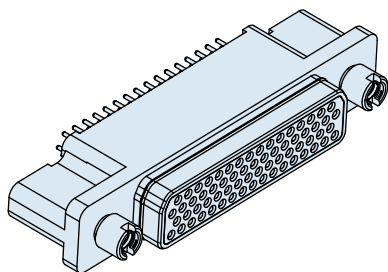


# Series 79 Micro-Crimp

## Section F: Straight Printed Circuit Board Connectors



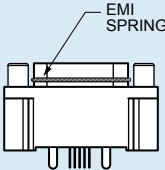
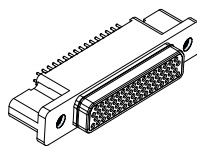
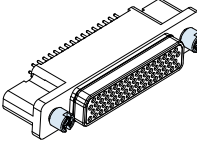
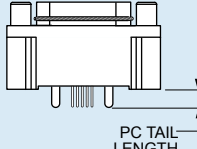
### PLUGS WITH SOCKET CONTACTS, STRAIGHT PCB TERMINATION, 790-044S



Free-standing, rugged vertical mount headers feature gold-plated PC tail contacts for thru-hole printed circuit board termination. Contacts are permanently installed and are sealed with epoxy. Shells are aluminum alloy. Threaded board mounting holes and integral standoffs simplify installation. Available in 29 different contact arrangements, these connectors feature size #23 signal contacts along with #16 and #12 power contacts for up to 23 amps current rating. Optional EMI spring improves shell-to-shell conductivity and shielding performance. Stainless steel jackposts are non-removable.

#### HOW TO ORDER

Sample Part Number

| 790-044S                                                                                                            | D-15                                          | MT                                                                                                                                                                                                                                                                                                                                                                        | E                                                                                                                                               | P                                                                                                                                                                                                                                           | B                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                                                                                                         | Shell Size - Insert Arr.                      | Shell Finish                                                                                                                                                                                                                                                                                                                                                              | EMI Spring                                                                                                                                      | Hardware Option                                                                                                                                                                                                                             | PC Tail Length                                                                                                                                                      |
| <b>790-044S</b><br>Plug with Straight Thru-Hole PC Tail Contacts for Termination to Backplanes or Flexible Circuits | See Table 1 for Available Insert Arrangements | <b>M</b><br>Electroless Nickel<br><i>general purpose applications</i><br><br><b>MT</b><br>Nickel-PTFE<br>1000 Hour Grey™<br><i>maximum corrosion protection and durability (non-reflective grey)</i><br><br><b>ZNU</b><br>Zinc-Nickel with Black Chromate<br><i>tactical applications (non-reflective black)</i><br><br>Additional shell finishes are listed on page C-9. | <b>E</b><br>EMI Spring<br><br><b>N</b><br>No Spring<br><br> | <br><b>N</b><br>No Hardware<br><br><br><b>P</b><br>Female Jackpost | <b>A</b><br>.125 Inch (3.2 mm.)<br><br><b>B</b><br>.250 inch (6.4 mm.)<br><br> |

#### SPECIFICATIONS

|                                 |                                           |
|---------------------------------|-------------------------------------------|
| Current Rating                  | #23 5 AMPS, #16 13 A., #12 23 A.          |
| Dielectric Withstanding Voltage | #23 500 VAC RMS, #12 and #16 1800 VAC RMS |
| Insulation Resistance           | 5000 megohms minimum                      |
| Operating Temperature           | -65° C. to +150° C.                       |
| Shock                           | 300 g.                                    |
| Vibration                       | 37 g.                                     |

#### MATERIALS AND FINISHES

|             |                                                                |
|-------------|----------------------------------------------------------------|
| Shell       | Aluminum alloy                                                 |
| Contacts    | Copper alloy, 50 microinches gold plated, stainless steel hood |
| Insulator   | Liquid crystal polymer (LCP)                                   |
| Jackposts   | 300 series stainless steel                                     |
| Encapsulant | Epoxy                                                          |

Dimensions in inches (millimeters) and are subject to change without notice.

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## Section F: Straight Printed Circuit Board Connectors

Table 1 Contact Arrangements

| Layout | Contact Quantity |     |     | Face View |
|--------|------------------|-----|-----|-----------|
|        | #23              | #16 | #12 |           |
| A-5    | 5                |     |     |           |
| B-2P2  | 2                |     |     |           |
| B-9    | 9                |     |     |           |
| C-13   | 13               |     |     |           |
| D-15   | 15               |     |     |           |
| D-3P3  | 3                |     |     |           |
| D-7P2  | 5                | 2   |     |           |
| E-11P2 | 9                | 2   |     |           |
| E-19   | 19               |     |     |           |
| E-7P3  | 4                | 3   |     |           |
| F-15P2 | 13               | 2   |     |           |
| F-23   | 23               |     |     |           |
| F-5P5  | 5                |     |     |           |
| G-33   | 33               |     |     |           |
| H-10P4 | 6                | 4   |     |           |
| H-29P7 | 22               | 7   |     |           |
| H-36P2 | 34               | 2   |     |           |
| H-54P2 | 52               | 2   |     |           |
| H-5P5  |                  | 5   |     |           |
| H-66   | 66               |     |     |           |
| J-17P4 | 13               | 4   |     |           |
| J-25P2 | 23               | 2   |     |           |
| J-33   | 33               |     |     |           |
| J-7P7  | 7                |     |     |           |
| K-27P4 | 23               | 4   |     |           |
| K-35P2 | 33               | 2   |     |           |
| K-43   | 43               |     |     |           |
| K-9P9  | 9                |     |     |           |
| L-6P6  |                  | 6   |     |           |

CROSS-SECTIONAL VIEW OF 790-044S

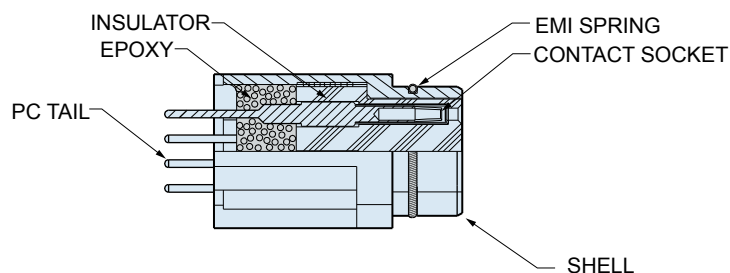
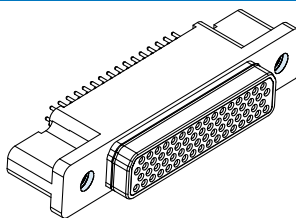
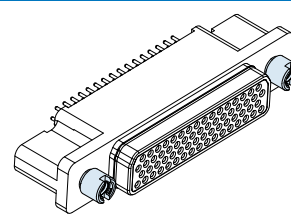


TABLE 2 HARDWARE OPTION

**N****No Mating Hardware**

Connector is supplied with threaded holes. Shell sizes H and L have #6-32 threads, other sizes have #4-40 threads. Thread depth is .150" (3.8).

**P****Jackposts**

Connector is supplied with non-removable stainless steel jackposts. Shell sizes H and L have #4-40 UNC thread, other sizes have #2-56 thread.

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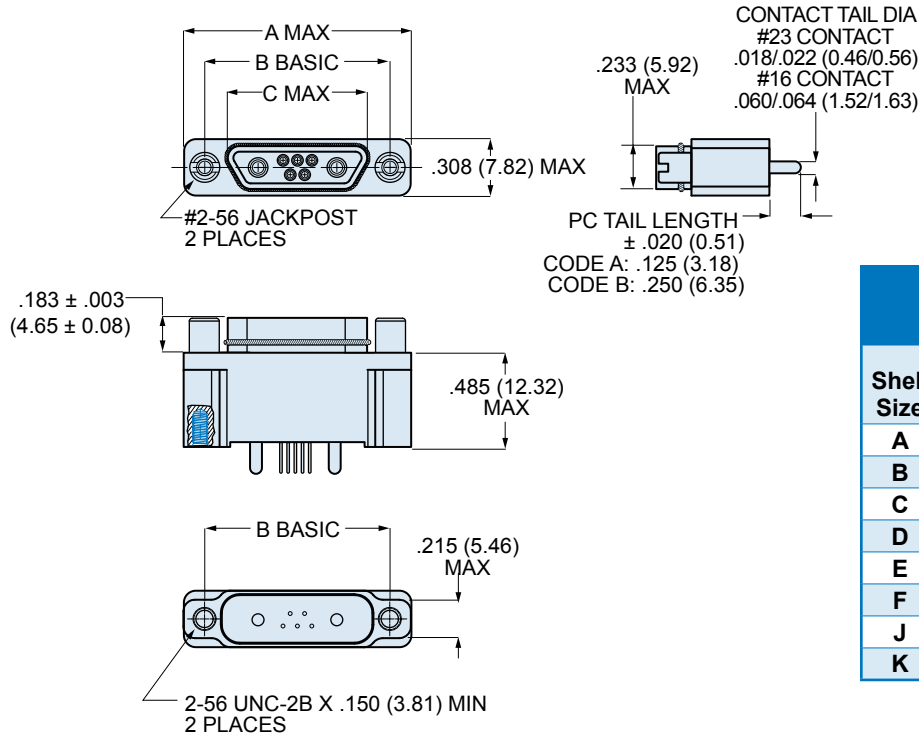
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## Section F: Straight Printed Circuit Board Connectors



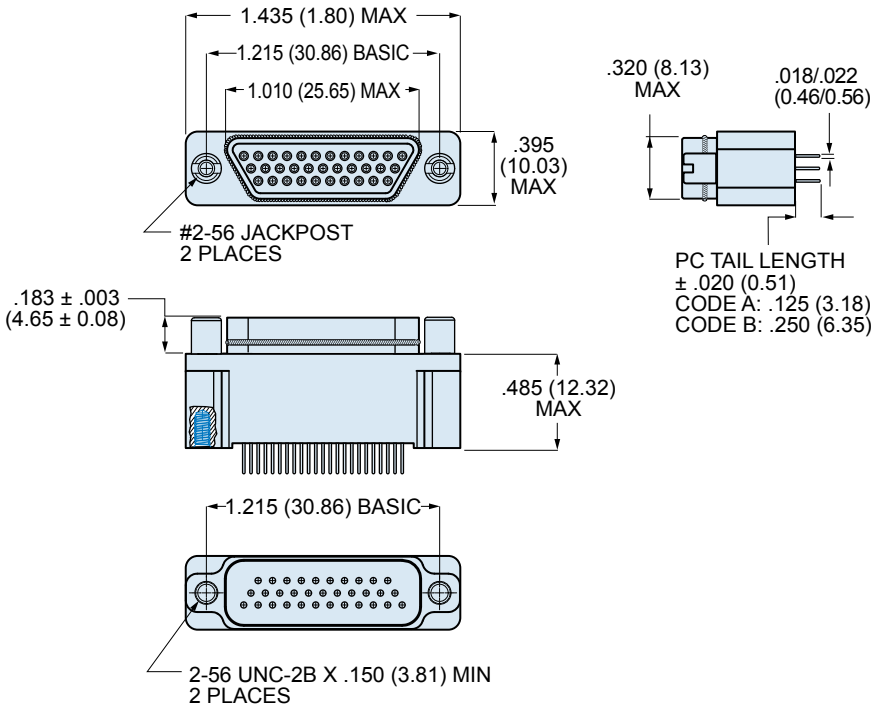
### 790-044S SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS



790-044S DIMENSIONS  
SHELL SIZE A-G, J, K

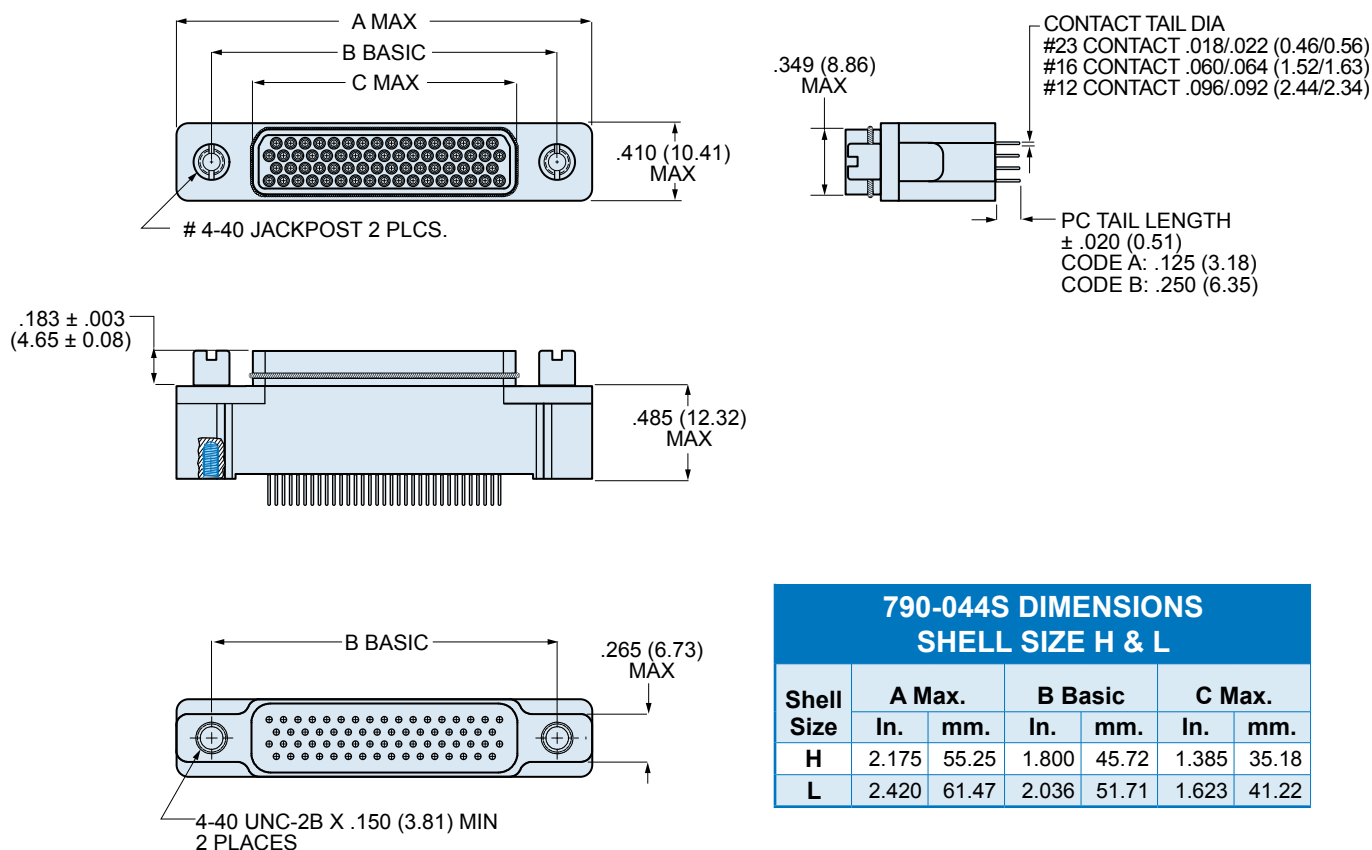
| Shell Size | A Max. |       | B Basic |       | C Max. |       |
|------------|--------|-------|---------|-------|--------|-------|
|            | In.    | mm.   | In.     | mm.   | In.    | mm.   |
| A          | .785   | 19.94 | .565    | 14.35 | .335   | 8.51  |
| B          | .935   | 23.75 | .715    | 18.16 | .485   | 12.32 |
| C          | 1.085  | 27.56 | .865    | 21.97 | .635   | 16.13 |
| D          | 1.185  | 30.10 | .965    | 24.51 | .735   | 18.67 |
| E          | 1.335  | 33.91 | 1.115   | 28.32 | .885   | 22.48 |
| F          | 1.485  | 37.72 | 1.265   | 32.13 | 1.035  | 26.29 |
| J          | 1.845  | 46.86 | 1.615   | 41.02 | 1.390  | 35.61 |
| K          | 2.240  | 56.90 | 2.015   | 51.18 | 1.795  | 45.59 |

### 790-044S SHELL SIZE G DIMENSIONS



Dimensions in inches (millimeters) and are subject to change without notice.

### 790-044S SHELL SIZE H & L DIMENSIONS



**790-044S DIMENSIONS  
SHELL SIZE H & L**

| Shell Size | A Max. |       | B Basic |       | C Max. |       |
|------------|--------|-------|---------|-------|--------|-------|
|            | In.    | mm.   | In.     | mm.   | In.    | mm.   |
| H          | 2.175  | 55.25 | 1.800   | 45.72 | 1.385  | 35.18 |
| L          | 2.420  | 61.47 | 2.036   | 51.71 | 1.623  | 41.22 |

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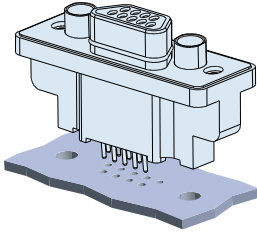
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# Series 79 Micro-Crimp Section F: Straight Printed Circuit Board Connectors



## PCB Hole Patterns for 790-029S and 790-044S Plugs



This section contains printed circuit board footprints for vertical mounted Series 79 plugs. The contact identification numbers are shown for the connector mounting side of the PC board. Contact tails are gold over nickel plated.

| Contact Size | PC Tail Diameter |                |
|--------------|------------------|----------------|
|              | Ø Diameter In.   | Ø Diameter mm. |
| #23          | .018-.022        | 0.46-0.56      |
| #16          | .060-.064        | 1.52-1.63      |
| #12          | .092-.096        | 2.34-2.44      |

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB |
|-------------|--------------------------------|
| A-5         |                                |
| B-2P2       |                                |
| B-9         |                                |
| C-13        |                                |

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## Section F: Straight Printed Circuit Board Connectors

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB |
|-------------|--------------------------------|
| D-15        |                                |
| D-3P3       |                                |
| D-7P2       |                                |
| E-11P2      |                                |
| E-19        |                                |

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**Glenair**

PCB  
Connectors

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB |
|-------------|--------------------------------|
| E-7P3       |                                |
| F-15P2      |                                |
| F-23        |                                |
| F-5P5       |                                |
| G-33        |                                |

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## Section F: Straight Printed Circuit Board Connectors

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB |
|-------------|--------------------------------|
| H-10P4      |                                |
| H-29P7      |                                |
| H-36P2      |                                |
| H-54P2      |                                |
| H-5P5       |                                |

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## Section F: Straight Printed Circuit Board Connectors

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PCB  
Connectors

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB |
|-------------|--------------------------------|
| H-66        |                                |
| J-17P4      |                                |
| J-25P2      |                                |
| J-33        |                                |
| J-7P7       |                                |

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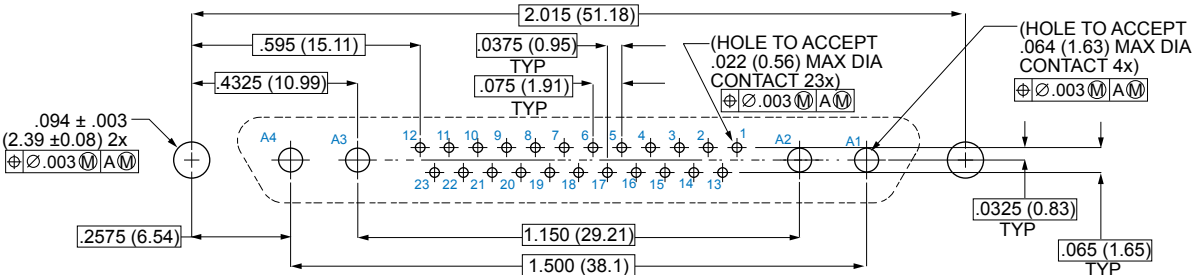
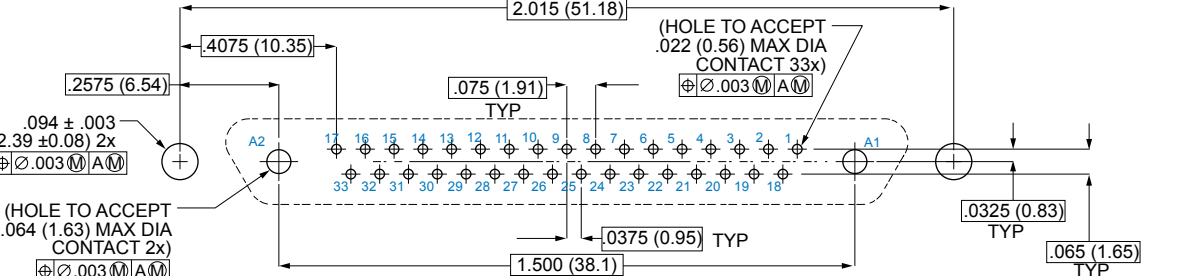
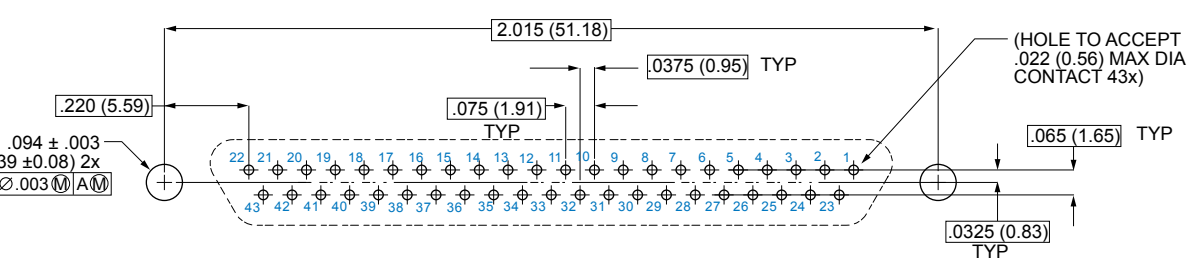
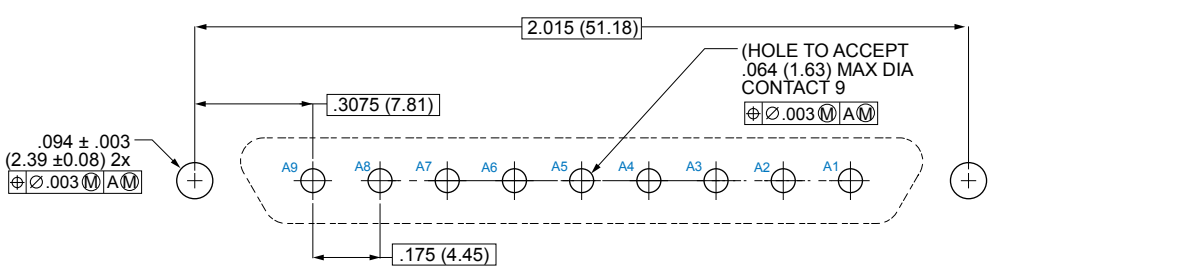
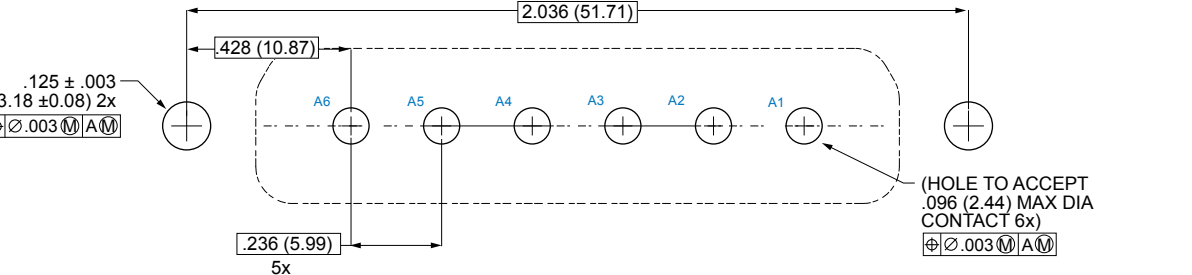
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# Series 79 Micro-Crimp

## Section F: Straight Printed Circuit Board Connectors

### 790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

| Insert Arr. | Component Mounting Side of PCB                                                       |
|-------------|--------------------------------------------------------------------------------------|
| K-27P4      |    |
| K-35P2      |    |
| K-43        |   |
| K-9P9       |  |
| L-6P6       |  |

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