

## 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)

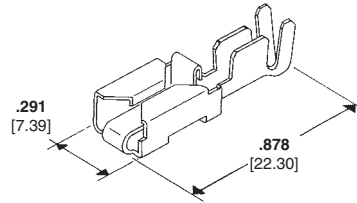
### Mark I

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

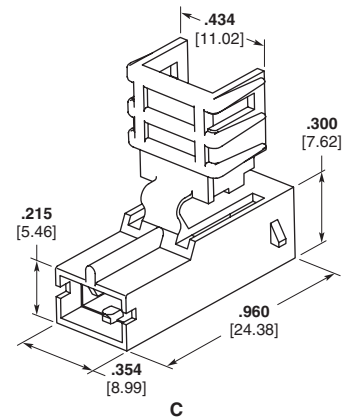
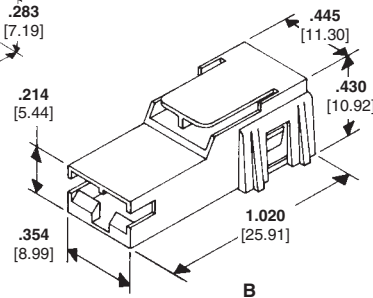
<sup>1</sup> "A" Style Housing only.

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

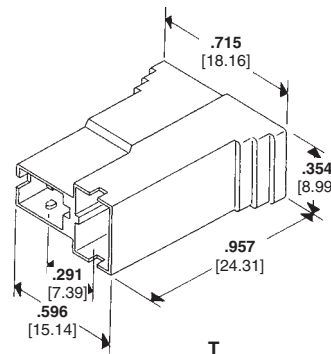
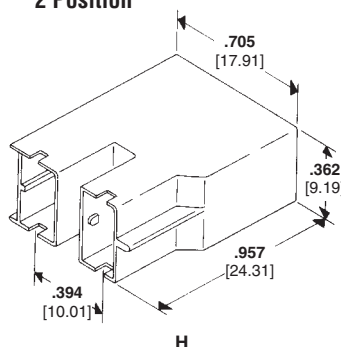
### Receptacle Housings

**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              |
|       | Natural | 926522-2              |
| 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.

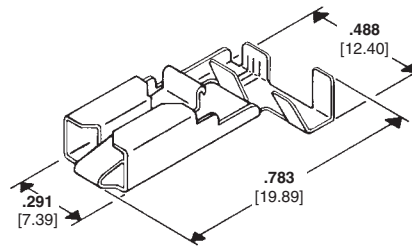
## Positive Lock Receptacles (Continued)

### Mark I

#### 250 Series Flag Receptacle

Stock Thickness — .016 [0.41]

Fits Tab — .032 [0.81]

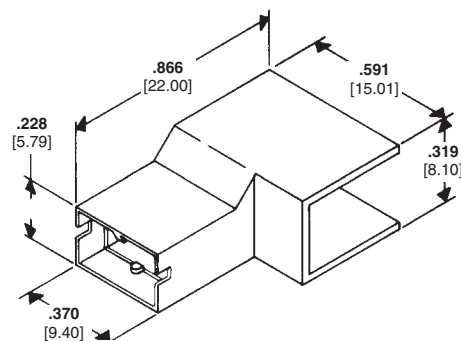


| Wire Range<br>AWG | Insulation<br>Diameter | Material<br>and Finish | Part Number |
|-------------------|------------------------|------------------------|-------------|
| 20-15             | .087-.130<br>2.21-3.30 | Brass/Pre-Tin          | 926820-4    |
| 17-13             | .130-.170<br>3.00-4.30 | 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<br>AWG       | Tab<br>Thickness | Insulation<br>Diameter                             | Material<br>and Finish | Stock<br>Thickness | L<br>(Overall Length) | UL | SP | Terminal<br>Part No. |
|-------------------------|------------------|----------------------------------------------------|------------------------|--------------------|-----------------------|----|----|----------------------|
| 22-18                   | .032<br>0.81     | .059-.122<br>1.50-3.10                             | Pre-Tin Brass          | .016<br>0.41       | .976<br>24.80         | X  | X  | 170327-1             |
| 18-16<br>(2) 18, (2) 20 | .032<br>0.81     | .105-.210<br>2.67-5.33 or<br>(2) .105 Max.<br>2.67 | Brass                  | .016<br>0.41       | .886<br>22.50         | —  | —  | 1742354-1            |
| 18-14                   | .032<br>0.81     | .090-.155<br>2.29-3.94                             | Brass                  | .016<br>0.41       | .886<br>22.50         | X  | X  | 63097-2              |
|                         | .025<br>0.64     | .090-.155<br>2.29-3.94                             | Brass,<br>Tin Plated   | .016<br>0.41       | .886<br>22.50         | X  | X  | 63809-1              |
|                         | .020<br>0.51     | .090-.155<br>2.29-3.94                             | Brass,<br>Tin Plated   | .016<br>0.41       | .886<br>22.50         | X  | X  | 63442-1              |
|                         | .032<br>0.81     | .090-.135<br>2.29-3.43                             | Pre-Tin Brass          | .016<br>0.41       | 1.015<br>25.80        | X  | X  | 170328-1             |
| 15-10                   | .032<br>0.81     | .110-.200<br>2.79-5.08                             | Pre-Tin Brass          | .016<br>0.41       | 1.015<br>25.80        | X  | X  | 170329-1             |
| 12-10                   | .032<br>0.81     | .150-.200<br>3.81-5.08                             | Brass,<br>Tin Plated   | .018<br>0.46       | .913<br>23.20         | X  | X  | 63239-1              |

### Mark II 250 Series Receptacle Housings 1 Circuit

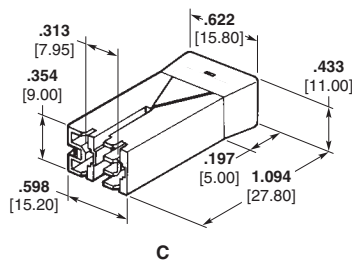


| Style | Material  | UL 94 | Color   | UL | SP | Part<br>Number |
|-------|-----------|-------|---------|----|----|----------------|
| A     | 6/6 Nylon | V2    | Natural | —  | —  | 172076-1       |
|       |           |       | Black   | —  | —  | 172076-2       |
|       |           |       | Yellow  | —  | —  | 172076-4       |
|       |           |       | Green   | —  | —  | 172076-5       |
|       |           |       | Blue    | —  | —  | 172076-6       |
|       |           |       | Red     | —  | —  | 172076-7       |
|       |           | V0    | Natural | —  | —  | 2-172076-1     |
|       |           |       | Black   | —  | —  | 2-172076-2     |
|       |           |       | Yellow  | —  | —  | 2-172076-4     |
|       |           |       | Green   | —  | —  | 2-172076-5     |
|       |           |       | Blue    | —  | —  | 2-172076-6     |
|       |           |       | Red     | —  | —  | 2-172076-7     |
| B     | 6/6 Nylon | V0    | 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                |
|       |           | V0    | Natural | — | — | 1-520935-1              |
|       |           |       | Red     | — | — | 1-520935-2              |
|       |           |       | Blue    | — | — | 1-520935-5              |
| B     | 6 Nylon   | V2    | Natural | — | — | 1-521229-1 <sup>1</sup> |
|       | 6/6 Nylon | V0    | Natural | X | X | 521229-1                |
|       |           |       | Red     | — | — | 521229-2                |
| C     | 6/6 Nylon | V0    | Natural | — | — | 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.

Positive Lock Receptacles

### 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)

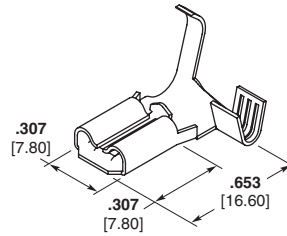
### Mark II

#### 250 Series

#### Flag Receptacles

Stock Thickness — .016 [0.41]

Fits Tab — .032 [0.81]



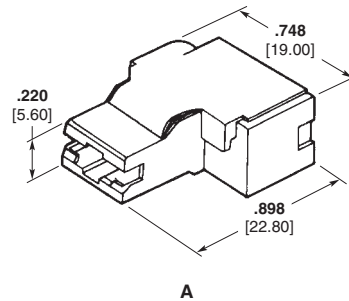
| Wire Range<br>AWG | Insulation<br>Diameter        | Material<br>and Finish | UL | UL | UL | Terminal<br>Part No. |
|-------------------|-------------------------------|------------------------|----|----|----|----------------------|
| 22-18             | <b>0.59-.110</b><br>1.50-2.80 | Pre-Tin Brass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

### Mark II

#### 250 Series

#### Flag Style Receptacle Housing

#### 1 Circuit

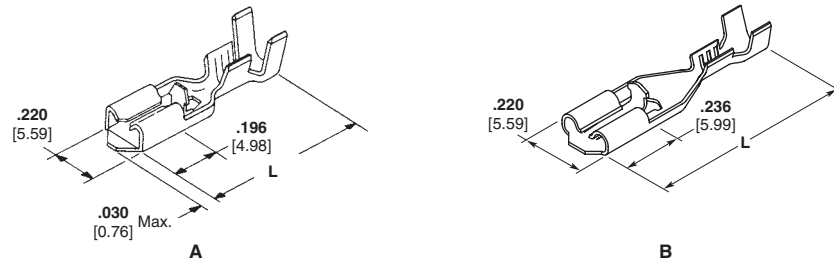


| Style | Material  | UL 94 | Color   | UL | UL | Part<br>Number |
|-------|-----------|-------|---------|----|----|----------------|
| A     | 6/6 Nylon | V2    | Natural | X  | X  | 172469-1       |
|       |           | V0    | Natural | —  | —  | 1-172469-1     |
|       |           |       | Blue    | —  | —  | 1-172469-2     |

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

## Positive Lock Receptacles (Continued)

### Mark II 187 Series Straight Receptacles

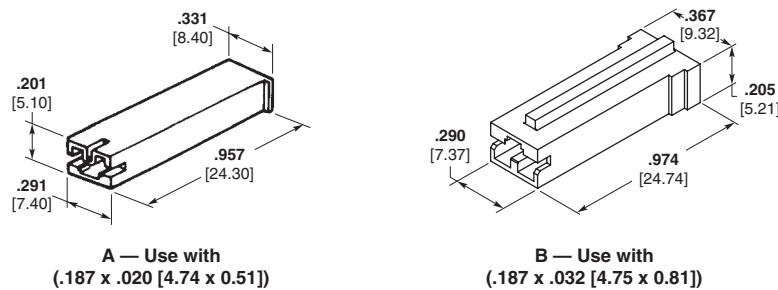


| Wire Range<br>AWG | Style | Tab<br>Fit   | Insulation<br>Diameter                     | Material<br>and Finish         | Stock<br>Thickness | L<br>(Overall Length) |  |  | Terminal<br>Part No. |
|-------------------|-------|--------------|--------------------------------------------|--------------------------------|--------------------|-----------------------|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



A — Use with  
(.187 x .020 [4.74 x 0.51])

B — Use with  
(.187 x .032 [4.75 x 0.81])

| Style | Material  | UL 94 | Color   | UL | SP | Part<br>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 | —  | —  | 521125-1       |

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

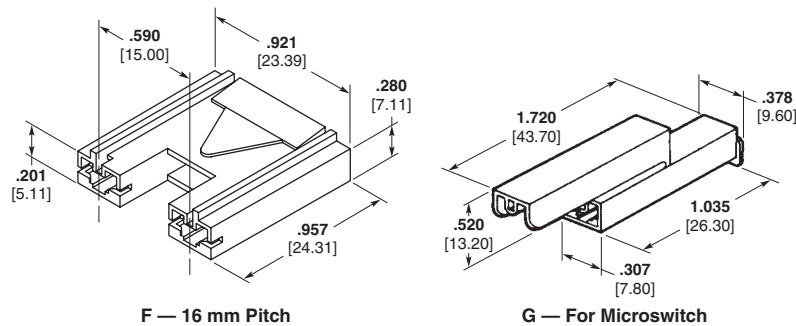
## Positive Lock Receptacles (Continued)

### 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  |
|       |           | V2    | Natural | X  | X  | 174587-1    |
|       |           |       | Yellow  | —  | —  | 1-174587-4  |
|       |           |       | Green   | —  | —  | 1-174587-5  |
| B     | 6/6 Nylon | V0    | 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              |
|       |           |       | Yellow  | —  | —  | 1-175578-4              |
|       |           |       | Blue    | —  | —  | 1-175578-6              |
|       |           |       | Red     | —  | —  | 1-175578-7              |
|       |           |       | Natural | —  | —  | 179720-1                |
| D     | 6/6 Nylon | V0    | Black   | —  | —  | 179720-2                |
|       |           |       | Yellow  | —  | —  | 179720-4                |
|       |           |       | Blue    | —  | —  | 179720-6                |
|       |           |       | Red     | —  | —  | 179720-7                |
| E     | 6/6 Nylon | V0    | Natural | X  | X  | 176498-1                |
|       |           |       | Black   | —  | —  | 176498-2                |
|       |           |       | Yellow  | —  | —  | 176498-4                |
|       |           |       | Blue    | —  | —  | 176498-6                |
|       |           |       | Yellow  | —  | —  | 3-176498-4 <sup>1</sup> |

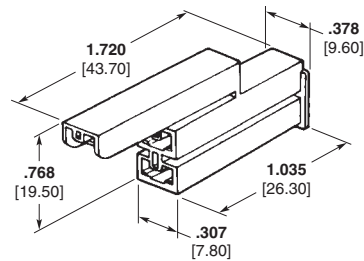
<sup>1</sup> Housing material to IEC 60695-2-11 Glow Wire temps. 650°C, 750°C, & 850°C.


| 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    |
|       |           |       | Black   | —  | —  | 1-174712-1  |
|       |           |       | Blue    | —  | —  | 1-174712-6  |
|       |           |       | Red     | —  | —  | 1-174712-7  |

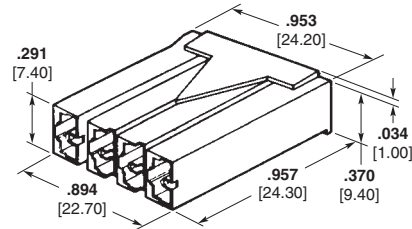
**Note:** All part numbers are RoHS compliant.

## Positive Lock Receptacles (Continued)

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



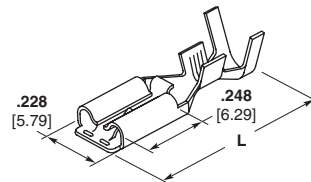
**A — 3 Circuit  
For Micro-Switch**



**B — 4 Circuit  
For Timer**

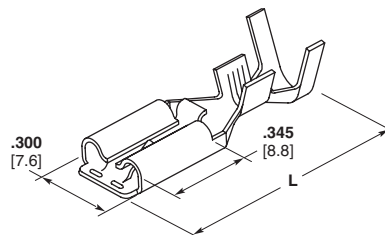
| Style | Material  | UL 94 | Color   | UL | SP | Part Number |
|-------|-----------|-------|---------|----|----|-------------|
| A     | 6/6 Nylon | V2    | Natural | X  | X  | 172075-1    |
|       |           |       | Yellow  | X  | X  | 172075-4    |
|       |           |       | Blue    | —  | —  | 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<br>AWG  | Tab<br>Thickness | Insulation<br>Diameter | Material        | Stock<br>Thickness | L<br>(Overall Length) | UL | SP | Terminal<br>Part No. |
|--------------------|------------------|------------------------|-----------------|--------------------|-----------------------|----|----|----------------------|
| 26-20<br>0.14-0.53 | .020<br>0.50     | .050-.140<br>1.3-3.6   | Stainless Steel | .012<br>0.30       | .675<br>17.2          | —  | —  | 175032-1             |
| 26-16<br>0.50-1.30 | .020<br>0.50     | .090-.140<br>2.3-3.6   | Stainless Steel | .012<br>0.30       | .675<br>17.2          | X  | —  | 1742669-1            |
| 20-14<br>0.50-2.20 | .020<br>0.50     | .075-.173<br>1.9-4.4   | Stainless Steel | .012<br>0.30       | .675<br>17.2          | —  | X  | 175034-1             |

### Positive Lock EX 250 Series Straight Receptacles



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



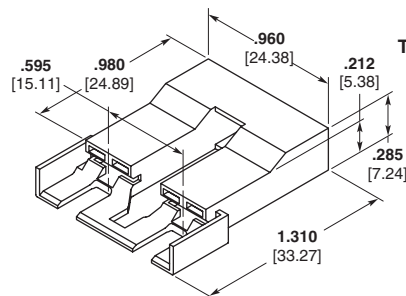
| Wire Range<br>AWG                                    | Insulation<br>Diameter | Material and<br>Finish | UL | SP | Part Number |
|------------------------------------------------------|------------------------|------------------------|----|----|-------------|
| 22-18                                                | .060-.110<br>1.52-2.79 | Brass                  | X  | X  | 63933-1     |
|                                                      |                        | Brass/Tin              | X  | X  | 63933-2     |
| 18-14                                                | .090-.155<br>2.28-3.93 | Brass                  | X  | X  | 63854-1     |
|                                                      |                        | Brass/Tin              | X  | X  | 63854-2     |
| 16-12 or (2) 18<br>or (2) 16 or<br>(1) 18 and (1) 16 | .120-.170<br>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 Water Valve Housing  
with Latch

D



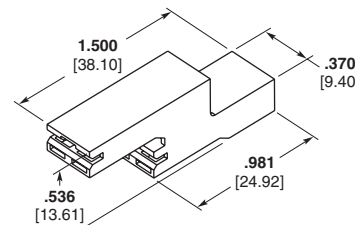
Two Circuit Wax Motor Housing

B



Two Circuit Water Valve Housing

C



Two Circuit Housing

E

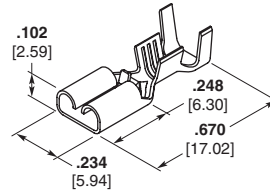
| Style | Material | UL 94 <sup>1</sup> | Color <sup>2</sup> | Part<br>Number          | Accepts                                                                                            | UL | SP |
|-------|----------|--------------------|--------------------|-------------------------|----------------------------------------------------------------------------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

### Mark III 187 Series Receptacles

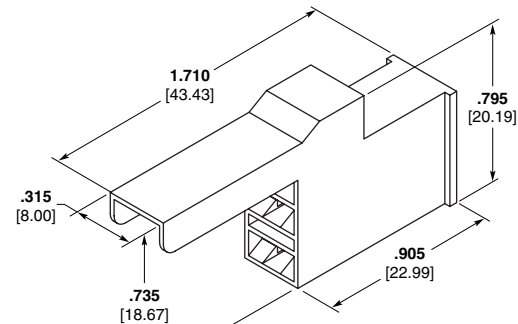


| Wire Range<br>AWG | Insulation<br>Dia.     | Mating Tab<br>Thickness | Material<br>and Finish | Terminal<br>Part No. | UL | CS | Applicator |
|-------------------|------------------------|-------------------------|------------------------|----------------------|----|----|------------|
| 22-18     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

### Mark III 187 Series Receptacle Housings



Part Number 521187-1

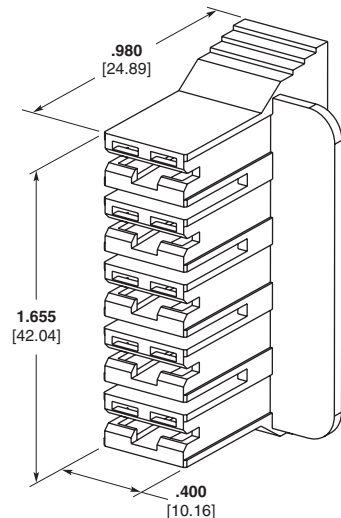


Part Number 521198-1

| Material | UL 94 | Color   | UL | CS | Part<br>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<br>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



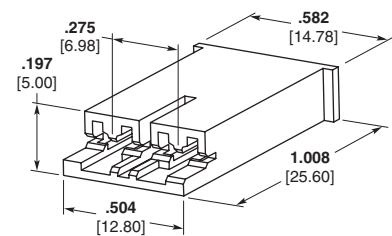
| Wire Range<br>AWG | Tab<br>Fit   | Insulation<br>Diameter | Material<br>and Finish | Stock<br>Thickness | UL | CS | Terminal<br>Part No. |
|-------------------|--------------|------------------------|------------------------|--------------------|----|----|----------------------|
| 24-20           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

### Receptacle Housing

Applicable Contact  
Part Number 175411, 174777



A — For 1 Circuit



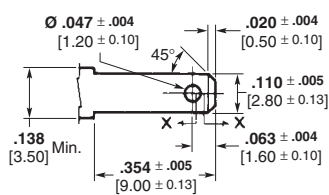
B — For 3 Circuit

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

### Tab Dimension For Signal Circuit

#### For 1 Circuit

##### Top View



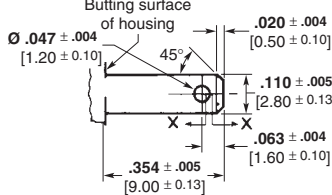
##### Side View



Type A

(When using tab shoulder for butting)

##### Top View



##### Side View



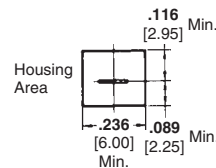
Type B

(When using resin, etc., for butting)

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

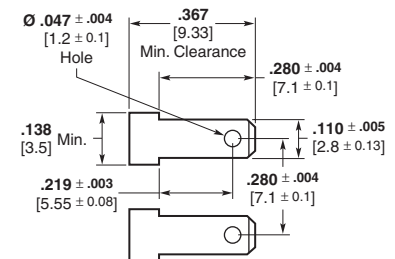
R .003 Through Hole [0.08] Max.

##### 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.

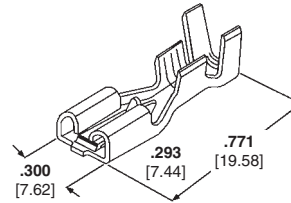
See TE catalog 296599 for additional RAST products.

## Positive Lock RAST 5 Connector System (Continued)

### Mark III 250 Series Receptacles

Stock Thickness — .013 [0.33]

Tab size — .032 [0.81]



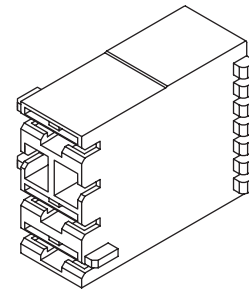
| Wire Range<br>AWG         | ID                                                                       | Material<br>and Finish | Part Number | UL | SP | Applicator<br>No. |
|---------------------------|--------------------------------------------------------------------------|------------------------|-------------|----|----|-------------------|
| 22-18                     | .060-.110<br>1.52-2.79                                                   | Brass                  | 1217378-1   | X  | X  | 1852165-2         |
|                           |                                                                          | Tin Plated Brass       | 1217378-2   | X  | X  | 1852165-2         |
| 18-14<br>(2) 18           | .090-.155<br>2.29-3.94<br>.190<br>4.83 Max.                              | Brass                  | 1217094-1   | X  | X  | 680653-2          |
|                           |                                                                          | Tin Plated Brass       | 1217094-2   | X  | X  | 680653-2          |
| 16-12<br>(2) 18<br>(2) 16 | .120-.170<br>3.04-4.32<br>(2) .120<br>3.05 Max.<br>(2) .120<br>3.05 Max. | Brass                  | 1217095-1   | X  | X  | 680654-2          |
|                           |                                                                          | Tin Plated Brass       | 1217095-2   | X  | X  | 680654-2          |
|                           |                                                                          |                        |             |    |    |                   |

### Receptacle Housings

Material — 94 V-0, 6/6 Nylon



Standard Version



Blocked Circuit Version

| Description | UL | SP | 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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[63809-1](#)