

# MICRO-CRIMP RECTANGULAR CONNECTORS

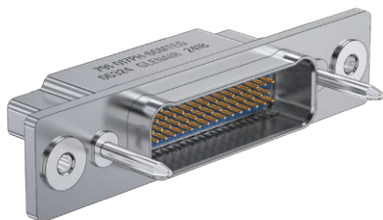
## Series 791 Scoop-Proof

**SERIES™**  
**791**  
Scoop-Proof

### 791-017

### Panel Receptacle, Float Mounting

- ◆ Crimp, rear-release
- ◆ Float mount blind mate
- ◆ Pin contacts



791-017 panel mount receptacle has snap-in, rear-release M39029-type crimp contacts. Machined aluminum shell has stainless steel float bushings. High-density size 23 contacts are on .075 inch (1.9mm) centers and accept AWG 22-28 wire. Size 16 and size 12 cavities accept power contacts (supplied with connector) or coaxial RF contacts (ordered separately). Optional nickel-plated beryllium copper grounding spring. Shell has threaded holes for attaching EMI banding adapter (799-016, sold separately).

- Aerospace-grade ultraminiature connector with rugged scoop-proof duo-lobe shell
- Environmental
- 42 layouts with up to 153 contacts
- M39029-type crimp contacts

#### HOW TO ORDER

Sample Part Number

**791-017P** L-78 MT E G B

|                                |                                                                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Basic Part Number</b>       | <b>791-017P</b> Panel Receptacle, Float Mount, Pin Contacts                                                                                  |
| <b>Shell Size-Insert Arr.</b>  | See "Insert Arrangements" Table                                                                                                              |
| <b>Shell Finish</b>            | <b>M</b> Electroless Nickel<br><b>MT</b> Nickel / PTFE<br><b>NF</b> Olive Drab Cadmium<br><b>TZ</b> Tin-Zinc<br><b>ZR</b> Black Zinc-Nickel  |
| <b>EMI Spring</b>              | <b>E</b> EMI Spring<br><b>N</b> No EMI Spring                                                                                                |
| <b>Hardware Option Table 1</b> | <b>B</b> Guide Bushings <i>For blind mating</i><br><b>G</b> Guide Pins <i>For blind mating</i><br><b>N</b> No Hardware <i>Threaded holes</i> |
| <b>Polarization Key Option</b> | Enter Letter Designator for Position <b>A, B, C, D, E,</b> or <b>F</b> per Mod Code 555 (see page B-8 for details) <b>Omit</b> for none      |

#### CONSTRUCTION

- Contacts: Copper alloy, gold over nickel finish
- Shell: Aluminum
- Insulators: High performance thermoplastic
- Wire grommet, face seal: Fluorosilicone/silicone blend
- Contact retaining clip: Beryllium copper, unplated
- Hardware: Stainless steel

#### RATINGS

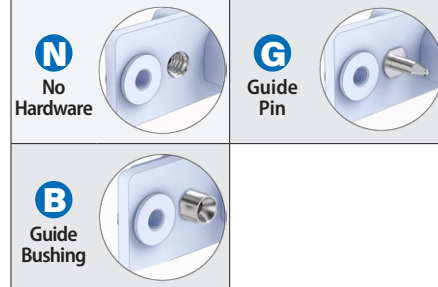
- Voltage (DWV): size 23 contacts 750 VAC, size 8, 12 and 16: 1800 VAC
- Current: #23 5A, #16 13A, #12 23A, #8 46A
- Operating temperature: -65 to +150 °C
- Durability: 500 mating cycles
- Shock: 300 g
- Vibration: 20 g random
- Altitude immersion: 75,000 feet
- Ingress protection: IP67

#### Application Note

##### Panel Cutouts

See page B-54 for recommended panel cutout dimensions for float mount connectors.

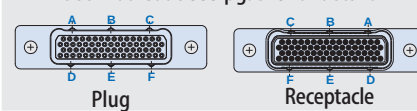
#### TABLE 1 HARDWARE OPTIONS



#### Application Note

##### Polarization Key Positions

See Mod Code 555 pg. B-8 for details



#### Application Note

##### EMI Banding Backshell 799-016

See page F-32 for backshell ordering information.

SERIES 791 SCOOP-PROOF

| INSERT ARRANGEMENTS         |                                              |                 |     |     |    |
|-----------------------------|----------------------------------------------|-----------------|-----|-----|----|
| FULL COMPLEMENT OF CONTACTS | #8, #12 OR #16 CONTACTS PURCHASED SEPARATELY | No. of Contacts |     |     |    |
|                             |                                              | #23             | #16 | #12 | #8 |
| A-5                         |                                              | 5               |     |     |    |
| B-2P2                       | B-2W2                                        |                 | 2   |     |    |
| B-9                         |                                              | 9               |     |     |    |
| C-13                        |                                              | 13              |     |     |    |
| D-15                        |                                              | 15              |     |     |    |
| D-3P3                       | D-3W3                                        |                 | 3   |     |    |
| D-7P2                       | D-7W2                                        | 5               | 2   |     |    |
| E-11P2                      | E-11W2                                       | 9               | 2   |     |    |
| E-19                        |                                              | 19              |     |     |    |
| E-7P3                       | E-7W3                                        | 4               | 3   |     |    |
| F-14P3                      | F-14W3                                       | 11              | 3   |     |    |
| F-15P2                      | F-15W2                                       | 13              | 2   |     |    |
| F-23                        |                                              | 23              |     |     |    |
| F-5P5                       | F-5W5                                        |                 | 5   |     |    |
| G-13P2                      | G-13W2                                       | 11              |     | 2   |    |
| G-21P1                      | G-21W1                                       | 20              |     | 1   |    |
| G-3P3                       | G-3W3                                        |                 |     | 3   |    |
| G-33                        |                                              | 33              |     |     |    |
| H-10P4                      | H-10W4                                       | 6               |     | 4   |    |
| H-29P7                      | H-29W7                                       | 22              | 7   |     |    |
| H-36P2                      | H-36W2                                       | 34              |     | 2   |    |
| H-51P1                      | H-51W1                                       | 50              |     | 1   |    |
| H-54P2                      | H-54W2                                       | 52              | 2   |     |    |
| H-5P5                       | H-5W5                                        |                 |     | 5   |    |
| H-66                        |                                              | 66              |     |     |    |
| J-17P4                      | J-17W4                                       | 13              | 4   |     |    |
| J-25P2                      | J-25W2                                       | 23              | 2   |     |    |
| J-33                        |                                              | 33              |     |     |    |
| J-7P7                       | J-7W7                                        |                 | 7   |     |    |
| K-27P4                      | K-27W4                                       | 23              | 4   |     |    |
| K-35P2                      | K-35W2                                       | 33              | 2   |     |    |
| K-43                        |                                              | 43              |     |     |    |
| K-9P9                       | K-9W9                                        |                 | 9   |     |    |
| L-22P4                      | L-22W4                                       | 18              |     | 4   |    |
| L-48P2                      | L-48W2                                       | 46              |     | 2   |    |
| L-6P6                       | L-6W6                                        |                 |     | 6   |    |
| L-78                        |                                              | 78              |     |     |    |
| M-17P17                     | M-17W17                                      |                 | 17  |     |    |
| M-102                       |                                              | 102             |     |     |    |
| M-4P4                       | M-4W4                                        |                 |     |     | 4  |
| N-13P13                     | N-13W13                                      |                 |     | 13  |    |
| N-153                       |                                              | 153             |     |     |    |

# MICRO-CRIMP RECTANGULAR CONNECTORS

## Series 791 Scoop-Proof

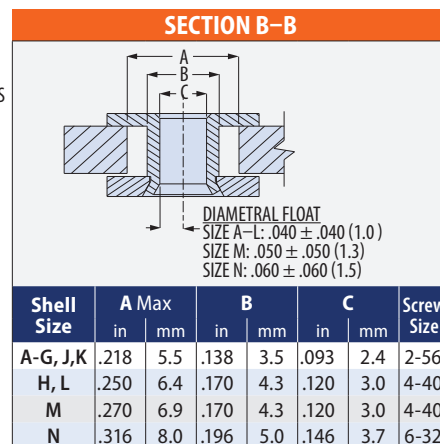
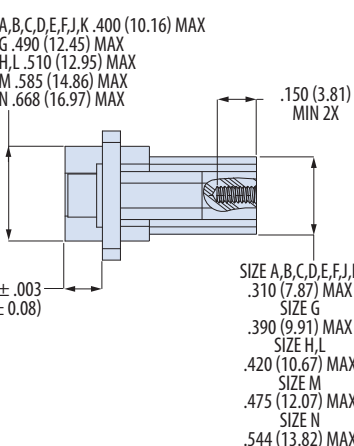
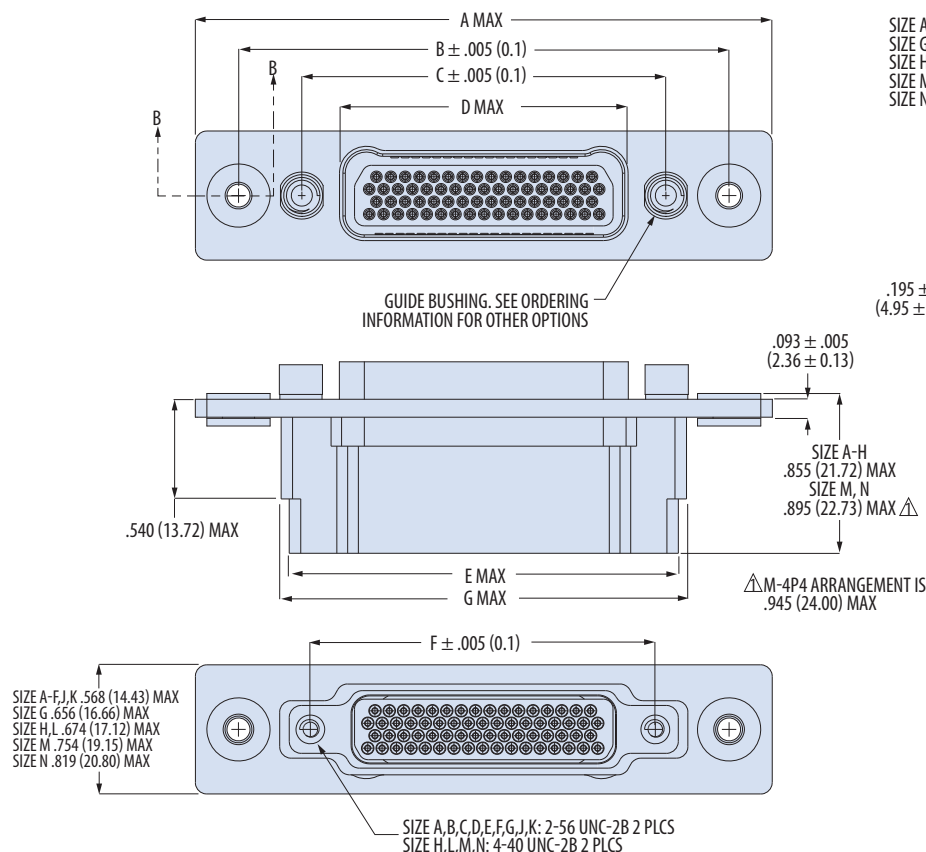


### 791-017

### Panel Receptacle, Float Mounting

- ◆ Crimp, rear-release
- ◆ Float mount blind mate
- ◆ Pin contacts

SERIES 791 SCOOP-PROOF



| Shell Size | A Max |       | B ± .005 (0.1) |      | C ± .005 (0.1) |      | D Max |      | E Max |      | F ± .005 (0.1) |      | G Max |      |
|------------|-------|-------|----------------|------|----------------|------|-------|------|-------|------|----------------|------|-------|------|
|            | in    | mm    | in             | mm   | in             | mm   | in    | mm   | in    | mm   | in             | mm   | in    | mm   |
| A          | 1.785 | 45.3  | 1.365          | 34.7 | .750           | 19.1 | .490  | 12.4 | .760  | 19.3 | .565           | 14.4 | .965  | 24.5 |
| B          | 1.935 | 49.1  | 1.515          | 38.5 | .900           | 22.9 | .640  | 16.3 | .910  | 23.1 | .715           | 18.2 | 1.115 | 28.3 |
| C          | 2.085 | 53.0  | 1.665          | 42.3 | 1.050          | 26.7 | .790  | 20.1 | 1.060 | 26.9 | .865           | 22.0 | 1.265 | 32.1 |
| D          | 2.160 | 54.9  | 1.740          | 44.2 | 1.125          | 28.6 | .865  | 22.0 | 1.160 | 29.5 | .965           | 24.5 | 1.340 | 34.0 |
| E          | 2.310 | 58.7  | 1.890          | 48.0 | 1.275          | 32.4 | 1.015 | 25.8 | 1.310 | 33.3 | 1.115          | 28.3 | 1.490 | 37.8 |
| F          | 2.460 | 62.5  | 2.040          | 51.8 | 1.425          | 36.2 | 1.165 | 29.6 | 1.460 | 37.1 | 1.265          | 32.1 | 1.640 | 41.7 |
| G          | 2.421 | 61.5  | 2.003          | 50.9 | 1.388          | 35.3 | 1.122 | 28.5 | 1.410 | 35.8 | 1.215          | 30.9 | 1.615 | 41.0 |
| H          | 3.010 | 76.5  | 2.560          | 65.0 | 1.900          | 48.3 | 1.516 | 38.5 | 2.045 | 51.9 | 1.800          | 45.7 | 2.130 | 54.1 |
| J          | 2.835 | 72.0  | 2.415          | 61.3 | 1.800          | 45.7 | 1.540 | 39.1 | 1.810 | 46.0 | 1.615          | 41.0 | 2.015 | 51.2 |
| K          | 3.210 | 81.5  | 2.790          | 70.9 | 2.175          | 55.2 | 1.915 | 48.6 | 2.210 | 56.1 | 2.015          | 51.2 | 2.390 | 60.7 |
| L          | 3.246 | 82.4  | 2.796          | 71.0 | 2.136          | 54.3 | 1.752 | 44.5 | 2.281 | 57.9 | 2.036          | 51.7 | 2.366 | 60.1 |
| M          | 3.442 | 87.4  | 2.940          | 74.7 | 2.200          | 55.9 | 1.815 | 46.1 | 2.445 | 62.1 | 2.200          | 55.9 | 2.470 | 62.7 |
| N          | 4.092 | 103.9 | 3.500          | 88.9 | 2.600          | 66.0 | 2.205 | 56.0 | 2.645 | 67.2 | 2.350          | 59.7 | 2.645 | 67.2 |

#### CRIMP CONTACTS AND TOOLS

Contacts are bulk packed with connector. Spare contacts are not included with connector and should be ordered separately if required. See "Contacts and Tools" section for additional information.

| Contact Size | Pin Contact Part No. | AWG Wire Size | Installing and Removal Tool | Tool    | Positioner | Die Assembly |
|--------------|----------------------|---------------|-----------------------------|---------|------------|--------------|
| 23           | 809-001              | 22 - 28       | 809-088                     | 809-015 | 809-005    | —            |
| 16           | 809-110              | 16 - 20       | 809-131                     | 809-136 | 809-137    | —            |
| 12           | 809-112              | 12 - 14       | 809-132                     | 809-136 | 809-137    | —            |
| 8            | 850-014F             | 8             | 859-049                     | 859-025 | 859-046    | 859-026      |

