

**Locking Clip Contacts and Housings**

**Product Facts**

- Self-retaining contacts provide permanent connection with quick connect and disconnect
- Fast, easy installation with no additional locking hardware required
- Mates with .025 [0.64] square posts in a variety of configurations
- Single- and double-row configurations in up to 20 positions on .100 [2.54] centers
- Modular design permits end-to-end stacking (double- row only) for circuit grouping
- Choice of tin or select gold plating
- Housings made of 94V-0 rated glass-filled polyester
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

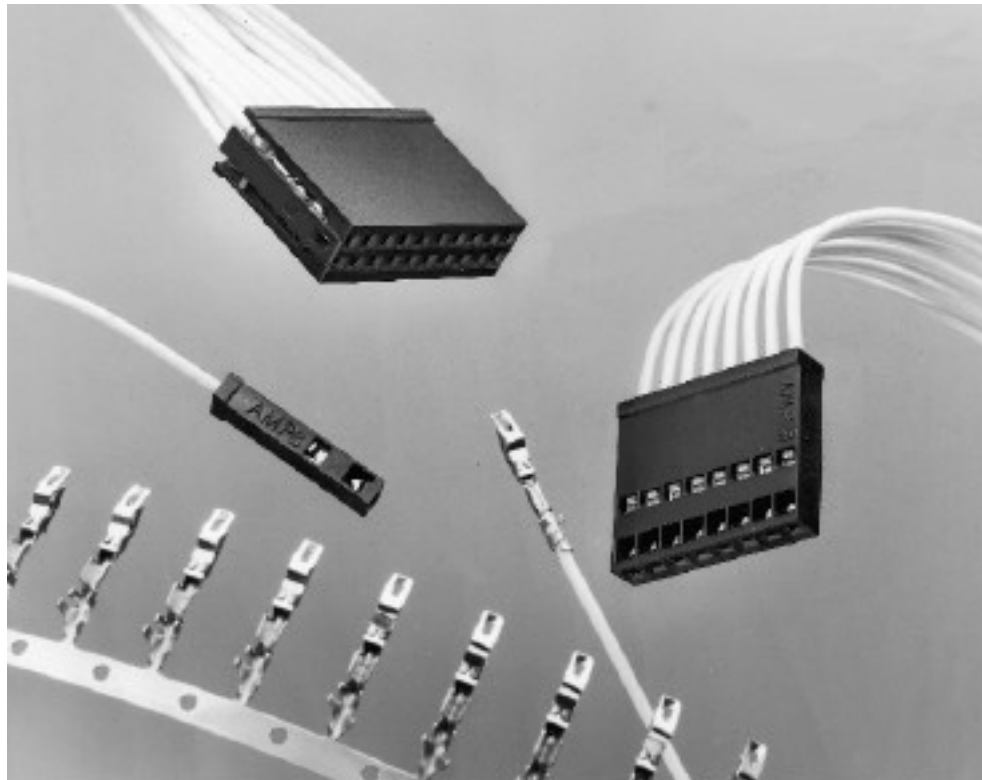


**Performance Characteristics**

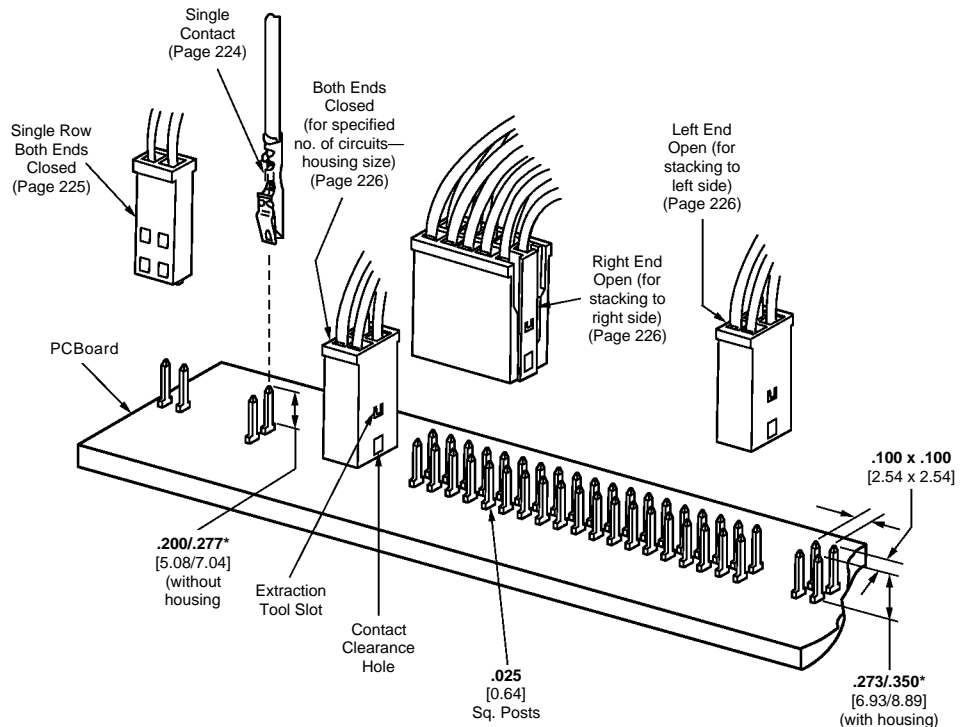
**Contact Current Rating**—3 amperes

**Termination Resistance:**  
 12 milliohms (max.)—Gold plated contacts  
 16 milliohms (max.)—Tin plated contacts

**Durability**—Ref. AMP Product Specification 108-36028 and 108-36028-1



**Typical Application**



\*If post is longer than maximum specified, post tip may butt against wire ends. Dimension defines .025 x .025 [0.64 x 0.64] portion of post.

**Locking Clip Contacts**

**Wire Crimp Contacts with Insulation Support**

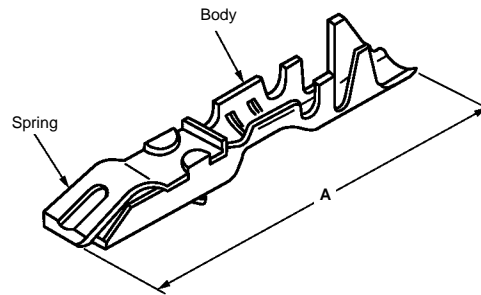
**Material and Finish:**

**Contact Spring**—Stainless steel

**Plating A**—Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating B**—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating C**—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact



| Wire Size Range |                    | Ins. Dis. Range       | Dimension A  | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator for AMP-O-LECTRIC Machine* | Hand Tool No. |
|-----------------|--------------------|-----------------------|--------------|-----------|------------|-------------|--|---------------|
| AWG             | [mm <sup>2</sup> ] |                       |              |           | Strip Form | Loose Piece |  |               |
| 30-28           | 0.05-0.09          | .029-.039 [0.74-0.99] | .550 [13.97] | Plating B | 87190-1    | 87191-1     | 567310-2   | 90295-1       |
|                 |                    |                       |              | Plating C | 87190-2    | 87191-2     |  |               |
| 26-22           | 0.12-0.4           | .038-.062 [0.97-1.57] | .584 [14.83] | Plating A | 87124-3    | 87165-3     | 466721-2   | 91533-1       |
|                 |                    |                       |              | Plating B | 87124-1    | 87165-1     |  |               |
|                 |                    |                       |              | Plating C | 87124-2    | 87165-2     |  |               |
| 20              | 0.5-0.6            | .038-.062 [0.97-1.57] | .584 [14.83] | Plating B | 867052-2   | —           | 679996-2   | 90431-1       |
|                 |                    |                       |              | Plating C | 867052-1   | —           |  |               |

\*For use with AMP-O-LECTRIC Model "K" machines. Call the Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATORlead making machines.  
**Notes:** 1. These contacts must be crimped in accordance with Tyco Electronics Specification No. 114-25006 in order to function properly in a connector housing.  
 2. **Extraction Tool No. 91084-1** is used for removing individual contacts from connector housings and for detaching contacts from mating posts.

**Related Product Data:**

**Housings Used With**—  
pages 225, 226

**Application Tooling**—  
page 290

**Technical Documents** (page 295, 296):

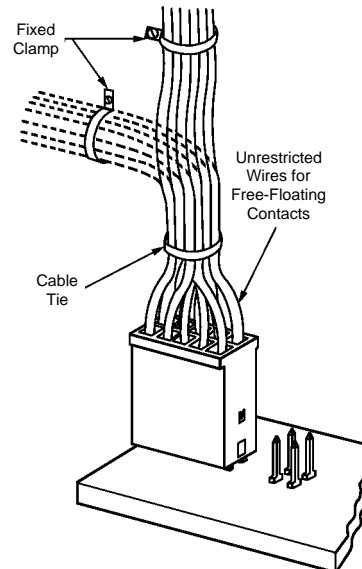
**Product Specification** 108-36028, 108-36028-1

**Application Specification** 114-25006

**Wire Harnessing**

If necessary, wires can be grouped with cable ties and secured to a panel with fixed clamps. However, locking clip contacts must be free to float within the connector housings to allow proper extraction. Therefore, harnessing hardware or the use of multiple terminations per contact must not restrict the free-floating action of contacts in the housing.

For more information request Insulation and Bundling Products Catalog 124132.



**Extraction Tool No. 91084-1**

**Wire-Applied Housings for Locking Clip Contacts,  
Single-Row, .100 [2.54] Centerline**

**Single-Row**



**Material:**

Glass-filled polyester, 94V-0 rated

**Related Product Data:**

**Contacts**—page 224

**Mateable Headers and Posts**—

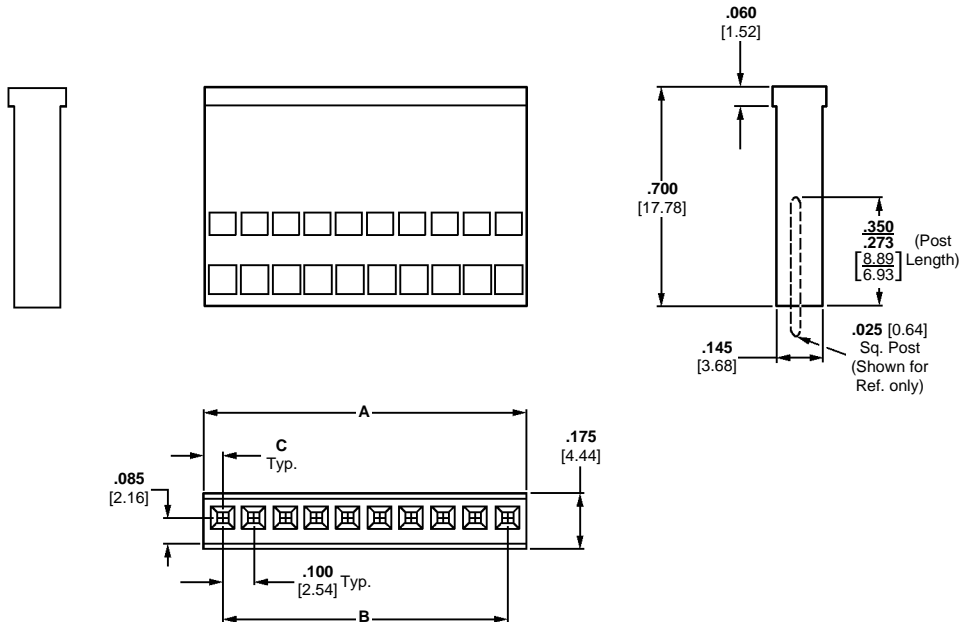
Refer to the Mating Post Selection Guide—page 89

**Technical Documents** (pages 295, 296):

**Product Specification** 108-36028, 108-36028-1

**Application Specification** 114-25006

.125 [3.18] centerline single-row, 2 and 3 position housings are available, Base Part No. 104905. They are designed to be stackable end-to-end and side-by-side. Consult Tyco Electronics.



**Note:** Housing illustrated above is the "Both Ends Closed" version.

**Keying Plug:**



**Part No. 87179-1**

(Plugs directly into housings for .025 [0.64] square post contacts)

**Material**—Yellow, nylon

| No. of Pos. | Dimensions    |               |             | Housing Part No. |           |
|-------------|---------------|---------------|-------------|------------------|-----------|
|             | A             | B             | C           | Unstamped        | Stamped   |
| 1           | .108 [2.74]   | —             | .054 [1.37] | 87175-2          | —         |
| 2           | .216 [5.49]   | .100 [2.54]   | .058 [1.47] | 87175-6          | —         |
| 3           | .316 [8.03]   | .200 [5.08]   | .058 [1.47] | 87175-8          | —         |
| 4           | .416 [10.57]  | .300 [7.62]   | .058 [1.47] | 1-87175-0        | —         |
| 5           | .516 [13.11]  | .400 [10.16]  | .058 [1.47] | 1-87175-2        | —         |
| 6           | .616 [15.65]  | .500 [12.70]  | .058 [1.47] | 1-87175-4        | 1-87175-3 |
| 7           | .716 [18.19]  | .600 [15.24]  | .058 [1.47] | 1-87175-6        | 1-87175-5 |
| 8           | .816 [20.73]  | .700 [17.78]  | .058 [1.47] | 1-87175-8        | 1-87175-7 |
| 9           | .916 [23.27]  | .800 [20.32]  | .058 [1.47] | 2-87175-0        | 1-87175-9 |
| 10          | 1.016 [25.81] | .900 [22.86]  | .058 [1.47] | 2-87175-2        | 2-87175-1 |
| 11          | 1.116 [28.35] | 1.000 [25.40] | .058 [1.47] | 2-87175-4        | 2-87175-3 |
| 12          | 1.216 [30.89] | 1.100 [27.94] | .058 [1.47] | 2-87175-6        | 2-87175-5 |
| 13          | 1.316 [33.43] | 1.200 [30.48] | .058 [1.47] | 2-87175-8        | 2-87175-7 |
| 14          | 1.416 [35.97] | 1.300 [33.02] | .058 [1.47] | 3-87175-0        | 2-87175-9 |
| 15          | 1.516 [38.51] | 1.400 [35.56] | .058 [1.47] | 87175-4          | 87175-3   |

**Wire-Applied Housings for Locking Clip Contacts,  
Double-Row, .100 x .100 [2.54 x 2.54] Centerline**

**Double-Row**



**Material:**

Glass-filled polyester, 94V-0 rated

**Related Product Data:**

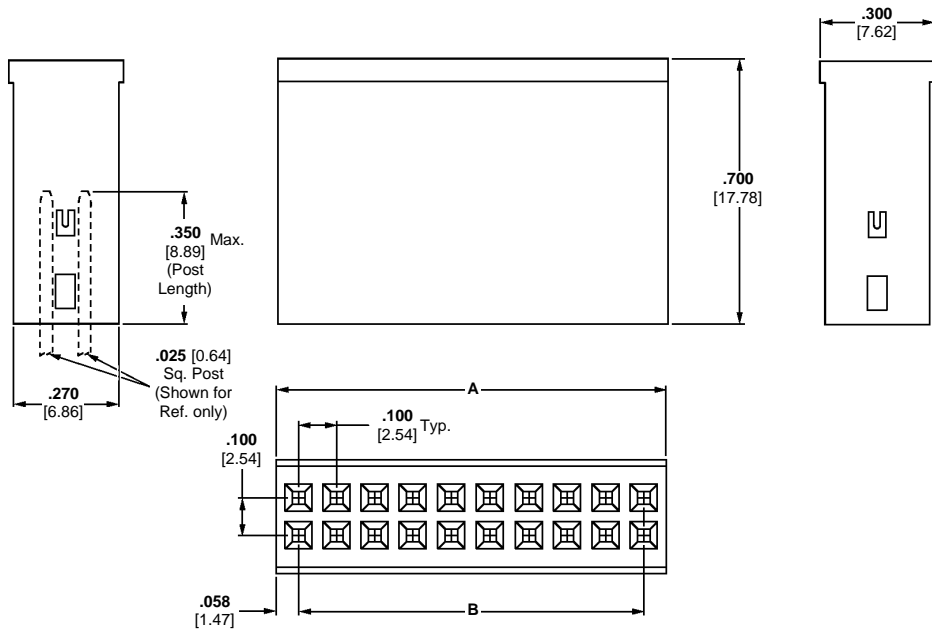
**Contacts**—page 224

**Mateable Headers and Posts**—  
Refer to the Mating Post Selection  
Guide—page 89

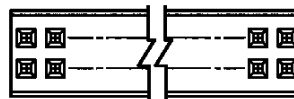
**Technical Documents** (pages 296,  
297):

**Product Specification** 108-36028,  
108-36028-1

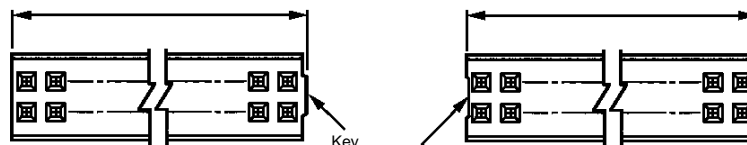
**Application Specification**  
114-25006



**Note:** Housing illustrated above is the "Both Ends Closed" version.



Both Ends Closed



Right End Open

Left End Open

| Housing Configuration | No. of Pos.    | Dimensions    |              | Housing Part No. |           |
|-----------------------|----------------|---------------|--------------|------------------|-----------|
|                       |                | A             | B            | Unstamped        | Stamped   |
| Both Ends Closed      | 2              | .116 [2.95]   | —            | 87176-2          | —         |
|                       | 4              | .216 [5.49]   | .100 [2.54]  | 87133-1          | —         |
|                       | 6              | .316 [8.03]   | .200 [5.08]  | 87133-7          | 87133-8   |
|                       | 8              | .416 [10.57]  | .300 [7.62]  | 87133-9          | 1-87133-0 |
|                       | 10             | .516 [13.11]  | .400 [10.16] | 87133-2          | 87133-5   |
|                       | 12             | .616 [15.65]  | .500 [12.70] | 1-87133-1        | 1-87133-2 |
|                       | 16             | .816 [20.73]  | .700 [17.78] | 1-87133-3        | 1-87133-4 |
|                       | 18             | .916 [23.27]  | .800 [20.32] | 1-87133-5        | 1-87133-6 |
|                       | 20             | 1.016 [25.81] | .900 [22.86] | 87133-3          | 87133-6   |
|                       | Right End Open | 4             | .216 [5.49]  | .100 [2.54]      | 87132-1   |
| 10                    |                | .516 [13.11]  | .400 [10.16] | 87132-2          | 87132-5   |
| 20                    |                | 1.016 [25.81] | .900 [22.86] | 87132-3          | 87132-6   |
| Left End Open         | 4              | .216 [5.49]   | .100 [2.54]  | 87131-1          | —         |
|                       | 10             | .516 [13.11]  | .400 [10.16] | 87131-2          | 87131-5   |
|                       | 20             | 1.016 [25.81] | .900 [22.86] | 87131-3          | 87131-6   |

**Keying Plug:**



**Part No. 87179-1**

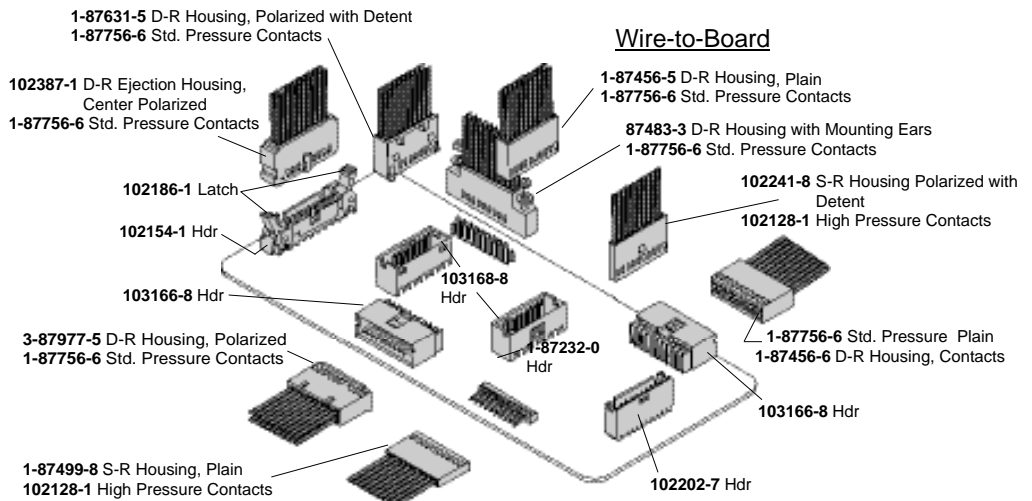
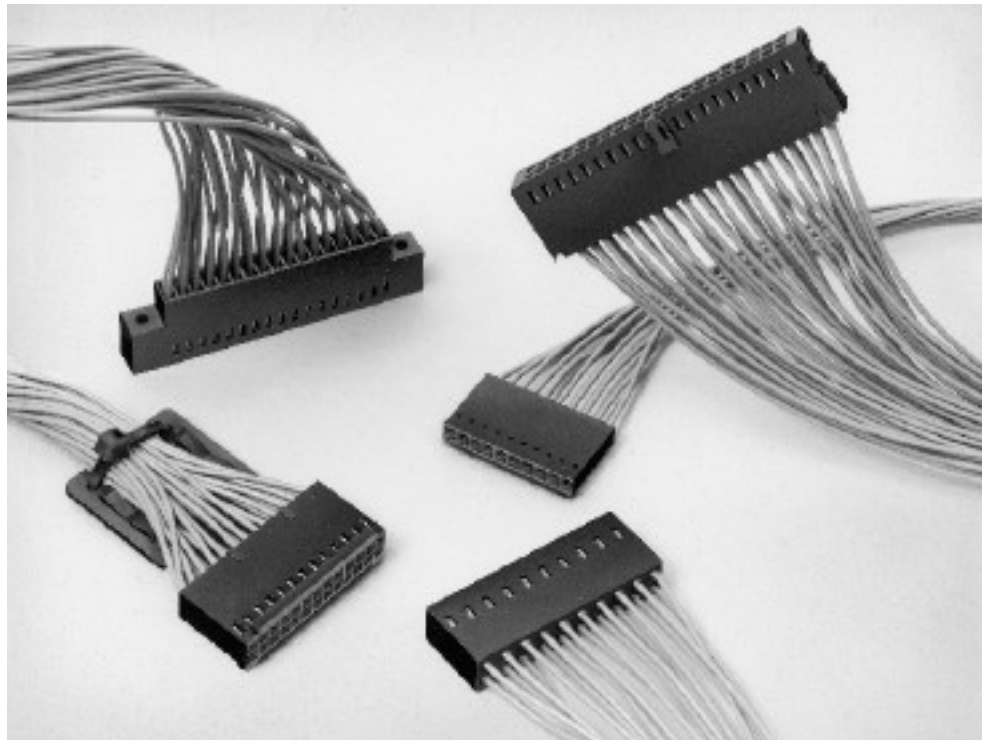
(Plugs directly into housings for  
.025 [0.64] square post contacts)

**Material**—Yellow, nylon

**Mod IV Wire-Applied Contacts and Housings**

**Product Facts**

- Terminates 32-20 AWG [0.03-0.6mm<sup>2</sup>] discrete wire
- Contacts have insulation support
- Choice of three contact mating pressures
- Available in a variety of gold and tin platings
- Receptacles mate with .025 [0.64] square or round posts
- Dual cantilever contact beam with built-in anti-overstress feature for reliable matings
- Housings accept a variety of receptacle and pin contacts
- Housing sizes range up to 100 positions
- Housing configurations include single- and double-rows on .100 [2.54] centerlines
- Housing options include detent latching, polarization and bonded strain relief/pull tabs
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association,

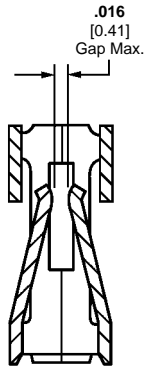


**Performance Characteristics**

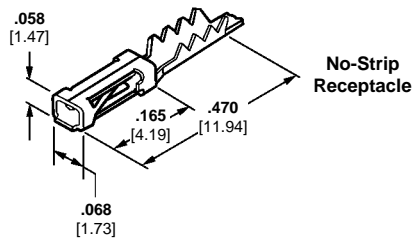
**Contact Current Rating**—3 amperes  
**Termination Resistance:**  
 12 milliohms (max.)—Beryllium copper contacts  
 20 milliohms (max.)—Copper-tin-phosphor bronze contacts  
**Durability**—Ref. AMP Product Specification 108-25020

**Mod IV Pin and Receptacle Contacts**

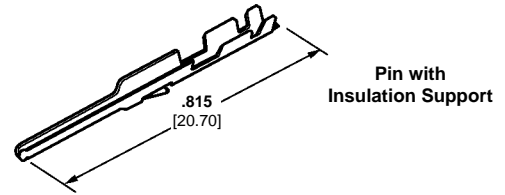
**Crimp Snap-In (No-strip) Receptacles and Crimp Snap-In Pins with Insulation Support (Standard Pressure)**



Standard Pressure Configuration



No-Strip Receptacle



Pin with Insulation Support

**Crimp Snap-In (No-strip) Receptacles**

| Ins. Dia. Range       | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator No. for AMP-O-LECTRIC Machine* | Hand Tool Part No. |
|-----------------------|-----------|------------|-------------|--|--------------------|
|                       |           | Strip Form | Loose Piece |  |                    |
| .040-.055 [1.02-1.40] | Plating A | 87107-5    | 102348-2    | 567307-2   | 90381-1            |
|                       | Plating C | 87107-6    | 102348-3    |  |                    |

**Material and Finish:**

Beryllium copper or phosphor bronze (see charts), plated as follows:

**Plating A**—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating B**—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating C**—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000030 [0.00076] nickel on entire contact

**Crimp Snap-In Pins with Insulation Support**

| Wire Size Range |                    | Ins. Dia. (Max.) | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator No. for AMP-O-LECTRIC Machine* | Hand Tool Part No. |            |
|-----------------|--------------------|------------------|-----------|------------|-------------|--|--------------------|------------|
| AWG             | [mm <sup>2</sup> ] |                  |           | Strip Form | Loose Piece |  | Premium            | Commercial |
| 26-22           | 0.12-0.4           | .061 [1.55]      | Plating A | 102095-3   | 102107-2    | 466812-2   | 91517-1            | 58641-1†   |
|                 |                    |                  | Plating B | 102095-2   | 102107-1    |  |                    |            |
|                 |                    |                  | Plating C | 102095-4   | 102107-3    |  |                    |            |

\*For use with AMP-O-LECTRIC Model "K" machines. Call the Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATORlead making machines.

†PRO-CRIMPER II hand tool frame with die set assembly. Die Set Part No. 58641-2

**Related Product Data:**

**Housings Used With**— pages 231-237

**Performance Characteristics**— page 227

**Application Tooling**— page 290

**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016

Additional header sizes are available; minimum order quantities may apply. Consult Tyco Electronics.

**Mod IV Receptacle Contacts**

**Crimp Snap-In Receptacles with Insulation Support (Standard, Intermediate and High Pressure)**

**Material and Finish:**

Beryllium copper, phosphor bronze or copper-tin-phosphor bronze (see charts, page 139), plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating D**—Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating E**—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating F**—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating G**—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000030 [0.00076] nickel on entire contact

**Related Product Data:**

**Housings Used With**— pages 231-237

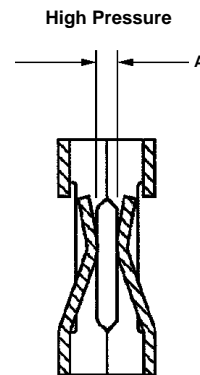
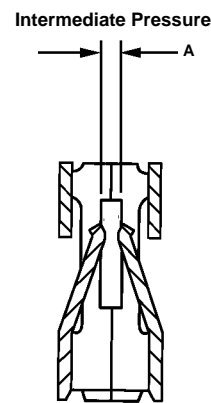
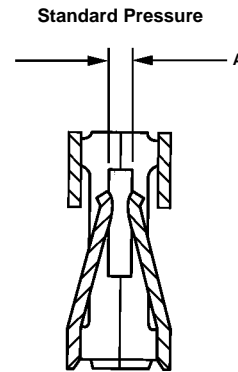
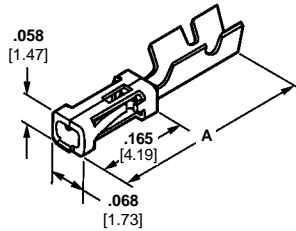
**Performance Characteristics**— page 227

**Application Tooling**— page 290

**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016



|                       | Mating Force | Unmating Force | A-Gap Dimension |
|-----------------------|--------------|----------------|-----------------|
| Standard Pressure     | 9 oz. Max.   | 1.5 oz. Min.   | .008/.014       |
| Intermediate Pressure | 16 oz. Max.  | 2 oz. Min.     | .008/.014       |
| High Pressure         | 20 oz. Max.  | 3 oz. Min.     | .013±.002       |

**Mod IV Receptacle Contacts** (Continued)

**Standard Pressure (Mod IV)**

| Wire Size Range<br>AWG [mm <sup>2</sup> ] | Ins. Dia. (Max.) | Dimension A  | Material    | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for Stripper/Crimper Machine | Hand Tool Part Nos. |            |
|---|------------------|--------------|-------------|-----------|------------|-------------|--|---|---------------------|------------|
|   |                  |              |             |           | Strip Form | Loose Piece |  |   | Premium             | Commercial |
| 32-27 0.03-0.1                            | .040 [1.02]      | .445 [11.30] | Cu-Sn-PhBz  | Plating A | 102316-8   | 1-102316-4  | 466655-2   | 466921-1                                | 91541-1             | —          |
|   |                  |              | Cu-Sn-Ph Bz | Plating B | 102316-6   | 1-102316-3  |  |   |                     |            |
|   |                  |              | Be Cu       | Plating D | 1-102917-1 | 1-102917-2  |  |   |                     |            |
|   |                  |              | Be Cu       | Plating E | 102917-1   | 102917-2    |  |   |                     |            |
|   |                  |              | Be Cu       | Plating F | 102917-5   | 102917-6    |  |   |                     |            |
|   |                  |              | Cu-Sn-PhBz  | Plating G | 102316-5   | 1-102316-2  |  |   |                     |            |
| 26-22 0.12-0.4                            | .061 [1.55]      | .445 [11.30] | Cu-Sn-PhBz  | Plating A | 1-87756-7  | 1-87756-8   | 466571-2   | 466918-1                                | 91517-1             | 58641-1†   |
|   |                  |              | Cu-Sn-Ph Bz | Plating B | 1-87756-2  | 1-87756-6   |  |   |                     |            |
|   |                  |              | Cu-Sn-Ph Br | Plating G | 87756-6    | 87756-7     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating D | 1-87666-6  | 87667-5     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating E | 87666-2    | 87667-2     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating F | 87666-5    | 87667-5     |  |   |                     |            |
| 24-20 0.2-0.6                             | .069 [1.75]      | .470 [11.94] | Cu-Sn-PhBz  | Plating A | 1-87523-8  | 1-87523-9   | 466562-2   | 466905-1                                | 91516-2             | —          |
|   |                  |              | Cu-Sn-Ph Bz | Plating B | 1-87523-5  | 1-87523-6   |  |   |                     |            |
|   |                  |              | Be Cu       | Plating E | 85969-8    | 86016-2     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating F | 85969-6    | 86016-5     |  |   |                     |            |
|   |                  |              | Cu-Sn-Ph Br | Plating G | 87523-5    | 87523-6     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating G | 85969-9    | 86016-3     |  |   |                     |            |

**Intermediate Pressure (Mod IV.v)**

| Wire Size Range<br>AWG [mm <sup>2</sup> ] | Ins. Dia. (Max.) | Dimension A  | Material    | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for Stripper/Crimper Machine | Hand Tool Part Nos. |            |
|---|------------------|--------------|-------------|-----------|------------|-------------|--|---|---------------------|------------|
|   |                  |              |             |           | Strip Form | Loose Piece |  |   | Premium             | Commercial |
| 32-27 0.03-0.1                            | .040 [1.02]      | .445 [11.30] | Cu-Sn-Ph Bz | Plating A | 102920-1   | 102920-2    | 466655-2   | 466921-1                                | 91541-1             | —          |
|   |                  |              | Be Cu       | Plating E | 102918-1   | 102918-2    |  |   |                     |            |
| 26-22 0.12-0.4                            | .061 [1.55]      | .445 [11.30] | Cu-Sn-PhBz  | Plating A | 103171-4   | 103171-5    | 466571-2   | 466918-1                                | 91517-1             | 58641-1†   |
|   |                  |              | Cu-Sn-Ph Bz | Plating B | 103171-1   | 103171-2    |  |   |                     |            |
|   |                  |              | Be Cu       | Plating E | 102548-5   | 102548-6    |  |   |                     |            |
| 24-20 0.2-0.6                             | .069 [1.75]      | .470 [11.94] | Be Cu       | Plating F | 102548-1   | 102548-3    | 466562-2   | 466905-1                                | 91516-1             | —          |
|   |                  |              | Cu-Sn-PhBz  | Plating A | 2-87195-0  | 2-87195-1   |  |   |                     |            |
|   |                  |              | Cu-Sn-Ph Bz | Plating B | 1-87195-7  | 1-87195-8   |  |   |                     |            |
|   |                  |              | Be Cu       | Plating E | 86492-6    | 87046-3     |  |   |                     |            |
|   |                  |              | Be Cu       | Plating F | 86492-2    | 87046-1     |  |   |                     |            |
| Be Cu                                     | Plating G        | 86492-9      | 87046-4     |           |            |             |  |   |                     |            |

**High Pressure (Mod V)\*\***

| Wire Size Range<br>AWG [mm <sup>2</sup> ] | Ins. Dia. (Max.) | Dimension A  | Material | Finish    | Part Nos.  |             | Heavy Duty Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Part Nos. |
|---|------------------|--------------|----------|-----------|------------|-------------|--|---|---------------------|
|   |                  |              |          |           | Strip Form | Loose Piece |  |   |                     |
| 32-27 0.03-0.1                            | .040 [1.02]      | .445 [11.30] | Ph Bz    | Plating E | 103455-1   | 103455-2    | 466655-2   | 466921-1  | 91541-1             |
| 26-22 0.12-0.4                            | .061 [1.55]      | .445 [11.30] | Ph Bz    | Plating E | 87809-1    | 102128-1    | 466571-2   | 466918-1  | 91517-1             |
|   |                  |              | Ph Bz    | Plating G | 87809-2    | 102128-2    |  |   |                     |
| 24-20 0.2-0.6                             | .069 [1.75]      | .470 [11.94] | Ph Bz    | Plating E | 87309-9    | 1-87309-4   | 466562-2   | 466905-1  | 91516-1             |
|   |                  |              | Ph Bz    | Plating G | 87309-8    | 1-87309-3   |  |   |                     |

\*For use with AMP-O-LECTRIC Model "K" machines. Call the Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATORlead making machines.

\*\*Contact material is phosphor bronze.

†PRO-CRIMPER II hand tool frame with die set assembly.  
Die Set Part No. 58641-2

Mod IV Contacts

5



**Mod IV Wire-Applied Housings, Single-Row, .100 [2.54] Centerline**

**Non-Polarized**



**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

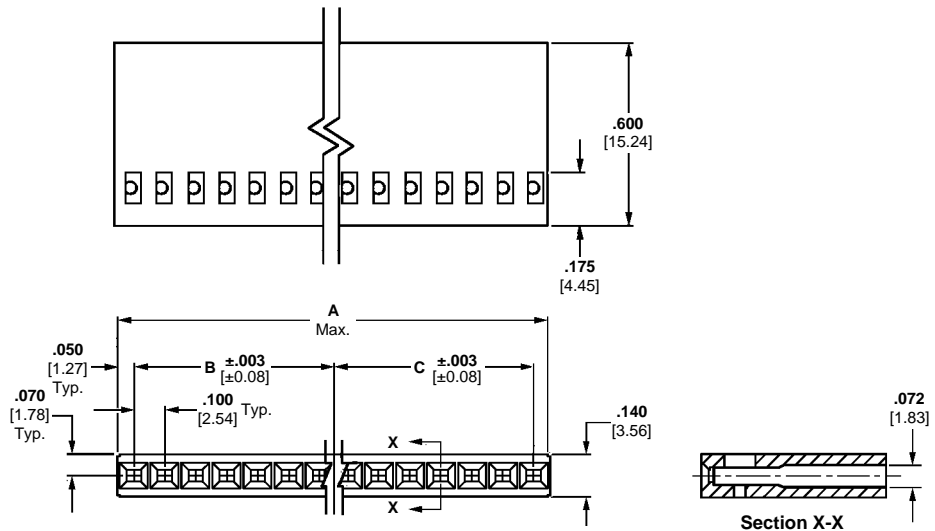
**Contacts**—pages 228-230

**Mateable Headers and Posts**—pages 92-94, 100-104, 110-112

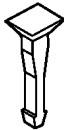
**Technical Documents** (page 294-296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016



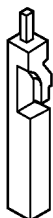
**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**Material**—Natural color nylon



**Part No. 87077-2**

(Plugs directly into housing)

| No. of Pos. | Dimensions    |               |               | Part No.  |             |
|-------------|---------------|---------------|---------------|-----------|-------------|
|             | A             | B             | C             | Stamped*  | Unstamped** |
| 1           | .105 [2.67]   | —             | —             | —         | 7-87499-2   |
| 2           | .205 [5.21]   | .100 [2.54]   | —             | 87499-3   | 87499-4     |
| 3           | .305 [7.75]   | .100 [2.54]   | .100 [2.54]   | 87499-5   | 87499-6     |
| 4           | .405 [10.29]  | .200 [5.08]   | .100 [2.54]   | 87499-7   | 87499-8     |
| 5           | .505 [12.83]  | .200 [5.08]   | .200 [5.08]   | 87499-9   | 1-87499-0   |
| 6           | .605 [15.37]  | .300 [7.62]   | .200 [5.08]   | 1-87499-1 | 1-87499-2   |
| 7           | .705 [17.91]  | .300 [7.62]   | .300 [7.62]   | 87499-1   | 87499-2     |
| 8           | .805 [20.45]  | .400 [10.16]  | .300 [7.62]   | 1-87499-3 | 1-87499-4   |
| 9           | .905 [22.99]  | .400 [10.16]  | .400 [10.16]  | 1-87499-5 | 1-87499-6   |
| 10          | 1.005 [25.53] | .500 [12.70]  | .400 [10.16]  | 1-87499-7 | 1-87499-8   |
| 11          | 1.105 [28.01] | .500 [12.70]  | .500 [12.70]  | 1-87499-9 | 2-87499-0   |
| 12          | 1.205 [30.61] | .600 [15.24]  | .500 [12.70]  | 2-87499-1 | 2-87499-2   |
| 13          | 1.305 [33.15] | .600 [15.24]  | .600 [15.24]  | 2-87499-3 | 2-87499-4   |
| 14          | 1.405 [35.69] | .700 [17.78]  | .600 [15.24]  | 2-87499-5 | 2-87499-6   |
| 15          | 1.505 [38.23] | .700 [17.78]  | .700 [17.78]  | 2-87499-7 | 2-87499-8   |
| 16          | 1.605 [40.77] | .800 [20.32]  | .700 [17.78]  | 2-87499-9 | 3-87499-0   |
| 17          | 1.700 [43.18] | .800 [20.32]  | .800 [20.32]  | —         | 3-87499-2   |
| 18          | 1.805 [45.85] | .900 [22.86]  | .800 [20.32]  | —         | 3-87499-4   |
| 19          | 1.900 [48.26] | .900 [22.86]  | .900 [22.86]  | —         | 3-87499-6   |
| 20          | 2.005 [50.93] | 1.000 [25.40] | .900 [22.86]  | 3-87499-7 | 3-87499-8   |
| 21          | 2.100 [53.34] | 1.000 [25.40] | 1.000 [25.40] | —         | 4-87499-0   |
| 22          | 2.205 [56.01] | 1.100 [27.94] | 1.000 [25.40] | —         | 4-87499-2   |
| 23          | 2.300 [58.42] | 1.100 [27.94] | 1.100 [27.94] | —         | 4-87499-4   |
| 24          | 2.400 [60.96] | 1.200 [30.48] | 1.100 [27.94] | —         | 4-87499-6   |
| 25          | 2.500 [63.50] | 1.200 [30.48] | 1.200 [30.48] | —         | 4-87499-8   |
| 26          | 2.605 [66.17] | 1.300 [33.02] | 1.200 [30.48] | —         | 5-87499-0   |
| 27          | 2.700 [68.58] | 1.300 [33.02] | 1.300 [33.02] | —         | 5-87499-2   |
| 28          | 2.800 [71.12] | 1.400 [35.56] | 1.300 [33.02] | —         | 5-87499-4   |
| 29          | 2.900 [73.66] | 1.400 [35.56] | 1.400 [35.56] | —         | 5-87499-6   |
| 30          | 3.005 [76.33] | 1.500 [38.10] | 1.400 [35.56] | —         | 5-87499-8   |
| 31          | 3.100 [78.74] | 1.500 [38.10] | 1.500 [38.10] | —         | 6-87499-0   |
| 32          | 3.200 [81.28] | 1.600 [40.64] | 1.500 [38.10] | —         | 6-87499-2   |
| 33          | 3.300 [83.82] | 1.600 [40.64] | 1.600 [40.64] | —         | 6-87499-4   |
| 34          | 3.400 [86.36] | 1.700 [43.18] | 1.600 [40.64] | —         | 6-87499-6   |
| 35          | 3.500 [88.98] | 1.700 [43.18] | 1.700 [43.18] | —         | 6-87499-8   |
| 36          | 3.600 [91.44] | 1.800 [45.72] | 1.700 [43.18] | —         | 7-87499-0   |

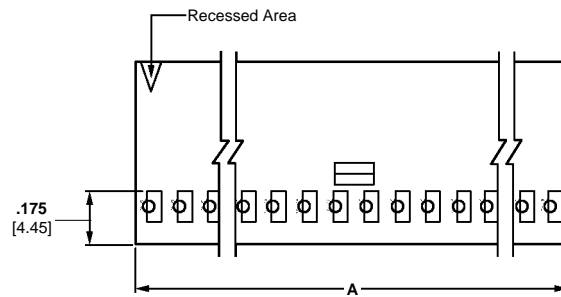
\*Cavity identification, part number and date code stamped on housing where size permits.

\*\*No marking on housing.

**Notes:** 1. Strain reliefs are available and may be purchased separately. Consult Tyco Electronics.  
2. Contact Extraction/Lance Reset Tool No. 843996-3.

Mod IV Wire-Applied Housings, Single-Row, .100 [2.54] Centerline (Continued)

**Polarized (with Detent Latching)**

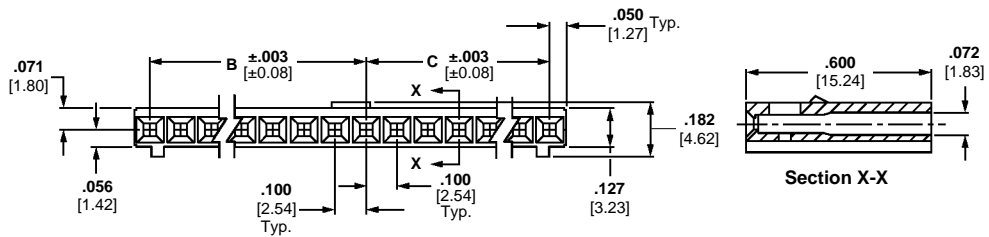


**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

- Contacts**—pages 228-230
- Mateable Headers and Posts**—pages 129-131
- Flexible Film Connectors, Single-Row Pin Assemblies**—Catalog 82007



**Technical Documents:** (pages 294, 296):

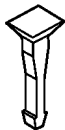
- Product Specification** 108-25007, 208-25019, 108-25020, 108-25021
- Application Specification** 114-25003, 114-25016

| No. of Pos. | Dimensions    |               |               | Part Nos. Unstamped* |
|-------------|---------------|---------------|---------------|----------------------|
|             | A             | B             | C             |                      |
| 3           | .300 [7.62]   | .100 [2.54]   | .100 [2.54]   | 102241-1             |
| 4           | .400 [10.16]  | .200 [5.08]   | .100 [2.54]   | 102241-2             |
| 5           | .500 [12.70]  | .200 [5.08]   | .200 [5.08]   | 102241-3             |
| 6           | .600 [15.24]  | .300 [7.62]   | .200 [5.08]   | 102241-4             |
| 7           | .700 [17.78]  | .300 [7.62]   | .300 [7.62]   | 102241-5             |
| 8           | .800 [20.32]  | .400 [10.16]  | .300 [7.62]   | 102241-6             |
| 9           | .900 [22.86]  | .400 [10.16]  | .400 [10.16]  | 102241-7             |
| 10          | 1.000 [25.40] | .500 [12.70]  | .400 [10.16]  | 102241-8             |
| 11          | 1.100 [27.94] | .500 [12.70]  | .500 [12.70]  | 102241-9             |
| 12          | 1.200 [30.48] | .600 [15.24]  | .500 [12.70]  | 1-102241-0           |
| 13          | 1.300 [33.02] | .600 [15.24]  | .600 [15.24]  | 1-102241-1           |
| 14          | 1.400 [35.56] | .700 [17.78]  | .600 [15.24]  | 1-102241-2           |
| 15          | 1.500 [38.10] | .700 [17.78]  | .700 [17.78]  | 1-102241-3           |
| 16          | 1.600 [40.64] | .800 [20.32]  | .700 [17.78]  | 1-102241-4           |
| 17          | 1.700 [43.18] | .800 [20.32]  | .800 [20.32]  | 1-102241-5           |
| 18          | 1.800 [45.72] | .900 [22.86]  | .800 [20.32]  | 1-102241-6           |
| 19          | 1.900 [48.26] | .900 [22.86]  | .900 [22.86]  | 1-102241-7           |
| 20          | 2.000 [50.80] | 1.000 [25.40] | .900 [22.86]  | 1-102241-8           |
| 21          | 2.100 [53.34] | 1.000 [25.40] | 1.000 [25.40] | 1-102241-9           |
| 22          | 2.200 [55.88] | 1.100 [27.94] | 1.000 [25.40] | 2-102241-0           |
| 23          | 2.300 [58.42] | 1.100 [27.94] | 1.100 [27.94] | 2-102241-1           |
| 24          | 2.400 [60.96] | 1.200 [30.48] | 1.100 [27.94] | 2-102241-2           |
| 25          | 2.500 [63.50] | 1.200 [30.48] | 1.200 [30.48] | 2-102241-3           |
| 26          | 2.600 [66.04] | 1.300 [33.02] | 1.200 [30.48] | 2-102241-4           |
| 27          | 2.700 [68.58] | 1.300 [33.02] | 1.300 [33.02] | 2-102241-5           |
| 28          | 2.800 [71.12] | 1.400 [35.56] | 1.300 [33.02] | 2-102241-6           |
| 29          | 2.900 [73.66] | 1.400 [35.56] | 1.400 [35.56] | 2-102241-7           |
| 30          | 3.000 [76.20] | 1.500 [38.10] | 1.400 [35.56] | 2-102241-8           |
| 31          | 3.100 [78.74] | 1.500 [38.10] | 1.500 [38.10] | 2-102241-9           |
| 32          | 3.200 [81.28] | 1.600 [40.64] | 1.500 [38.10] | 3-102241-0           |
| 33          | 3.300 [83.82] | 1.600 [40.64] | 1.600 [40.64] | 3-102241-1           |
| 34          | 3.400 [86.36] | 1.700 [43.18] | 1.600 [40.64] | 3-102242-2           |
| 35          | 3.500 [88.90] | 1.700 [43.18] | 1.700 [43.18] | 3-102241-3           |
| 36          | 3.600 [91.44] | 1.800 [45.72] | 1.700 [43.18] | 3-102241-4           |

\*No marking on housing.

**Note:** Contact Extraction/Lance Reset Tool No. 843996-3.

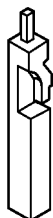
**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**Material**—Natural color nylon



**Part No. 87077-2**

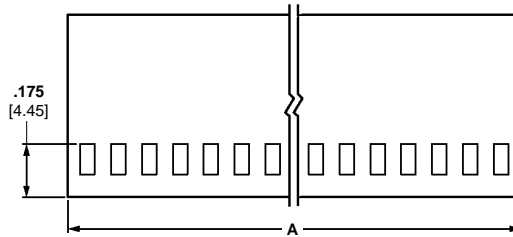
(Plugs directly into housing)

Mod IV Wire-Applied Housings

5

**Mod IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centerline**

**Non-Polarized**

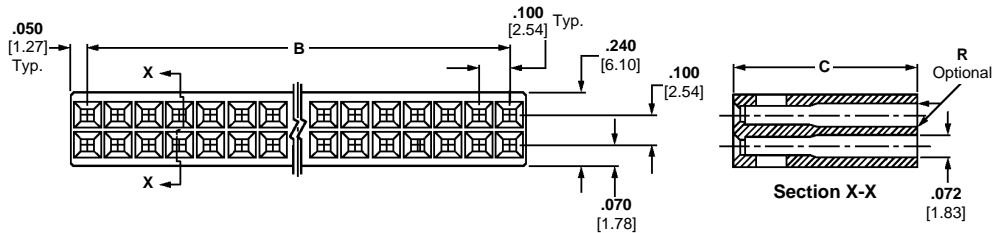


**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

**Contacts**—pages 228-230  
**Mateable Headers and Posts**—pages 95-97, 105-109, 133-135



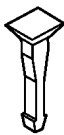
**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016

| No. of Pos. | Dimensions    |               | Part Nos.        |             |                  |
|-------------|---------------|---------------|------------------|-------------|------------------|
|             | A             | B             | C = .600 [15.24] |             | C = .645 [16.38] |
|             |               |               | Stamped*         | Unstamped** | Unstamped**      |
| 2           | .100 [2.54]   | —             | —                | 5-87456-3   | —                |
| 4           | .200 [5.08]   | .100 [2.54]   | 5-87456-0        | 4-87456-9   | 2-86177-5        |
| 6           | .300 [7.62]   | .200 [5.08]   | 87456-2          | 87456-1     | 1-86177-8        |
| 8           | .400 [10.16]  | .300 [7.62]   | 87456-4          | 87456-3     | 2-86177-0        |
| 10          | .500 [12.70]  | .400 [10.16]  | 87456-6          | 87456-5     | 1-86177-2        |
| 12          | .600 [15.24]  | .500 [12.70]  | 87456-8          | 87456-7     | 1-86177-3        |
| 14          | .700 [17.78]  | .600 [15.24]  | 1-87456-0        | 87456-9     | 1-86177-4        |
| 16          | .800 [20.32]  | .700 [17.78]  | 1-87456-2        | 1-87456-1   | 1-86177-5        |
| 18          | .900 [22.86]  | .800 [20.32]  | 1-87456-4        | 1-87456-3   | 1-86177-6        |
| 20          | 1.000 [25.40] | .900 [22.86]  | 1-87456-6        | 1-87456-5   | 86177-1          |
| 22          | 1.100 [27.94] | 1.000 [25.40] | —                | 1-87456-7   | 86177-2          |
| 24          | 1.200 [30.48] | 1.100 [27.94] | 2-87456-0        | 1-87456-9   | 86177-3          |
| 26          | 1.300 [33.02] | 1.200 [30.48] | 2-87456-2        | 2-87456-1   | 86177-4          |
| 28          | 1.400 [35.56] | 1.300 [33.02] | 2-87456-4        | 2-87456-3   | 86177-5          |
| 30          | 1.500 [38.10] | 1.400 [35.56] | 2-87456-6        | 2-87456-5   | 86177-6          |
| 32          | 1.600 [40.64] | 1.500 [38.10] | 2-87456-8        | 2-87456-7   | 86177-7          |
| 34          | 1.700 [43.18] | 1.600 [40.64] | 3-87456-0        | 2-87456-9   | 86177-8          |
| 36          | 1.800 [45.72] | 1.700 [43.18] | 3-87456-2        | 3-87456-1   | 86177-9          |
| 38          | 1.900 [48.26] | 1.800 [45.72] | —                | 3-87456-3   | 1-86177-0        |
| 40          | 2.000 [50.80] | 1.900 [48.26] | 3-87456-6        | 3-87456-5   | 1-86177-1        |
| 42          | 2.100 [53.34] | 2.000 [50.80] | 4-87456-4        | 4-87456-3   | —                |
| 44          | 2.200 [55.88] | 2.100 [53.34] | 3-87456-8        | 3-87456-7   | 1-86177-7        |
| 48          | 2.400 [60.96] | 2.300 [58.42] | 6-87456-0        | 5-87456-9   | 2-86177-3        |
| 50          | 2.500 [63.50] | 2.400 [60.96] | 4-87456-0        | 3-87456-9   | 2-86177-1        |
| 52          | 2.600 [66.04] | 2.500 [63.50] | 4-87456-2        | 4-87456-1   | 1-86177-9        |
| 54          | 2.700 [68.58] | 2.600 [66.04] | —                | 4-87456-5   | —                |
| 56          | 2.800 [71.12] | 2.700 [68.58] | —                | 6-87456-1   | —                |
| 58          | 2.900 [73.66] | 2.800 [71.12] | —                | 6-87456-3   | —                |
| 60          | 3.000 [76.20] | 2.900 [73.66] | 5-87456-2        | 5-87456-1   | —                |
| 64          | 3.200 [81.28] | 3.100 [78.74] | 6-87456-6        | 6-87456-5   | —                |
| 66          | 3.300 [83.82] | 3.200 [81.28] | 5-87456-4        | 5-87456-7   | —                |
| 70          | 3.500 [88.90] | 3.400 [86.36] | —                | 5-87456-5   | 2-86177-4        |
| 72          | 3.600 [91.44] | 3.500 [88.90] | 4-87456-8        | 4-87456-7   | —                |

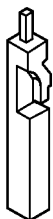
**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**Material**—Natural color nylon



**Part No. 87077-1**

(for .645 high housings)

**Part No. 87077-2**

(for .600 high housings)  
 (Plugs directly into housing)

\*Cavity identification, AMP, part number and date code stamped on housing where size permits.

\*\*No marking on housing.

**Notes:** 1. Strain reliefs are available and may be purchased separately. Consult Tyco Electronics.

2. Contact **Extraction/Lance Reset Tool No. 843996-3**.

**Mod IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centerline** (Continued)

**Polarized**



**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

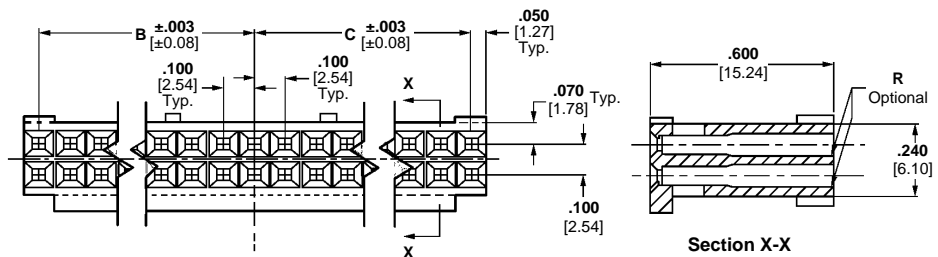
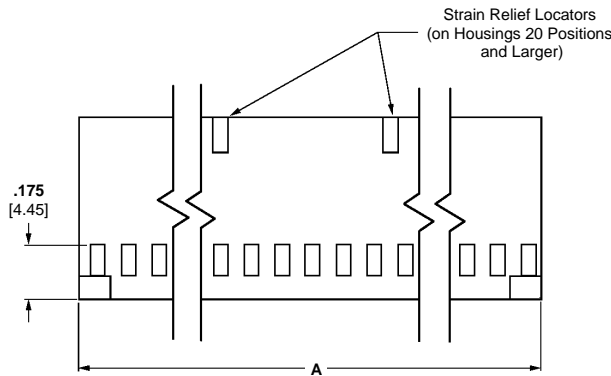
**Contacts**—pages 228-230

**Mateable Headers and Posts**—pages 133-148

**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016



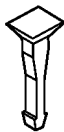
| No. of Pos. | Dimensions    |               |               | Part Nos. |             |
|-------------|---------------|---------------|---------------|-----------|-------------|
|             | A             | B             | C             | Stamped*  | Unstamped** |
| 6           | .300 [7.62]   | .100 [2.54]   | .100 [2.54]   | 87977-1   | 2-87977-8   |
| 8           | .400 [10.16]  | .200 [5.08]   | .100 [2.54]   | 87977-2   | 2-87977-9   |
| 10          | .500 [12.70]  | .200 [5.08]   | .200 [5.08]   | 87977-3   | 3-87977-0   |
| 12          | .600 [15.24]  | .300 [7.62]   | .200 [5.08]   | 87977-4   | 3-87977-1   |
| 14          | .700 [17.78]  | .300 [7.62]   | .300 [7.62]   | 87977-5   | 3-87977-2   |
| 16          | .800 [20.32]  | .400 [10.16]  | .300 [7.62]   | 87977-6   | 3-87977-3   |
| 18          | .900 [22.86]  | .400 [10.16]  | .400 [10.16]  | —         | 3-87977-4   |
| 20          | 1.000 [25.40] | .500 [12.70]  | .400 [10.16]  | 87977-8   | 3-87977-5   |
| 22          | 1.100 [27.94] | .500 [12.70]  | .500 [12.70]  | —         | 3-87977-6   |
| 24          | 1.200 [30.48] | .600 [15.24]  | .500 [12.70]  | 1-87977-0 | 3-87977-7   |
| 26          | 1.300 [33.02] | .600 [15.24]  | .600 [15.24]  | 1-87977-1 | 3-87977-8   |
| 28          | 1.400 [35.56] | .700 [17.78]  | .600 [15.24]  | —         | 3-87977-9   |
| 30          | 1.500 [38.10] | .700 [17.78]  | .700 [17.78]  | —         | 4-87977-0   |
| 32          | 1.600 [40.64] | .800 [20.32]  | .700 [17.78]  | —         | 4-87977-1   |
| 34          | 1.700 [43.18] | .800 [20.32]  | .800 [20.32]  | —         | 4-87977-2   |
| 36          | 1.800 [45.72] | .900 [22.86]  | .800 [20.32]  | —         | 4-87977-3   |
| 38          | 1.900 [48.26] | .900 [22.86]  | .900 [22.86]  | —         | 4-87977-4   |
| 40          | 2.000 [50.80] | 1.000 [25.40] | .900 [22.86]  | 1-87977-8 | 4-87977-5   |
| 42          | 2.100 [53.34] | 1.000 [25.40] | 1.000 [25.40] | —         | 4-87977-6   |
| 44          | 2.200 [55.88] | 1.100 [27.94] | 1.000 [25.40] | —         | 4-87977-7   |
| 48          | 2.400 [60.96] | 1.200 [30.48] | 1.100 [27.94] | —         | 5-87977-6   |
| 50          | 2.500 [63.50] | 1.200 [30.48] | 1.200 [30.48] | 2-87977-1 | 4-87977-8   |
| 52          | 2.600 [66.04] | 1.300 [33.02] | 1.200 [30.48] | —         | 4-87977-9   |
| 54          | 2.700 [68.58] | 1.300 [33.02] | 1.300 [33.02] | —         | 5-87977-0   |
| 56          | 2.800 [71.12] | 1.400 [35.56] | 1.300 [33.02] | —         | 5-87977-8   |
| 58          | 2.900 [73.66] | 1.400 [35.56] | 1.400 [35.56] | —         | 6-87977-0   |
| 60          | 3.000 [76.20] | 1.500 [38.10] | 1.400 [35.56] | 2-87977-4 | 5-87977-1   |
| 64          | 3.200 [81.28] | 1.600 [40.64] | 1.500 [38.10] | —         | 6-87977-2   |
| 66          | 3.300 [83.82] | 1.600 [40.64] | 1.600 [40.64] | —         | 5-87977-2   |
| 70          | 3.500 [88.90] | 1.700 [43.18] | 1.700 [43.18] | —         | 5-87977-3   |
| 72          | 3.600 [91.44] | 1.800 [45.72] | 1.700 [43.18] | —         | 5-87977-4   |

\*Cavity identification, AMP, part number and date code stamped on housing where size permits.

\*\*No marking on housing or strain relief.

**Notes:** 1. Strain reliefs are available and may be purchased separately. Consult Tyco Electronics.  
2. Contact **Extraction/Lance Reset Tool No. 843996-3**.

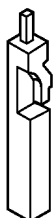
**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**Material**—Natural color nylon



**Part No. 87077-2**

(Plugs directly into housing)

**Mod IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centerline** (Continued)

**Polarized (with Detent Latching, with and without Strain Relief/Pull Tab)**



**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

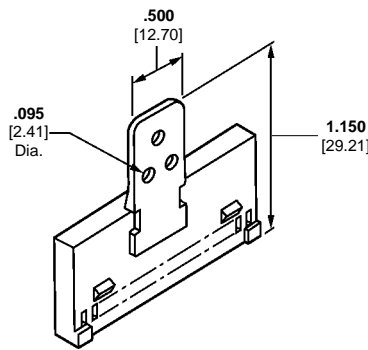
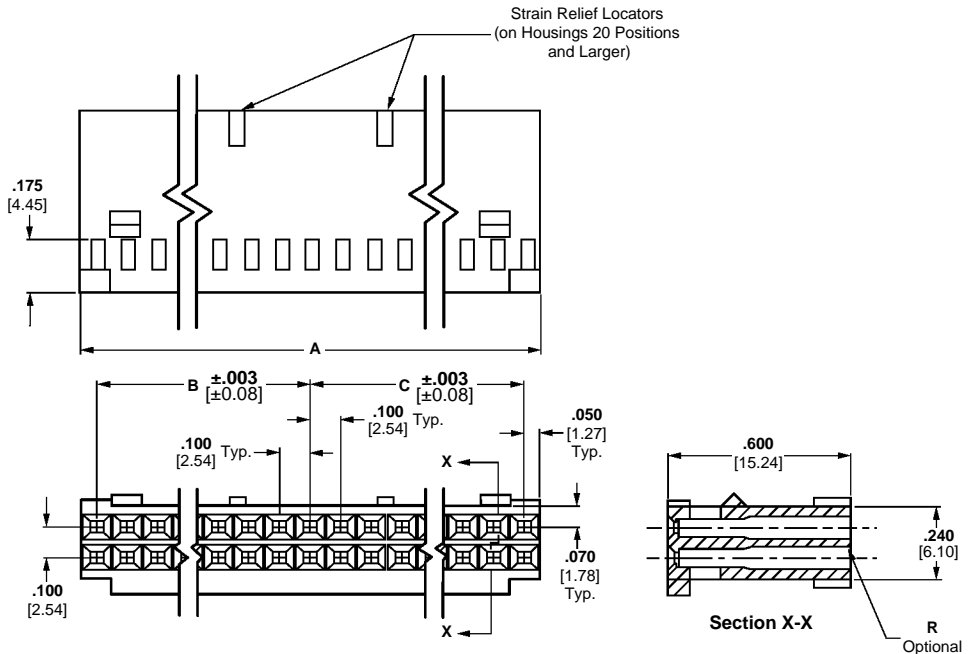
**Contacts**—pages 228-230

**Mateable Headers and Posts**—pages 133-141, 144-149

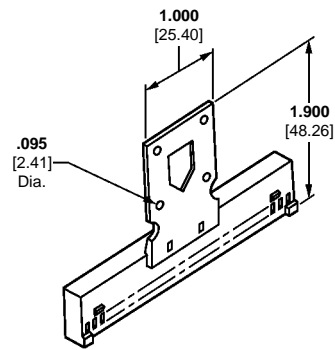
**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016

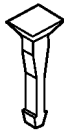


**Housing with Strain Relief/Pull Tab**  
Strain Relief Part No. 87921-1  
(10 thru 18 positions)



**Housing with Strain Relief/Pull Tab**  
Strain Relief Part No. 87710-1  
(20 positions and larger)

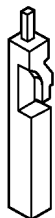
**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**Material**—Natural color nylon



**Part No. 87077-2**

(Plugs directly into housing)

| No. of Pos. | Dimensions   |              |             | No. of Detents | Part Nos.                      |                                |                             |
|-------------|--------------|--------------|-------------|----------------|--------------------------------|--------------------------------|-----------------------------|
|             | A            | B            | C           |                | Without Strain Relief Stamped* | With Strain Relief Unstamped** | With Strain Relief Stamped* |
| 6           | .300 [7.62]  | .100 [2.54]  | .100 [2.54] | 1              | 87631-2                        | 87631-1                        | —                           |
| 8           | .400 [10.16] | .200 [5.08]  | .100 [2.54] | 1              | 87631-4                        | 87631-3                        | —                           |
| 10          | .500 [12.70] | .200 [5.08]  | .200 [5.08] | 1              | 87631-6                        | 87631-5                        | 87922-1                     |
| 12          | .600 [15.24] | .300 [7.62]  | .200 [5.08] | 1              | 87631-8                        | 87631-7                        | 87922-2                     |
| 14          | .700 [17.78] | .300 [7.62]  | .300 [7.62] | 1              | 1-87631-0                      | 87631-9                        | 87922-3                     |
| 16          | .800 [20.32] | .400 [10.16] | .300 [7.62] | 1              | 1-87631-2                      | 1-87631-1                      | 87922-4                     |

\*Cavity identification, AMP, part number and date code stamped on housing and/or strain relief where size permits.

\*\*No marking on housing or strain relief.

- Notes:**
1. The Strain Relief/Pull Tab can be bonded to any thermoplastic connector housing.
  2. Strain reliefs may be purchased separately.
  3. Contact **Extraction/Lance Reset Tool No. 843996-3**.

**Mod IV Wire-Applied Housings, Double-Row,  
.100 x .100 [2.54 x 2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               |               | No. of Detents | Part Nos.             |             |                    |
|-------------|---------------|---------------|---------------|----------------|-----------------------|-------------|--------------------|
|             | A             | B             | C             |                | Without Strain Relief |             | With Strain Relief |
|             |               |               |               |                | Stamped*              | Unstamped** | Stamped*           |
| 18          | .900 [22.86]  | .400 [10.16]  | .400 [10.16]  | 1              | 1-87631-4             | 1-87631-3   | 87922-5            |
| 20          | 1.000 [25.40] | .500 [12.70]  | .400 [10.16]  | 2              | 1-87631-6             | 1-87631-5   | 87733-1            |
| 22          | 1.100 [27.94] | .500 [12.70]  | .500 [12.70]  | 2              | 1-87631-8             | 1-87631-7   | —                  |
| 24          | 1.200 [30.48] | .600 [15.24]  | .500 [12.70]  | 2              | 2-87631-0             | 1-87631-9   | 87733-3            |
| 26          | 1.300 [33.02] | .600 [15.24]  | .600 [15.24]  | 2              | 2-87631-2             | 2-87631-1   | 87733-4            |
| 28          | 1.400 [35.56] | .700 [17.78]  | .600 [15.24]  | 2              | 2-87631-4             | 2-87631-3   | —                  |
| 30          | 1.500 [38.10] | .700 [17.78]  | .700 [17.78]  | 2              | 2-87631-6             | 2-87631-5   | 87733-6            |
| 32          | 1.600 [40.64] | .800 [20.32]  | .700 [17.78]  | 2              | 2-87631-8             | 2-87631-7   | 87733-7            |
| 34          | 1.700 [43.18] | .800 [20.32]  | .800 [20.32]  | 2              | 3-87631-0             | 2-87631-9   | 87733-8            |
| 36          | 1.800 [45.72] | .900 [22.86]  | .800 [20.32]  | 2              | 3-87631-2             | 3-87631-1   | —                  |
| 38          | 1.900 [48.26] | .900 [22.86]  | .900 [22.86]  | 2              | —                     | 3-87631-3   | —                  |
| 40          | 2.000 [50.80] | 1.000 [25.40] | .900 [22.86]  | 2              | 3-87631-6             | 3-87631-5   | 1-87733-1          |
| 42          | 2.100 [53.34] | 1.000 [25.40] | 1.000 [25.40] | 2              | 3-87631-8             | 3-87631-7   | —                  |
| 44          | 2.200 [55.88] | 1.100 [27.94] | 1.000 [25.40] | 2              | 4-87631-0             | 3-87631-9   | —                  |
| 48          | 2.400 [60.96] | 1.200 [30.48] | 1.100 [27.94] | 2              | —                     | 5-87631-9   | —                  |
| 50          | 2.500 [63.50] | 1.200 [30.48] | 1.200 [30.48] | 2              | 4-87631-2             | 4-87631-1   | 1-87733-4          |
| 52          | 2.600 [66.04] | 1.300 [33.02] | 1.200 [30.48] | 2              | —                     | 4-87631-3   | —                  |
| 54          | 2.700 [68.58] | 1.300 [33.02] | 1.300 [33.02] | 2              | 4-87631-6             | 4-87631-5   | —                  |
| 58          | 2.900 [73.66] | 1.400 [35.56] | 1.400 [35.56] | 2              | —                     | 6-87631-3   | —                  |
| 60          | 3.000 [76.20] | 1.500 [38.10] | 1.400 [35.56] | 2              | 5-87631-2             | 5-87631-1   | 1-87733-7          |
| 64          | 3.200 [81.28] | 1.600 [40.64] | 1.500 [38.10] | 2              | 6-87631-6             | 6-87631-5   | —                  |
| 66          | 3.300 [81.28] | 1.600 [40.64] | 1.600 [40.64] | 2              | —                     | 5-87631-3   | —                  |
| 70          | 3.500 [88.90] | 1.700 [43.18] | 1.700 [43.18] | 2              | —                     | 5-87631-5   | —                  |
| 72          | 3.800 [96.52] | 1.800 [45.72] | 1.700 [43.18] | 2              | 5-87631-8             | 5-87631-7   | —                  |

\*Cavity identification, AMP, part number and date code stamped on housing and/or strain relief where size permits.

\*\*No marking on housing or strain relief.

- Notes:**
1. The Strain Relief/Pull Tab can be bonded to any thermoplastic connector housing.
  2. Strain reliefs may be purchased separately.
  3. Contact **Extraction/Lance Reset Tool No. 843996-3**.

**Mod IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centerline** (Continued)

**Center Polarized**



**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

**Contacts**—pages 228-230

**Mateable Headers and Posts: Low Profile Shrouded Headers, Double-Row, Straight or Right-Angle Posts**—pages 153-155

**Low Profile Shrouded Headers, Double-Row, Straight or Right-Angle Posts, with .585 [14.86] Ejection Latches**—pages 156-157

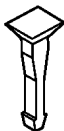
**AMP-LATCH Ejection Headers with .576 [14.63] Ejection Latches**—Catalog 82012, Part Nos. 102186-1 & 102320-1

**Technical Documents** (pages 294, 296):

**Product Specification** 108-25007, 208-25019, 108-25020, 108-25021

**Application Specification** 114-25003, 114-25016

**Keying Plugs**



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

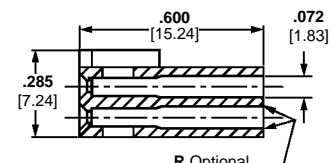
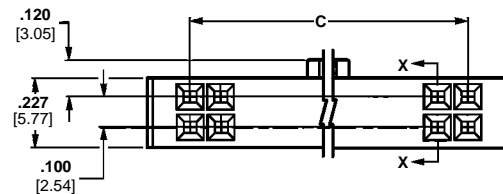
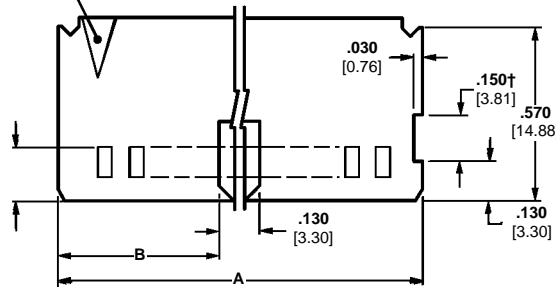
**Material**—Natural color nylon



**Part No. 87077-2**

(Plugs directly into housing)

Position No. 1 Indicator



Section X-X

| No. of Pos. | A             | B             | C             | Part Nos. (Stamped*) |
|-------------|---------------|---------------|---------------|----------------------|
| 8           | .580 [14.73]  | .225 [5.72]   | .300 [7.62]   | 1-102387-4           |
| 10          | .680 [17.27]  | .275 [6.98]   | .400 [10.16]  | 102387-1             |
| 14          | .880 [22.35]  | .375 [9.53]   | .600 [15.24]  | 102387-2             |
| 16          | .980 [24.89]  | .425 [10.80]  | .700 [17.78]  | 102387-3             |
| 20          | 1.180 [29.97] | .525 [13.34]  | .900 [22.86]  | 102387-4             |
| 22          | 1.280 [32.51] | .575 [14.61]  | 1.000 [25.40] | 1-102387-5           |
| 24          | 1.380 [35.05] | .625 [15.88]  | 1.100 [27.94] | 102387-5             |
| 26          | 1.480 [37.59] | .675 [17.15]  | 1.200 [30.48] | 102387-6             |
| 30          | 1.680 [42.67] | .775 [19.69]  | 1.400 [35.56] | 102387-7             |
| 34          | 1.880 [47.75] | .875 [22.23]  | 1.600 [40.64] | 102387-8             |
| 40          | 2.180 [55.37] | 1.025 [26.04] | 1.900 [48.26] | 102387-9             |
| 44          | 2.380 [60.45] | 1.125 [28.58] | 2.100 [53.34] | 1-102387-3           |
| 50          | 2.680 [68.07] | 1.275 [32.39] | 2.400 [60.96] | 1-102387-0           |
| 60          | 3.180 [80.77] | 1.525 [38.74] | 2.900 [73.66] | 1-102387-1           |
| 64          | 3.380 [85.85] | 1.625 [41.28] | 3.100 [78.74] | 1-102387-2           |

\*Cavity identification and AMP stamped on housing.

†Non-functional slot is used for gating purposes during injection molding process. This gating feature is not inherent in all production molds. Therefore, the depicted slot will only be present on housings produced on mold tooling requiring this gating feature.

**Note:** Contact Extraction/Lance Reset Tool No. 843996-3.

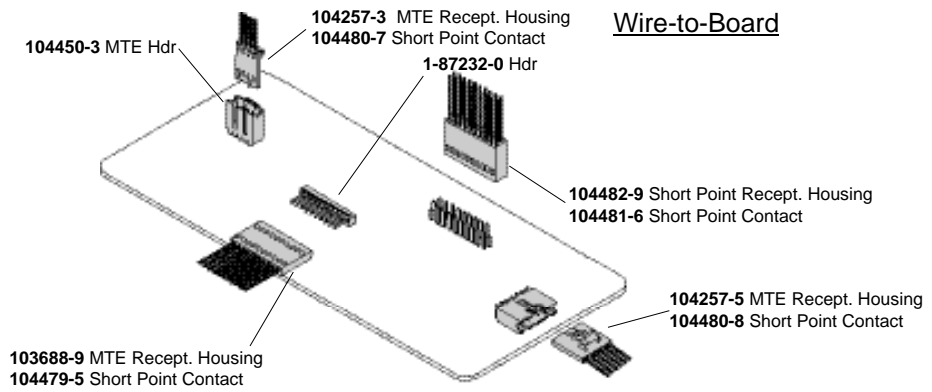
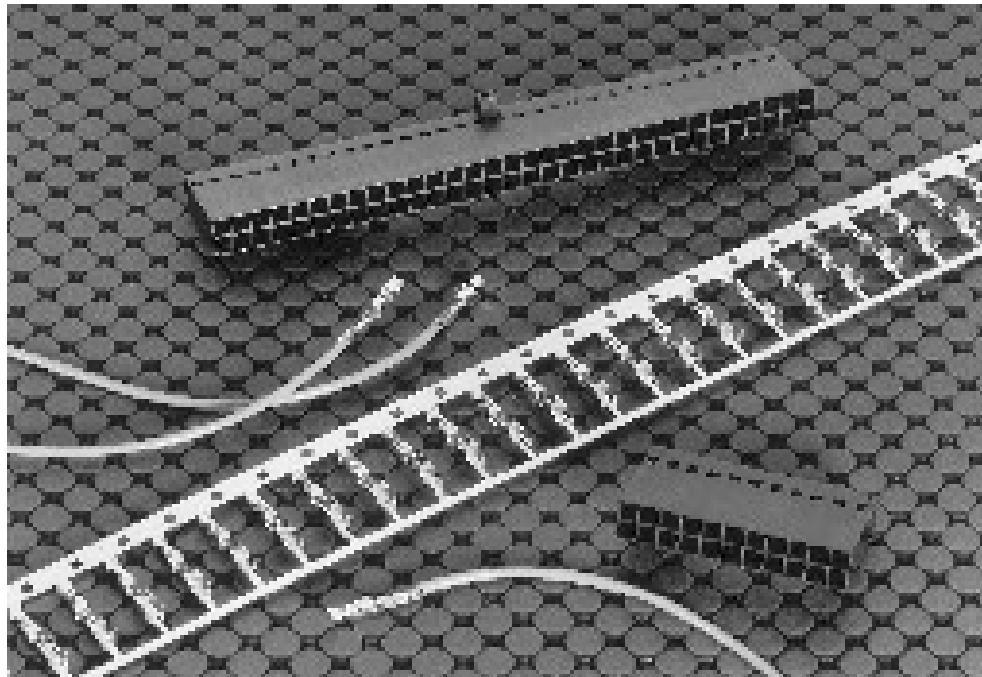
Short Point, Crimp Snap-In Wire-Applied Contacts and Housings

Product Facts

- Short point of contact mates with .169 [4.29] to .259 [6.58] long post
- Double-row housings are end-to-end and side-to-side stackable
- Terminates 32-20 AWG [0.03-0.6 mm<sup>2</sup>] discrete wire
- Contacts have insulation support to accept a maximum insulation diameter of .060 [1.52]
- Available with .000015 [0.00038] or .000030 [0.00076] gold duplex, or bright tin-lead plating
- Mates with .025 [0.64] square posts
- Dual cantilever contact beams for reliable matings
- Locking retention latch provides 3 lb [13.34 N] of retention force
- Unique locking latch design helps prevent latch from protruding through latch window
- Contacts snap into AMPMODU MTE single-row housings
- Double-row housing configurations include .100 [2.54] centerline, plain and polarized
- Housing sizes range from 4 to 52 positions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189
- Produced under a Quality Management System certified to ISO 9001



A copy of the certificate is available upon request



Wire-to-Board

AMPMODU Short Point receptacle contacts are designed to mate with .025 [0.64] square posts. They will mate with posts as short as .169 [4.29].

Short Point double-row housings are end-to-end and side-to-side stackable on .100 [2.54] centers. Contacts also can be used in single-row AMPMODU MTE housings to provide a complete wire-crimp system, or to serve as replacement contacts.

Performance Characteristics

- **Contact Current Rating**—3 amperes
- **Termination Resistance**—12 milliohms (max.)
- **Durability**—Ref. Tyco Electronics Product Specification 108-1472

Short Point, Crimp Snap-In Wire-Applied Contacts and Housings

5



**Short Point Crimp Snap-In Receptacle Contacts**

**Material and Finish:**

Copper alloy C7025, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating B**—Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating C**—.000100 [0.00254] min. bright tin-lead over .000050 [0.00127] min. nickel on entire contact

**Related Product Data:**

**Performance Characteristics**—page 238

**Housings used in**—Short Point—pages 240, 241

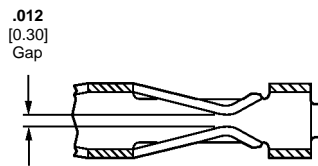
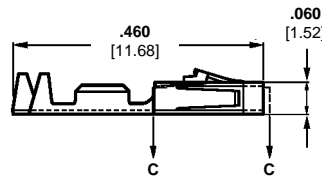
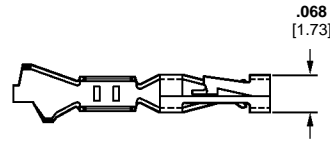
**AMPMODU MTE Unloaded Housings**—pages 245-250

**Application Tooling**—page 290

**Technical Documents** (page 294-296):

**Product Specification** 108-1472, 108-25027

**Application Specification** 114-25038



Section C - C



**Keying Plug**  
Part No. 104072-1

Ten plugs are supplied per strip. Order quantity reflects the number of strips required.



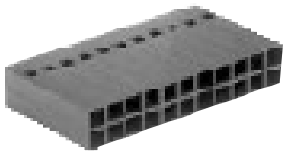
Photo 4857

**Extraction/Lance Reset**  
Tool No. 843477-1

| Wire Size Range |                    | Ins. Dia. Range       | Finish    | Contact Part No. (Standard Pressure) |             | Quick-Change Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Nos. |
|-----------------|--------------------|-----------------------|-----------|--------------------------------------|-------------|--|---|----------------|
| AWG             | [mm <sup>2</sup> ] |                       |           | Strip Form                           | Loose Piece |  |   |                |
| 32-28           | 0.03-0.08          | .025-.060 [0.64-1.52] | Plating A | 104481-4                             | 104481-8    | 567296-2   | 466980-1  | 91518-1        |
|                 |                    |                       | Plating B | 104481-3                             | 104481-7    |  |   |                |
|                 |                    |                       | Plating C | 104481-2                             | 104481-6    |  |   |                |
| 26-22           | 0.13-0.3           | .025-.060 [0.64-1.52] | Plating A | 104480-4                             | 104480-9    | 567297-2   | 466981-1  | 91518-1        |
|                 |                    |                       | Plating B | 104480-3                             | 104480-8    |  |   |                |
|                 |                    |                       | Plating C | 104480-2                             | 104480-7    |  |   |                |
| 24-20           | 0.2-0.5            | .025-.060 [0.64-1.52] | Plating A | 104479-4                             | 104479-7    | 567298-2   | 466982-1  | 91551-1        |
|                 |                    |                       | Plating B | 104479-3                             | 104479-6    |  |   |                |
|                 |                    |                       | Plating C | 104479-2                             | 104479-5    |  |   |                |

\*For use with Model "K" machines. Call the Tooling/Technical Assistance Center (1-800-722-1111) for part nos. of applicators for use with the Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

**Short Point Wire-Applied Housings, Double-Row, Non-Polarized, .100 x .100 [2.54 x 2.54] Centerline**



**Material:**

Black thermoplastic, flame retardant, 94V-0 rated

**Related Product Data:**

**Performance Characteristics**—page 238

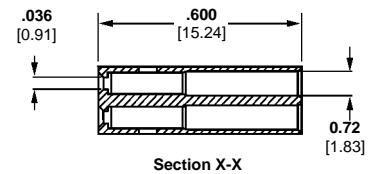
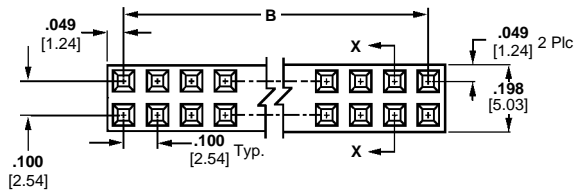
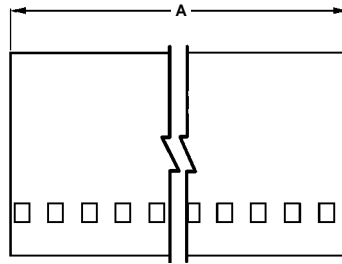
**Contacts**—page 239

**Mateable Headers**—pages 105-108, 113, 114

**Technical Documents** (page 294-296):

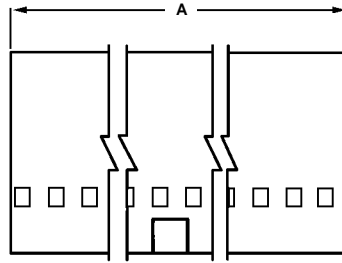
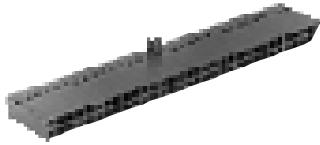
**Product Specification** 108-1472, 108-25027

**Application Specification** 114-25038



| No. of Pos. | Dimensions    |               | Housing Part No. |
|-------------|---------------|---------------|------------------|
|             | A             | B             |                  |
| 4           | .198 [5.03]   | .100 [2.54]   | 104482-1         |
| 6           | .298 [7.57]   | .200 [5.08]   | 104482-2         |
| 8           | .398 [10.11]  | .300 [7.62]   | 104482-3         |
| 10          | .498 [12.65]  | .400 [10.16]  | 104482-4         |
| 12          | .598 [15.19]  | .500 [12.70]  | 104482-5         |
| 14          | .698 [17.73]  | .600 [15.24]  | 104482-6         |
| 16          | .798 [20.27]  | .700 [17.78]  | 104482-7         |
| 18          | .898 [22.81]  | .800 [20.32]  | 104482-8         |
| 20          | .998 [25.35]  | .900 [22.86]  | 104482-9         |
| 22          | 1.098 [27.89] | 1.000 [25.40] | 1-104482-0       |
| 26          | 1.298 [32.97] | 1.200 [30.48] | 1-104482-1       |
| 28          | 1.398 [35.51] | 1.300 [33.02] | 1-104482-2       |
| 30          | 1.498 [38.05] | 1.400 [35.56] | 1-104482-3       |
| 32          | 1.598 [40.59] | 1.500 [38.10] | 1-104482-4       |
| 34          | 1.698 [43.13] | 1.600 [40.64] | 1-104482-5       |
| 36          | 1.798 [45.67] | 1.700 [43.18] | 1-104482-6       |
| 38          | 1.898 [48.21] | 1.800 [45.72] | 1-104482-7       |
| 40          | 1.998 [50.75] | 1.900 [48.26] | 1-104482-8       |
| 44          | 2.198 [55.83] | 2.100 [53.34] | 1-104482-9       |
| 52          | 2.598 [65.99] | 2.500 [63.50] | 2-104482-0       |

**Short Point Wire-Applied Housings, Double-Row, Polarized, .100 x .100 [2.54 x 2.54] Centerline**



**Material:**

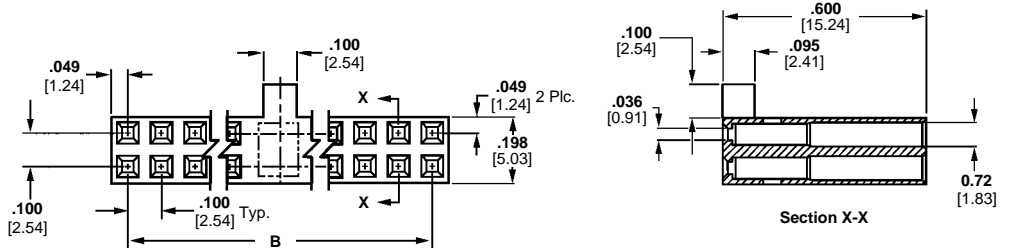
Black thermoplastic, flame retardant, 94V-0 rated

**Related Product Data:**

**Performance Characteristics**—page 238

**Contacts**—page 239

**Mateable Headers**—pages 121, 122, 153-155



**Technical Documents** (page 294-296):

**Product Specification** 108-1472, 108-25027

**Application Specification** 114-25038

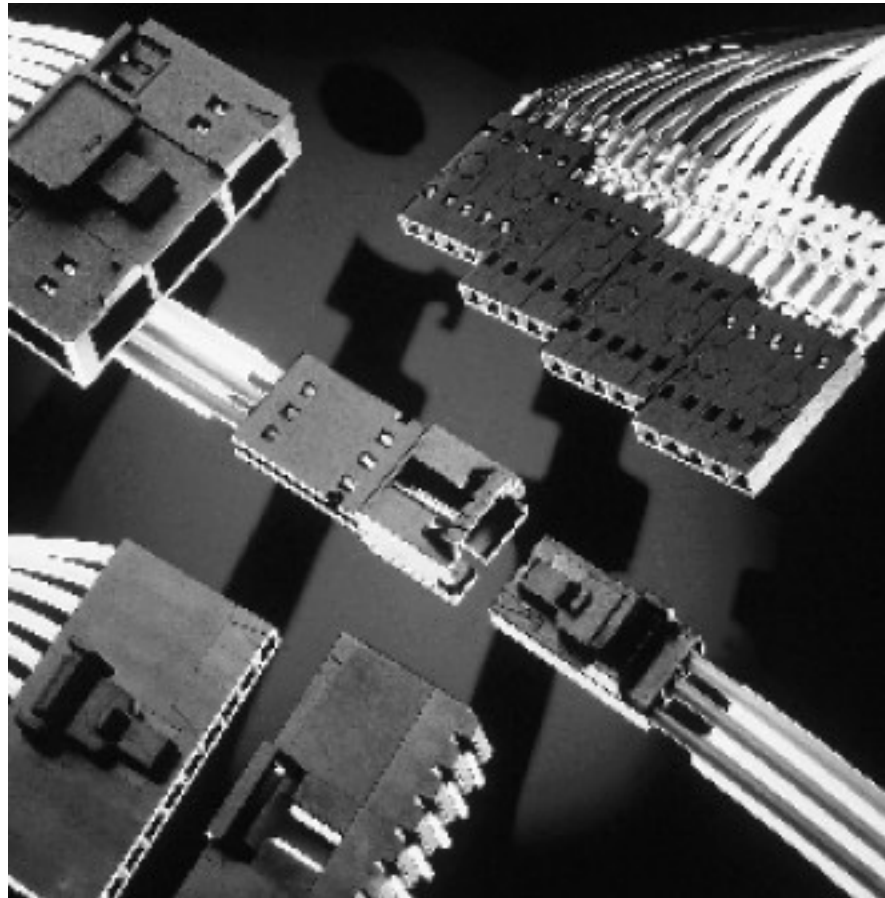
| No. of Pos. | Dimensions    |               | Housing Part No. |
|-------------|---------------|---------------|------------------|
|             | A             | B             |                  |
| 8           | .398 [10.11]  | .300 [7.62]   | 104483-1         |
| 10          | .498 [12.65]  | .400 [10.16]  | 1-104483-1       |
| 12          | .598 [15.19]  | .500 [12.70]  | 1-104483-2       |
| 14          | .698 [17.73]  | .600 [15.24]  | 104483-9         |
| 18          | .898 [22.81]  | .800 [20.32]  | 104483-2         |
| 20          | .998 [25.35]  | .900 [22.86]  | 104483-3         |
| 26          | 1.298 [32.97] | 1.200 [30.48] | 104483-4         |
| 30          | 1.498 [38.05] | 1.400 [35.56] | 104483-5         |
| 38          | 1.898 [48.21] | 1.800 [45.72] | 104483-6         |
| 50          | 2.498 [63.45] | 2.400 [60.96] | 1-104483-3       |
| 52          | 2.598 [65.99] | 2.500 [63.50] | 1-104483-0       |
| 54          | 2.698 [68.53] | 2.600 [66.04] | 104483-7         |
| 64          | 3.198 [81.23] | 3.100 [78.74] | 104483-8         |

**Note:** Other sizes can be made available on request.

**MTE Interconnection System**

**Product Facts**

- Receptacle assemblies mate with .025 [0.64] sq. posts; mating post length is .200 [5.08] min., .250 [6.35] max.
- Proven AMPMODU receptacle contact design; dual cantilever beams, built-in anti-overstress, completely enclosed "box" design, standard or high-pressure
- Insulation displacement technology
- Two contact sizes for terminating 30-22 AWG [0.05-0.3 mm<sup>2</sup>] wire range; .054 [1.37] max. insulation diameter with an insulation wall thickness of .015 [0.38] max.
- Choice of gold duplex or tin plated contacts
- Interchangeable crimp snap-in pin and receptacle contacts available
- Housing sizes 2 through 25 positions, single-row .100 [2.54] centers
- Colors also available
- Plain housings are end-to-end and/or back-to-back stackable for open pin field applications
- Optional header with "swaged tail" feature helps prevent movement prior to flow soldering
- Integral latch provides positive retention between header and receptacle housing
- Coupling shrouds permit ganging of smaller connectors with guide ribs to form larger single- or double-row latching connectors
- Mass terminating tooling provides lowest applied cost for most production needs
- SMT and SMT compatible, high-temp headers available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189



The AMPMODU MTE Interconnection System offers both wire-to-board and wire-to-wire connectors using .025 [0.64] sq. post technology.

The AMPMODU MTE Interconnection System consists of single-row housings with contacts preloaded on .100 [2.54] centers. Housings are furnished with contacts partially inserted, leaving the termination areas exposed. Final contact insertion is accomplished automatically by Tyco Electronics application equipment, and manually when terminated with the Tyco Electronics pistol grip hand tool.

The heart of the system is the insulation displacement contact design, featured in both pin and receptacle

contacts. The receptacle contact, available in either standard or high-pressure, features dual cantilever beams in an enclosed "box." The post stop helps prevent a mating post from disturbing the wire termination and also limits the mating depth of a long post to protect a wrap-type termination at the base of the post. The forward contact stop helps prevent contact overinsertion prior to termination. All contacts are furnished on carrier strips which are interlocked for stability and positive location during termination.

Single-row housings are available in sizes 2 through 25 positions. Included are three styles of receptacle housings—plain, polarized/latching and ribbed and two styles of pin housings, shrouded with polarizing/

**Performance Specifications**

**Electrical Characteristics**

**Contact Current Rating**—3 amperes for single contact in free air (Amperage could vary due to ambient temperature, wire size and duty cycles.)

**Contact Termination Resistance**—15 milliohms (max.)

**Dielectric Withstanding Voltage**—At Sea Level—600 VAC, rms

At 70,000 Ft. [21 336 m]—225 VAC, rms

**Insulation Resistance**—5,000 megohms (min.)

**Environmental Characteristics**

**Operating Temperature**—-65°C to +105°C

**Vibration**—15 G's (gold), 10 G's (tin)

**Physical Shock**—50 G's

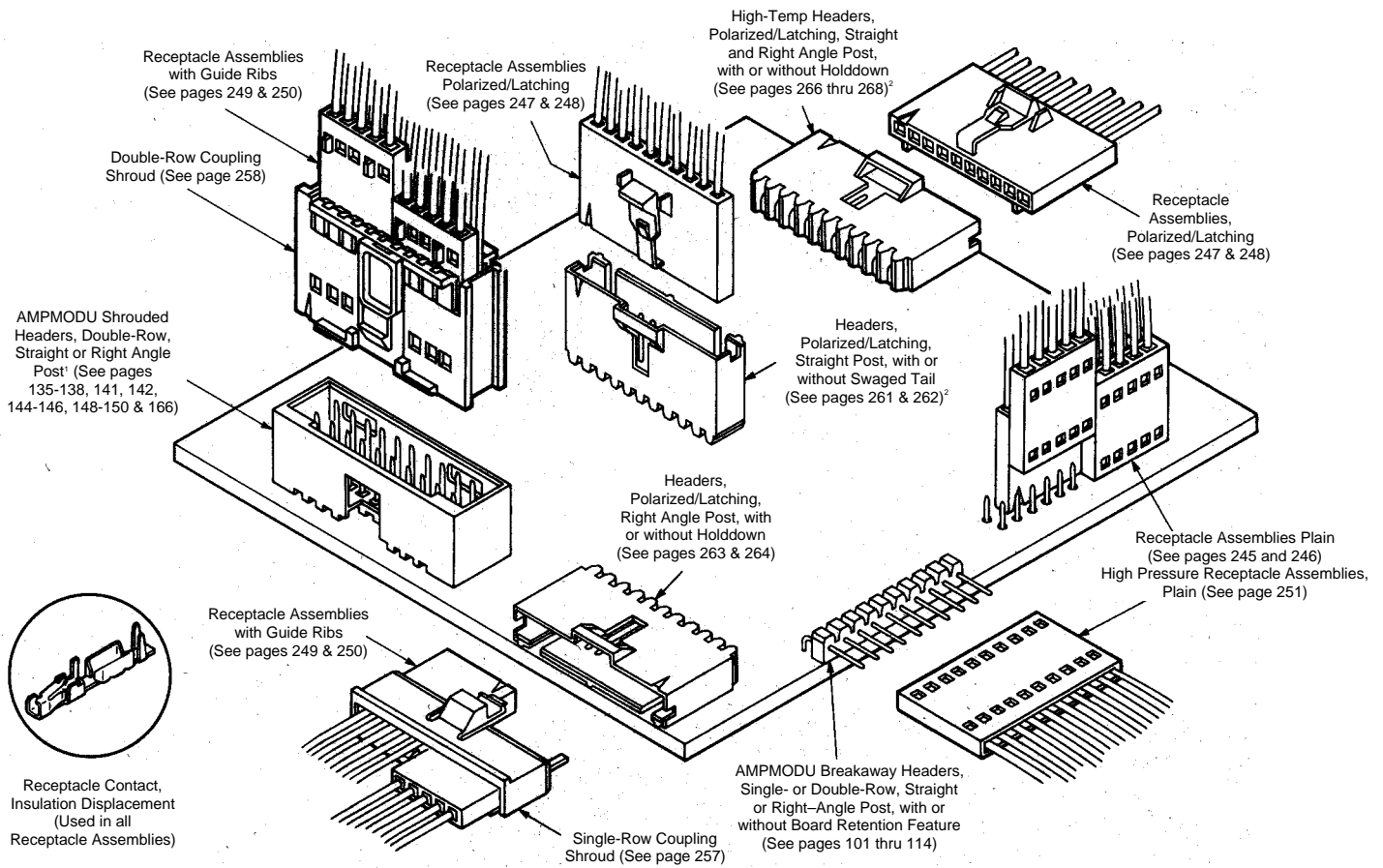
**Industrial Mixed Flow Gasing**—Class 1 (20 days) (gold)

**Product Specification** 108-25034

**Application Specification** 114-25026

MTE Interconnection System (Continued)

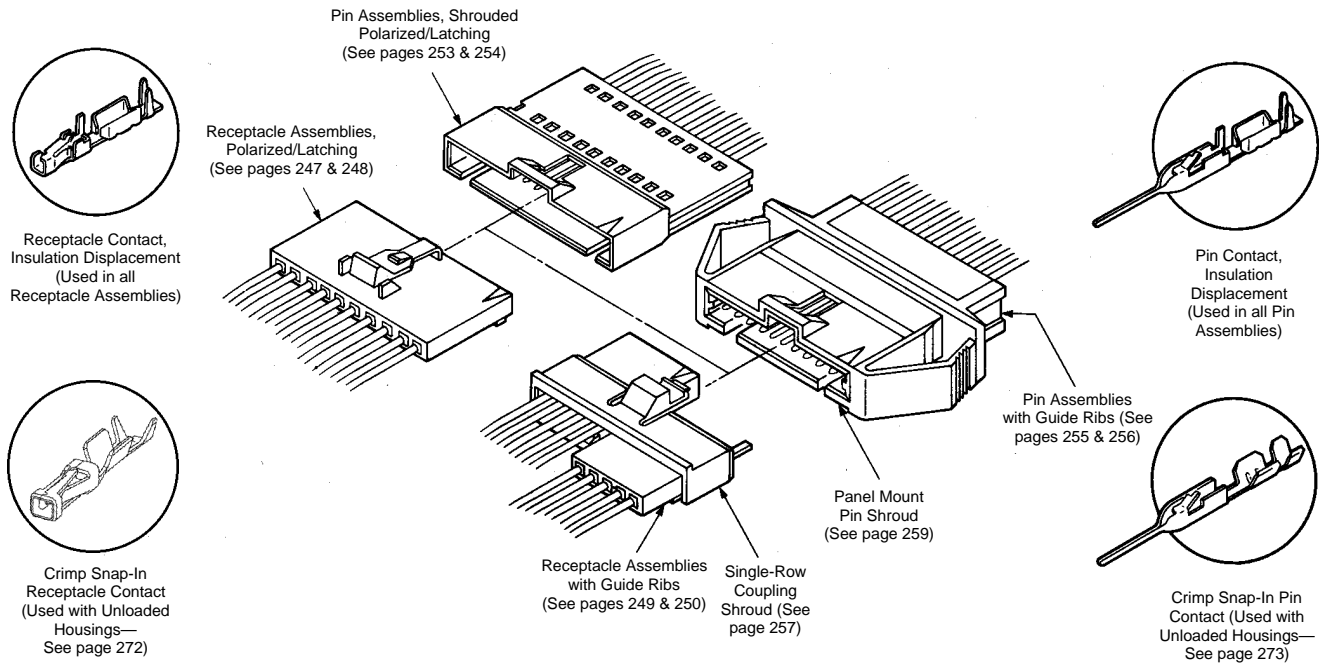
Wire-to-Board



<sup>1</sup>Mating AMPMODU Double-Row Shrouded Header Assemblies must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

<sup>2</sup>Surface Mount Right-Angle and Vertical Headers are also available (see pages 269 and 270)

Wire-to-Wire



**Note:** For wire-to-wire applications shown above, all pin and receptacle assembly combinations are intermateable.

**MTE Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Mateable AMPMODU Products:**

**Breakaway Headers**—pages 101-114, 117-124 (with .230 mating length)

**Reeled Breakaway Headers**—pages 115-116 (with .230 mating length)

**Machine Applied Bandolier Posts**—page 180

**Single- or Double-Row Shrouded Headers with .066 [1.68] End Dimension**—pages 118, 121, 129-134, 139, 140, 143, 147, 149, 150, 162-165

**Interchangeable Crimp Contacts (Short Point)**—page 272

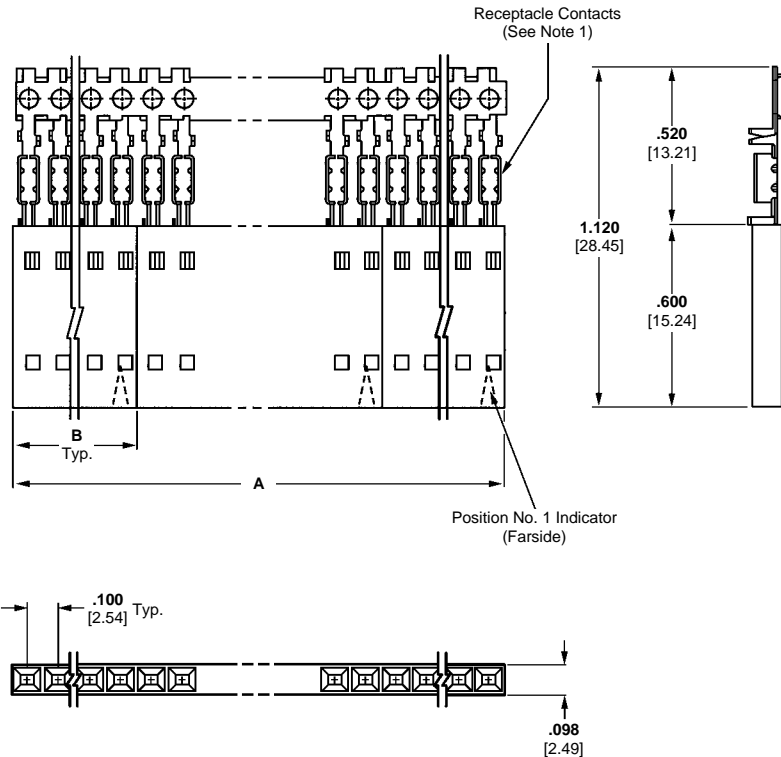
**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242

**Technical Documents** (page 295, 296):

**Product Specification** 108-25034

**Application Specification** 114-25026



These receptacle assemblies with plain housings can be stacked end-to-end and/or side-to-side for single or double-row connections to an open pin field with a .100 [2.54] centerline grid.

**MTE Receptacle Assemblies—Strip Form Plain,  
Single-Row, .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---|------------|------------|--|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 2           | 2.000 [50.80] | .198 [5.03]   | 10                                   | 103979-1  | 103978-1   | 103977-1   | 103976-1   | 103975-1   | 103974-1   | 103688-1          |
| 3           | 2.400 [60.96] | .298 [7.57]   | 8                                    | 103979-2  | 103978-2   | 103977-2   | 103976-2   | 103975-2   | 103974-2   | 103688-2          |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                    | 103979-3  | 103978-3   | 103977-3   | 103976-3   | 103975-3   | 103974-3   | 103688-3          |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                    | 103979-4  | 103978-4   | 103977-4   | 103976-4   | 103975-4   | 103974-4   | 103688-4          |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                    | 103979-5  | 103978-5   | 103977-5   | 103976-5   | 103975-5   | 103974-5   | 103688-5          |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                    | 103979-6  | 103978-6   | 103977-6   | 103976-6   | 103975-6   | 103974-6   | 103688-6          |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                    | 103979-7  | 103978-7   | 103977-7   | 103976-7   | 103975-7   | 103974-7   | 103688-7          |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                    | 103979-8  | 103978-8   | 103977-8   | 103976-8   | 103975-8   | 103974-8   | 103688-8          |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                    | 103979-9  | 103978-9   | 103977-9   | 103976-9   | 103975-9   | 103974-9   | 103688-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 1-103979-0  | 1-103978-0 | 1-103977-0 | 1-103976-0   | 1-103975-0 | 1-103974-0 | 1-103688-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 1-103979-1  | 1-103978-1 | 1-103977-1 | 1-103976-1   | 1-103975-1 | 1-103974-1 | 1-103688-1        |

**MTE Receptacle Assemblies—Individual Form Plain,  
Single-Row, .100 [2.54] Centerline**

| No. of Pos. | Dimensions B  | Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---|------------|------------|--|------------|------------|-------------------|
|             |               | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 13          | 1.298 [32.96] | 1-103903-2  | 1-103684-2 | 1-103685-2 | 1-103902-2   | 1-103686-2 | 1-103687-2 | 1-103688-2        |
| 14          | 1.398 [35.51] | 1-103903-3  | 1-103684-3 | 1-103685-3 | 1-103902-3   | 1-103686-3 | 1-103687-3 | 1-103688-3        |
| 15          | 1.498 [38.05] | 1-103903-4  | 1-103684-4 | 1-103685-4 | 1-103902-4   | 1-103686-4 | 1-103687-4 | 1-103688-4        |
| 16          | 1.598 [40.59] | 1-103903-5  | 1-103684-5 | 1-103685-5 | 1-103902-5   | 1-103686-5 | 1-103687-5 | 1-103688-5        |
| 17          | 1.698 [43.13] | 1-103903-6  | 1-103684-6 | 1-103685-6 | 1-103902-6   | 1-103686-6 | 1-103687-6 | 1-103688-6        |
| 18          | 1.798 [45.67] | 1-103903-7  | 1-103684-7 | 1-103685-7 | 1-103902-7   | 1-103686-7 | 1-103687-7 | 1-103688-7        |
| 19          | 1.898 [48.20] | 1-103903-8  | 1-103684-8 | 1-103685-8 | 1-103902-8   | 1-103686-8 | 1-103687-8 | 1-103688-8        |
| 20          | 1.998 [50.75] | 1-103903-9  | 1-103684-9 | 1-103685-9 | 1-103902-9   | 1-103686-9 | 1-103687-9 | 1-103688-9        |
| 21          | 2.098 [53.29] | 2-103903-0  | 2-103684-0 | 2-103685-0 | 2-103902-0   | 2-103686-0 | 2-103687-0 | 2-103688-0        |
| 22          | 2.198 [55.83] | 2-103903-1  | 2-103684-1 | 2-103685-1 | 2-103902-1   | 2-103686-1 | 2-103687-1 | 2-103688-1        |
| 23          | 2.298 [58.37] | 2-103903-2  | 2-103684-2 | 2-103685-2 | 2-103902-2   | 2-103686-2 | 2-103687-2 | 2-103688-2        |
| 24          | 2.398 [60.91] | 2-103903-3  | 2-103684-3 | 2-103685-3 | 2-103902-3   | 2-103686-3 | 2-103687-3 | 2-103688-3        |
| 25          | 2.498 [63.45] | 2-103903-4  | 2-103684-4 | 2-103685-4 | 2-103902-4   | 2-103686-4 | 2-103687-4 | 2-103688-4        |

**Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with AMP pistol grip hand tool.  
 2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
 3. Keying plugs are available, see page 272.

MTE Receptacle Assemblies

5





Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Mateable AMPMODU Products:**

**Pin Assemblies**

**(Polarized/Latching)**—pages 253, 254

**Pin Assemblies with Guide**

**Ribs (installed in Panel Mount Pin Shroud)**—pages 255, 256, 259

**Headers (Polarized/Latching)**—pages 261-270

**Interchangeable Crimp Contacts**

**(Short Point)**—page 272

**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242

**Technical Documents** (pages 295, 296):

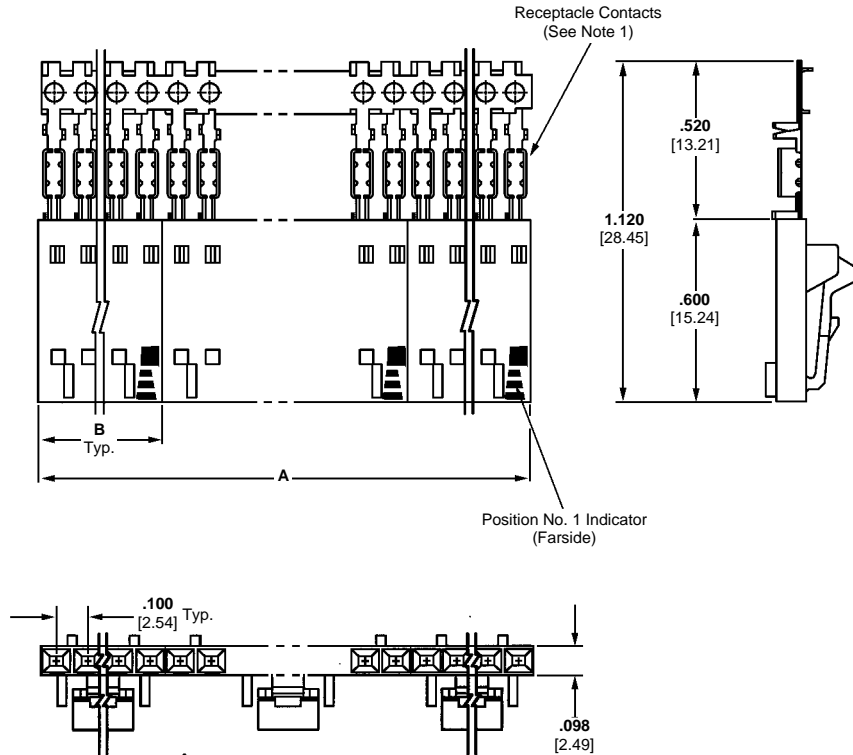
**Product Specification**

108-25034

**Application Specification**

114-25026

**MTE Receptacle Assemblies—Polarized/Latching, Single-Row, .100 [2.54] Centerline**



**MTE Receptacle Assemblies—Strip Form Polarized/Latching,  
Single-Row, .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---|------------|------------|--|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 2           | 2.000 [50.80] | .198 [5.03]   | 10                                   | 103961-1  | 103960-1   | 103959-1   | 103958-1   | 103957-1   | 103956-1   | 104257-1          |
| 3           | 2.400 [60.96] | .298 [7.57]   | 8                                    | 103961-2  | 103960-2   | 103959-2   | 103958-2   | 103957-2   | 103956-2   | 104257-2          |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                    | 103961-3  | 103960-3   | 103959-3   | 103958-3   | 103957-3   | 103956-3   | 104257-3          |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                    | 103961-4  | 103960-4   | 103959-4   | 103958-4   | 103957-4   | 103956-4   | 104257-4          |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                    | 103961-5  | 103960-5   | 103959-5   | 103958-5   | 103957-5   | 103956-5   | 104257-5          |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                    | 103961-6  | 103960-6   | 103959-6   | 103958-6   | 103957-6   | 103956-6   | 104257-6          |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                    | 103961-7  | 103960-7   | 103959-7   | 103958-7   | 103957-7   | 103956-7   | 104257-7          |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                    | 103961-8  | 103960-8   | 103959-8   | 103958-8   | 103957-8   | 103956-8   | 104257-8          |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                    | 103961-9  | 103960-9   | 103959-9   | 103958-9   | 103957-9   | 103956-9   | 104257-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 1-103961-0  | 1-103960-0 | 1-103959-0 | 1-103958-0   | 1-103957-0 | 1-103956-0 | 1-104257-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 1-103961-1  | 1-103960-1 | 1-103959-1 | 1-103958-1   | 1-103957-1 | 1-103956-1 | 1-104257-1        |

**MTE Receptacle Assemblies—Individual Form Polarized/Latching,  
Single-Row, .100 [2.54] Centerline**

| No. of Pos. | Dimensions B  | Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---|------------|------------|--|------------|------------|-------------------|
|             |               | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 13          | 1.298 [32.96] | 1-103897-2  | 1-103640-2 | 1-103641-2 | 1-103734-2   | 1-103644-2 | 1-103645-2 | 1-104257-2        |
| 14          | 1.398 [35.51] | 1-103897-3  | 1-103640-3 | 1-103641-3 | 1-103734-3   | 1-103644-3 | 1-103645-3 | 1-104257-3        |
| 15          | 1.498 [38.05] | 1-103897-4  | 1-103640-4 | 1-103641-4 | 1-103734-4   | 1-103644-4 | 1-103645-4 | 1-104257-4        |
| 16          | 1.598 [40.59] | 1-103897-5  | 1-103640-5 | 1-103641-5 | 1-103734-5   | 1-103644-5 | 1-103645-5 | 1-104257-5        |
| 17          | 1.698 [43.13] | 1-103897-6  | 1-103640-6 | 1-103641-6 | 1-103734-6   | 1-103644-6 | 1-103645-6 | 1-104257-6        |
| 18          | 1.798 [45.67] | 1-103897-7  | 1-103640-7 | 1-103641-7 | 1-103734-7   | 1-103644-7 | 1-103645-7 | 1-104257-7        |
| 19          | 1.898 [48.20] | 1-103897-8  | 1-103640-8 | 1-103641-8 | 1-103734-8   | 1-103644-8 | 1-103645-8 | 1-104257-8        |
| 20          | 1.998 [50.75] | 1-103897-9  | 1-103640-9 | 1-103641-9 | 1-103734-9   | 1-103644-9 | 1-103645-9 | 1-104257-9        |
| 21          | 2.098 [53.29] | 2-103897-0  | 2-103640-0 | 2-103641-0 | 2-103734-0   | 2-103644-0 | 2-103645-0 | 2-104257-0        |
| 22          | 2.198 [55.83] | 2-103897-1  | 2-103640-1 | 2-103641-1 | 2-103734-1   | 2-103644-1 | 2-103645-1 | 2-104257-1        |
| 23          | 2.298 [58.37] | 2-103897-2  | 2-103640-2 | 2-103641-2 | 2-103734-2   | 2-103644-2 | 2-103645-2 | 2-104257-2        |
| 24          | 2.398 [60.91] | 2-103897-3  | 2-103640-3 | 2-103641-3 | 2-103734-3   | 2-103644-3 | 2-103645-3 | 2-104257-3        |
| 25          | 2.498 [63.45] | 2-103897-4  | 2-103640-4 | 2-103641-4 | 2-103734-4   | 2-103644-4 | 2-103645-4 | 2-104257-4        |

- Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.  
 2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
 3. Keying plugs are available, see page 272.

MTE Receptacle Assemblies

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**MTE Receptacle Assemblies—Guide Ribs, Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Coupling Shrouds used with:**

**Single-Row**—page 257

**Double-Row**—page 258

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds):**

**Pin Assemblies (Polarized/Latching)**—pages 253, 254

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)**—pages 255, 256, 259

**Headers (Polarized/Latching)**—pages 261-270

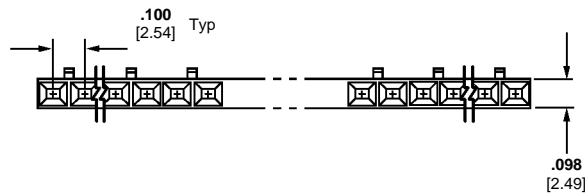
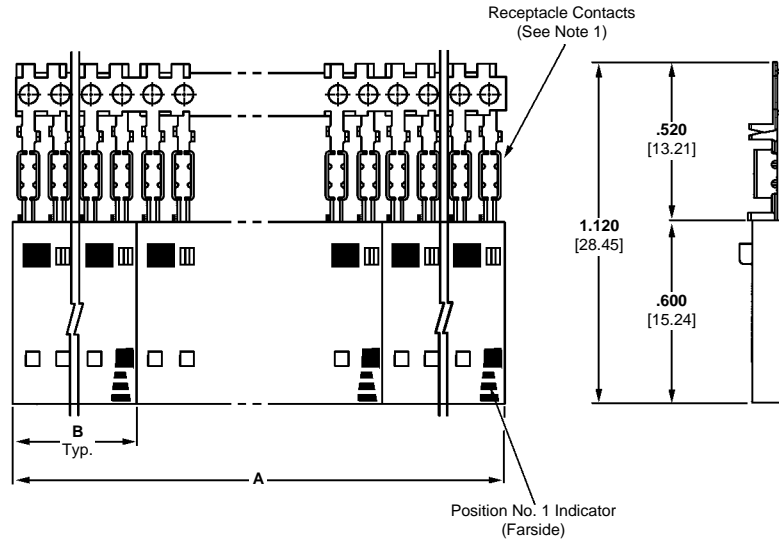
**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds):**

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension)**—pages 135-138, 141, 142, 144, 145, 146, 148-150, 166

**Interchangeable Crimp Contacts**—(Short Point)—page 272

**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242



**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

**MTE Receptacle Assemblies—Strip Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---|------------|------------|--|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 2           | 2.000 [50.80] | .198 [5.03]   | 10                                   | 103973-1  | 103972-1   | 103971-1   | 103970-1   | 103969-1   | 103968-1   | 103648-1          |
| 3           | 2.400 [60.96] | .298 [7.57]   | 8                                    | 103973-2  | 103972-2   | 103971-2   | 103970-2   | 103969-2   | 103968-2   | 103648-2          |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                    | 103973-3  | 103972-3   | 103971-3   | 103970-3   | 103969-3   | 103968-3   | 103648-3          |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                    | 103973-4  | 103972-4   | 103971-4   | 103970-4   | 103969-4   | 103968-4   | 103648-4          |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                    | 103973-5  | 103972-5   | 103971-5   | 103970-5   | 103969-5   | 103968-5   | 103648-5          |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                    | 103973-6  | 103972-6   | 103971-6   | 103970-6   | 103969-6   | 103968-6   | 103648-6          |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                    | 103973-7  | 103972-7   | 103971-7   | 103970-7   | 103969-7   | 103968-7   | 103648-7          |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                    | 103973-8  | 103972-8   | 103971-8   | 103970-8   | 103969-8   | 103968-8   | 103648-8          |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                    | 103973-9  | 103972-9   | 103971-9   | 103970-9   | 103969-9   | 103968-9   | 103648-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 1-103973-0  | 1-103972-0 | 1-103971-0 | 1-103970-0   | 1-103969-0 | 1-103968-0 | 1-103648-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 1-103973-1  | 1-103972-1 | 1-103971-1 | 1-103970-1   | 1-103969-1 | 1-103968-1 | 1-103648-1        |

**MTE Receptacle Assemblies—Individual Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline**

| No. of Pos. | Dimensions B  | Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---|------------|------------|--|------------|------------|-------------------|
|             |               | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 13          | 1.298 [32.96] | 1-103901-2  | 1-103649-2 | 1-103650-2 | 1-103900-2   | 1-103651-2 | 1-103652-2 | 1-103648-2        |
| 14          | 1.398 [35.51] | 1-103901-3  | 1-103649-3 | 1-103650-3 | 1-103900-3   | 1-103651-3 | 1-103652-3 | 1-103648-3        |
| 15          | 1.498 [38.05] | 1-103901-4  | 1-103649-4 | 1-103650-4 | 1-103900-4   | 1-103651-4 | 1-103652-4 | 1-103648-4        |
| 16          | 1.598 [40.59] | 1-103901-5  | 1-103649-5 | 1-103650-5 | 1-103900-5   | 1-103651-5 | 1-103652-5 | 1-103648-5        |
| 17          | 1.698 [43.13] | 1-103901-6  | 1-103649-6 | 1-103650-6 | 1-103900-6   | 1-103651-6 | 1-103652-6 | 1-103648-6        |
| 18          | 1.798 [45.67] | 1-103901-7  | 1-103649-7 | 1-103650-7 | 1-103900-7   | 1-103651-7 | 1-103652-7 | 1-103648-7        |
| 19          | 1.898 [48.20] | 1-103901-8  | 1-103649-8 | 1-103650-8 | 1-103900-8   | 1-103651-8 | 1-103652-8 | 1-103648-8        |
| 20          | 1.998 [50.75] | 1-103901-9  | 1-103649-9 | 1-103650-9 | 1-103900-9   | 1-103651-9 | 1-103652-9 | 1-103648-9        |
| 21          | 2.098 [53.29] | 2-103901-0  | 2-103649-0 | 2-103650-0 | 2-103900-0   | 2-103651-0 | 2-103652-0 | 2-103648-0        |
| 22          | 2.198 [55.83] | 2-103901-1  | 2-103649-1 | 2-103650-1 | 2-103900-1   | 2-103651-1 | 2-103652-1 | 2-103648-1        |
| 23          | 2.298 [58.37] | 2-103901-2  | 2-103649-2 | 2-103650-2 | 2-103900-2   | 2-103651-2 | 2-103652-2 | 2-103648-2        |
| 24          | 2.398 [60.91] | 2-103901-3  | 2-103649-3 | 2-103650-3 | 2-103900-3   | 2-103651-3 | 2-103652-3 | 2-103648-3        |
| 25          | 2.498 [63.45] | 2-103901-4  | 2-103649-4 | 2-103650-4 | 2-103900-4   | 2-103651-4 | 2-103652-4 | 2-103648-4        |

**Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into "preload" windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
3. Keying plugs are available, see page 272.

MTE Receptacle Assemblies

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**MTE High Pressure Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline**



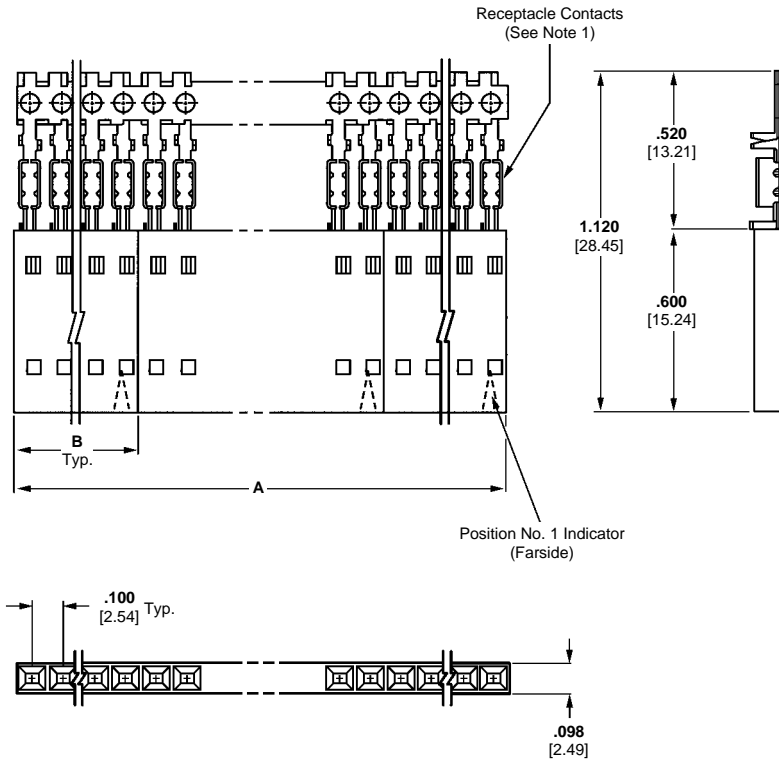
Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.



**Related Product Data:**

**Mateable AMPMODU Products:**

**Breakaway Headers**—pages 101-114, 117-124 (with .230 mating length)

**Reeled Breakaway Headers**—pages 115-116 (with .230 mating length)

**Machine Applied Bandolier Posts**—page 180

**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242

**Technical Documents** (pages 295, 296):

**Product Specification** 108-25034

**Application Specification** 114-25026

| No. of Pos | Dimensions    |               | Housings Quantites Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG | Strip Form Receptacle Assembly 26-22 AWG |
|------------|---------------|---------------|--------------------------------------|--|--|
|            | A             | B             |                                      | [.05-.15mm] Wire                         | [.12-.30mm] Wire                         |
| 2          | 1.980 [50.29] | .198 [5.03]   | 10                                   | 104438-1                                 | 104439-1                                 |
| 3          | 1.490 [37.85] | .298 [7.57]   | 5                                    | 104438-2                                 | 104439-2                                 |
| 4          | 1.990 [50.55] | .398 [10.11]  | 5                                    | 104438-3                                 | 104439-3                                 |
| 5          | 1.990 [50.55] | .498 [12.65]  | 4                                    | 104438-4                                 | 104439-4                                 |
| 6          | 2.390 [60.71] | .598 [15.19]  | 4                                    | 104438-5                                 | 104439-5                                 |
| 7          | 1.400 [35.56] | .698 [17.73]  | 2                                    | 104438-6                                 | 104439-6                                 |
| 8          | 1.600 [40.64] | .798 [20.27]  | 2                                    | 104438-7                                 | 104439-7                                 |
| 9          | 1.800 [45.72] | .898 [22.81]  | 2                                    | 104438-8                                 | 104439-8                                 |
| 10         | 2.000 [50.80] | .998 [23.35]  | 2                                    | 104438-9                                 | 104439-9                                 |
| 11         | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 1-104438-0                               | 1-104439-0                               |
| 12         | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 1-104438-1                               | 1-104439-1                               |

- Notes:**
1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into "preload" windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.
  2. High pressure receptacle contacts can be made available in other housing styles and position sizes. Contact your Tyco Electronics sales representative.

**MTE High Pressure Receptacle Assemblies – Guide Ribs**



Photo 5527

Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Thermoplastic, Color-Black, 94V-0 rated

**Contacts**—Phosphor Bronze, Duplex plated .000030 [0.00076] gold on contact area .000100 [0.00254] min. tin-lead on crimp area, with entire post under-plated .000050 [0.00127] nickel.

**Related Product Data:**

**Coupling Shrouds used with:**

**Single-Row**—page 257

**Double-Row**—page 258

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds):**

**Pin Assemblies (Polarized/Latching)**—pages 253, 254

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)**—pages 255, 256, 259

**Headers (Polarized/Latching)**—pages 261-270

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds):**

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension)**—pages 135, 137, 141, 145, 146, 148-150, 166

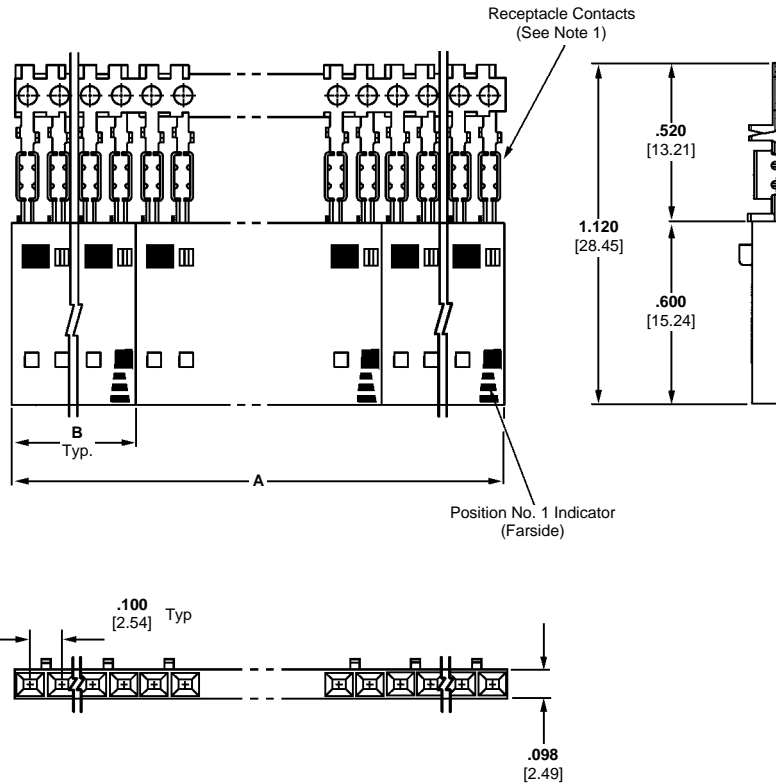
**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242

**Technical Documents (pages 295, 296):**

**Product Specification** 108-25034

**Application Specification** 114-25026



| No. of Pos | Dimensions    |               | Housings Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [.05-.15mm <sup>2</sup> ] Wire | Strip Form Receptacle Assembly 26-22 AWG [.12-.30mm <sup>2</sup> ] Wire |
|------------|---------------|---------------|---------------------------------------|---|---|
|            | A             | B             |                                       |   |   |
| 2          | 1.980 [50.29] | .198 [5.03]   | 10                                    | 147396-1  | 147030-3  |
| 3          | 1.490 [37.85] | .298 [7.57]   | 5                                     | 147396-2  | 147030-4  |
| 4          | 1.990 [50.55] | .398 [10.11]  | 5                                     | 147396-3  | 147030-1  |
| 5          | 1.990 [50.55] | .498 [12.65]  | 4                                     | 147396-4  | 147030-2  |
| 6          | 2.390 [60.71] | .598 [15.19]  | 4                                     | 147396-5  | 147030-5  |
| 7          | 1.400 [35.56] | .698 [17.73]  | 2                                     | 147396-6  | 147030-6  |
| 8          | 1.600 [40.64] | .798 [20.27]  | 2                                     | 147396-7  | 147030-7  |
| 9          | 1.800 [45.72] | .898 [22.81]  | 2                                     | 147396-8  | 147030-8  |
| 10         | 2.000 [50.80] | .998 [23.35]  | 2                                     | 147396-9  | 147030-9  |
| 11         | 2.200 [55.88] | 1.098 [27.89] | 2                                     | 1-147396-0  | 1-147030-0  |
| 12         | 2.400 [60.96] | 1.198 [30.43] | 2                                     | 1-147396-1  | 1-147030-1  |

MTE Pin Assemblies

**5**

**MTE Pin Assemblies, Shrouded—Polarized/Latching,  
Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

**Related Product Data:**

**Mateable AMPMODU Products:**

**Receptacle Assemblies (Polarized/Latching)**—pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**—pages 249, 250, 252, 257

**Interchangeable Crimp Contacts**—page 273

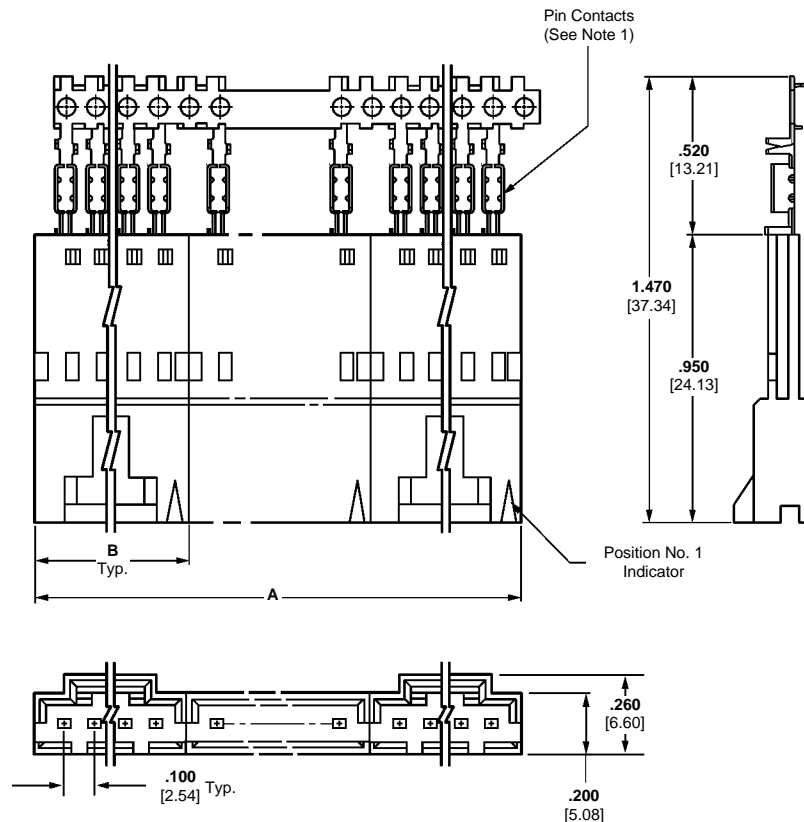
**Application Tooling**—pages 291, 292

**Performance Specifications**—page 242

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**MTE Pin Assemblies, Shrouded—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|--|------------|------------|---|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A  | Plating B  | Plating C  | Plating A   | Plating B  | Plating C  |                   |
| 2           | 2.360 [59.94] | .295 [7.49]   | 8                                    | 103949-1   | 103948-1   | 103947-1   | 103946-1  | 103945-1   | 103944-1   | 103653-1          |
| 3           | 1.980 [50.29] | .395 [10.03]  | 5                                    | 103949-2   | 103948-2   | 103947-2   | 103946-2  | 103945-2   | 103944-2   | 103653-2          |
| 4           | 1.980 [50.29] | .495 [12.57]  | 4                                    | 103949-3   | 103948-3   | 103947-3   | 103946-3  | 103945-3   | 103944-3   | 103653-3          |
| 5           | 2.380 [60.45] | .595 [15.11]  | 4                                    | 103949-4   | 103948-4   | 103947-4   | 103946-4  | 103945-4   | 103944-4   | 103653-4          |
| 6           | 1.390 [35.31] | .695 [17.65]  | 2                                    | 103949-5   | 103948-5   | 103947-5   | 103946-5  | 103945-5   | 103944-5   | 103653-5          |
| 7           | 2.390 [60.71] | .795 [20.19]  | 3                                    | 103949-6   | 103948-6   | 103947-6   | 103946-6  | 103945-6   | 103944-6   | 103653-6          |
| 8           | 1.790 [45.47] | .895 [22.73]  | 2                                    | 103949-7   | 103948-7   | 103947-7   | 103946-7  | 103945-7   | 103944-7   | 103653-7          |
| 9           | 1.990 [50.57] | .995 [25.27]  | 2                                    | 103949-8   | 103948-8   | 103947-8   | 103946-8  | 103945-8   | 103944-8   | 103653-8          |
| 10          | 2.190 [55.63] | 1.095 [27.81] | 2                                    | 103949-9   | 103948-9   | 103947-9   | 103946-9  | 103945-9   | 103944-9   | 103653-9          |
| 11          | 2.390 [60.71] | 1.195 [30.35] | 2                                    | 1-103949-0   | 1-103948-0 | 1-103947-0 | 1-103946-0  | 1-103945-0 | 1-103944-0 | 1-103653-0        |
| 12          | 2.590 [65.79] | 1.295 [32.89] | 2                                    | 1-103949-1   | 1-103948-1 | 1-103947-1 | 1-103946-1  | 1-103945-1 | 1-103944-1 | 1-103653-1        |

**MTE Pin Assemblies, Shrouded—Individual Form Polarized/Latching, Single-Row, .100 [2.54] Centerline**

| No. of Pos. | Dimensions B  | Individual Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|--|------------|------------|---|------------|------------|-------------------|
|             |               | Plating A  | Plating B  | Plating C  | Plating A   | Plating B  | Plating C  |                   |
| 13          | 1.395 [35.43] | 1-103894-2   | 1-103658-2 | 1-103659-2 | 1-103893-2  | 1-103660-2 | 1-103661-2 | 1-103653-2        |
| 14          | 1.495 [37.97] | 1-103894-3   | 1-103658-3 | 1-103659-3 | 1-103893-3  | 1-103660-3 | 1-103661-3 | 1-103653-3        |
| 15          | 1.595 [40.51] | 1-103894-4   | 1-103658-4 | 1-103659-4 | 1-103893-4  | 1-103660-4 | 1-103661-4 | 1-103653-4        |
| 16          | 1.695 [43.05] | 1-103894-5   | 1-103658-5 | 1-103659-5 | 1-103893-5  | 1-103660-5 | 1-103661-5 | 1-103653-5        |
| 17          | 1.795 [45.59] | 1-103894-6   | 1-103658-6 | 1-103659-6 | 1-103893-6  | 1-103660-6 | 1-103661-6 | 1-103653-6        |
| 18          | 1.895 [48.13] | 1-103894-7   | 1-103658-7 | 1-103659-7 | 1-103893-7  | 1-103660-7 | 1-103661-7 | 1-103653-7        |
| 19          | 1.995 [50.67] | 1-103894-8   | 1-103658-8 | 1-103659-8 | 1-103893-8  | 1-103660-8 | 1-103661-8 | 1-103653-8        |
| 20          | 2.095 [53.21] | 1-103894-9   | 1-103658-9 | 1-103659-9 | 1-103893-9  | 1-103660-9 | 1-103661-9 | 1-103653-9        |
| 21          | 2.195 [55.75] | 2-103894-0   | 2-103658-0 | 2-103659-0 | 2-103893-0  | 2-103660-0 | 2-103661-0 | 2-103653-0        |
| 22          | 2.295 [58.29] | 2-103894-1   | 2-103658-1 | 2-103659-1 | 2-103893-1  | 2-103660-1 | 2-103661-1 | 2-103653-1        |
| 23          | 2.395 [60.83] | 2-103894-2   | 2-103658-2 | 2-103659-2 | 2-103893-2  | 2-103660-2 | 2-103661-2 | 2-103653-2        |
| 24          | 2.495 [63.37] | 2-103894-3   | 2-103658-3 | 2-103659-3 | 2-103893-3  | 2-103660-3 | 2-103661-3 | 2-103653-3        |
| 25          | 2.595 [65.91] | 2-103894-4   | 2-103658-4 | 2-103659-4 | 2-103893-4  | 2-103660-4 | 2-103661-4 | 2-103653-4        |

**Notes:** 1. Pin assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.  
 2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove pin contacts.

MTE Pin Assemblies

5





Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

**Related Product Data:**

**Mateable AMPMODU MTE Products (with Pin Assembly Installed in Panel Mount Pin Shroud):** pages 259, 260

**Receptacle Assemblies (Polarized/Latching)**—pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single Coupling Shroud)**—pages 249, 250, 252, 257

**Interchangeable Crimp Contacts**—page 273

**Application Tooling**—pages 291, 292

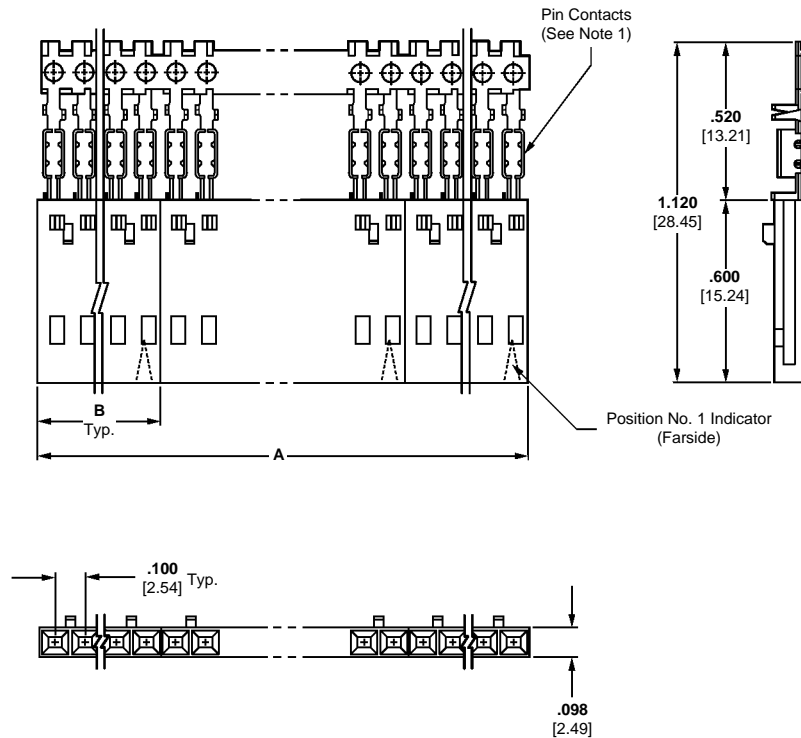
**Performance Specifications**—page 242

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

**MTE Pin Assemblies—Guide Ribs, Single-Row, .100 [2.54] Centerline**



**MTE Pin Assemblies—Strip Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Pin Assembly<br>30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Pin Assembly<br>26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---|------------|------------|--|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 2           | 1.980 [50.29] | 0.198 [5.03]  | 10                                   | 103955-1  | 103954-1   | 103953-1   | 103952-1   | 103951-1   | 103950-1   | 104503-1          |
| 3           | 1.490 [37.85] | 0.298 [7.57]  | 5                                    | 103955-2  | 103954-2   | 103953-2   | 103952-2   | 103951-2   | 103950-2   | 104503-2          |
| 4           | 1.990 [50.55] | 0.398 [10.11] | 5                                    | 103955-3  | 103954-3   | 103953-3   | 103952-3   | 103951-3   | 103950-3   | 104503-3          |
| 5           | 1.990 [50.55] | 0.498 [12.65] | 4                                    | 103955-4  | 103954-4   | 103953-4   | 103952-4   | 103951-4   | 103950-4   | 104503-4          |
| 6           | 2.390 [60.71] | 0.598 [15.19] | 4                                    | 103955-5  | 103954-5   | 103953-5   | 103952-5   | 103951-5   | 103950-5   | 104503-5          |
| 7           | 1.400 [35.56] | 0.698 [17.73] | 2                                    | 103955-6  | 103954-6   | 103953-6   | 103952-6   | 103951-6   | 103950-6   | 104503-6          |
| 8           | 1.600 [40.64] | 0.798 [20.27] | 2                                    | 103955-7  | 103954-7   | 103953-7   | 103952-7   | 103951-7   | 103950-7   | 104503-7          |
| 9           | 1.800 [45.72] | 0.898 [22.81] | 2                                    | 103955-8  | 103954-8   | 103953-8   | 103952-8   | 103951-8   | 103950-8   | 104503-8          |
| 10          | 2.000 [50.80] | 0.998 [25.35] | 2                                    | 103955-9  | 103954-9   | 103953-9   | 103952-9   | 103951-9   | 103950-9   | 104503-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 1-103955-0  | 1-103954-0 | 1-103953-0 | 1-103952-0   | 1-103951-0 | 1-103950-0 | 1-104503-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 1-103955-1  | 1-103954-1 | 1-103953-1 | 1-103952-1   | 1-103951-1 | 1-103950-1 | 1-104503-1        |

**MTE Pin Assemblies—Individual Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline**

| No. of Pos. | Dimensions B  | Individual Pin Assembly<br>30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Pin Assembly<br>26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---|------------|------------|--|------------|------------|-------------------|
|             |               | Plating A   | Plating B  | Plating C  | Plating A  | Plating B  | Plating C  |                   |
| 13          | 1.398 [35.51] | 1-103896-2  | 1-103657-2 | 1-103656-2 | 1-103895-2   | 1-103655-2 | 1-103654-2 | 1-104503-2        |
| 14          | 1.498 [38.05] | 1-103896-3  | 1-103657-3 | 1-103656-3 | 1-103895-3   | 1-103655-3 | 1-103654-3 | 1-104503-3        |
| 15          | 1.598 [40.59] | 1-103896-4  | 1-103657-4 | 1-103656-4 | 1-103895-4   | 1-103655-4 | 1-103654-4 | 1-104503-4        |
| 16          | 1.698 [43.13] | 1-103896-5  | 1-103657-5 | 1-103656-5 | 1-103895-5   | 1-103655-5 | 1-103654-5 | 1-104503-5        |
| 17          | 1.798 [45.67] | 1-103896-6  | 1-103657-6 | 1-103656-6 | 1-103895-6   | 1-103655-6 | 1-103654-6 | 1-104503-6        |
| 18          | 1.898 [48.20] | 1-103896-7  | 1-103657-7 | 1-103656-7 | 1-103895-7   | 1-103655-7 | 1-103654-7 | 1-104503-7        |
| 19          | 1.998 [50.75] | 1-103896-8  | 1-103657-8 | 1-103656-8 | 1-103895-8   | 1-103655-8 | 1-103654-8 | 1-104503-8        |
| 20          | 2.098 [53.29] | 1-103896-9  | 1-103657-9 | 1-103656-9 | 1-103895-9   | 1-103655-9 | 1-103654-9 | 1-104503-9        |
| 21          | 2.198 [55.83] | 2-103896-0  | 2-103657-0 | 2-103656-0 | 2-103895-0   | 2-103655-0 | 2-103654-0 | 2-104503-0        |
| 22          | 2.298 [58.37] | 2-103896-1  | 2-103657-1 | 2-103656-1 | 2-103895-1   | 2-103655-1 | 2-103654-1 | 2-104503-1        |
| 23          | 2.398 [60.91] | 2-103896-2  | 2-103657-2 | 2-103656-2 | 2-103895-2   | 2-103655-2 | 2-103654-2 | 2-104503-2        |
| 24          | 2.498 [63.45] | 2-103896-3  | 2-103657-3 | 2-103656-3 | 2-103895-3   | 2-103655-3 | 2-103654-3 | 2-104503-3        |
| 25          | 2.598 [65.99] | 2-103896-4  | 2-103657-4 | 2-103656-4 | 2-103895-4   | 2-103655-4 | 2-103654-4 | 2-104503-4        |

**Notes:** 1. Pin assemblies are furnished with strip contacts partially inserted into housing—contacts latched into "preload" windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove pin contacts.

**Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs**

**Single-Row**

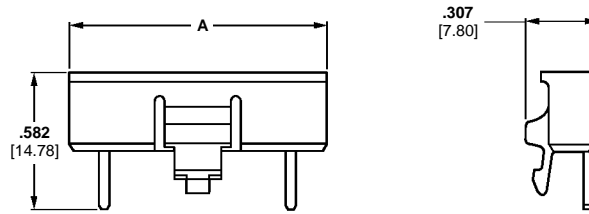
**Material:**

Black thermoplastic, 94V-0 rated

**Technical Documents**  
(pages 295, 296):

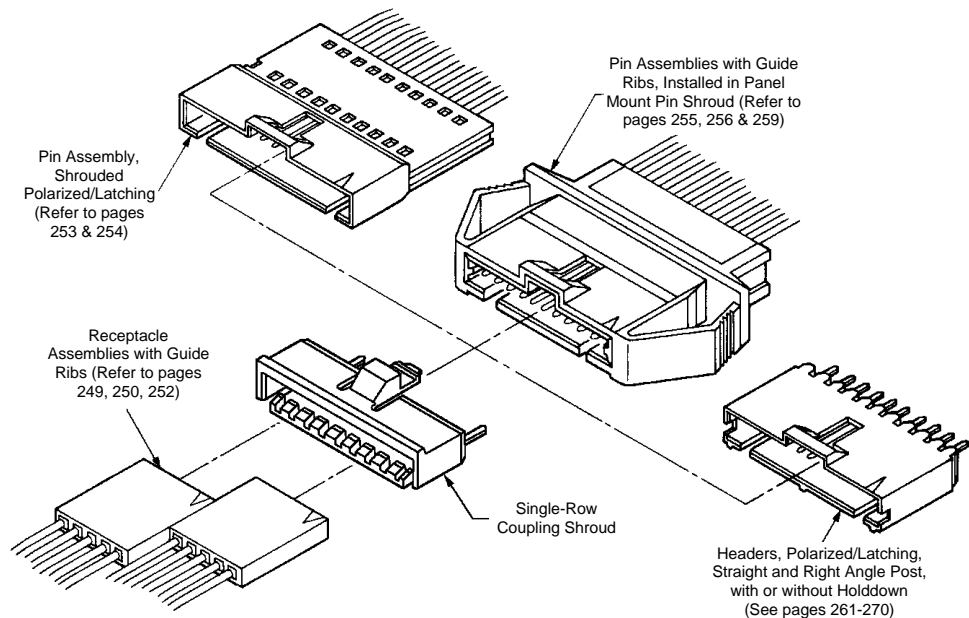
**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimension A   | Single-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 4           | .485 [12.32]  | 103680-1                   |
| 5           | .585 [14.86]  | 103680-2                   |
| 6           | .685 [17.40]  | 103680-3                   |
| 7           | .785 [19.94]  | 103680-4                   |
| 8           | .885 [22.48]  | 103680-5                   |
| 9           | .985 [25.02]  | 103680-6                   |
| 10          | 1.085 [27.56] | 103680-7                   |
| 11          | 1.185 [30.10] | 103680-8                   |
| 12          | 1.285 [32.64] | 103680-9                   |
| 13          | 1.385 [35.18] | 1-103680-0                 |
| 14          | 1.485 [37.72] | 1-103680-1                 |

| No. of Pos. | Dimension A   | Single-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 15          | 1.585 [40.26] | 1-103680-2                 |
| 16          | 1.685 [42.80] | 1-103680-3                 |
| 17          | 1.785 [45.34] | 1-103680-4                 |
| 18          | 1.885 [47.88] | 1-103680-5                 |
| 19          | 1.985 [50.42] | 1-103680-6                 |
| 20          | 2.085 [52.96] | 1-103680-7                 |
| 21          | 2.185 [55.50] | 1-103680-8                 |
| 22          | 2.285 [58.04] | 1-103680-9                 |
| 23          | 2.385 [60.58] | 2-103680-0                 |
| 24          | 2.485 [63.12] | 2-103680-1                 |
| 25          | 2.585 [65.66] | 2-103680-2                 |



**Typical Application of Single-Row Coupling Shroud and Mating AMPMODU MTE Products**

**Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs (Continued)**

**Double-Row**

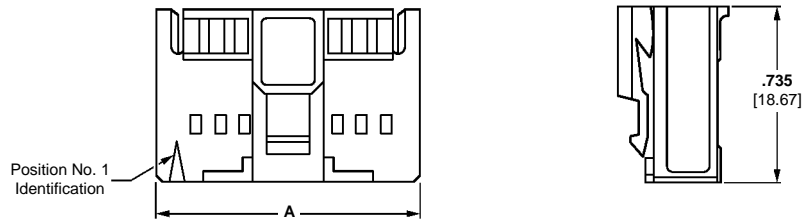
**Material:**

Black thermoplastic, 94V-0 rated

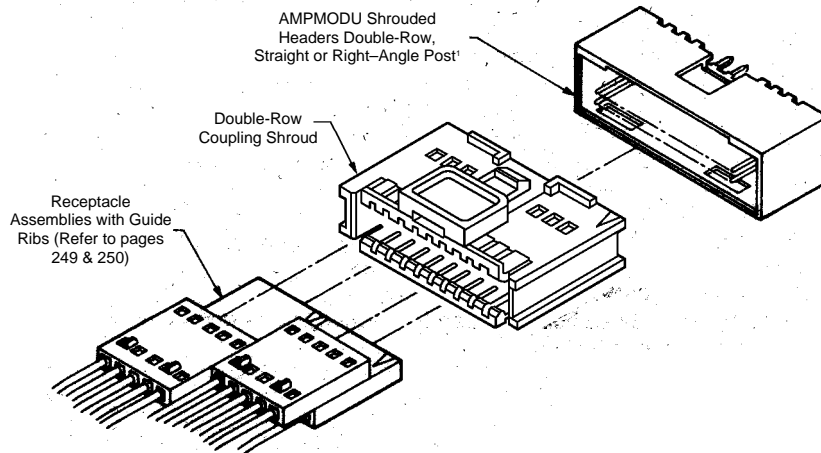
**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimension A   | Double-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 8           | .585 [14.86]  | 103681-1                   |
| 10          | .685 [17.40]  | 103681-2                   |
| 12          | .785 [19.94]  | 103681-3                   |
| 14          | .885 [22.48]  | 103681-4                   |
| 16          | .985 [25.02]  | 103681-5                   |
| 18          | 1.085 [27.56] | 104500-1                   |
| 20          | 1.185 [30.10] | 104500-2                   |
| 22          | 1.285 [32.64] | 104500-3                   |
| 24          | 1.385 [35.18] | 104500-4                   |
| 26          | 1.485 [37.72] | 104500-5                   |
| 28          | 1.585 [40.26] | 104500-6                   |
| 30          | 1.685 [42.80] | 104500-7                   |
| 32          | 1.785 [45.34] | 104500-8                   |
| 34          | 1.885 [47.88] | 104500-9                   |
| 40          | 2.185 [55.50] | 1-104500-0                 |
| 50          | 2.685 [68.20] | 1-104500-1                 |



\*Mating AMPMODU Double-Row Shrouded Headers must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

**Typical Application of Double-Row Coupling Shroud and Mating AMPMODU Products**

**Panel Mount Pin Shrouds for MTE Pin Assemblies with Guide Ribs, Single-Row**

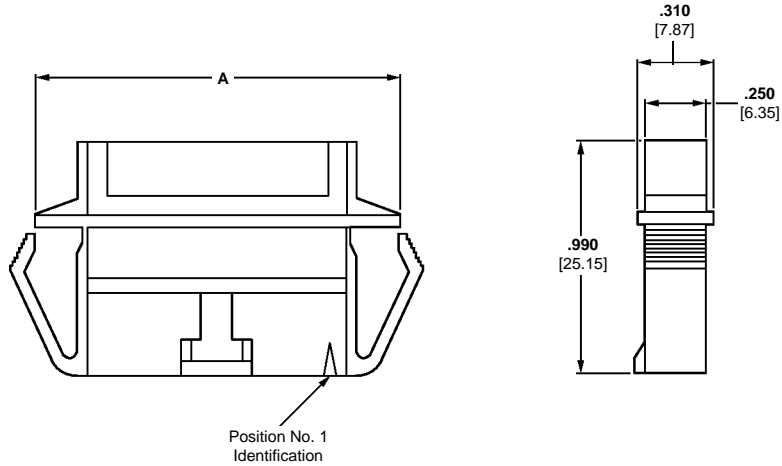
**Material:**

Black thermoplastic, 94V-0 rated

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimensions    |               | Panel Mount Pin Shroud |
|-------------|---------------|---------------|------------------------|
|             | A             | B             |                        |
| 2           | .735 [18.67]  | .625 [15.88]  | 103682-1               |
| 3           | .835 [21.21]  | .725 [18.42]  | 103682-2               |
| 4           | .935 [23.75]  | .825 [20.96]  | 103682-3               |
| 5           | 1.035 [26.29] | .925 [23.50]  | 103682-4               |
| 6           | 1.135 [28.83] | 1.025 [26.04] | 103682-5               |
| 7           | 1.235 [31.37] | 1.125 [28.58] | 103682-6               |
| 8           | 1.335 [33.91] | 1.225 [31.12] | 103682-7               |
| 9           | 1.435 [36.45] | 1.325 [33.66] | 103682-8               |
| 10          | 1.535 [38.99] | 1.425 [36.20] | 103682-9               |
| 11          | 1.635 [41.53] | 1.525 [38.74] | 1-103682-0             |
| 12          | 1.735 [44.07] | 1.625 [41.28] | 1-103682-1             |
| 13          | 1.835 [46.61] | 1.725 [43.82] | 1-103682-2             |

| No. of Pos. | Dimensions    |               | Panel Mount Pin Shroud |
|-------------|---------------|---------------|------------------------|
|             | A             | B             |                        |
| 14          | 1.935 [49.15] | 1.825 [46.36] | 1-103682-3             |
| 15          | 2.035 [51.69] | 1.925 [48.90] | 1-103682-4             |
| 16          | 2.135 [54.23] | 2.025 [51.44] | 1-103682-5             |
| 17          | 2.235 [56.77] | 2.125 [53.98] | 1-103682-6             |
| 18          | 2.335 [59.31] | 2.225 [56.52] | 1-103682-7             |
| 19          | 2.435 [61.85] | 2.325 [59.06] | 1-103682-8             |
| 20          | 2.535 [64.39] | 2.425 [61.60] | 1-103682-9             |
| 21          | 2.635 [66.93] | 2.525 [64.14] | 2-103682-0             |
| 22          | 2.735 [69.47] | 2.625 [66.68] | 2-103682-1             |
| 23          | 2.835 [72.01] | 2.725 [69.22] | 2-103682-2             |
| 24          | 2.935 [74.55] | 2.825 [71.76] | 2-103682-3             |
| 25          | 3.035 [77.09] | 2.925 [74.30] | 2-103682-4             |

**Panel Mount Pin Shrouds for MTE Pin Assemblies with Guide Ribs, Single-Row (Continued)**

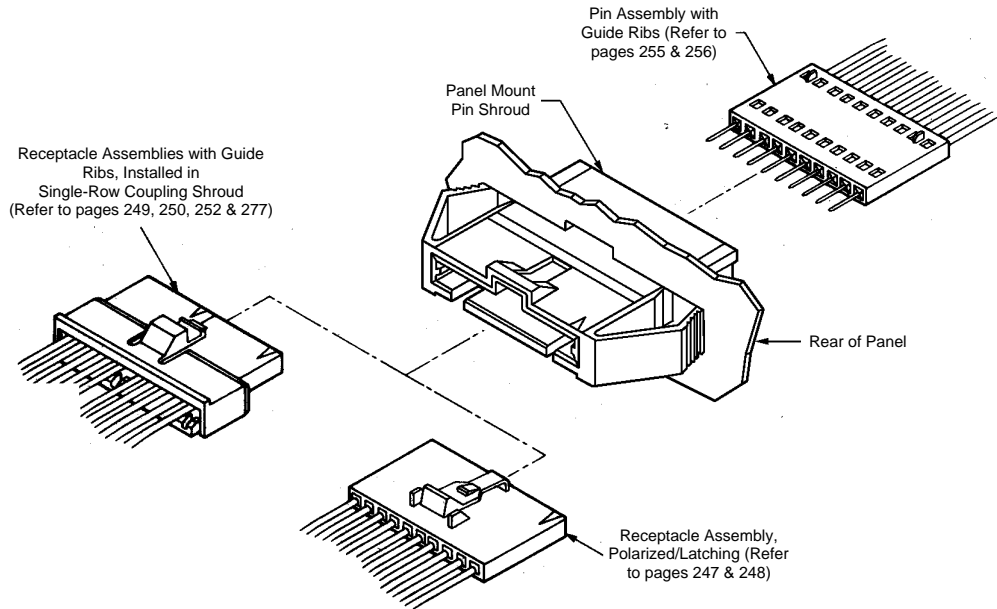
**Material:**

Black thermoplastic, 94V-0 rated

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Typical Application of Panel Mount Pin Shroud and Mating AMPMODU Products**

**MTE Headers, Shrouded Polarized/Latching,  
Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square  
Straight Post (With or  
Without Swaged Tail)**

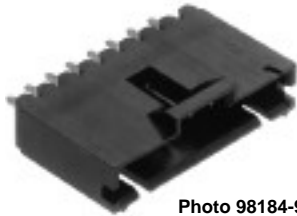
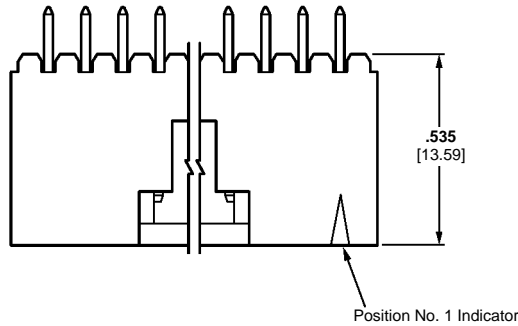


Photo 98184-9



Swaged Retention Tail  
(See Note)

**Material and Finish:**

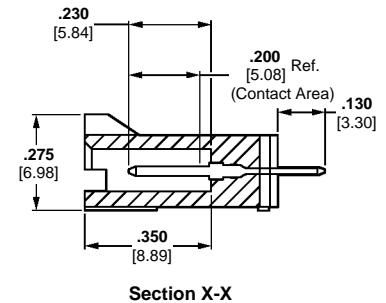
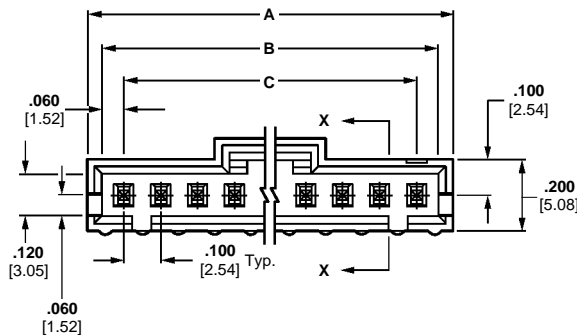
**Housing**—Black thermoplastic,  
94V-0 rated

**Posts**—Copper alloy, plated as follows:

**Plating A**—Duplex plated .000030  
[0.00076] gold on contact area, .000100  
[0.00254] min. tin-lead on solder area,  
with entire post underplated .000050  
[0.00127] nickel

**Plating B**—Duplex plated .000015  
[0.00038] gold on contact area, .000100  
[0.00254] min. tin-lead on solder area,  
with entire post underplated .000050  
[0.00127] nickel

**Plating C**—.000100 [0.00254] tin-lead  
over .000050 [0.00127] nickel on entire  
post



**Related Product Data:**

**Mateable AMPMODU MTE  
Products:**

**Receptacle Assemblies  
(Polarized/Latching)**—  
pages 247, 248

**Receptacle Assemblies with Guide  
Ribs (installed in Single-Row  
Coupling Shroud)**—  
pages 249, 250, 252, 257

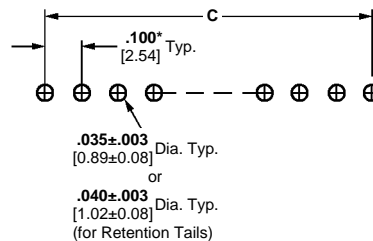
**Other Mateable Connectors:**

**Flexible Film Connectors**—  
Catalog 82007

**Technical Documents** (pages  
295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

**MTE Headers, Shrouded Polarized/Latching,  
Single-Row .100 [2.54] Centerline** (Continued)

| No. of Pos. | Dimensions    |               |               | Polarized/Latching Header With Swage |            |            | Polarized/Latching Header Without Swage |            |            |
|-------------|---------------|---------------|---------------|--------------------------------------|------------|------------|---|------------|------------|
|             | A             | B             | C             | Plating A                            | Plating B  | Plating C  | Plating A                               | Plating B  | Plating C  |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 103908-1                             | 103670-1   | 103669-1   | 103735-1                                | 103638-1   | 103639-1   |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 103908-2                             | 103670-2   | 103669-2   | 103735-2                                | 103638-2   | 103639-2   |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 103908-3                             | 103670-3   | 103669-3   | 103735-3                                | 103638-3   | 103639-3   |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 103908-4                             | 103670-4   | 103669-4   | 103735-4                                | 103638-4   | 103639-4   |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 103908-5                             | 103670-5   | 103669-5   | 103735-5                                | 103638-5   | 103639-5   |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 103908-6                             | 103670-6   | 103669-6   | 103735-6                                | 103638-6   | 103639-6   |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 103908-7                             | 103670-7   | 103669-7   | 103735-7                                | 103638-7   | 103639-7   |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 103908-8                             | 103670-8   | 103669-8   | 103735-8                                | 103638-8   | 103639-8   |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 103908-9                             | 103670-9   | 103669-9   | 103735-9                                | 103638-9   | 103639-9   |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 1-103908-0                           | 1-103670-0 | 1-103669-0 | 1-103735-0                              | 1-103638-0 | 1-103639-0 |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 1-103908-1                           | 1-103670-1 | 1-103669-1 | 1-103735-1                              | 1-103638-1 | 1-103639-1 |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 1-103908-2                           | 1-103670-2 | 1-103669-2 | 1-103735-2                              | 1-103638-2 | 1-103639-2 |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 1-103908-3                           | 1-103670-3 | 1-103669-3 | 1-103735-3                              | 1-103638-3 | 1-103639-3 |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 1-103908-4                           | 1-103670-4 | 1-103669-4 | 1-103735-4                              | 1-103638-4 | 1-103639-4 |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 1-103908-5                           | 1-103670-5 | 1-103669-5 | 1-103735-5                              | 1-103638-5 | 1-103639-5 |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 1-103908-6                           | 1-103670-6 | 1-103669-6 | 1-103735-6                              | 1-103638-6 | 1-103639-6 |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 1-103908-7                           | 1-103670-7 | 1-103669-7 | 1-103735-7                              | 1-103638-7 | 1-103639-7 |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 1-103908-8                           | 1-103670-8 | 1-103669-8 | 1-103735-8                              | 1-103638-8 | 1-103639-8 |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 1-103908-9                           | 1-103670-9 | 1-103669-9 | 1-103735-9                              | 1-103638-9 | 1-103639-9 |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 2-103908-0                           | 2-103670-0 | 2-103669-0 | 2-103735-0                              | 2-103638-0 | 2-103639-0 |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 2-103908-1                           | 2-103670-1 | 2-103669-1 | 2-103735-1                              | 2-103638-1 | 2-103639-1 |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 2-103908-2                           | 2-103670-2 | 2-103669-2 | 2-103735-2                              | 2-103638-2 | 2-103639-2 |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 2-103908-3                           | 2-103670-3 | 2-103669-3 | 2-103735-3                              | 2-103638-3 | 2-103639-3 |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 2-103908-4                           | 2-103670-4 | 2-103669-4 | 2-103735-4                              | 2-103638-4 | 2-103639-4 |

Notes: 1. Selectively loaded headers are available, consult Tyco Electronics.  
2. Use Keying Tool No. 91417-1 to remove post for keying.



**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Right-Angle Post**



**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

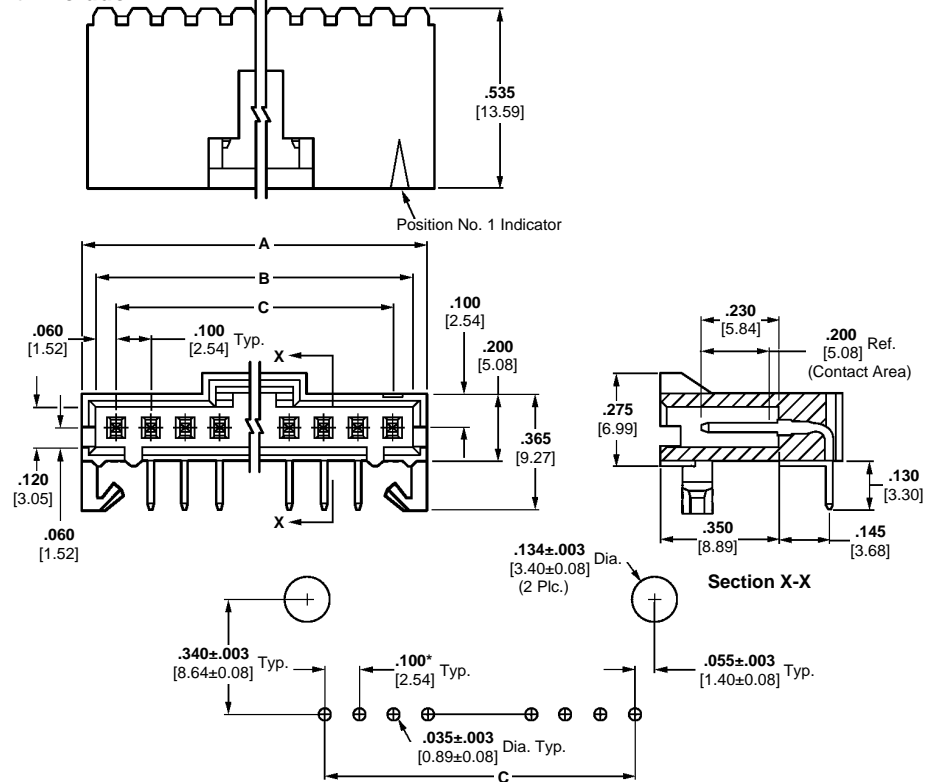
**Posts**—Copper alloy, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] tin-lead over .000050 [0.00127] nickel on entire post

**With Holddown**



**Recommended PC Board Hole Layout**  
(PC board thickness (for Holddown Feature) is  $.062 \pm .008$  [1.57 ± 0.20])  
\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.



**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies (Latching)**—pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**—pages 249, 250, 252, 257

**Other Mateable Connectors:**

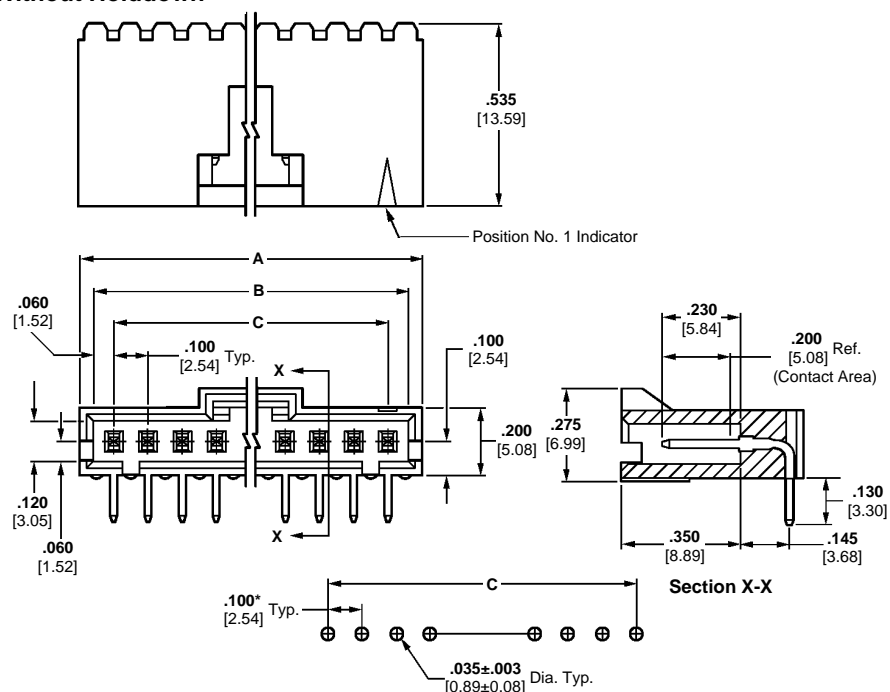
**Flexible Film Connectors**—Catalog 82007

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

**Without Holddown**



**Recommended PC Board Hole Layout**  
\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline (Continued)**

| No. of Pos. | Dimensions    |               |               | Latching Header With Hold Down |            |            | Latching Header Without Hold Down |            |            |
|-------------|---------------|---------------|---------------|--------------------------------|------------|------------|-----------------------------------|------------|------------|
|             | A             | B             | C             | Plating A                      | Plating B  | Plating C  | Plating A                         | Plating B  | Plating C  |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 103904-1                       | 103673-1   | 103672-1   | 103906-1                          | 103635-1   | 103634-1   |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 103904-2                       | 103673-2   | 103672-2   | 103906-2                          | 103635-2   | 103634-2   |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 103904-3                       | 103673-3   | 103672-3   | 103906-3                          | 103635-3   | 103634-3   |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 103904-4                       | 103673-4   | 103672-4   | 103906-4                          | 103635-4   | 103634-4   |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 103904-5                       | 103673-5   | 103672-5   | 103906-5                          | 103635-5   | 103634-5   |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 103904-6                       | 103673-6   | 103672-6   | 103906-6                          | 103635-6   | 103634-6   |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 103904-7                       | 103673-7   | 103672-7   | 103906-7                          | 103635-7   | 103634-7   |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 103904-8                       | 103673-8   | 103672-8   | 103906-8                          | 103635-8   | 103634-8   |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 103904-9                       | 103673-9   | 103672-9   | 103906-9                          | 103635-9   | 103634-9   |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 1-103904-0                     | 1-103673-0 | 1-103672-0 | 1-103906-0                        | 1-103635-0 | 1-103634-0 |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 1-103904-1                     | 1-103673-1 | 1-103672-1 | 1-103906-1                        | 1-103635-1 | 1-103634-1 |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 1-103904-2                     | 1-103673-2 | 1-103672-2 | 1-103906-2                        | 1-103635-2 | 1-103634-2 |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 1-103904-3                     | 1-103673-3 | 1-103672-3 | 1-103906-3                        | 1-103635-3 | 1-103634-3 |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 1-103904-4                     | 1-103673-4 | 1-103672-4 | 1-103906-4                        | 1-103635-4 | 1-103634-4 |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 1-103904-5                     | 1-103673-5 | 1-103672-5 | 1-103906-5                        | 1-103635-5 | 1-103634-5 |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 1-103904-6                     | 1-103673-6 | 1-103672-6 | 1-103906-6                        | 1-103635-6 | 1-103634-6 |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 1-103904-7                     | 1-103673-7 | 1-103672-7 | 1-103906-7                        | 1-103635-7 | 1-103634-7 |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 1-103904-8                     | 1-103673-8 | 1-103672-8 | 1-103906-8                        | 1-103635-8 | 1-103634-8 |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 1-103904-9                     | 1-103673-9 | 1-103672-9 | 1-103906-9                        | 1-103635-9 | 1-103634-9 |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 2-103904-0                     | 2-103673-0 | 2-103672-0 | 2-103906-0                        | 2-103635-0 | 2-103634-0 |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 2-103904-1                     | 2-103673-1 | 2-103672-1 | 2-103906-1                        | 2-103635-1 | 2-103634-1 |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 2-103904-2                     | 2-103673-2 | 2-103672-2 | 2-103906-2                        | 2-103635-2 | 2-103634-2 |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 2-103904-3                     | 2-103673-3 | 2-103672-3 | 2-103906-3                        | 2-103635-3 | 2-103634-3 |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 2-103904-4                     | 2-103673-4 | 2-103672-4 | 2-103906-4                        | 2-103635-4 | 2-103634-4 |

Notes: 1. Selectively loaded headers are available, consult Tyco Electronics.  
 2. Use Keying Tool No. 91471-1 to remove post for keying.

MTE Headers

5

**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**



Photo 98184-5

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Posts**—Copper alloy, plated .000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies (Polarized/Latching)**— pages 247, 248

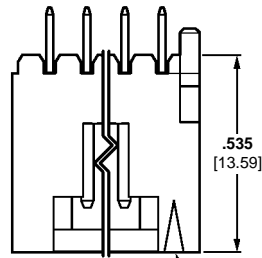
**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**— pages 249, 250, 252, 257

**Other Mateable Connectors:**  
**Flexible Film Connectors**— Catalog 82007

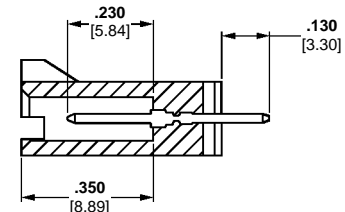
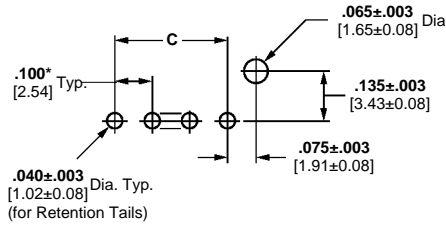
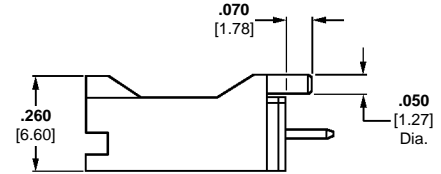
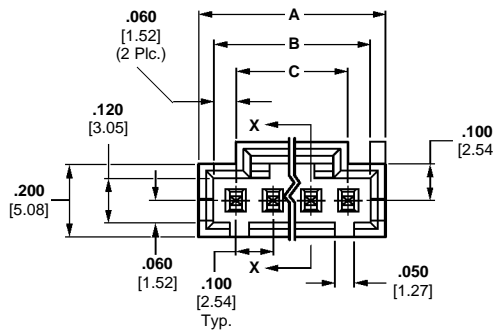
**Technical Documents** (pages 295, 296):

**Product Specification** 108-25034

**Application Specification** 114-25026



Swaged Retention Tail (See Note)



Section X-X

**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

| No. of Pos. | Dimensions    |               |              | Latching Header |
|-------------|---------------|---------------|--------------|-----------------|
|             | A             | B             | C            |                 |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]  | 104450-1        |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]  | 104450-2        |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]  | 104450-3        |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16] | 104450-4        |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70] | 104450-5        |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24] | 104450-6        |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78] | 104450-7        |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32] | 104450-8        |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86] | 104450-9        |

**MTE Headers, High-Temp, Shrouded Polarized/Latching,  
Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**

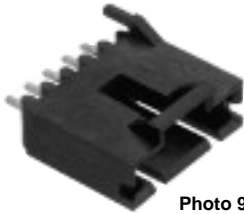


Photo 98184-5

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**—pages 249, 250, 252, 257

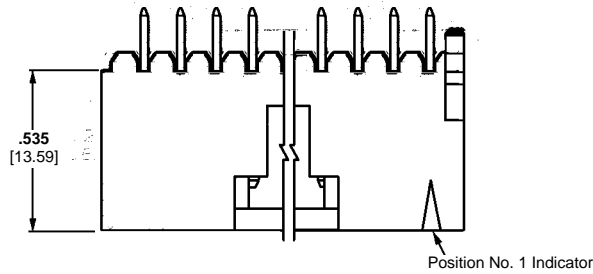
**Receptacle Assemblies (Polarized Latching)**—pages 247, 248

**Other Mateable Connectors:**  
**Flexible Film Connectors**—Catalog 82007

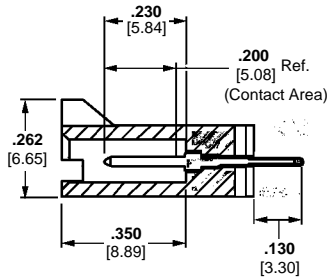
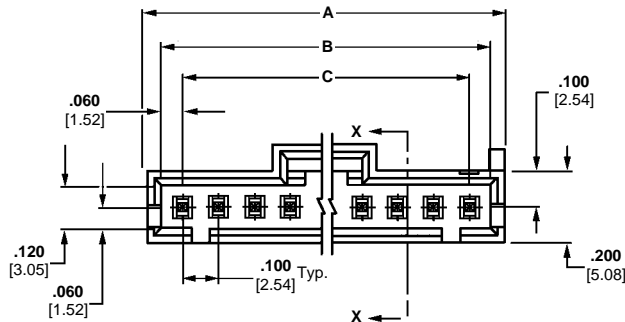
**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

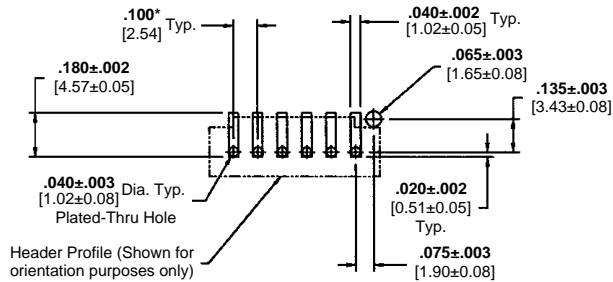
**Application Specification**  
114-25026



Swaged Retention Tail (See Note)



Section X-X



**Recommended PC Board Hole Layout (Stencil Thickness = .010 [0.25])**

\*±.003 [±0.08] tolerance not to accumulate within one connector pattern

| No. of Pos. | Dimensions    |               |               | Polarized/Latching Header, High-Temp |
|-------------|---------------|---------------|---------------|--------------------------------------|
|             | A             | B             | C             |                                      |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 104809-1                             |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 104809-2                             |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 104809-3                             |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 104809-4                             |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 104809-5                             |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 104809-6                             |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 104809-7                             |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 104809-8                             |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 104809-9                             |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 1-104809-0                           |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 1-104809-1                           |

**MTE Headers, Shrouded High-Temp, Polarized/Latching  
(Thru-Hole, SMT Compatible) Single-Row, .100 [2.54] Centerline**

**.025 [0.64] Square  
Straight Post (With or  
Without Swaged Tail)**



**Material and Finish:**

**Housing**—Black thermoplastic, high temperature, 94V-0 rated

**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies (Polarized/Latching)**—pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**—pages 249, 250, 252, 257

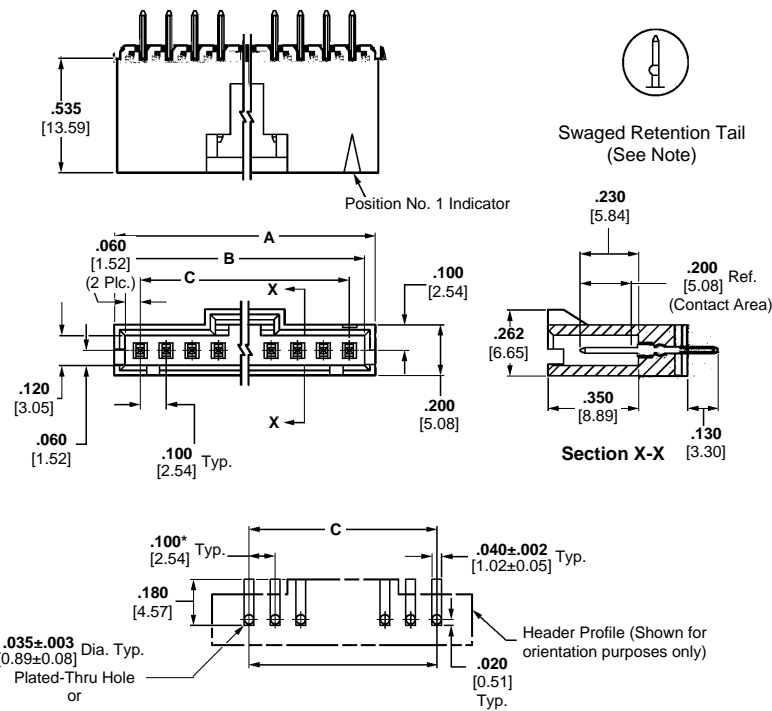
**Other Mateable Connectors:**

**Flexible Film Connectors**—Catalog 82007

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board Hole Layout  
(Stencil Thickness = .010 [0.25])**

\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

**Note:** Swaged retention tails in Holddown versions only. Retention tails are provided in a minimum of two locations per header.

| No. of Pos. | Dimensions    |               |               | Straight Header |               |
|-------------|---------------|---------------|---------------|-----------------|---------------|
|             | A             | B             | C             | With Swage      | Without Swage |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 104362-1        | 104363-1      |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 104362-2        | 104363-2      |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 104362-3        | 104363-3      |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 104362-4        | 104363-4      |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 104362-5        | 104363-5      |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 104362-6        | 104363-6      |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 104362-7        | 104363-7      |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 104362-8        | 104363-8      |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 104362-9        | 104363-9      |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 1-104362-0      | 1-104363-0    |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 1-104362-1      | 1-104363-1    |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 1-104909-2      | 1-104910-2    |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 1-104909-3      | 1-104910-3    |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 1-104909-4      | 1-104910-4    |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 1-104909-5      | 1-104910-5    |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 1-104909-6      | 1-104910-6    |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 1-104909-7      | 1-104910-7    |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 1-104909-8      | 1-104910-8    |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 1-104909-9      | 1-104910-9    |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 2-104909-0      | 2-104910-0    |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 2-104909-1      | 2-104910-1    |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 2-104909-2      | 2-104910-2    |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 2-104909-3      | 2-104910-3    |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 2-104909-4      | 2-104910-4    |

**Note:** Use Keying Tool No. 91417-1 to remove post for keying.

**MTE Headers, Shrouded High-Temp, Polarized/Latching (Thru-Hole, SMT Compatible) Single-Row, .100 [2.54] Centerline (Continued)**

**.025 [0.64] Square Right-Angle Post (With Holddown)**



**Material and Finish:**

**Housing**—Black thermoplastic, high temperature, 94V-0 rated  
**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

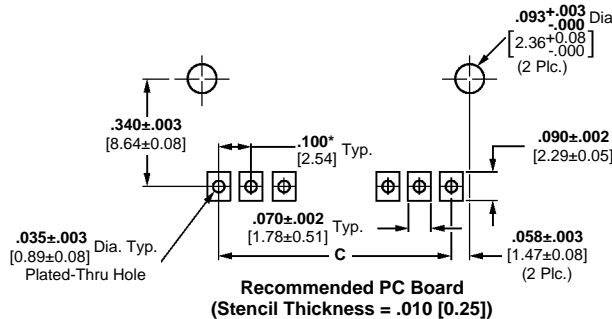
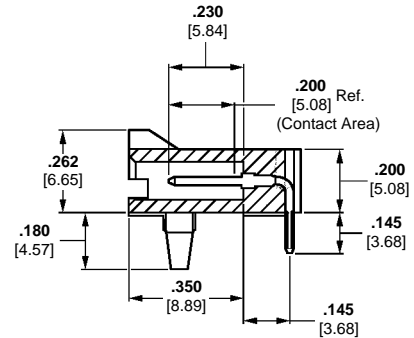
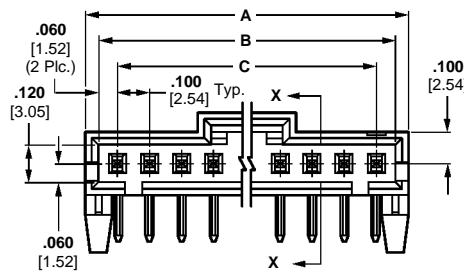
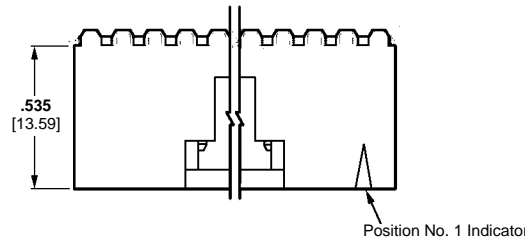
**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies (Polarized/Latching)**—pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**—pages 249, 250, 252, 257

**Other Mateable Connectors:**  
**Flexible Film Connectors**—Catalog 82007



\*±.003 [±0.08]; tolerance is not to accumulate within one connector pattern.

**Technical Documents (pages 295, 296):**

**Product Specification**  
108-25034

**Application Specification**  
114-25026

| No. of Positions | Dimensions    |               |               | Right-Angle Header with Hold Down |
|------------------|---------------|---------------|---------------|-----------------------------------|
|                  | A             | B             | C             |                                   |
| 2                | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 104361-1                          |
| 3                | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 104361-2                          |
| 4                | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 104361-3                          |
| 5                | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 104361-4                          |
| 6                | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 104361-5                          |
| 7                | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 104361-6                          |
| 8                | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 104361-7                          |
| 9                | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 104361-8                          |
| 10               | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 104361-9                          |
| 11               | 1.200 [30.48] | 1.120 [28.44] | 1.000 [25.40] | 1-104361-0                        |
| 12               | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 1-104361-1                        |
| 13               | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 1-104361-2                        |

| No. of Positions | Dimensions    |               |               | Right-Angle Header with Hold Down |
|------------------|---------------|---------------|---------------|-----------------------------------|
|                  | A             | B             | C             |                                   |
| 14               | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 1-104361-3                        |
| 15               | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 1-104361-4                        |
| 16               | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 1-104361-5                        |
| 17               | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 1-104361-6                        |
| 18               | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 1-104361-7                        |
| 19               | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 1-104361-8                        |
| 20               | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 1-104361-9                        |
| 21               | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 2-104361-0                        |
| 22               | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 2-104361-1                        |
| 23               | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 2-104361-2                        |
| 24               | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 2-104361-3                        |
| 25               | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 2-104361-4                        |

**MTE Headers, Right-Angle, Polarized/Latching, Surface Mount**



**Material and Finish:**

**Housing**—High temperature thermoplastic, Color - Black

**Posts**—Copper Alloy, plated as follows:

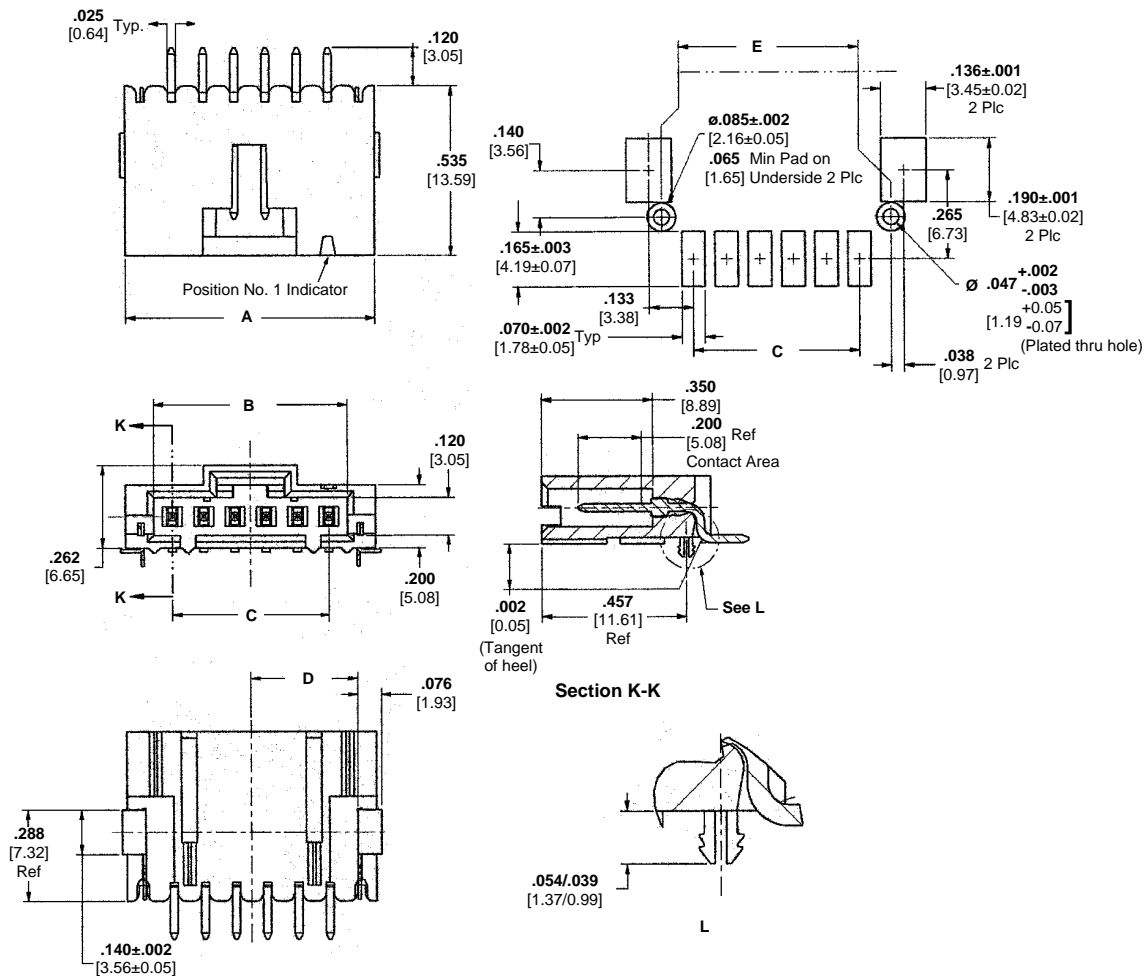
**Plating A**—Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin-lead on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating B**—Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin-lead on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating C**—.000100 [.00254] tin lead over .000050 [.00127] nickel on entire post

**Recommended PC Board Layout**

(Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)



**Related Product Data:**

**Mateable AMPMODU MTE Products:**

**Receptacle Assemblies (Polarized/Latching)**— pages 247, 248

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)**— pages 249, 250, 252, 257

**Other Mateable Connectors:**

**Flexible Film Connectors**— Catalog 82007

**Technical Documents**

(pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

| No. of Pos. | Dimensions    |               |               |               |               | Right-Angle Latching SMT Headers |            |            |
|-------------|---------------|---------------|---------------|---------------|---------------|----------------------------------|------------|------------|
|             | A             | B             | C             | D             | E             | Plating A                        | Plating B  | Plating C  |
| 2           | .400 [10.16]  | .220 [5.59]   | .100 [2.54]   | .140 [3.56]   | .290 [7.37]   | 147323-1                         | 147278-1   | 147324-1   |
| 3           | .500 [12.70]  | .320 [8.13]   | .200 [5.08]   | .190 [4.83]   | .390 [9.91]   | 147323-2                         | 147278-2   | 147324-2   |
| 4           | .600 [15.24]  | .420 [10.67]  | .300 [7.62]   | .240 [6.10]   | .490 [12.45]  | 147323-3                         | 147278-3   | 147324-3   |
| 5           | .700 [17.78]  | .520 [13.21]  | .400 [10.16]  | .290 [7.37]   | .590 [14.99]  | 147323-4                         | 147278-4   | 147324-4   |
| 6           | .800 [20.32]  | .620 [15.75]  | .500 [12.70]  | .340 [8.64]   | .690 [17.53]  | 147323-5                         | 147278-5   | 147324-5   |
| 7           | .900 [22.86]  | .720 [18.29]  | .600 [15.24]  | .390 [9.91]   | .790 [20.07]  | 147323-6                         | 147278-6   | 147324-6   |
| 8           | 1.000 [25.40] | .820 [20.83]  | .700 [17.78]  | .440 [11.18]  | .890 [22.61]  | 147323-7                         | 147278-7   | 147324-7   |
| 9           | 1.100 [27.94] | .920 [23.37]  | .800 [20.32]  | .490 [12.45]  | .990 [25.15]  | 147323-8                         | 147278-8   | 147324-8   |
| 10          | 1.200 [30.48] | 1.020 [25.91] | .900 [22.86]  | .540 [13.72]  | 1.090 [27.69] | 147323-9                         | 147278-9   | 147324-9   |
| 11          | 1.300 [33.02] | 1.120 [28.45] | 1.000 [25.40] | .590 [14.99]  | 1.190 [30.23] | 1-147323-0                       | 1-147278-0 | 1-147324-0 |
| 12          | 1.400 [35.56] | 1.220 [30.99] | 1.100 [27.94] | .640 [16.26]  | 1.290 [32.77] | 1-147323-1                       | 1-147278-1 | 1-147324-1 |
| 13          | 1.500 [38.10] | 1.320 [33.53] | 1.200 [30.48] | .690 [17.53]  | 1.390 [35.31] | 1-147323-2                       | 1-147278-2 | 1-147324-2 |
| 14          | 1.600 [40.64] | 1.420 [36.07] | 1.300 [33.02] | .740 [18.80]  | 1.490 [37.85] | 1-147323-3                       | 1-147278-3 | 1-147324-3 |
| 15          | 1.700 [43.18] | 1.520 [38.61] | 1.400 [35.56] | .790 [20.07]  | 1.590 [40.39] | 1-147323-4                       | 1-147278-4 | 1-147324-4 |
| 16          | 1.800 [45.72] | 1.620 [41.15] | 1.500 [38.10] | .840 [21.34]  | 1.690 [42.93] | 1-147323-5                       | 1-147278-5 | 1-147324-5 |
| 17          | 1.900 [48.26] | 1.720 [43.69] | 1.600 [40.64] | .890 [22.61]  | 1.790 [45.47] | 1-147323-6                       | 1-147278-6 | 1-147324-6 |
| 18          | 2.000 [50.80] | 1.820 [46.23] | 1.700 [43.18] | .940 [23.88]  | 1.890 [48.01] | 1-147323-7                       | 1-147278-7 | 1-147324-7 |
| 19          | 2.100 [53.34] | 1.920 [48.77] | 1.800 [45.72] | .990 [25.15]  | 1.990 [50.55] | 1-147323-8                       | 1-147278-8 | 1-147324-8 |
| 20          | 2.200 [55.88] | 2.020 [51.31] | 1.900 [48.26] | 1.040 [26.42] | 2.090 [53.09] | 1-147323-9                       | 1-147278-9 | 1-147324-9 |
| 21          | 2.300 [58.42] | 2.120 [53.85] | 2.000 [50.80] | 1.090 [27.69] | 2.190 [55.63] | 2-147323-0                       | 2-147278-0 | 2-147324-0 |
| 22          | 2.400 [60.96] | 2.220 [56.39] | 2.100 [53.34] | 1.140 [28.96] | 2.290 [58.17] | 2-147323-1                       | 2-147278-1 | 2-147324-1 |
| 23          | 2.500 [63.50] | 2.320 [58.93] | 2.200 [55.88] | 1.190 [30.23] | 2.390 [60.71] | 2-147323-2                       | 2-147278-2 | 2-147324-2 |
| 24          | 2.600 [66.04] | 2.420 [61.47] | 2.300 [58.42] | 1.240 [31.50] | 2.490 [63.25] | 2-147323-3                       | 2-147278-3 | 2-147324-3 |
| 25          | 2.700 [68.58] | 2.520 [64.01] | 2.400 [60.96] | 1.290 [32.77] | 2.590 [65.79] | 2-147323-4                       | 2-147278-4 | 2-147324-4 |





Colored MTE Interconnection System-4 position only

**Colored Polarized Latching Receptacle Mates to Colored Vertical Header with PC Board orientation:**

**Material and Finish:**

**Housing** – Color Thermoplastic, 94V-0 rated

**Contact/post** – Copper alloy, plated .000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire contact/post.

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

Refer to pages 247 and 265 for line art and customer drawings for specific dimensions.

**Note:** The .065+/- .003 [1.65+/-0.08] diameter hole, used for PCB orientation, changes in position for headers listed below.

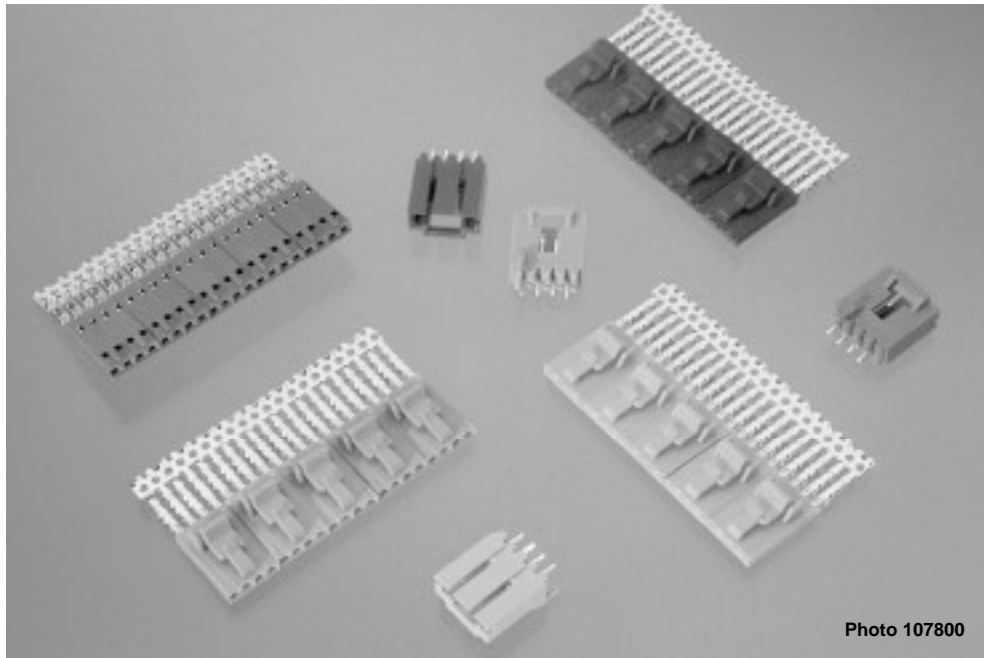
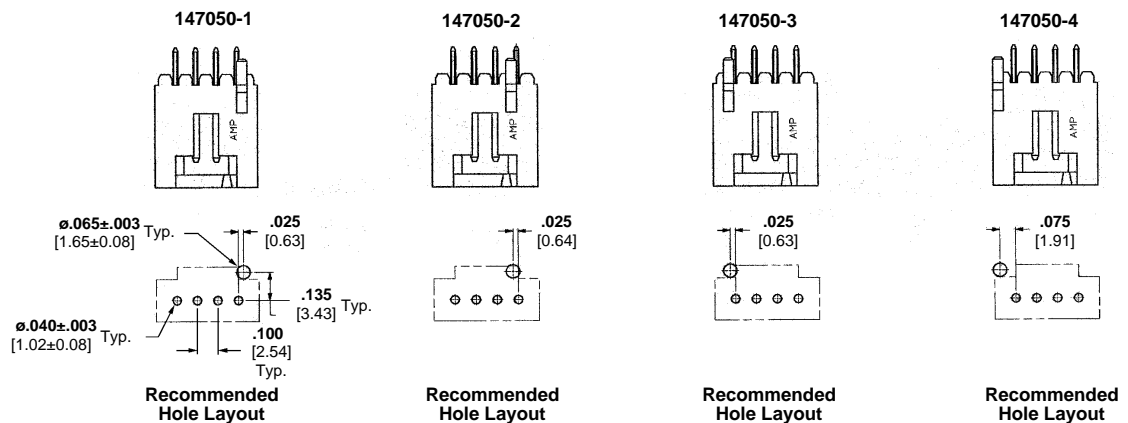


Photo 107800

| Color          | Strip Form Housing Quantities | Receptacle 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire | Mates with | Header   | Unloaded Receptacle Housing |
|----------------|-------------------------------|---|------------|----------|-----------------------------|
| Natural/ Beige | 5                             | 147048-1  | —          | 147050-1 | 147047-1                    |
| Green          | 5                             | 147048-2  | —          | 147050-2 | 147047-2                    |
| Blue           | 5                             | 147048-3  | —          | 147050-3 | 147047-3                    |
| Yellow         | 5                             | 147048-4  | —          | 147050-4 | 147047-4                    |



PC Board Orientation Feature

Colored MTE Interconnection System

**5**

**Interchangeable Contacts, Wire Crimp (Snap-In)**

**Material and Finish:**

Copper alloy C7025, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating B**—Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating C**—.000100 [0.00254] min. bright tin-lead over .000050 [0.00127] min. nickel on entire contact



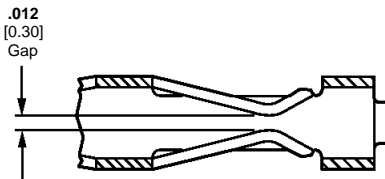
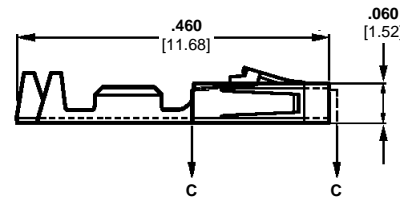
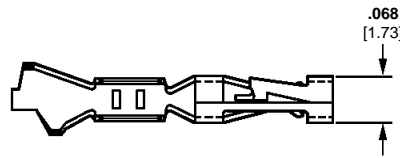
**Keying Plug  
Part No. 104072-1**

Ten plugs are supplied per strip. Order quantity reflects the number of strips required.



**Photo 4857  
Extraction/Lance Reset  
Tool No. 843477-1**

**Short Point Receptacles**



**Section C - C**

**Related Product Data:**

**Performance Characteristics**—page 238

**Housings used in**—Short Point—pages 240, 241

**AMPMODU MTE Unloaded Housings**—pages 245-250

**Application Tooling**—pages 289, 290

**Technical Documents** (page 295, 296):

**Product Specification**  
108-1472, 108-1472-1

**Application Specification**  
114-25038

| Wire Size Range |                    | Ins. Dia. Range        | Finish    | Contact Part No. (Standard Pressure) |             | Heavy Duty Miniature Applicator for AMP-O-ELECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Nos. |
|-----------------|--------------------|------------------------|-----------|--------------------------------------|-------------|---|---|----------------|
| AWG             | [mm <sup>2</sup> ] |                        |           | Strip Form                           | Loose Piece |   |   |                |
| 32-28           | 0.03-0.08          | .025-.060<br>0.64-1.52 | Plating A | 104481-4                             | 104481-8    | 567296-2  | 466980-1  | 91518-1        |
|                 |                    |                        | Plating B | 104481-3                             | 104481-7    |   |   |                |
|                 |                    |                        | Plating C | 104481-2                             | 104481-6    |   |   |                |
| 26-22           | 0.13-0.3           | .025-.060<br>0.64-1.52 | Plating A | 104480-4                             | 104480-9    | 567297-2  | 466981-1  | 91518-1        |
|                 |                    |                        | Plating B | 104480-3                             | 104480-8    |   |   |                |
|                 |                    |                        | Plating C | 104480-2                             | 104480-7    |   |   |                |
| 24-20           | 0.2-0.5            | .025-.060<br>0.64-1.52 | Plating A | 104479-4                             | 104479-7    | 567298-2  | 466982-1  | 91551-1        |
|                 |                    |                        | Plating B | 104479-3                             | 104479-6    |   |   |                |
|                 |                    |                        | Plating C | 104479-2                             | 104479-5    |   |   |                |

\*For use with Model "K" machines. Call the Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

Interchangeable Contacts, Wire Crimp (Snap-In) (Continued)

**Material and Finish:**

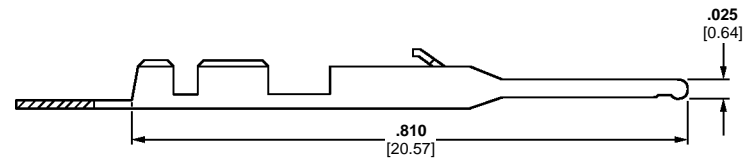
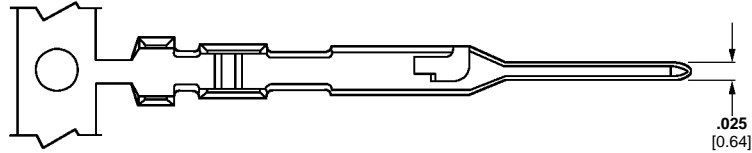
Phosphor bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000030 [0.00076] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000030 [0.00076] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] min. bright tin-lead over .000050 [0.00127] nickel on entire contact

**Pins**



Extraction/Lance Reset  
Tool No. 843477-1

**Related Product Data:**

**Performance Characteristics**—  
page 238

**AMPMODU MTE Unloaded Housings**—pages 245-250

**Application Tooling**—  
pages 289, 290

**Technical Documents** (page 295, 296):

**Product Specification**  
108-25034

**Application Specification**  
114-25026

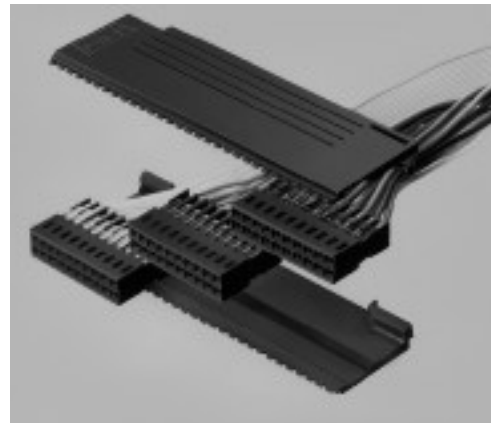
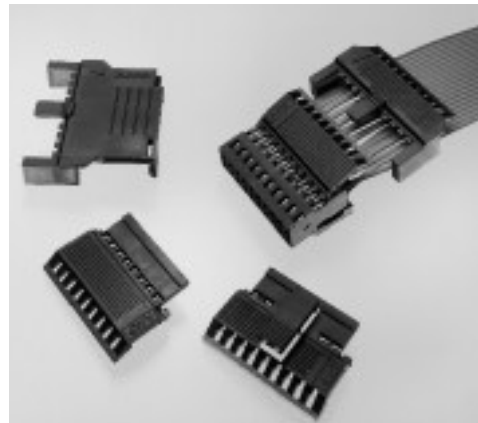
| Wire Size Range |                    | Ins. Dia. Range        | Finish    | Contact Part No. (Standard Pressure) |             | Heavy Duty Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Nos. |
|-----------------|--------------------|------------------------|-----------|--------------------------------------|-------------|--|---|----------------|
| AWG             | [mm <sup>2</sup> ] |                        |           | Strip Form                           | Loose Piece |  |   |                |
| 32-28           | 0.03-0.08          | .025-.054<br>0.64-1.37 | Plating A | 104506-6                             | 104506-7    | —  | —   | 58342-2        |
|                 |                    |                        | Plating B | 104506-4                             | 104506-5    |  |   |                |
|                 |                    |                        | Plating C | 104506-2                             | 104506-3    |  |   |                |
| 26-22           | 0.14-0.32          | .036-.054<br>0.91-1.37 | Plating A | 104505-6                             | 104505-7    | 567239-2   | 466983-1  | 91531-1        |
|                 |                    |                        | Plating B | 104505-4                             | 104505-5    |  |   |                |
|                 |                    |                        | Plating C | 104505-2                             | 104505-3    |  |   |                |

\*For use with AMP-O-LECTRIC Model "K" machines. Call Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATORlead making machines.  
**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

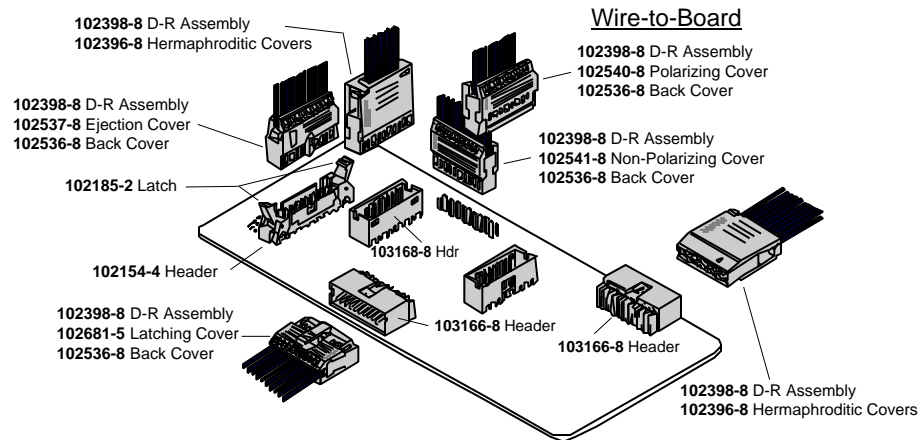
**MT and Shielded MT Interconnection System**

**Product Facts**

- Full line of mass termination tooling offers lowest installed cost for most production needs
- Dual cantilever beams with anti-overstress features provide redundant contact of mating post and limit beam deflection, preventing permanent deformation
- Redundant insulation displacement slots provide for maximum reliability
- Integral wire strain relief on contact prevents wire motion from being transmitted to wire termination areas
- Built-in contact post stop protects terminated wire from being disturbed by over-insertion of mating post, prevents wire from entering contact area and positively limits mating connector depth
- Insulation displacement contacts and crimp, snap-in contacts are interchangeable
- Complete serviceability with replacement contacts
- Cover styles include low profile (polarized, non-polarized, latching and ejection) and standard profile (hermaphroditic and ejection)
- Connector housings may be stacked end-to-end within one pair of covers. All varieties of covers in this catalog are suitable for multiple housing stacking applications similar to the example illustrated in the photograph to the right
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189



Typical Application of End-to-End Stacking



The AMPMODU MT and Shielded MT Interconnection System offers labor and cost savings through mass termination technology, while maintaining the time-proven reliability of the AMPMODU product family. The MT system is comprised of preloaded, double-row receptacle assemblies with snap-on covers and a variety of shielding hardware and accessories. The system is supported by a full line of mass termination tooling to meet virtually most production needs.

The insulation displacement contact, the heart of the MT

system, features a mating interface that is the same as the conventional AMPMODU crimp, snap-in contact, featuring dual cantilever beams, built-in overstress protection and a completely enclosed "box" design.

To reduce EMI/ESD (electromagnetic interference/ electrostatic discharge) at the input-output interface, add-on metal shields can be used to convert standard MT connectors to shielded MT connectors.

**Performance Characteristics**

- Contact Current Rating**—3 amperes for single contact in free air. (Amperage could vary due to ambient temperature, wire size and duty cycles.)
- Operating Temperature**—-65°C to +105°C
- Termination Resistance**—12 milliohms max.
- Max. Mating Force**—High pressure - 26 oz. [7.23 N]  
Standard pressure - 9 oz. [2.50 N]
- Min. Unmating Force**—High pressure - 5 oz. [1.39 N]  
Standard pressure - 1.5 oz. [0.417 N]
- Contact Retention in Housing**—5 lb. [22.24 N] per contact min.

MT and Shielded MT Interconnection System

**5**



**MT Receptacle Assemblies, Double-Row  
.100 x .100 [2.54 x 2.54] Centerline**

**Housings Pre-loaded with Standard Pressure Contacts**



**Material and Finish:**

**Housing**—Black thermoplastic, flame retardant

**Contacts**—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Related Product Data:**

**Mateable Connectors**—pages 133, 139, 143, 147, 283

**Cable Insulation Wall Thickness**— .015 [0.39] max.

**Cable Insulation Diameter**— .050 [1.27] max.

**Mating Post Length**— 222-.273 [5.64-6.94] max.

**Performance Characteristics**— page 274

**Replacement Contacts**—page 284

**Connector Covers**— pages 277, 278

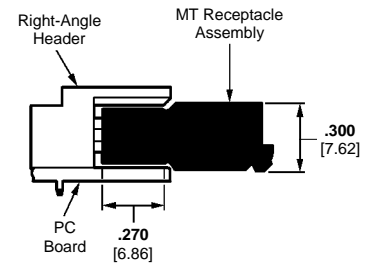
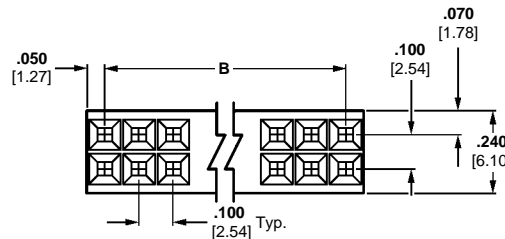
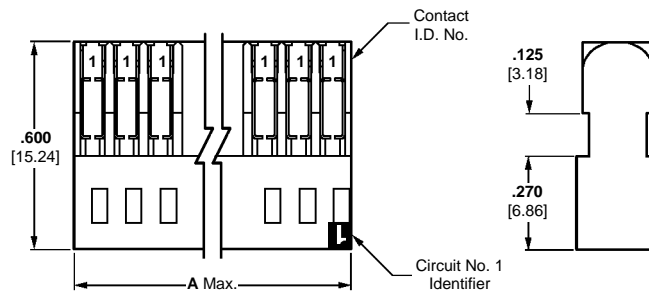
**Application Tooling**— pages 290-293

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25015, 108-25018, 108-25030

**Application Specification**  
114-25032

**Instruction Sheet**  
408-6532



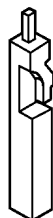
| No. of Pos. | Dimensions<br>A B |               | Part Nos. (Stamped)                       |  |   | Unloaded Housings |
|-------------|-------------------|---------------|---|--|---|-------------------|
|             |                   |               | Wire Size Range                           |  |   |                   |
|             |                   |               | 30-26 AWG<br>[0.05-0.15 mm <sup>2</sup> ] | 26-22 AWG<br>[0.12-0.3 mm <sup>2</sup> ] | 22-20 AWG<br>[0.3-0.6 mm <sup>2</sup> ] |                   |
| 6           | .300 [7.62]       | .200 [5.08]   | 102393-1                                  | 102398-1                                 | 102448-1                                | 102394-1          |
| 8           | .400 [10.16]      | .300 [7.62]   | 102393-2                                  | 102398-2                                 | 102448-2                                | 102394-2          |
| 10          | .500 [12.70]      | .400 [10.16]  | 102393-3                                  | 102398-3                                 | 102448-3                                | 102394-3          |
| 12          | .600 [15.24]      | .500 [12.70]  | 102393-4                                  | 102398-4                                 | 102448-4                                | 102394-4          |
| 14          | .700 [17.78]      | .600 [15.24]  | 102393-5                                  | 102398-5                                 | 102448-5                                | 102394-5          |
| 16          | .800 [20.32]      | .700 [17.78]  | 102393-6                                  | 102398-6                                 | 102448-6                                | 102394-6          |
| 18          | .900 [22.86]      | .800 [20.32]  | 102393-7                                  | 102398-7                                 | 102448-7                                | 102394-7          |
| 20          | 1.000 [25.40]     | .900 [22.86]  | 102393-8                                  | 102398-8                                 | 102448-8                                | 102394-8          |
| 22          | 1.100 [27.94]     | 1.000 [25.40] | 102393-9                                  | 102398-9                                 | 102448-9                                | 102394-9          |
| 24          | 1.200 [30.48]     | 1.100 [27.94] | 1-102393-0                                | 1-102398-0                               | 1-102448-0                              | 1-102394-0        |
| 26          | 1.300 [33.02]     | 1.200 [30.48] | 1-102393-1                                | 1-102398-1                               | 1-102448-1                              | 1-102394-1        |
| 28          | 1.400 [35.56]     | 1.300 [33.02] | 1-102393-2                                | 1-102398-2                               | 1-102448-2                              | 1-102394-2        |
| 30          | 1.500 [38.10]     | 1.400 [35.56] | 1-102393-3                                | 1-102398-3                               | 1-102448-3                              | 1-102394-3        |
| 32          | 1.600 [40.64]     | 1.500 [38.10] | 1-102393-4                                | 1-102398-4                               | 1-102448-4                              | 1-102394-4        |
| 34          | 1.700 [43.18]     | 1.600 [40.64] | 1-102393-5                                | 1-102398-5                               | 1-102448-5                              | 1-102394-5        |
| 40          | 2.000 [50.80]     | 1.900 [48.26] | 1-102393-8                                | 1-102398-8                               | 1-102448-8                              | 1-102394-8        |
| 50          | 2.500 [63.50]     | 2.400 [60.96] | 2-102393-3                                | 2-102398-3                               | 2-102448-3                              | 2-102394-3        |
| 60          | 3.000 [76.20]     | 2.900 [73.66] | 2-102393-8                                | 2-102398-8                               | 2-102448-8                              | 2-102394-8        |
| 64          | 3.200 [81.28]     | 3.100 [78.74] | 3-102393-0                                | 3-102398-0                               | 3-102448-0                              | 3-102394-0        |

Note: Contact Extraction/Lance Reset Tool No. 843477-3, see page 284.

**Keying Plugs**



Part No. 86286-1  
(Plugs into receptacle contact)



Part No. 87077-2  
(Plugs directly into housing)

**Material**—Natural color nylon

**MT Receptacle Assemblies, Double-Row  
.100 x .100 [2.54 x 2.54] Centerline**

**Housings Pre-loaded with High Pressure Contacts**



**Material and Finish:**

**Housing**—Black thermoplastic, flame retardant

**Contacts**—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Related Product Data:**

**Mateable Connectors**—pages 133, 139, 143, 147, 283

**Cable Insulation Wall Thickness**—  
.015 [0.39] max.

**Cable Insulation Diameter**—  
.050 [1.27] max.

**Mating Post Length**—  
.200-.273 [5.64-6.94] max.

**Performance Characteristics**—  
page 274

**Replacement Contacts**—page 284

**Connector Covers**—  
pages 277, 278

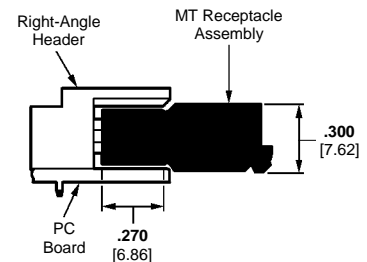
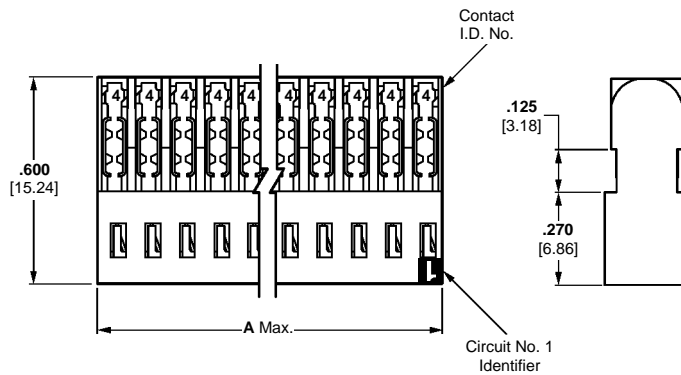
**Application Tooling**—  
pages 290-293

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25015, 108-25018, 108-25030

**Application Specification**  
114-25032

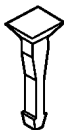
**Instruction Sheet**  
408-6532



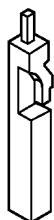
| No. of Pos. | Dimensions    |              | Part Nos. (Stamped*)                      |  |   |
|-------------|---------------|--------------|---|--|---|
|             | A             | B            | Wire Size Range                           |  |   |
|             |               |              | 30-26 AWG<br>[0.05-0.15 mm <sup>2</sup> ] | 26-22 AWG<br>[0.12-0.3 mm <sup>2</sup> ] | 22-20 AWG<br>[0.3-0.6 mm <sup>2</sup> ] |
| 6           | .300 [7.62]   | .200 [5.08]  | 102693-1                                  | 102694-1                                 | 102695-1                                |
| 8           | .400 [10.16]  | .300 [7.62]  | 102693-2                                  | 102694-2                                 | 102695-2                                |
| 10          | .500 [12.70]  | .400 [10.16] | 102693-3                                  | 102694-3                                 | 102695-3                                |
| 12          | .600 [15.24]  | .500 [12.70] | 102693-4                                  | 102694-4                                 | 102695-4                                |
| 14          | .700 [17.78]  | .600 [15.24] | 102693-5                                  | 102694-5                                 | 102695-5                                |
| 16          | .800 [20.32]  | .700 [17.78] | 102693-6                                  | 102694-6                                 | 102695-6                                |
| 18          | .900 [22.86]  | .800 [20.32] | 102693-7                                  | 102694-7                                 | 102695-7                                |
| 20          | 1.000 [25.40] | .900 [22.86] | 102693-8                                  | 102694-8                                 | 102695-8                                |

\*Cavity identification — first cavity (one side); Tyco Electronics Part No. and date code stamped on housing where size permits.  
**Note:** Contact Extraction/Lance Reset Tool No. 843477-3, see page 284.

**Keying Plugs**



**Part No. 86286-1**  
(Plugs into receptacle contact)



**Part No. 87077-2**  
(Plugs directly into housing)

**Material**—Natural color nylon

**Low Profile Covers for Double-Row MT Receptacle Assemblies**

**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

For use on Double-Row MT Receptacle Assemblies—pages 275, 276

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25015, 108-25018, 108-25030

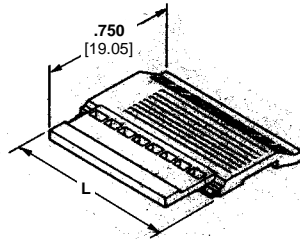
**Application Specification**  
114-25032

**Instruction Sheet**  
408-6532

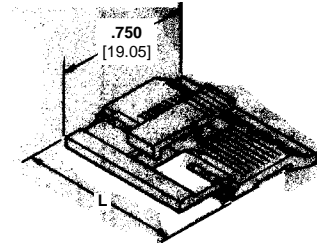
**Note:** See page 278 for Low Profile Cover Part Nos.

**Front Covers**

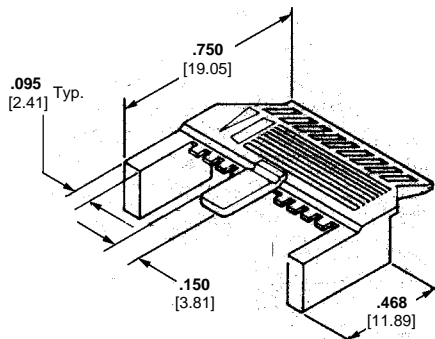
**A - Polarizing Cover**  
(Mates with AMPMODU 4-sided shrouded headers. Refer to pages 133, 139, 143, 147.)



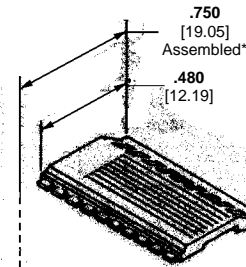
**B - Latching Cover**  
(Mates with AMPMODU 4-sided shrouded headers with extraction slot. Refer to pages 133, 139, 143, 147.)



**C - Ejection Cover**  
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see AMP Catalog 82012.)



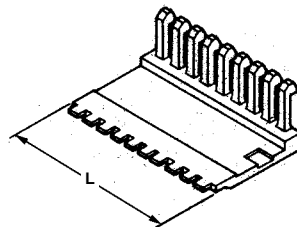
**D - Non-Polarizing Cover**  
(Designed for use with shielded connectors, pages 280 & 281; or for non-polarizing applications.)



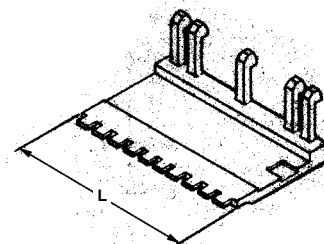
\*Dimension applies to cover when installed on connector housing.

**Back Covers**

**E - For Shielding and Non-Shielding Applications**  
(For use with any low profile cover.)



**F - For Shielding Applications**  
(For use with Non-Polarizing Cover only.)



**Standard Profile Covers for Double-Row MT Receptacle Assemblies**

**Material:**

Black thermoplastic, flame retardant

**Related Product Data:**

For use on Double-Row MT Receptacle Assemblies—pages 275, 276

**Technical Documents** (pages 295, 296):

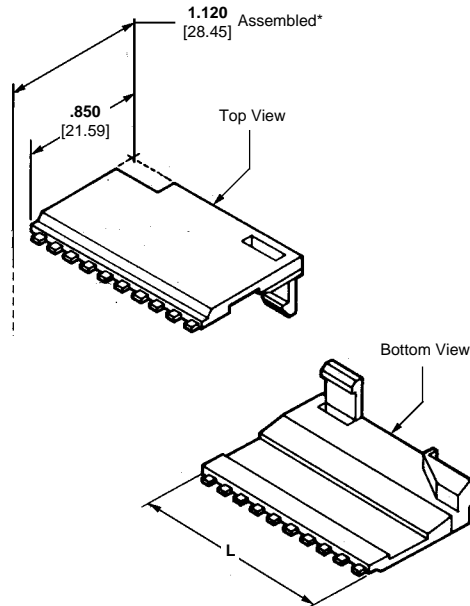
**Product Specification**  
108-25015, 108-25018, 108-25030

**Application Specification**  
114-25032

**Instruction Sheet**  
408-6532

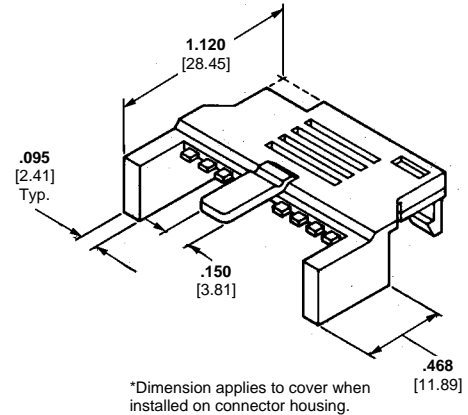
**G - Hermaphroditic Cover**

(Two hermaphroditic covers can be used or one hermaphroditic cover can be used with an H Ejection Cover.)



**H - Ejection Cover**

(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see Tyco Electronics Catalog 82012.)



\*Dimension applies to cover when installed on connector housing.

| No. of Pos. | Dimension L   | Low Profile Covers |            |            |                  |  |                          | Standard Profile Covers |            |
|-------------|---------------|--------------------|------------|------------|------------------|--|--------------------------|-------------------------|------------|
|             |               | Front Covers       |            |            |                  | Back Covers                                |                          | G Hermaphroditic        | H Ejection |
|             |               | A Polarizing       | B Latching | C Ejection | D Non-Polarizing | E Shielding and Non-Shielding Applications | F Shielding Applications |                         |            |
| 6           | .300 [7.62]   | 102540-1           | —          | 102537-1   | 102541-1         | 102536-1                                   | —                        | 102396-1                | —          |
| 8           | .400 [10.16]  | 102540-2           | —          | 102537-2   | 102541-2         | 102536-2                                   | —                        | 102396-2                | —          |
| 10          | .500 [12.70]  | 102540-3           | —          | 102537-3   | 102541-3         | 102536-3                                   | —                        | 102396-3                | —          |
| 12          | .600 [15.24]  | 102540-4           | 102681-1   | 102537-4   | 102541-4         | 102536-4                                   | 102823-5                 | 102396-4                | —          |
| 14          | .700 [17.78]  | 102540-5           | 102681-2   | 102537-5   | 102541-5         | 102536-5                                   | 102823-6                 | 102396-5                | —          |
| 16          | .800 [20.32]  | 102540-6           | 102681-3   | 102537-6   | 102541-6         | 102536-6                                   | 102823-7                 | 102396-6                | —          |
| 18          | .900 [22.86]  | 102540-7           | 102681-4   | 102537-7   | 102541-7         | 102536-7                                   | 102823-1                 | 102396-7                | —          |
| 20          | 1.000 [25.40] | 102540-8           | 102681-5   | 102537-8   | 102541-8         | 102536-8                                   | 102823-4                 | 102396-8                | 103268-6   |
| 22          | 1.100 [27.94] | 102540-9           | 102681-6   | 102537-9   | 102541-9         | 102536-9                                   | 102823-8                 | 102396-9                | —          |
| 24          | 1.200 [30.48] | 1-102540-0         | 102681-7   | 1-102537-0 | 1-102541-0       | 1-102536-0                                 | 102823-9                 | 1-102396-0              | 103268-7   |
| 26          | 1.300 [33.02] | 1-102540-1         | 102681-8   | 1-102537-1 | 1-102541-1       | 1-102536-1                                 | 1-102823-0               | 1-102396-1              | 103268-8   |
| 28          | 1.400 [35.56] | 1-102540-2         | 102681-9   | 1-102537-2 | 1-102541-2       | 1-102536-2                                 | 1-102823-1               | 1-102396-2              | —          |
| 30          | 1.500 [38.10] | 1-102540-3         | 1-102681-0 | 1-102537-3 | 1-102541-3       | 1-102536-3                                 | 1-102823-2               | 1-102396-3              | 103268-9   |
| 32          | 1.600 [40.64] | —                  | 1-102681-1 | 1-102537-4 | 1-102541-4       | 1-102536-4                                 | 1-102823-3               | 1-102396-4              | —          |
| 34          | 1.700 [43.18] | —                  | 1-102681-2 | 1-102537-5 | 1-102541-5       | 1-102536-5                                 | 1-102823-4               | 1-102396-5              | 1-103268-0 |
| 40          | 2.000 [50.80] | —                  | 1-102681-5 | 1-102537-8 | 1-102541-8       | 1-102536-8                                 | 102823-2                 | 1-102396-8              | —          |
| 50          | 2.500 [63.50] | —                  | 2-102681-0 | 2-102537-3 | 2-102541-3       | 2-102536-3                                 | 102823-3                 | 2-102396-3              | 1-103268-3 |
| 60          | 3.000 [76.20] | —                  | —          | 2-102537-8 | 2-102541-8       | 2-102536-8                                 | —                        | 2-102396-8              | —          |
| 64          | 3.200 [81.28] | —                  | —          | 3-102537-0 | 3-102541-0       | 3-102536-0                                 | —                        | 3-102396-0              | —          |

MT Standard Profile Covers

**5**



**Shielding Hardware and Accessories for MT Interconnection System**

**Product Facts**

- Add-on shielding accessories for existing AMPMODU Standard MT and PC board mounted headers
- Compact design
- Tin plated copper alloy material
- Redundant cantilever beams provide for good peripheral contact, eliminating the need for a separate RF gasket
- Polarized mating
- 360° cable braid termination with cable jacket support
- Cable shielding hardware permits molded cable terminations after assembly
- Must be used with braided shielded cables
- Solder tabs on right-angle header shields are self-retaining in a PC board



Photo 110928

**Shielded MT Receptacles**

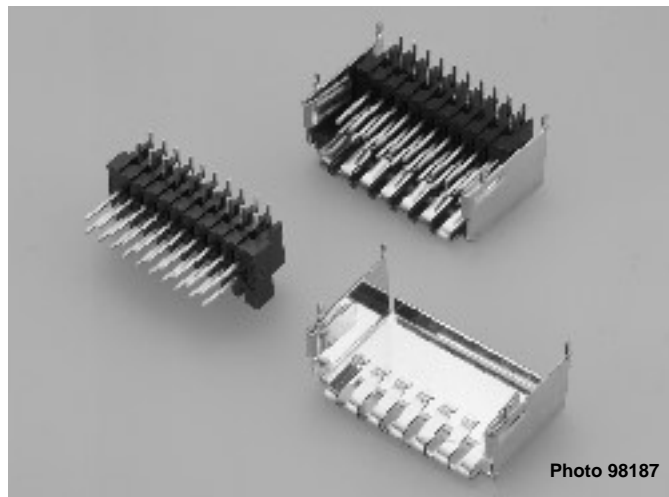


Photo 98187

**Shielded Right-Angle Headers**

The shielded AMPMODU MT system features add-on metal shielding kits for double-row standard MT receptacle assemblies and double-row right-angle headers.

Cable shielding hardware consists of a ferrule and two stamped and formed shell halves. The inner shell half has a series of integral cantilever beams to provide

good peripheral contact with the mating outer shell half. This feature also eliminates the need for a separate RF gasket. Detents in the cantilever beam provide a positive lock when the two halves are mated. During assembly the inner and outer shell halves are snapped together over a terminated standard MT connector.

Shields for right-angle headers have integral cantilever beams which provide good contact with the mating shielded MT receptacle assembly, without the use of a separate RF gasket.

**Shielding Hardware and Accessories for Double-Row MT Receptacle Assemblies**

**Two-Piece Shields—Straight Exit**

**Material and Finish:**

**Shell Halves**—Copper alloy, .020 [0.51] thick; pretinned .000030 [0.00076] min.

**Related Product Data:**

**Double-Row MT Receptacle Assemblies**—pages 275, 276

**Non-Polarizing Covers (Part No. Series 102541 with back cover 102536 or 102823)**—pages 277, 278

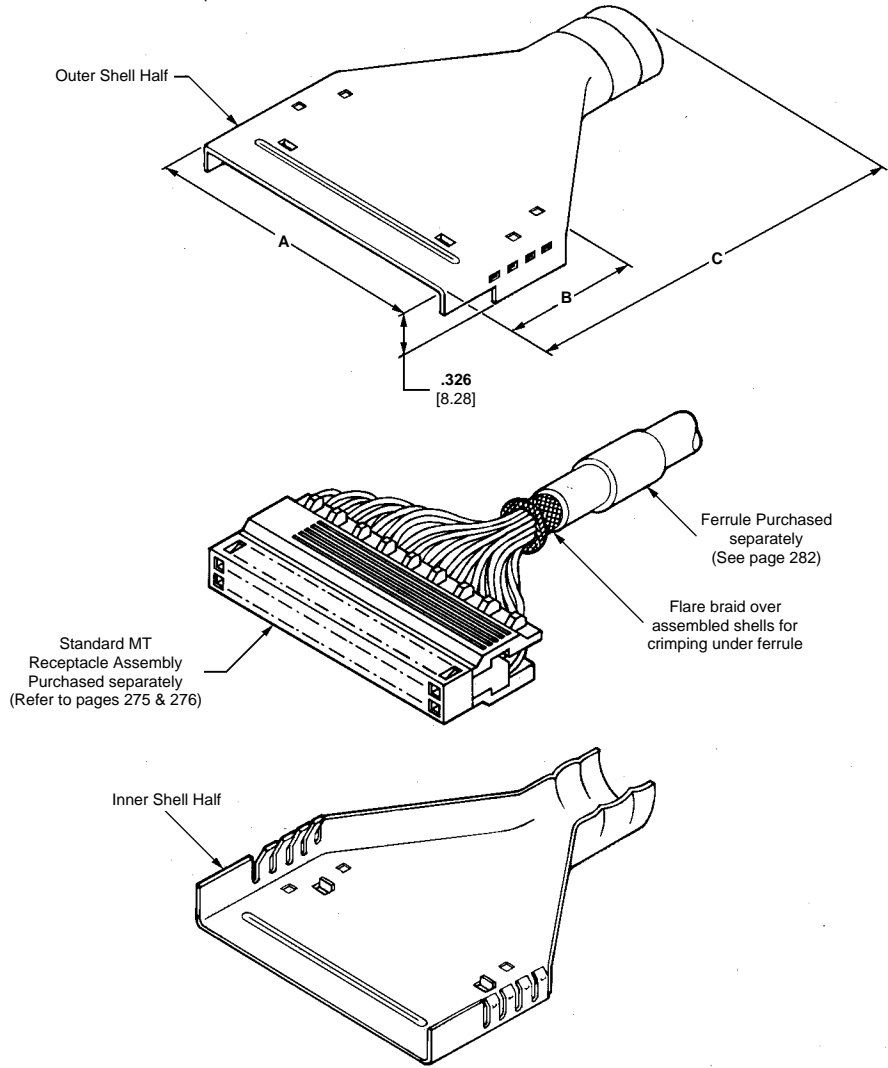
**Shield Ferrules**—page 282

**Technical Documents** (pages 295, 296):

**Product Specification**  
108-25015, 108-25018, 108-25030

**Application Specification**  
114-25032

**Instruction Sheet**  
408-6532



| No. of Pos. | Dimensions    |               |               | Part Nos.   |             |
|-------------|---------------|---------------|---------------|-------------|-------------|
|             | A             | B             | C             | Outer Shell | Inner Shell |
| 6           | .410 [10.41]  | .817 [20.75]  | 1.268 [32.21] | 102988-2    | 102987-6    |
| 10          | .610 [15.49]  | .817 [20.75]  | 1.667 [42.34] | 103137-2    | 103136-2    |
| 16          | .910 [23.11]  | .950 [24.13]  | 1.925 [48.90] | 103153-2    | 103152-2    |
| 26          | 1.410 [35.81] | .950 [24.13]  | 1.925 [48.90] | 103341-2    | 103340-2    |
| 40          | 2.110 [53.59] | 1.325 [33.66] | 2.468 [62.69] | 104272-1    | 104271-1    |
| 50          | 2.610 [66.29] | .950 [24.13]  | 2.468 [62.69] | 103158-2    | 103157-2    |

**Note:** Match shield size to number of connector positions.

5 MT Shielding Hardware and Accessories

**Shielding Hardware and Accessories for Double-Row MT Receptacle Assemblies** (Continued)

**Two-Piece Shields—Right-Angle Exit**

**Material and Finish:**

**Shell Halves**—Copper alloy, .020 [0.51] thick; pretinned .000030 [0.00076] min.

**Related Product Data:**

**Double-Row MT Receptacle Assemblies**—pages 275, 276

**Non-Polarizing Covers (Part No. Series 102541 with back cover 102536 or 102823)**—pages 277, 278

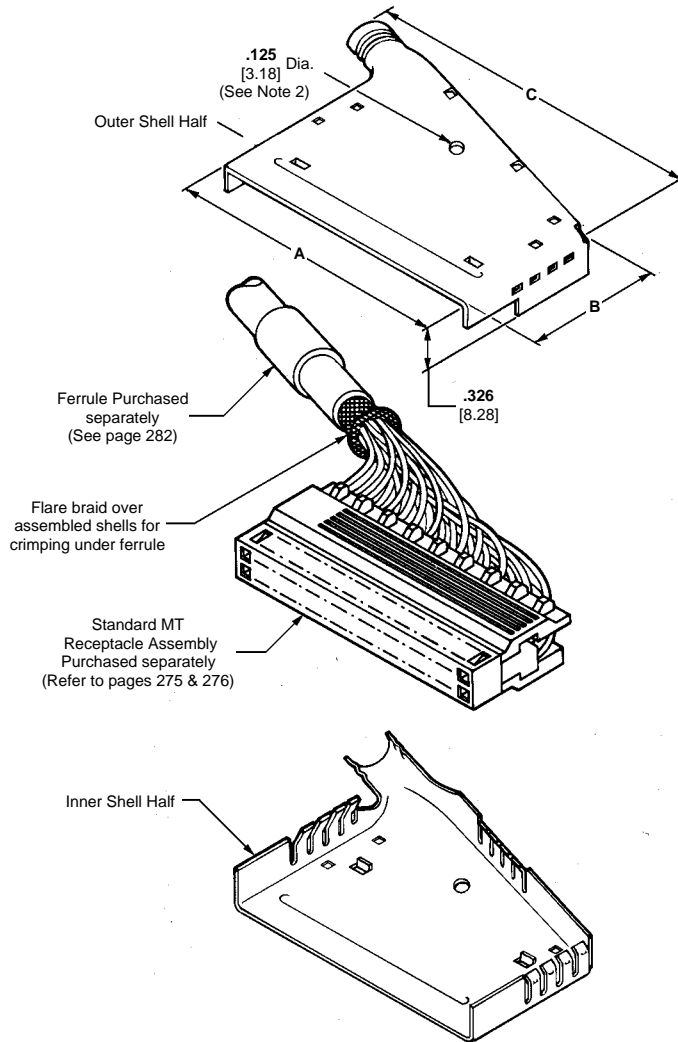
**Shield Ferrules**—page 282

**Technical Documents** (pages 295, 296):

**Product Specification** 108-25015, 108-25018, 108-25030

**Application Specification** 114-25032

**Instruction Sheet** 408-6532



| No. of Pos. | Dimensions    |               |               | Part Nos.   |             |
|-------------|---------------|---------------|---------------|-------------|-------------|
|             | A             | B             | C             | Outer Shell | Inner Shell |
| 18          | 1.010 [25.65] | 1.120 [28.45] | 1.413 [35.89] | 102784-2    | 102783-2    |
| 26          | 1.410 [35.81] | 1.166 [29.62] | 1.975 [50.17] | 103139-2    | 103138-2    |
| 40          | 2.110 [53.59] | 1.135 [28.83] | 2.633 [66.88] | 102786-2    | 102785-2    |
| 50          | 2.610 [66.29] | .983 [24.97]  | 3.133 [79.58] | 102788-2    | 102787-2    |
| 60          | 3.110 [78.99] | 1.118 [28.40] | 3.606 [91.59] | 103141-2    | 103140-2    |

**Notes:** 1. Match shield size to number of connector positions.  
2. Hole is provided in 26 through 60-position cable shields for application of optional cable tie pull ring after assembly.

**Shielding Hardware and Accessories for Double-Row MT Receptacle Assemblies** (Continued)

**Ferrules for Shielding Kits**

**Material and Finish:**

Soft copper, tin plated

**Related Product Data:**

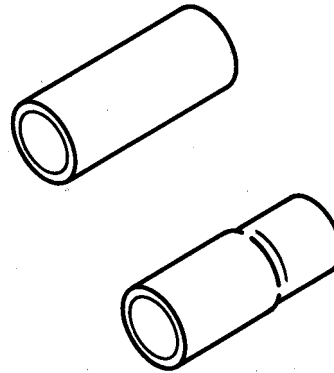
**Used with Shielding Kits**—  
pages 280, 281

**Technical Documents** (pages 295, 296):

**Product Specification** 108-25015, 108-25018, 108-25030

**Application Specification** 114-25032

**Instruction Sheet** 408-6532



**Application Tooling**



**AMP-O-LECTRIC Model "G" Terminating Machine**

**AMP Hand Tool 91410-1 (Die Set required, see table below)**

| No. of Positions | Straight-Exit Shields |          | Right-Angle Exit Shields |          | Cable Dia. Range          | Ferrule Part Number     | Applicator Die* Assembly Part No. | Hand Tool Die Sets |          |
|------------------|-----------------------|----------|--------------------------|----------|---------------------------|-------------------------|-----------------------------------|--------------------|----------|
|                  | Outer                 | Inner    | Outer                    | Inner    |                           |                         |                                   | Insulation         | Braid    |
| 6                | 102988-2              | 102987-6 | —                        | —        | 0.170-0.195 [4.32-4.95]   | 1-102903-8 <sup>a</sup> | 812665-1                          | 1-527116-9         | 527116-4 |
|                  |                       |          |                          |          | 0.200-0.250 [5.08-6.35]   | 102985-3                | 812665-2                          | 1-527116-8         | 527116-4 |
|                  |                       |          |                          |          | 0.190-0.240 [4.83-6.10]   | 1-102903-5              | 812665-6                          | 1-527116-7         | 527116-3 |
| 10               | 103137-2              | 103136-2 | —                        | —        | 0.250-0.300 [6.35-7.62]   | 102903-9                | 812665-5                          | 1-527116-6         | 527116-3 |
|                  |                       |          |                          |          | 0.310-0.360 [7.87-9.14]   | 102903-3                | 812665-4                          | 1-527116-5         | 527116-3 |
|                  |                       |          |                          |          | 0.370-0.420 [9.40-10.67]  | 102789-3                | 812665-3                          | 1-527116-4         | 527116-3 |
|                  |                       |          |                          |          | 0.190-0.240 [4.83-6.10]   | 1-102903-5              | 812665-6                          | 1-527116-7         | 527116-3 |
|                  |                       |          |                          |          | 0.250-0.300 [6.35-7.62]   | 102903-9                | 812665-5                          | 1-527116-6         | 527116-3 |
| 16               | 103153-2              | 103152-2 | —                        | —        | 0.310-0.360 [7.87-9.14]   | 102903-3                | 812665-4                          | 1-527116-5         | 527116-3 |
|                  |                       |          |                          |          | 0.370-0.420 [9.40-10.67]  | 102789-3                | 812665-3                          | 1-527116-4         | 527116-3 |
|                  |                       |          |                          |          | 0.190-0.240 [4.83-6.10]   | 1-102903-5              | 812665-6                          | 1-527116-7         | 527116-3 |
|                  |                       |          |                          |          | 0.250-0.300 [6.35-7.62]   | 102903-9                | 812665-5                          | 1-527116-6         | 527116-3 |
|                  |                       |          |                          |          | 0.310-0.360 [7.87-9.14]   | 102903-3                | 812665-4                          | 1-527116-5         | 527116-3 |
| 18               | —                     | —        | 102784-2                 | 102783-2 | 0.370-0.420 [9.40-10.67]  | 102789-3                | 812665-3                          | 1-527116-4         | 527116-3 |
|                  |                       |          |                          |          | 0.320-0.370 [8.13-9.40]   | 2-102903-4              | 812665-9                          | 1-527116-3         | 527116-2 |
|                  |                       |          |                          |          | 0.380-0.420 [9.65-10.67]  | 2-102903-1              | 812665-8                          | 1-527116-2         | 527116-2 |
|                  |                       |          |                          |          | 0.430-0.460 [10.92-11.68] | 102789-6                | 812665-7                          | 1-527116-1         | 527116-2 |
|                  |                       |          |                          |          | 0.320-0.370 [8.13-9.40]   | 2-102903-4              | 812665-9                          | 1-527116-3         | 527116-2 |
| 40               | 104272-1              | 104271-1 | 102786-2                 | 102785-2 | 0.380-0.420 [9.65-10.67]  | 2-102903-1              | 812665-8                          | 1-527116-2         | 527116-2 |
|                  |                       |          |                          |          | 0.430-0.460 [10.92-11.68] | 102789-6                | 812665-7                          | 1-527116-1         | 527116-2 |
|                  |                       |          |                          |          | 0.380-0.420 [9.65-10.67]  | 3-102903-0              | 1-812665-5                        | 1-527116-2         | 527116-1 |
|                  |                       |          |                          |          | 0.430-0.460 [10.92-11.68] | 2-102903-7              | 1-812665-4                        | 1-527116-1         | 527116-1 |
|                  |                       |          |                          |          | 0.470-0.520 [11.94-13.21] | 102789-9                | 1-812665-3                        | 1-527116-0         | 527116-1 |
| 50               | 103158-2              | 103157-2 | 102788-2                 | 102787-2 | 0.470-0.520 [11.94-13.21] | 3-102903-6              | 1-812665-8                        | —                  | —        |
|                  |                       |          |                          |          | 0.500-0.545 [12.70-13.84] | 3-102903-3              | 1-812665-7                        | —                  | —        |
|                  |                       |          |                          |          | 0.550-0.600 [13.97-15.24] | 1-102789-2              | 1-812665-6                        | —                  | —        |

\*For use with Model "K" machines. Call the Tyco Electronics Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (also shown on page 289), as well as other bench machines and fully automatic AMPOMATORlead making machines.

- Notes:** 1. Ferrules are used with shielding kits shown on pages 280 & 281, and are purchased separately.  
2. Individual anvils and crimpers also may be purchased separately.  
3. Ferrule Part Number 1-102903-8 also requires Spacer Part Number 527116-9.

5 MT Shielding Hardware and Accessories

**Shielded MT Headers for use with Shielded MT Receptacle Assemblies**

**AMPMODU Right-Angle Headers PC Board Mounted**

**Material and Finish:**

**Housing**—Black thermoplastic, flame retardant

**Posts**—Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

**Shield**—Copper alloy, .020 [0.51] thick; pretinned .000030 [0.00076] min.

**Related Product Data:**

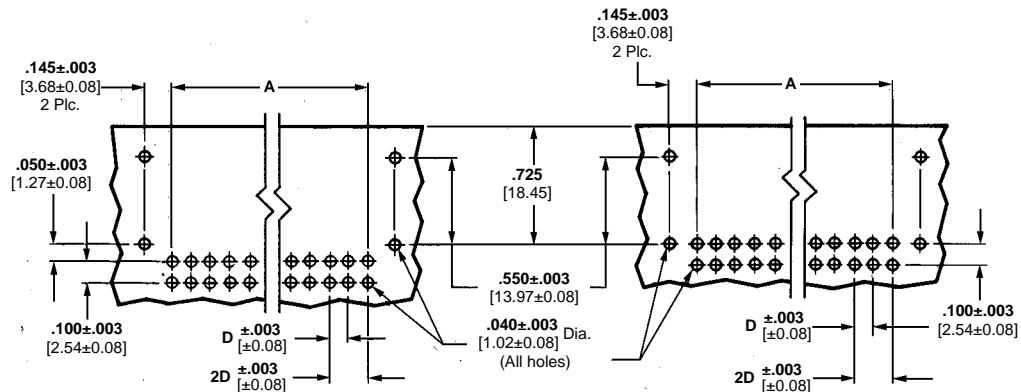
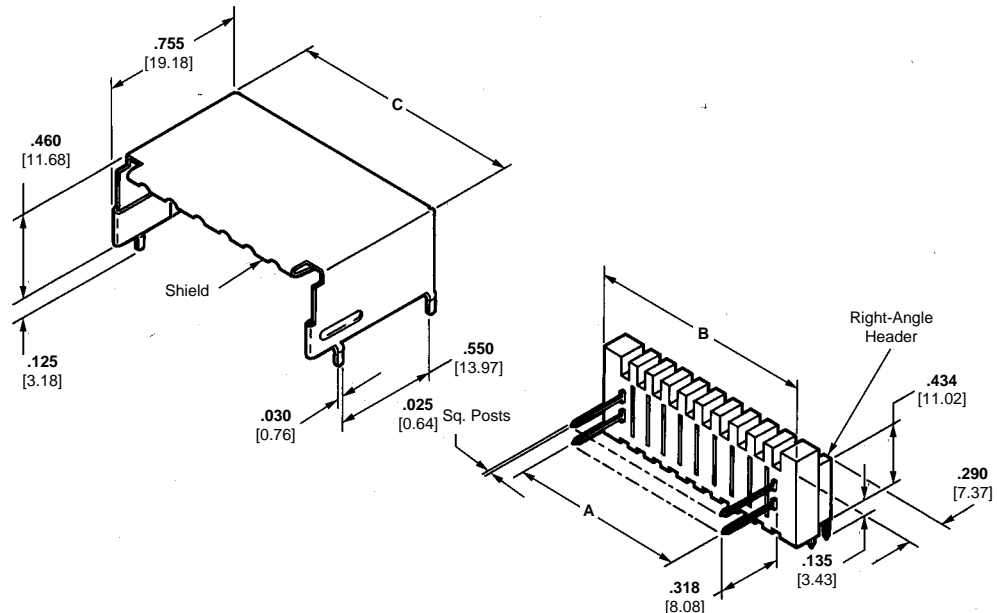
**Mating Connectors**—Double-Row MT Receptacle Assemblies with Shielding Hardware—pages 275-282

**Technical Documents** (pages 295, 296):

**Product Specification** 108-25015, 108-25018, 108-25030

**Application Specification** 114-25032.

**Instruction Sheet** 408-6532



**Recommended PC Board Hole Layout for 6, 8 and 10 Positions**

**Recommended PC Board Hole Layout for 16 thru 50 Positions**

D - Contact centerline is .100 [2.54]; ±.003 [0.08] tolerances not to accumulate within one connector pattern.

| No. of Pos. | Dimensions    |               |               | Header Part Nos. | Shield Part Nos. |
|-------------|---------------|---------------|---------------|------------------|------------------|
|             | A             | B             | C             |                  |                  |
| 6           | .200 [5.08]   | .430 [10.92]  | .510 [12.95]  | 102792-6         | 102991-1         |
| 8           | .300 [7.62]   | .530 [13.46]  | .610 [15.49]  | 102792-8         | 102991-2         |
| 10          | .400 [10.16]  | .630 [16.00]  | .710 [18.03]  | 102792-1         | 102791-2         |
| 16          | .700 [17.78]  | .930 [23.62]  | 1.010 [25.65] | 102792-7         | 102791-3         |
| 18          | .800 [20.32]  | 1.030 [26.16] | 1.110 [28.19] | 102792-2         | 102791-4         |
| 20          | .900 [22.86]  | 1.130 [28.70] | 1.210 [30.73] | 102792-5         | 1-102791-0       |
| 26          | 1.200 [30.48] | 1.430 [36.32] | 1.510 [38.35] | 102792-9         | 102791-1         |
| 50          | 2.400 [60.96] | 2.630 [66.80] | 2.710 [68.83] | 102792-4         | 102791-8         |

**Replacement MT Receptacle Contacts**

**Insulation Displacement Contacts**

**Material and Finish:**

Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Related Product Data:**

**Performance Characteristics**—page 274

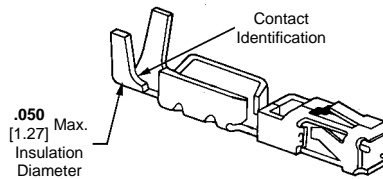
**Application Tooling**—pages 290-293

**Technical Documents** (pages 295, 296):

**Product Specification** 108-25015, 108-25018, 108-25030

**Application Specification** 114-25032

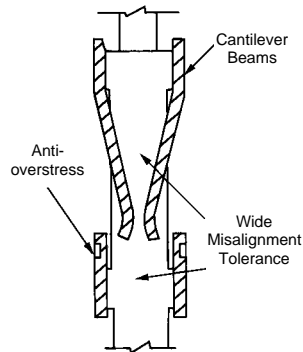
**Instruction Sheet** 408-6532



| Wire Size Range |                    | Standard Pressure Receptacle |          | High Pressure Receptacle |          |
|-----------------|--------------------|------------------------------|----------|--------------------------|----------|
| AWG             | [mm <sup>2</sup> ] | Contact Ident.               | Part No. | Contact Ident.           | Part No. |
| 30-26           | 0.05-0.15          | 1                            | 102395-3 | 4                        | 102641-3 |
| 26-22           | 0.12-0.3           | 2                            | 102399-3 | 5                        | 102642-3 |
| 22-20           | 0.3-0.6            | 3                            | 102449-3 | —                        | —        |

**Note:** Termination tooling for MT receptacle insulation displacement contacts is shown on pages 290 thru 293.

MT receptacle contacts incorporate the following features.



The MT receptacle contact cross-section is primarily rectangular, with rounded corners. Two integral cantilever beams contact the mating square male posts. Deflection of these spring members is limited by anti-overstress and excessive permanent deformation is prevented. This feature allows a wide range for tolerance of misalignment of mating contacts.

The configuration of the receptacle completely encloses the spring members helping to prevent damage during handling and assembly, and makes the system compatible with automatic application techniques.

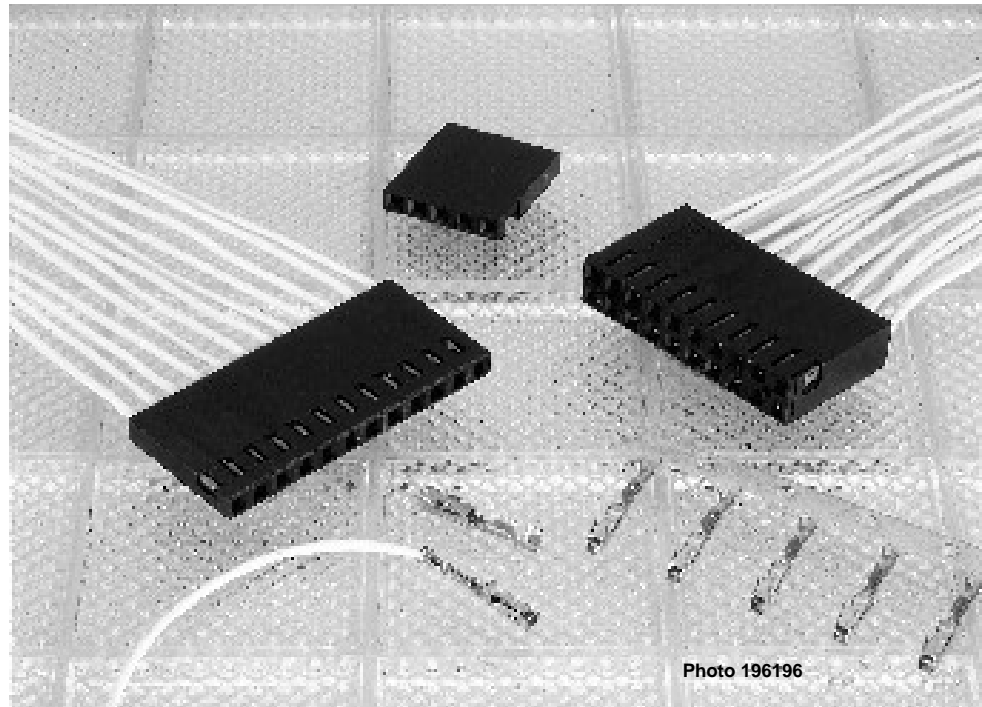


**Extraction/Lance Reset Tool No. 843477-3**

**AMP Mini-Tandem Spring Receptacle Housings and Contacts**

**Product Facts**

- Individual contacts mate with .025 [0.64] sq. posts, .125 [3.18] long
- Crimp snap-in contacts accept 32-22 AWG [0.03-0.32 mm<sup>2</sup>] wire
- Retention latch provides for positive installation
- No insertion tool required
- High durability design provides long life
- Available with .000015 [0.00038] or .000030 [0.00076] thick gold inlay in contact areas, or bright tin plated
- Closed-entry housings
- Mini-contact box size: .060 [1.52] sq.
- Mini-Tandem Spring Housings can be stacked on .100 [2.54] centers in either direction
- Mini-Tandem Spring Housings are Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189



AMP Mini-Tandem Spring Receptacle Contacts are designed to mate with .025 [0.64] posts. When used individually, they will mate with posts as short as .125 [3.18] and when used in a housing, they will mate with .140 [3.55] long posts. These versatile contacts may be used for interconnecting posted pc panels, I/O wiring and cross-connecting pin arrays.

The receptacle contact's box configuration provides for long contact life with controlled contact mating forces which minimize wear. An external retention spring facilitates quick assembly and provides firm seating in a contact housing.

AMP Mini-Tandem Spring Receptacle Contacts are used in single- or double-row housings with .100 [2.54] centerline spacing. Single-row housings can be converted into double-row connectors on .100 x .200 [2.54 x 5.08] centers with the use of stacking clips.

Mini-Tandem Spring Housings can be stacked side-by-side or end-to-end on .100 [2.54] centers.

**Specifications**

**Contact Current Rating**—3 amperes

**Termination Resistance**—  
12 milliohms (max.)—gold plated contacts  
18 milliohms (max.)—tin plated contacts

**Durability**—Ref. AMP Product Specification 108-25031

**AMP Mini-Tandem Spring Housings, Single-Row**

**.100 [2.54] Centerline**

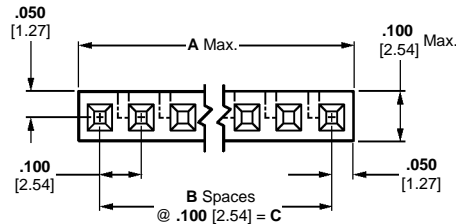
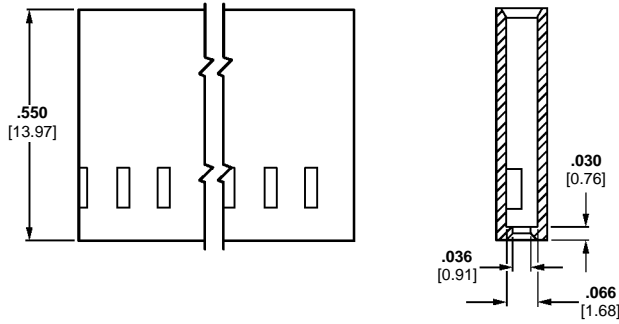


**Material**—Black glass-filled polyester, 94V-0 rated

**Technical Documents** (page 295):

**Product Specification** 108-25031

**Application Specification** 114-25021

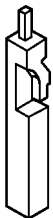


Minimum mating post length is .140 [3.55].

| No. of Pos. | Dimensions    |    |               | Housing Part No. |
|-------------|---------------|----|---------------|------------------|
|             | A             | B  | C             |                  |
| 2           | .200 [5.08]   | 1  | .100 [2.54]   | 530554-1         |
| 3           | .300 [7.62]   | 2  | .200 [5.08]   | 530554-2         |
| 4           | .400 [10.16]  | 3  | .300 [7.62]   | 530554-3         |
| 5           | .500 [12.70]  | 4  | .400 [10.16]  | 530554-4         |
| 7           | .700 [17.78]  | 6  | .600 [15.24]  | 530554-6         |
| 8           | .800 [20.32]  | 7  | .700 [17.78]  | 530554-7         |
| 10          | 1.000 [25.40] | 9  | .900 [22.86]  | 530554-9         |
| 12          | 1.200 [30.48] | 11 | 1.100 [27.94] | 1-530554-1       |
| 16          | 1.600 [40.64] | 15 | 1.500 [38.10] | 1-530554-5       |
| 18          | 1.800 [45.72] | 17 | 1.700 [43.18] | 1-530554-7       |
| 20          | 2.000 [50.80] | 19 | 1.900 [48.26] | 1-530554-9       |
| 22          | 2.200 [55.88] | 21 | 2.100 [53.34] | 2-530554-1       |

**Note:** AMP Mini-Tandem Spring contacts for use in these housings are shown on page 288.

**Material**—Natural color nylon, 94V-2 rated



**Keying Plug**  
Part No. 531226-1  
(Plugs directly into housing)



**AMP Mini-Tandem Spring Housings, Double-Row**

**.100 [2.54] Centerline**

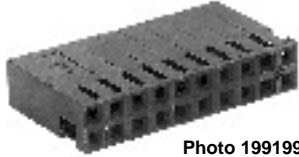


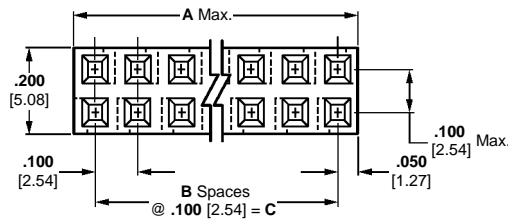
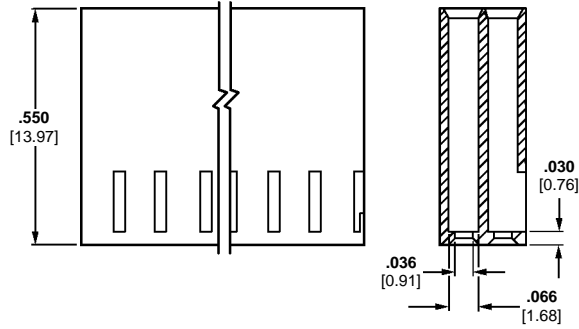
Photo 199199

**Material**—Black glass-filled polyester, 94V-0 rated\*

**Technical Documents** (page 294):

**Product Specification** 108-25031

**Application Specification** 114-25021



Minimum mating post length is .140 [3.55].

**Material**—Natural color nylon, 94V-2 rated



**Keying Plug**  
Part No. 531226-1  
(Plugs directly into housing)

| No. of Pos. | Dimensions    |   |              | Housing Part No. |
|-------------|---------------|---|--------------|------------------|
|             | A             | B | C            |                  |
| 4           | .200 [5.08]   | 1 | .100 [2.54]  | 530902-5         |
| 6           | .300 [7.62]   | 2 | .200 [5.08]  | 530902-1         |
| 8           | .400 [10.16]  | 3 | .300 [7.62]  | 530902-6         |
| 10          | .500 [12.70]  | 4 | .400 [10.16] | 530902-2         |
| 12          | .600 [15.24]  | 5 | .500 [12.70] | 2-530902-0       |
| 16          | .800 [20.32]  | 7 | .700 [17.78] | 3-530902-0       |
| 20          | 1.000 [25.40] | 9 | .900 [22.86] | 530902-8         |

**Note:** AMP Mini-Tandem Spring contacts for use in these housings are shown on page 288.

\*Consult Tyco Electronics for specific UL recognition.

**AMP Mini-Tandem Spring Contacts**

**Receptacle Contacts**

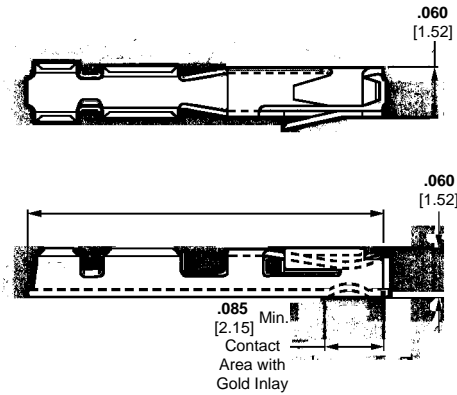
**Material and Finish:**

Phosphor bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold inlay on contact area, tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold inlay on contact area, tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] min. bright tin over .000030 [0.00076] nickel on entire contact



**Technical Documents (page 294):**

**Product Specification** 108-25031

**Application Specification**  
114-25021

**Low Pressure Contacts**

| Wire Size Range |                 | Ins. Dia. Range          | Finish    | Contact Part No. |             | Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine |
|-----------------|-----------------|--------------------------|-----------|------------------|-------------|---|---|
| AWG             | mm <sup>2</sup> |                          |           | Strip Form       | Loose Piece |   |   |
| 26-22           | 0.14-0.32       | .036-.054<br>[0.64-1.37] | Plating A | 531216-3         | 531216-4    | 466819-2  | 466943-1  |
|                 |                 |                          | Plating B | 531216-1         | 531216-2    |   |   |

**Standard Pressure Contacts**

| Wire Size Range |                 | Ins. Dia. Range          | Finish    | Contact Part No. |             | Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine |
|-----------------|-----------------|--------------------------|-----------|------------------|-------------|---|---|
| AWG             | mm <sup>2</sup> |                          |           | Strip Form       | Loose Piece |   |   |
| 32-28           | 0.03-0.08       | .025-.054<br>[0.64-1.37] | Plating B | 530901-2         | 530901-3    | 466723-1  | 466952-1  |
|                 |                 |                          | Plating C | 530901-6         | 530901-7    |   |   |
|                 |                 |                          | Plating D | 530901-4         | 530901-5    |   |   |
| 26-22           | 0.14-0.32       | .036-.054<br>[0.91-1.37] | Plating B | 530553-4         | 530553-5    | 466819-2  | 466943-1  |
|                 |                 |                          | Plating C | 530553-6         | 530553-7    |   |   |
|                 |                 |                          | Plating D | 530553-2         | —           |   |   |

**High Pressure Contacts**

| Wire Size Range |                 | Ins. Dia. Range       | Finish    | Contact Part Number |             | Miniature Applicator for AMP-O-LECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine |
|-----------------|-----------------|-----------------------|-----------|---------------------|-------------|---|---|
| AWG             | mm <sup>2</sup> |                       |           | Strip Form          | Loose Piece |   |   |
| 32-28           | 0.03-0.08       | .025-.054 [0.64-1.37] | Plating B | 531225-6            | —           | 466723-1  | 466952-1  |
| 26-22           | 0.14-0.32       | .036-.054 [0.91-1.37] | Plating B | 531224-6            | 531224-7    | 466819-2  | 466943-1  |

\*For use with AMP-O-LECTRIC Model "K" machines. Call the Tooling/Technical Assistance Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-LECTRIC Model "G" machines (shown on page 289), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

- Notes: 1. Mini-Tandem Spring Receptacle Contacts are for use only in the housings shown on pages 286 & 287. They cannot be used in AMPMODU Mod IV Housings.  
2. Use Hand Tool No. 91540-1 for crimping loose-piece receptacles to all wire sizes listed above.  
3. Application tooling is described on pages 289 & 293.