

MICRO-CRIMP RECTANGULAR CONNECTORS

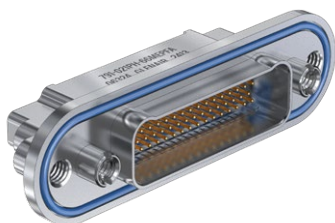
Series 791 Scoop-Proof



791-021

Panel Receptacle, Straight PC Tails

- ◆ Straight PCB termination
- ◆ Rear panel mount
- ◆ Pin contacts



791-021P receptacle has straight PC tails. For rear panel mounting. Mounting flange has blind threaded holes and O-ring for ingress protection. Contact tails are sealed with epoxy. Machined aluminum shell has integral standoff and threaded holes for attachment to PC board. Optional ground spring. Fluorosilicone face seal provides environmental protection. Available in 40 insert arrangements with up to 102 contacts.

- Aerospace-grade ultraminiature connector with scoop-proof duo-lobe shell
- Epoxy-sealed PCB terminals
- 40 insert arrangements with M39029-type contacts
- Environmental

| INSERT ARRANGEMENTS | | | | |
|---------------------|-----------------|-----|-----|----|
| Insert Arrangement | No. of Contacts | | | |
| | #23 | #16 | #12 | #8 |
| 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-14P3 | 11 | 3 | | |
| F-15P2 | 13 | 2 | | |
| F-23 | 23 | | | |
| F-5P5 | | 5 | | |
| G-13P2 | 11 | | 2 | |
| G-21P1 | 20 | | 1 | |
| G-3P3 | | | 3 | |
| G-33 | 33 | | | |
| H-10P4 | 6 | | 4 | |
| H-29P7 | 22 | 7 | | |
| H-36P2 | 34 | | 2 | |
| H-51P1 | 50 | | 1 | |
| 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-22P4 | 18 | | 4 | |
| L-48P2 | 46 | | 2 | |
| L-6P6 | | | 6 | |
| L-78 | 78 | | | |
| M-17P17 | | 17 | | |
| M-102 | 102 | | | |
| M-4P4 | | | | 4 |

| HOW TO ORDER | |
|-------------------------|--|
| Sample Part Number | 791-021P K-43 M E G C A B |
| Basic Part Number | 791-021P Panel Receptacle, Pin Contacts, Straight PCB Tails |
| Shell Size-Insert Arr. | See "Insert Arrangements" Table |
| Shell Finish | M Electroless Nickel MT Nickel / PTFE NF Olive Drab Cadmium TZ Tin-Zinc ZR Black Zinc-Nickel |
| EMI Spring | E EMI Spring N No EMI Spring |
| Hardware Option Table 1 | B Guide Bushings For blind mating G Guide Pins For blind mating N No Hardware Threaded holes P Female Jackposts |
| Panel O-Ring | N No O-ring C Conductive Fluorosilicone O-ring F Fluorosilicone O-ring |
| PC Tail Length | A .125 (3.2) B .250 (6.4) C .375 (9.5) |
| Polarization Key Option | Enter Letter Designator for Position A, B, C, D, E , or F per Mod Code 555 (see page B-8 for details) Omit for none |

| TABLE 1 HARDWARE OPTION | | | |
|-------------------------|--------------------------|--------------------|------------------------|
| N No Hardware | P Female Jackpost | G Guide Pin | B Guide Bushing |

| 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 |

| CONSTRUCTION |
|---|
| ■ Contacts: Copper alloy, gold over nickel finish |
| ■ Shell: Aluminum |
| ■ Insulator: High performance thermoplastic |
| ■ Ground spring: BeCu, electroless nickel plated |
| ■ Face seal: Fluorosilicone/silicone blend |
| ■ O-ring: Code F- fluorosilicone, Code C- conductive fluorosilicone |
| ■ Hardware: Stainless steel |
| ■ Encapsulant: Epoxy |

SERIES 791 SCOOP-PROOF

MICRO-CRIMP RECTANGULAR CONNECTORS

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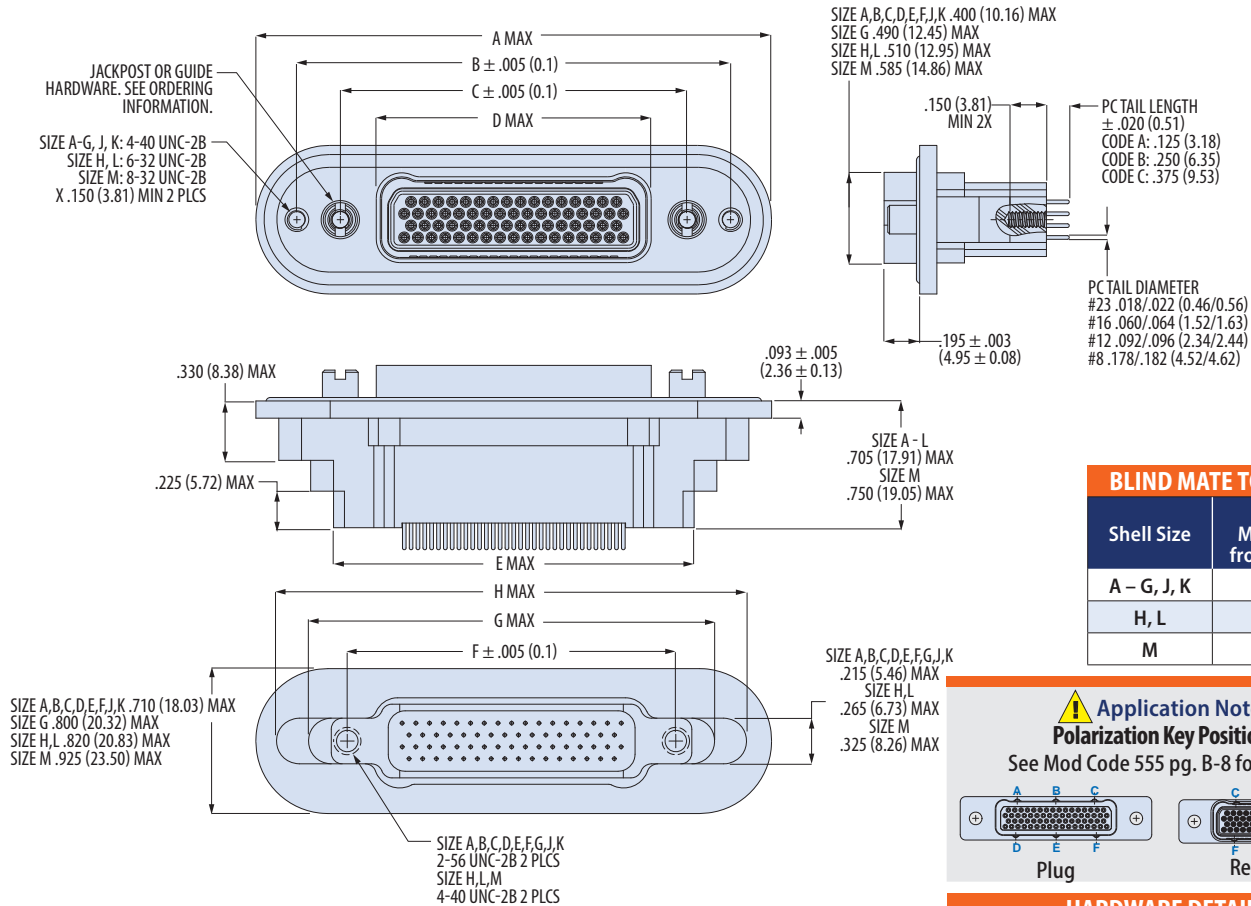


791-021

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- ◆ Straight PCB termination
- ◆ Rear panel mount
- ◆ Pin contacts

SERIES 791 SCOOP-PROOF



| BLIND MATE TOLERANCES | |
|-----------------------|--|
| Shell Size | Allowable Misalignment from Centerline |
| A - G, J, K | ± .030 (0.8) |
| H, L | ± .040 (1.0) |
| M | ± .050 (1.3) |

| Shell Size | A Max | | B ± .005 (0.1) | | C ± .005 (0.1) | | D Max | | E Max | | F ± .005 (0.1) | | G Max | | H Max | |
|------------|-------|------|----------------|------|----------------|------|-------|------|-------|------|----------------|------|-------|------|-------|------|
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm |
| A | 1.565 | 39.8 | 1.150 | 29.2 | .750 | 19.1 | .490 | 12.4 | .760 | 19.3 | .565 | 14.4 | .960 | 24.4 | 1.345 | 34.2 |
| B | 1.715 | 43.6 | 1.300 | 33.0 | .900 | 22.9 | .640 | 16.3 | .910 | 23.1 | .715 | 18.2 | 1.110 | 28.2 | 1.495 | 38.0 |
| C | 1.865 | 47.4 | 1.450 | 36.8 | 1.050 | 26.7 | .790 | 20.1 | 1.060 | 26.9 | .865 | 22.0 | 1.260 | 32.0 | 1.645 | 41.8 |
| D | 1.940 | 49.3 | 1.525 | 38.7 | 1.125 | 28.6 | .865 | 22.0 | 1.160 | 29.5 | .965 | 24.5 | 1.360 | 34.5 | 1.745 | 44.3 |
| E | 2.090 | 53.1 | 1.675 | 42.5 | 1.275 | 32.4 | 1.015 | 25.8 | 1.310 | 33.3 | 1.115 | 28.3 | 1.510 | 38.4 | 1.895 | 48.1 |
| F | 2.240 | 56.9 | 1.825 | 46.4 | 1.425 | 36.2 | 1.165 | 29.6 | 1.460 | 37.1 | 1.265 | 32.1 | 1.660 | 42.2 | 2.045 | 51.9 |
| G | 2.200 | 55.9 | 1.785 | 45.3 | 1.388 | 35.3 | 1.122 | 28.5 | 1.410 | 35.8 | 1.215 | 30.9 | 1.633 | 41.5 | 1.983 | 50.4 |
| H | 2.835 | 72.0 | 2.375 | 60.3 | 1.900 | 48.3 | 1.516 | 38.5 | 2.045 | 51.9 | 1.800 | 45.7 | 2.240 | 56.9 | 2.590 | 65.8 |
| J | 2.615 | 66.4 | 2.200 | 55.9 | 1.800 | 45.7 | 1.540 | 39.1 | 1.810 | 46.0 | 1.615 | 41.0 | 2.010 | 51.1 | 2.395 | 60.8 |
| K | 2.990 | 75.9 | 2.575 | 65.4 | 2.175 | 55.2 | 1.915 | 48.6 | 2.210 | 56.1 | 2.015 | 51.2 | 2.410 | 61.2 | 2.795 | 71.0 |
| L | 3.075 | 78.1 | 2.611 | 66.3 | 2.136 | 54.3 | 1.752 | 44.5 | 2.281 | 57.9 | 2.036 | 51.7 | 2.476 | 62.9 | 2.826 | 71.8 |
| M | 3.345 | 85.0 | 2.824 | 71.7 | 2.200 | 55.9 | 1.815 | 46.1 | 2.445 | 62.1 | 2.200 | 55.9 | 2.650 | 67.3 | 3.090 | 78.5 |

Application Note
Polarization Key Positions
 See Mod Code 555 pg. B-8 for details

Plug Receptacle

HARDWARE DETAILS

N No Hardware Threaded holes.
 Size A-G, J, K: 6-32 UNC-2B
 H, L: 8-32 UNC-2B
 M: 10-32 UNF-2B
 150 (3.8) min. depth

P Female Jackposts
 Jackposts are non-removable.
 Size A-G, J, K: 4-40 UNC-2B
 H, L: 6-32 UNC-2B
 M: 8-32 UNC-2B

G Guide Pins
 Guide pins for blind mate applications. Non-removable. Requires guide bushing (B) on mating plug.

B Guide Bushings
 Guide sockets for blind mate applications. Non-removable. Requires guide pins (G) on mating plug.

Application Note
PCB Footprints
 See Section **G** for PC board layouts.

Application Note
Panel Cutout
 See page B-53 for recommended panel cutout dimensions for connectors.