520982-1
							.032	V-2	Natural	Tin Plated Brass	520982-2
.187 Series							0.81	1/ 0	Matural	Brass	521284-1
Genes								V-0	Natural	Tin Plated Brass	521284-2
										Brass	521293-1
								V-2	Natural	Tin Distant Dunca	521293-2
	18-16 or 2-18	(2) .105 Max.	.170 5.33	.295 7.49	.200 5.08	.775 19.68	.020 0.51			Tin Plated Brass	521995-24,5
	2-10	2.07	5.55	7.43	5.00	13.00	0.51	1// 0	Matrical	Brass	521586-1
								V-0	Natural	Tin Plated Brass	521586-2
								1/ 0	Matrical	Brass	520988-1
	00.10	.090130	.195	.370	.225	.945	.032	V-2	Natural	Tin Plated Brass	520988-2
	22-18	2.29-3.30	4.95	9.40	5.72	24.00	0.81	1//0	Matrical	Brass	521368-1
								V-0	Natural	Tin Plated Brass	521368-2
										Droop	521997-14,5
								V-2	Natural	Brass	520963-1
										Tin Plated Brass	520963-2
	10.11	.120170	.195	.370	.225	.945	.032	1// 0	Matrical	Brass	521367-1
	18-14	3.05-4.32	4.95	9.40	5.72	24.00	0.81	V-0	Natural	Tin Plated Brass	521367-2
										Tin Plated Brass	521011-2 ²
.250 Series								V-2	Black	Nieles Dietes Otes el	521011-12,3
Genes										Nickel Plated Steel	521113-2 ³
										Brass	521637-1
								V-2	Natural	Tin Distant Do	521637-2
	18-14 or 2-18	(2) .105 Max.	.195 4.95	.370 9.40	.225 5.72	.945 24.00	.032 0.81			Tin Plated Brass	521998-24,5
	2-10	2.07	4.53	3.40	5.72	24.00	0.01		NI=1	Brass	521632-1
								V-0	Natural	Tin Plated Brass	521632-2
								1//0	NI. I	Brass	520974-1
		.130180	.195	.370 9.40	.225	.945	.032	V-2	Natural	Tin Plated Brass	520974-2
	14-10	3.30-4.57	4.95		5.72	24.00	0.81			Brass	521366-1
		3.30-4.37			5.72			V-0	Natural	Tin Plated Brass	521366-2

¹ Flammability rating of plastic material.

² 150°C rated nylon.

³ UL recognized.

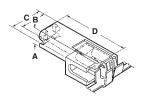
⁴ No UL or CSA approvals.

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



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

Flag Insulation Support



Description	Wire	Ins. Dia.		Dimer	nsions		Mating	UL 941	Color	Material	Part Numbers
Description	Range	Range	Α	В	С	D	Tab	UL 94	Coloi	and Finish	Part Numbers
										Brass	521470-14
							000	V-2	Natural	Tin Plated Brass	521470-24
							.020 0.51			Till Flated Diass	1969106-23,5
							0.0.	V-0	Natural	Brass	521596-14
	22-18	.060110	.170	.295	.485	.680		V-U	Ivaluiai	Tin Plated Brass	521596-24
	22-10	1.52-2.79	4.32	7.49	12.32	17.27		V-2	Natural	Brass	521598-1 ³
							.032	V-Z	Ivalurai	Tin Plated Brass	521598-2 ³
							0.81	V-0	Natural	Brass	521600-14
								V-0	Maturai	Tin Plated Brass	521600-24
.187 [—] Series										Brass	521471-14
001100								V-2	Natural	Tin Plated Brass	521471-24
							.020 0.51			TIII Flateu Blass	1969133-23,5
							0.01	V-0	Natural	Brass	521597-14
	18-14 or	(a) .105 May	.170	.295	.485	.680		V-0	Maturai	Tin Plated Brass	521597-24
	(2) 20 or	(2) 105 Max.	4.32	7.49	12.32	17.27				Brass	521599-14
	(2) 18							V-2	Natural		521599-24
							.032 0.81				1969107-23,5
							0.01	1/0	Matrical	Brass	521601-14
								V-0	Natural	Tin Plated Brass	521601-24
								V-2	Matrical	Brass	521050-1
	00.40	.050100	.200	.370	.585	.680	.032	V-2	Natural	Tin Plated Brass	521050-2
	22-18	1.27-2.54	5.08	9.40	14.86	17.27	0.81	V-0	Matrical	Brass	521411-1
								V-U	Natural	Tin Plated Brass	521411-2
_										Brass	1969109-13,5
									Matrical	Tin Plated Brass	1969109-23,5
								14.0	Natural	Brass	520971-1
.250	10.11	.110160	.200	.370	.585	.680	.032	V-2		Tin Plated Brass	520971-2
Series	18-14	2.79-4.06	5.08	9.40	14.86	17.27	0.81		DI I	Tin Plated Brass	520971-4
									Black	Nickel Plated Steel	521087-1 ³
										Brass	521282-1
								V-0	Natural	Tin Plated Brass	521282-2
_								1/0	N1	Brass	521112-1
	18-14 or		.200	.370 9.40	.585 14.86		.032	V-2	Natural	Tin Plated Brass	1969110-23,5
	(2) 20 or (2) 18	(2) 2.66 Max.	5.08				0.81		N1	Brass	521633-1
	(2) 18							V-0	Natural	Tin Plated Brass	521633-2

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

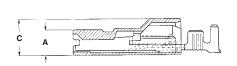
⁴ No CSA approvals.

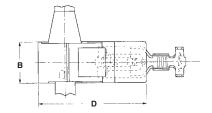
⁵ VDE certified to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.



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

Positive Lock Insulation Support

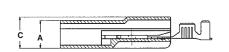


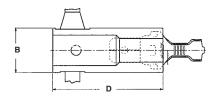


Description	Wire	Ins. Dia.		Dimen	sions		Mating	UL 941	Color	Material	Part Numbers
Description	Range	Range	Α	В	С	D	Tab	UL 94	Color	and Finish	Part Numbers
								V-2	Natural	Brass	521271-1 ²
.187 Series	18-14	.110180 2.79-4.57	.186 4.72	.307 7.80	.265 6.73	.812 20.62	.020 0.51	V-Z	Maturai	Tin Plated Brass	521271-2 ²
Series		2.75 4.57	4.72	7.00	0.75	20.02	0.51	V-0	Natural	Tin Plated Brass	521212-2 ²
								V-2	Natural	Brass	521213-1 ²
.250	10.14	.110180	.205	.370	.245	.950	.032	V-2	Maturai	Tin Plated Brass	521213-2 ²
Series			5.21	9.40	6.22	24.13	0.81		Matrical	Brass	521317-1 ²
								V-0	Natural	Tin Plated Brass	521317-2 ²

¹ Flammability rating of plastic material. ² UL Recognized, CSA Certified

Tabs Insulation Support





Description	Wire	Ins. Dia.		Dimen	sions		Tab	UL 941	Color	Material	Part Numbers
Description	Range	Range	Α	В	С	D	Iab	UL 94	Color	and Finish	Part Numbers
								V-2	Natural	Brass	521217-1
	18-14	.130180	.275	.450	.310	1.120	.032	V-Z	ivaturai	Tin Plated Brass	521217-2
.250	10-14	3.30-4.57	6.99	11.43	7.87	28.45	0.81	V-0	Natural	Brass	521451-1
Series								V-U	ivaturai	Tin Plated Brass	521451-2
	12-10	.150200	.275	.450	.310	1.120	.032	V-2	Natural	Brass	521227-1 ²
	12-10	3.81-5.08	6.99	11.43	7.87	28.45	0.81	v-2	ivaturai	Tin Plated Brass	521227-2 ²

¹ Flammability rating of plastic material. ² No UL or CSA approvals



PIDG FASTON Receptacles and Tabs

Product Facts

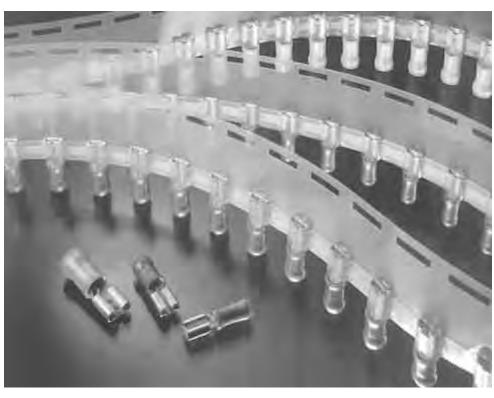
- Pre-insulated terminal designed for complete and uniform reliability in the most difficult circuit environment
- Consists of an unplated or tin plated brass body or a tin plated phosphor bronze body with a specially designed copper sleeve and insulation sleeve fitted over the terminal barrel
- Design 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 precisionengineered from the finest hard-metal alloys
- Crimping pressure is controlled by a ratchet device on the hand tool or a corresponding precalibration 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 precalibration 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	0001/14
16-14	16-14 Stranded	300 V Max., 105°C Max. ¹
12-10	12-10 Stranded	- 100 O Wax.

¹ UL and CSA — Nylon.



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

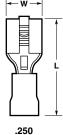
Plating — Tin per MIL-T-10727 except where noted.

Metallic Sleeve — Copper per **ASTM B-152**

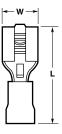
Plating — Tin per MIL-T-10727

Related Product Data

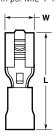
Application Tooling — reference Catalog 82042 for tooling



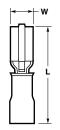




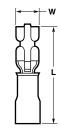
.205 Series



.187 Series



.110 Series-Standard



.110 Series-Low Insertion

	Wire Size		Dimer	nsions	Terminal	Wire	Decemb	OtI-	Fits	ı	Part Numbers	i
Series	Circular Mils [mm ²]	Style	W Nom.	L Max.	Insulation Color	Insulation Diameter Max.	Recept. Matl.	Stock Thk.	Tab Thk.	Loose Piece	Tape Mounted	Strip Form
	22-18 509-1,900	В	.300	.900	Red	.140 3.56	Brass	.018 0.46	.032 0.81	640903-1*	640903-2	640902-1
	[0.26-0.96]	ь	7.62	22.86	Red	.140 3.56	Brass	.018 0.46	.032 0.81	55675-1 ²	55675-2 ²	_
	16-14 2,050-5,180 [1.04-2.62]	В	.300 7.62	.900 22.86	Blue	.170 4.32	Brass	.018 0.46	.032 0.81	640905-1*	640905-2	640904-1
.250	14-12 3,831-6,470 ¹	В	.300	1.012	Green	.250 6.35	Brass	.018 0.46	.032 0.81	42844-1*†	42844-3†	60544-3†
	[1.94-3.28]	Ь	7.62	25.70	Green	.250 6.35	Phos. Brz.	.018 0.46	.032 0.81	42844-2*†	_	_
	12-10 5.180-13.100	В	.300	1.012	Yellow	.250 6.35	Brass	.018 0.46	.032 0.81	640907-1*	640907-2	640906-1
	[2.62-6.64]		7.62	25.70	Yellow	.250 6.35	Phos. Brz.	.018 0.46	.032 0.81	61198-2 ^{3†}	61198-4 ⁴ †	61197-2
.250	22-18 509-1,900 [0.26-0.96]	В	.300 7.62	.900 22.86	Red	.145 3.68	Brass	.016 0.41	.032 0.81	184262-1†	184262-2†	184261-1 [†]
Low Insertion	16-14 2,050-5,180 [1.04-2.62]	В	.300 7.62	.900 22.86	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]	В	.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
	22-18 509-1,900	В	.250 6.35	.800 20.32	Red/Black	.140 3.56	Brass	.016 0.41	.020 0.51	640174-1	_	_
.205	[0.26-0.96]				Red	.140 3.56	Brass	.016 0.41	.032 0.81	640911-1*	640911-2	_
	16-14 2.050-5.180	В	.250	.800	Blue	.170 4.32	Brass	.016 0.41	.020 0.51	640913-1*	640913-2	_
	[1.04-2.62]	Ь	6.35	20.32	Blue	.170 4.32	Brass	.016 0.41	.032 0.81	640915-1*	640915-2	_
.187	26-24 238-475 [0.12-0.24]	В	.230 5.84	.700 17.78	Yellow	.082 2.08	Brass	.016 0.41	.020 0.51	641321-1*†	641321-2 [†]	641320-1†
.107	22-18 509-1,900 [0.26-0.96]	В	.230 5.84	.800 20.32	Red	.140 3.56	Brass	.016 0.41	.020 0.51	640917-1*	640917-2	640916-1

[†] Not UL or CSA approved or listed.

* Available in small packaging quantities.

¹ Wire range is limited as noted.

² Unplated receptacle body.

³ Requires tool 90276-2

⁴ Requires die 58541-1



Receptacles (Continued)

	Wire Size		Dimer	nsions	Terminal	Wire Insulation	Decemb	Stock	Fits		Part Numbers	3
Series	Circular Mils [mm²]	Style	W Nom.	L Max.	Insulation Color	Diameter Max.	Recept. Mati.	Thk.	Tab Thk.	Loose Piece	Tape Mounted	Strip Form
	16-14 2.050-5.180	В	.230 5.84	.800 20.32	Blue	.170 4.32	Brass	.016 0.41	.020 0.51	640919-1*	640919-2	640918-1
.187	[1.04-2.62]	В	.230 5.84	.900 22.86	Blue	.250 6.35	Brass	.016 0.41	.032 0.81	696108-1 [†]	696108-2 [†]	_
	16-14 509-1,900 [0.26-0.96]	В	.235 5.84	.800 20.32	Blue	.170 4.32	Brass	.016 0.41	.032 0.81	184235-1 [†]	184235-2 [†]	_
.187 Low	22-18 509-1.900	В	.230	.800	Red	.140	Brass	.016	.020 0.51	696777-2	_	696776-1
Insertion	[0.26-0.96]		5.84	22.86	rica	3.68	Diass	0.41	.032 0.81	184268-1 [†]	184268-2 [†]	184267-1 [†]
	00.40		.148 3.76	.734 18.64	Natural	.110 2.79	Brass	.012 0.30	.016 0.41	61048-1*†	61048-2 [†]	_
.110 Standard	22-18 509-1,900 [0.26-0.96]	В	.148 3.76	.734 18.64	Natural	.110 2.79	Brass	.012 0.30	.020 0.51	61060-1*†	61060-2 [†]	61059-2 [†]
	[0.20 0.00]		.148 3.76	.734 18.64	Natural	.110 2.79	Brass	.012 0.30	.032 0.81	60894-1*†	60894-2 [†]	60893-2 [†]
	26-24 238-475 [0.12-0.24]	Α	.160 4.06	.700 17.78	Yellow	.082 2.08	Brass	.016 0.41	.020 0.51	641324-1 [†]	641324-2 [†]	_
			. 160 4.06	.796 20.22	Red	.140 3.56	Brass	.016 0.41	.012 0.30	_	_	350871-1 [†]
.110	22-18 509-1.900	Α							.016 0.41	640921-1	640921-2	_
Low Insertion	[0.26-0.96]	^	.160 4.06	.800 20.32	Red	.140 3.56	Brass	.016 0.41	.020 0.51	640923-1*	640923-2	640922-1
									.032 0.81	640925-1*	640925-2	640924-1
	10.14	Α	.160	.800	Blue	.170	Brass	.016	.020 0.51	640929-1*	640929-2	_
	16-14 2,050-5,180 [1.04-2.62]		4.06	20.32	Diue	4.32	Diass	0.41	.032 0.81	640931-1*	640931-2	_
	[1.07 2.02]	В	.160 4.06	.800 20.32	Blue	.170 4.32	Brass	.016 0.41	.016 0.41	640927-1	640927-2	_

[†]Not UL or CSA approved or listed.

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

•		•		•	
		1	Tools for Strip Form Terminations		
Wire Size	Hand Tool	Tape Dies for 69875 AMP-TAPETRONIC No Applicator Required	Tape Dies for AMP-0-LECTRIC¹ 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 ²
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 ²
14-12	90246-1	90240-2	90240-2	90240-2	_
12-10	59824-1	59828-1	59828-1*	59828-1	466790-4 ²

^{*}Available in small packaging quantities.

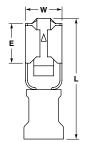
^{*}Only UL and CSA approved.

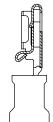
¹AMP-O-LECTRIC model "K" 565435-5 uses applicator 567200-2.

²Die included with applicator.



Positive Lock Receptacle Low Insertion Force with Locking Device

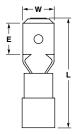


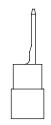


Description	Wire	Ins. Dia.		Dimensior	ıs	Material	Part Number	
Description	Range	Max.	W	L	E	and Finish	Part Number	
For Tab .250 x .032	16-14	.190 4.83	.362 9.19	.850 21.59	.315 8.00	Tin Plated Brass	165536-1 [†]	

†Not UL or CSA approved or listed.

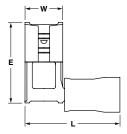
Tab





Description	Wire	Ins. Dia.		Dimensior	ıs	Material	Part Number
Description	Range	Max.	W	W L E and Fir		and Finish	Part Number
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	ription Wire Range	Ins. Dia.		Dimensions		Material	Part Number
Description		Max.	W	L	E	and Finish	Part Number
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.

Catalog 82004 Revised 3-11

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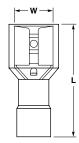
Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

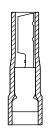
UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



Fully Insulated Receptacles

Insulation Sleeve — Nylon





Description	Wire	Wire Ins. Dia.		nsions	Material	Part Number	
Description	Range	Range	W	L	and Finish	rait Nullibel	
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

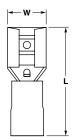
Material

Insulation — PVC, UL 94V-0 Receptacle Body — Brass

Plating — Tin

Metallic Sleeve — Copper

Plating — Tin



Series	Wire Size	Dimensions		Tarminal	Wire Fits		Part Numbers	
	Circular Mils [mm²]	W Nom.	L Nom.	Terminal Color	Diameter Max.	Tab Thk.	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

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