



# 790-029S Straight PCB Terminated Panel Mount Plugs, Socket Contacts How To Order

## 790-029S Straight PCB Panel Mount Plugs

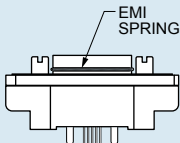
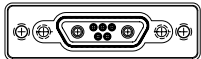
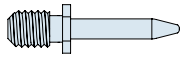
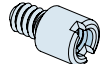
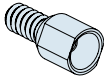
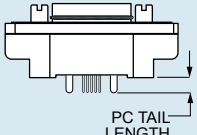
### SOCKET CONTACTS WITH STRAIGHT PCB TERMINATION



Lightweight, rugged vertical mount headers feature gold-plated PC tail contacts for thru-hole printed circuit board termination. 790-029S connectors are designed for rear-panel mounting and are supplied with conductive panel gaskets. 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

| 790-029S                                                                                                                     | K-43                                          | M                                                                                                                                                                                                                                                                                                                                                                      | E                                                                                                                                                                                                                                                        | P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                                                                                                                  | Shell Size - Insert Arrangements              | Shell Finish                                                                                                                                                                                                                                                                                                                                                           | EMI Spring                                                                                                                                                                                                                                               | Hardware Option                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PC Tail Length                                                                                                                                                                        |
| <b>790-029S</b><br>Rear Panel Mounted Plug with Straight 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><i>1000 Hour Grey™ 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>Note:</b><br>EMI Spring is not compatible with chromate finishes including cadmium and zinc-nickel | <br><b>N</b><br>No Hardware<br><br><br><b>G</b><br>Guide Pin<br><br><br><b>P</b><br>Female Jackpost<br><br><br><b>S</b><br>Female Guide Socket | <b>A</b><br>.125 Inch (3.2 mm.)<br><br><b>B</b><br>.250 inch (6.4 mm.)<br><br><br>PC TAIL LENGTH |

#### 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, with stainless steel hoods |
| Insulator    | Liquid crystal polymer (LCP)                                         |
| Hardware     | 300 series stainless steel                                           |
| Panel Gasket | Fluorosilicone, conductive                                           |
| Encapsulant  | Epoxy                                                                |

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

# 790-029S

## Straight PCB Terminated Panel Mount Plugs, Socket Contacts

### How To Order



Series 79  
Straight  
PCB 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 |  |           |
| L-78      | 78               |   |  |           |
| M-102     | 102              |   |  |           |

CROSS-SECTIONAL VIEW OF 790-029S

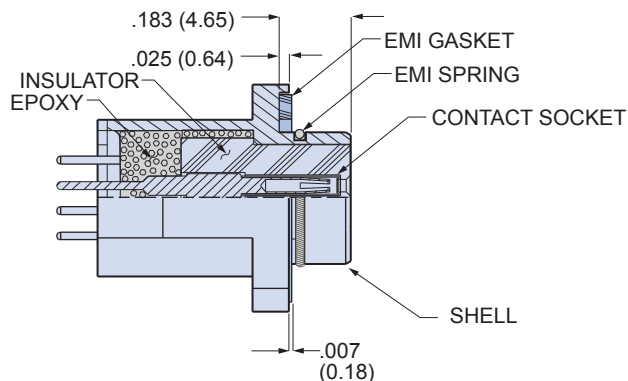
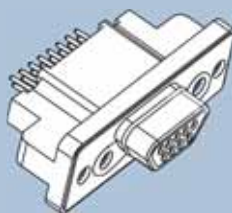


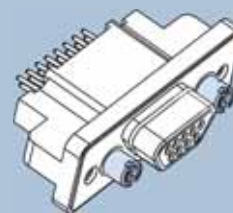
TABLE 2 HARDWARE OPTION



**N**

#### No Mating Hardware

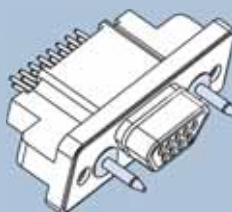
Connector is supplied with threaded holes. Shell sizes H and L have #6-32 threads, other sizes have #4-40 threads. Thread depth is .150" (3.8).



**P**

#### Jackposts

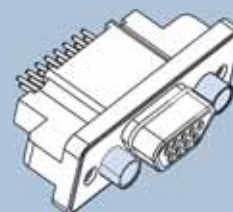
Connector is supplied with non-removable stainless steel jackposts. Shell sizes H and L have #4-40 UNC thread, other sizes have #2-56 thread.



**G**

#### Guide Pins

Connector is supplied with stainless steel non-removable guide pins. Mates with type "S" guide sockets on corresponding receptacle connector.



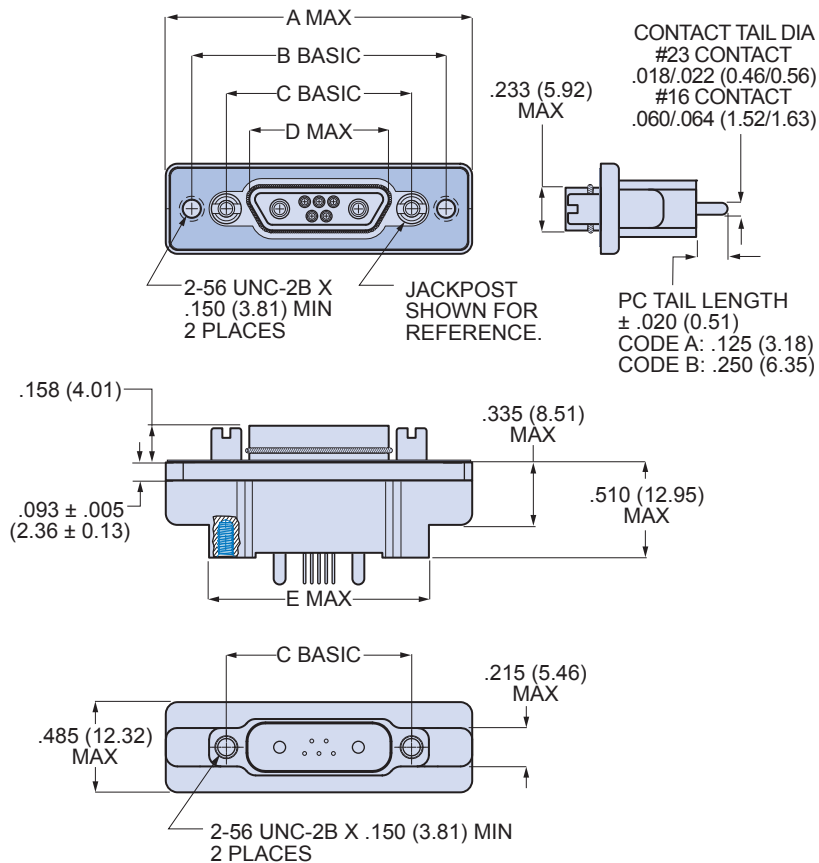
**S**

#### Guide Sockets

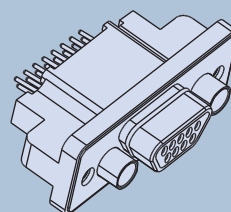
Connector is supplied with stainless steel non-removable bushings. Mates with type "G" guide pins on corresponding receptacle connector.

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

## 790-029S Shell Size A, B, C, D, E, F, J and K Dimensions



### BLIND MATE



SHELL SIZES A, B, C, D, E, F, J, K  
+/- .030 (0.76) ALLOWABLE  
MISALIGNMENT FROM CENTERLINE

F

**790-029S SIZE A-F, J, K DIMENSIONS**

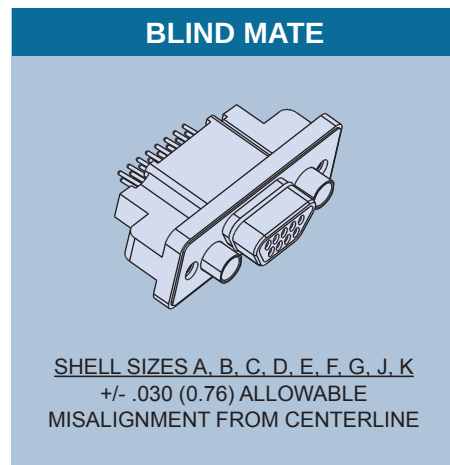
| Shell Size | A Max. |       | B Basic |       | C Basic |       | D Max. |       | E Max. |       |
|------------|--------|-------|---------|-------|---------|-------|--------|-------|--------|-------|
|            | In.    | mm.   | In.     | mm.   | In.     | mm.   | In.    | mm.   | In.    | mm.   |
| <b>A</b>   | 1.211  | 30.76 | .925    | 23.50 | .565    | 14.35 | .335   | 8.51  | .760   | 19.30 |
| <b>B</b>   | 1.361  | 34.57 | 1.075   | 27.31 | .715    | 18.16 | .485   | 12.32 | .910   | 21.11 |
| <b>C</b>   | 1.511  | 38.38 | 1.225   | 31.12 | .865    | 21.97 | .635   | 16.13 | 1.060  | 26.92 |
| <b>D</b>   | 1.611  | 40.92 | 1.325   | 33.66 | .965    | 24.51 | .735   | 18.67 | 1.160  | 29.46 |
| <b>E</b>   | 1.761  | 44.73 | 1.475   | 37.47 | 1.115   | 28.32 | .885   | 22.48 | 1.310  | 33.27 |
| <b>F</b>   | 1.911  | 48.54 | 1.625   | 41.28 | 1.265   | 32.13 | 1.035  | 26.29 | 1.460  | 37.08 |
| <b>J</b>   | 2.261  | 57.43 | 1.975   | 50.17 | 1.615   | 41.02 | 1.390  | 35.31 | 1.810  | 45.97 |
| <b>K</b>   | 2.661  | 67.59 | 2.375   | 60.33 | 2.015   | 51.18 | 1.795  | 45.59 | 2.210  | 56.13 |

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



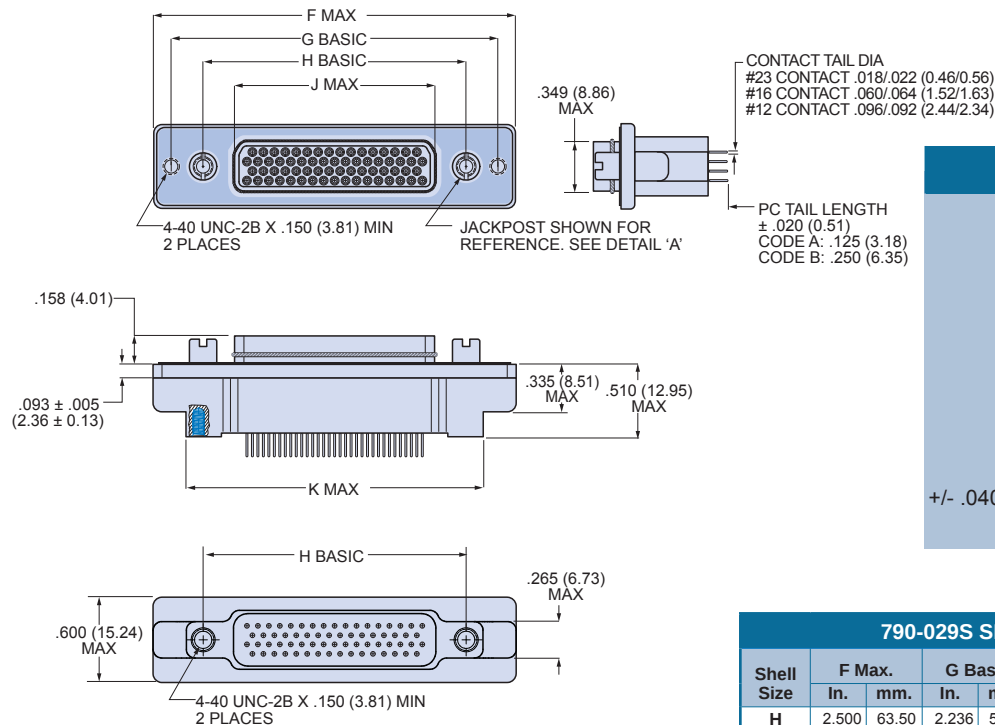
Glennair®

## F

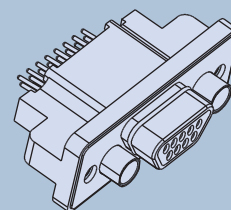


**E-Mail: [sales@glenair.com](mailto:sales@glenair.com)**

## 790-029S Shell Size H & L Dimensions



### BLIND MATE

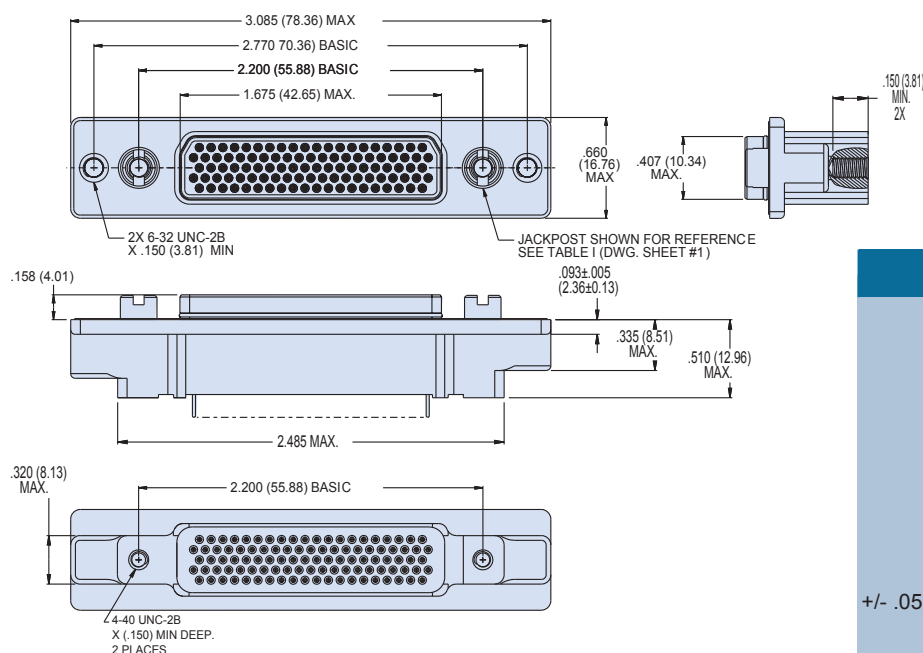


**SHELL SIZES H, L**  
+/- .040 (1.02) ALLOWABLE MISALIGNMENT  
FROM CENTERLINE

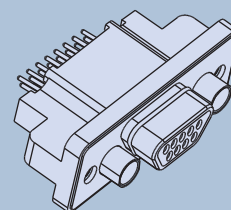
790-029S SIZE H & L DIMENSIONS

| Shell Size | F Max. |       | G Basic |       | H Basic |       | J Max. |       | K Max. |       |
|------------|--------|-------|---------|-------|---------|-------|--------|-------|--------|-------|
|            | In.    | mm.   | In.     | mm.   | In.     | mm.   | In.    | mm.   | In.    | mm.   |
| H          | 2.500  | 63.50 | 2.236   | 56.79 | 1.800   | 45.72 | 1.385  | 35.18 | 2.045  | 51.94 |
| L          | 2.736  | 69.49 | 2.472   | 62.79 | 2.036   | 51.71 | 1.623  | 41.22 | 2.281  | 57.94 |

## 790-029S Shell Size M Dimensions



### BLIND MATE



**SHELL SIZE M**  
+/- .050 (1.27) ALLOWABLE MISALIGNMENT  
FROM CENTERLINE

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