

## 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.,<br>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

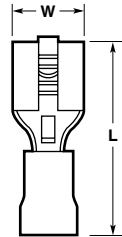
- A** — No dimple with wire stop  
**B** — Dimple with wire stop  
**C** — No dimple, no wire stop

#### Material

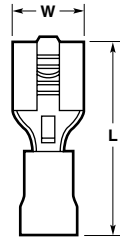
**Insulation** — Nylon  
**Receptacle Body** — Brass per ASTM B-36 or phosphor bronze per ASTM B-139  
**Plating** — Tin per MIL-T-10727 except where noted.  
**Metallic Sleeve** — Copper per ASTM B-152  
**Plating** — Tin per MIL-T-10727

#### Related Product Data

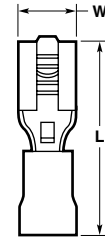
**Application Tooling** — reference Catalog 82042 for tooling



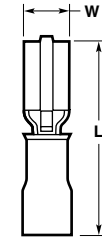
**.250 Series**



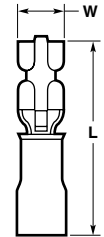
**.205 Series**



**.187 Series**



**.110 Series-Standard**



**.110 Series-Low Insertion**

| Series                   | Wire Size<br>Circular Mils<br>[mm <sup>2</sup> ] | Style | Dimensions   |                | Terminal<br>Insulation<br>Color | Wire<br>Insulation<br>Diameter<br>Max. | Recept.<br>Mater. | Stock<br>Thk. | Fits<br>Tab<br>Thk. | Part Numbers          |                       |               |
|--------------------------|--------------------------------------------------|-------|--------------|----------------|---------------------------------|----------------------------------------|-------------------|---------------|---------------------|-----------------------|-----------------------|---------------|
|                          |                                                  |       | W<br>Nom.    | L<br>Max.      |                                 |                                        |                   |               |                     | Loose<br>Piece        | Tape<br>Mounted       | Strip<br>Form |
| .250                     | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .300<br>7.62 | .900<br>22.86  | Red                             | .140<br>3.56                           | Brass             | .018<br>0.46  | .032<br>0.81        | 640903-1*             | 640903-2              | 640902-1      |
|                          |                                                  |       |              |                | Red                             | .140<br>3.56                           | Brass             | .018<br>0.46  | .032<br>0.81        | 55675-1 <sup>2</sup>  | 55675-2 <sup>2</sup>  | —             |
|                          | 16-14<br>2,050-5,180<br>[1.04-2.62]              | B     | .300<br>7.62 | .900<br>22.86  | Blue                            | .170<br>4.32                           | Brass             | .018<br>0.46  | .032<br>0.81        | 640905-1*             | 640905-2              | 640904-1      |
|                          |                                                  |       |              |                | Green                           | .250<br>6.35                           | Brass             | .018<br>0.46  | .032<br>0.81        | 42844-1*†             | 42844-3†              | 60544-3†      |
|                          | 14-12<br>3,831-6,470 <sup>1</sup><br>[1.94-3.28] | B     | .300<br>7.62 | 1.012<br>25.70 | Green                           | .250<br>6.35                           | Phos. Brz.        | .018<br>0.46  | .032<br>0.81        | 42844-2*†             | —                     | —             |
|                          |                                                  |       |              |                | Yellow                          | .250<br>6.35                           | Brass             | .018<br>0.46  | .032<br>0.81        | 640907-1*             | 640907-2              | 640906-1      |
|                          | 12-10<br>5,180-13,100<br>[2.62-6.64]             | B     | .300<br>7.62 | 1.012<br>25.70 | Yellow                          | .250<br>6.35                           | Phos. Brz.        | .018<br>0.46  | .032<br>0.81        | 61198-2 <sup>3†</sup> | 61198-4 <sup>4†</sup> | 61197-2       |
|                          |                                                  |       |              |                | Yellow                          | .250<br>6.35                           | Phos. Brz.        | .018<br>0.46  | .032<br>0.81        | 61198-2 <sup>3†</sup> | 61198-4 <sup>4†</sup> | 61197-2       |
| .250<br>Low<br>Insertion | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .300<br>7.62 | .900<br>22.86  | Red                             | .145<br>3.68                           | Brass             | .016<br>0.41  | .032<br>0.81        | 184262-1†             | 184262-2†             | 184261-1†     |
|                          | 16-14<br>2,050-5,180<br>[1.04-2.62]              | B     | .300<br>7.62 | .900<br>22.86  | Blue                            | .173<br>4.39                           | Brass             | .016<br>0.41  | .032<br>0.81        | 184265-1†             | 184265-2†             | 184264-1†     |
| .205<br>Low<br>Insertion | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .250<br>6.35 | .800<br>20.32  | Red                             | .135<br>3.43                           | Brass             | .016<br>0.41  | .020<br>0.51        | 696018-1†             | 696018-2†             | —             |
|                          |                                                  |       |              |                | Red                             | .140<br>3.56                           | Brass             | .016<br>0.41  | .020<br>0.51        | 640909-1*             | 640909-2              | 640908-1      |
|                          | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .250<br>6.35 | .800<br>20.32  | Red/Black                       | .140<br>3.56                           | Brass             | .016<br>0.41  | .020<br>0.51        | 640174-1              | —                     | —             |
|                          |                                                  |       |              |                | Red                             | .140<br>3.56                           | Brass             | .016<br>0.41  | .032<br>0.81        | 640911-1*             | 640911-2              | —             |
|                          | 16-14<br>2,050-5,180<br>[1.04-2.62]              | B     | .250<br>6.35 | .800<br>20.32  | Blue                            | .170<br>4.32                           | Brass             | .016<br>0.41  | .020<br>0.51        | 640913-1*             | 640913-2              | —             |
|                          |                                                  |       |              |                | Blue                            | .170<br>4.32                           | Brass             | .016<br>0.41  | .032<br>0.81        | 640915-1*             | 640915-2              | —             |
|                          | 26-24<br>238-475<br>[0.12-0.24]                  | B     | .230<br>5.84 | .700<br>17.78  | Yellow                          | .082<br>2.08                           | Brass             | .016<br>0.41  | .020<br>0.51        | 641321-1*†            | 641321-2†             | 641320-1†     |
|                          |                                                  |       |              |                | Red                             | .140<br>3.56                           | Brass             | .016<br>0.41  | .020<br>0.51        | 640917-1*             | 640917-2              | 640916-1      |
| .187                     | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .230<br>5.84 | .800<br>20.32  | Red                             | .140<br>3.56                           | Brass             | .016<br>0.41  | .020<br>0.51        | 640917-1*             | 640917-2              | 640916-1      |

† 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<br>Circular Mils<br>[mm <sup>2</sup> ] | Style | Dimensions   |               | Terminal<br>Insulation<br>Color | Wire<br>Insulation<br>Diameter<br>Max. | Recept.<br>Matl. | Stock<br>Thk. | Fits<br>Tab<br>Thk. | Part Numbers   |                 |               |
|--------------------------|--------------------------------------------------|-------|--------------|---------------|---------------------------------|----------------------------------------|------------------|---------------|---------------------|----------------|-----------------|---------------|
|                          |                                                  |       | W<br>Nom.    | L<br>Max.     |                                 |                                        |                  |               |                     | Loose<br>Piece | Tape<br>Mounted | Strip<br>Form |
| .187                     | 16-14<br>2,050-5,180<br>[1.04-2.62]              | B     | .230<br>5.84 | .800<br>20.32 | Blue                            | .170<br>4.32                           | Brass            | .016<br>0.41  | .020<br>0.51        | 640919-1*      | 640919-2        | 640918-1      |
|                          |                                                  |       | .230<br>5.84 | .900<br>22.86 | Blue                            | .250<br>6.35                           | Brass            | .016<br>0.41  | .032<br>0.81        | 696108-1†      | 696108-2†       | —             |
|                          | 16-14<br>509-1,900<br>[0.26-0.96]                | B     | .235<br>5.84 | .800<br>20.32 | Blue                            | .170<br>4.32                           | Brass            | .016<br>0.41  | .032<br>0.81        | 184235-1†      | 184235-2†       | —             |
| .187<br>Low<br>Insertion | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .230<br>5.84 | .800<br>22.86 | Red                             | .140<br>3.68                           | Brass            | .016<br>0.41  | .020<br>0.51        | 696777-2       | —               | 696776-1      |
|                          |                                                  |       |              |               |                                 |                                        |                  |               | .032<br>0.81        | 184268-1†      | 184268-2†       | 184267-1†     |
| .110<br>Standard         | 22-18<br>509-1,900<br>[0.26-0.96]                | B     | .148<br>3.76 | .734<br>18.64 | Natural                         | .110<br>2.79                           | Brass            | .012<br>0.30  | .016<br>0.41        | 61048-1*†      | 61048-2†        | —             |
|                          |                                                  |       | .148<br>3.76 | .734<br>18.64 | Natural                         | .110<br>2.79                           | Brass            | .012<br>0.30  | .020<br>0.51        | 61060-1*†      | 61060-2†        | 61059-2†      |
|                          |                                                  |       | .148<br>3.76 | .734<br>18.64 | Natural                         | .110<br>2.79                           | Brass            | .012<br>0.30  | .032<br>0.81        | 60894-1*†      | 60894-2†        | 60893-2†      |
|                          | 26-24<br>238-475<br>[0.12-0.24]                  | A     | .160<br>4.06 | .700<br>17.78 | Yellow                          | .082<br>2.08                           | Brass            | .016<br>0.41  | .020<br>0.51        | 641324-1†      | 641324-2†       | —             |
|                          |                                                  |       | .160<br>4.06 | .796<br>20.22 | Red                             | .140<br>3.56                           | Brass            | .016<br>0.41  | .012<br>0.30        | —              | —               | 350871-1†     |
|                          |                                                  |       |              |               |                                 |                                        |                  |               | .016<br>0.41        | 640921-1       | 640921-2        | —             |
| .110<br>Low<br>Insertion | 22-18<br>509-1,900<br>[0.26-0.96]                | A     | .160<br>4.06 | .800<br>20.32 | Red                             | .140<br>3.56                           | Brass            | .016<br>0.41  | .020<br>0.51        | 640923-1*      | 640923-2        | 640922-1      |
|                          |                                                  |       |              |               |                                 |                                        |                  |               | .032<br>0.81        | 640925-1*      | 640925-2        | 640924-1      |
|                          |                                                  |       |              |               |                                 |                                        |                  |               | .020<br>0.51        | 640929-1*      | 640929-2        | —             |
|                          | 16-14<br>2,050-5,180<br>[1.04-2.62]              | A     | .160<br>4.06 | .800<br>20.32 | Blue                            | .170<br>4.32                           | Brass            | .016<br>0.41  | .032<br>0.81        | 640931-1*      | 640931-2        | —             |
|                          |                                                  | B     | .160<br>4.06 | .800<br>20.32 | Blue                            | .170<br>4.32                           | Brass            | .016<br>0.41  | .016<br>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<br>69875 AMP-TAPETRONIC<br>No Applicator Required | Tape Dies for<br>AMP-O-LECTRIC <sup>1</sup> Model "G"<br>Applicator 567200-3 | Tape Dies for<br>AMPOMATOR CLS III G,<br>CLS IV Applicator 687658-1 | AMPOMATOR<br>CLS III G, CLS IV<br>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<br>(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.

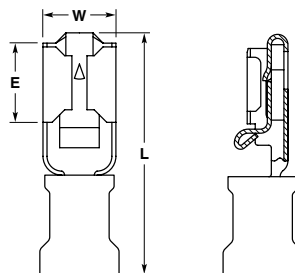
<sup>1</sup>AMP-O-LECTRIC model "K" 565435-5 uses applicator 567200-2.

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

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

## PIDG FASTON Receptacles and Tabs (Continued)

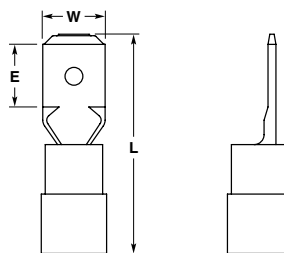
### Positive Lock Receptacle Low Insertion Force with Locking Device



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

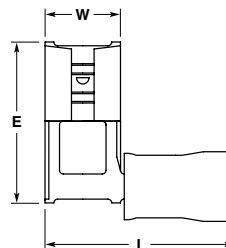
†Not UL or CSA approved or listed.

### Tab



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

### PIDG FASTON Flag Receptacles



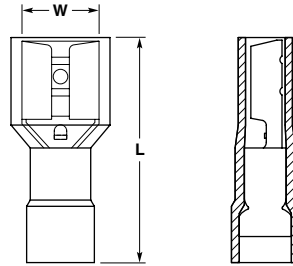
| Description            | Wire Range | Ins. Dia. Max. | Dimensions   |               |               | Material and Finish | Part Number |
|------------------------|------------|----------------|--------------|---------------|---------------|---------------------|-------------|
|                        |            |                | W            | L             | E             |                     |             |
| For Tab<br>.250 x .032 | 22-18      | .134<br>3.40   | .300<br>7.62 | .720<br>18.29 | .610<br>15.49 | Tin Plated Brass    | 156667-1    |
|                        | 16-14      | .157<br>3.99   | .300<br>7.62 | .720<br>18.29 | .610<br>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<br>.250 x .032 | 22-18      | .128<br>3.25    | .375<br>9.53 | .891<br>22.63 | Tin Plated Brass    | 696357-1    |
|                        | 16-14      | .165<br>4.19    | .375<br>9.53 | .881<br>22.38 | Tin Plated Brass    | 696366-1    |
|                        | 12-10      | .225<br>5.72    | .375<br>9.53 | .998<br>25.35 | Tin Plated Brass    | 696371-1    |

### Budget Line PIDG FASTON Receptacles

#### Material

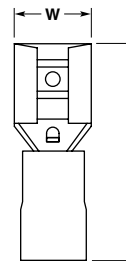
Insulation — PVC, UL 94V-0

Receptacle Body — Brass

Plating — Tin

Metallic Sleeve — Copper

Plating — Tin



| Series | Wire Size<br>Circular Mils<br>[mm²] | Dimensions   |               | Terminal<br>Color | Wire<br>Insulation<br>Diameter<br>Max. | Fits<br>Tab<br>Thk. | Part Numbers   |                 |
|--------|-------------------------------------|--------------|---------------|-------------------|----------------------------------------|---------------------|----------------|-----------------|
|        |                                     | W<br>Nom.    | L<br>Nom.     |                   |                                        |                     | Loose<br>Piece | Tape<br>Mounted |
| .250   | 22-18                               | .300<br>7.62 | .819<br>20.80 | Red               | .150<br>3.81                           | .032<br>0.81        | 696301-1       | 696301-2        |
|        | 16-14                               | .300<br>7.62 | .819<br>20.80 | Blue              | .185<br>4.70                           | .032<br>0.81        | 696302-1       | 696302-2        |

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