



# 790-027S Crimp Terminated Panel Mount Plugs, Socket Contacts How To Order

## 790-027S Panel Mount Plugs

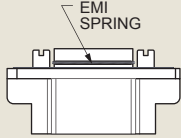
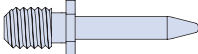
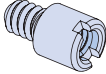
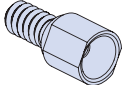
### SOCKET CONTACTS WITH CRIMP TERMINATION



790-027S connectors are designed for rear-panel mounting and are supplied with conductive panel gaskets. These connectors feature machined aluminum shells and wire grommets for environmental protection. Contacts are rear-release snap-in crimp type. Connectors are supplied with crimp contacts packaged separately. Size #23 signal pins accept up to #22 AWG wire. Size #16 contacts accept #16-18 AWG wire. Size #12 contacts accept #12-14 AWG wire. Size 12 and 16 cavities also accept coaxial contacts purchased separately. Attach optional shielding adapters (799-016) for EMI protection.

#### HOW TO ORDER

##### Sample Part Number

| 790-027S                                                        | H-66                                                                                                                                                                                                                                                                                                                                                         | M                                                                                                                                                                                                                                                                                                                                                                         | E                                                                                                                                               | P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                                                     | Shell Size - Insert Arr.                                                                                                                                                                                                                                                                                                                                     | Shell Finish                                                                                                                                                                                                                                                                                                                                                              | EMI Spring                                                                                                                                      | Hardware Option                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>790-027S</b><br>Rear Panel Mounted Plug with Socket Contacts | See Table 1 for Available Insert Arrangements<br><br>To order a connector without size #16 or #12 power pins, substitute "W" instead of "P" in the insert arrangement.<br><br>Example:<br><br><b>36P2</b> is supplied with 2 power pins.<br><br><b>36W2</b> is supplied less the power pins.<br><br>See Section B for coaxial contacts purchased separately. | <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>G</b><br>Guide Pin<br><br><br><b>P</b><br>Female Jackpost<br><br><br><b>S</b><br>Female Guide Socket |

#### 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 |
| Insulators      | Liquid crystal polymer (LCP)                                   |
| Retention Clips | Beryllium copper alloy                                         |
| Grommet         | Fluorosilicone rubber                                          |
| Hardware        | 300 series stainless steel                                     |
| Panel Gasket    | Fluorosilicone, conductive                                     |

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

# 790-027S

## Crimp Terminated Panel Mount Plugs, Socket Contacts

### How To Order



Table 1 Contact Arrangements

| Layout | Contact Quantity<br>#23 #16 #12 |   | Face View |
|--------|---------------------------------|---|-----------|
| 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 790-027S

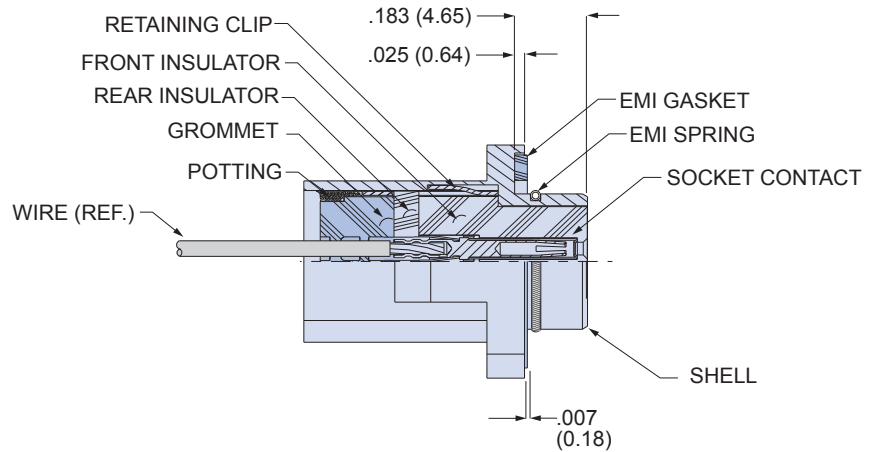
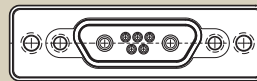


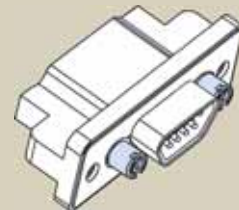
TABLE 2 HARDWARE OPTION



**N**

### No Mating Hardware

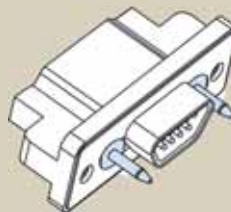
Connector is supplied with threaded holes. Shell sizes H and L have #6-32 threads, other sizes have #4-40 threads. Thread depth is .150" (3.8).



**P**

### Jackposts

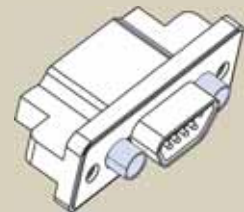
Connector is supplied with non-removable stainless steel jackposts. Shell sizes H and L have #4-40 UNC thread, other sizes have #2-56 thread. Stainless steel.



**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

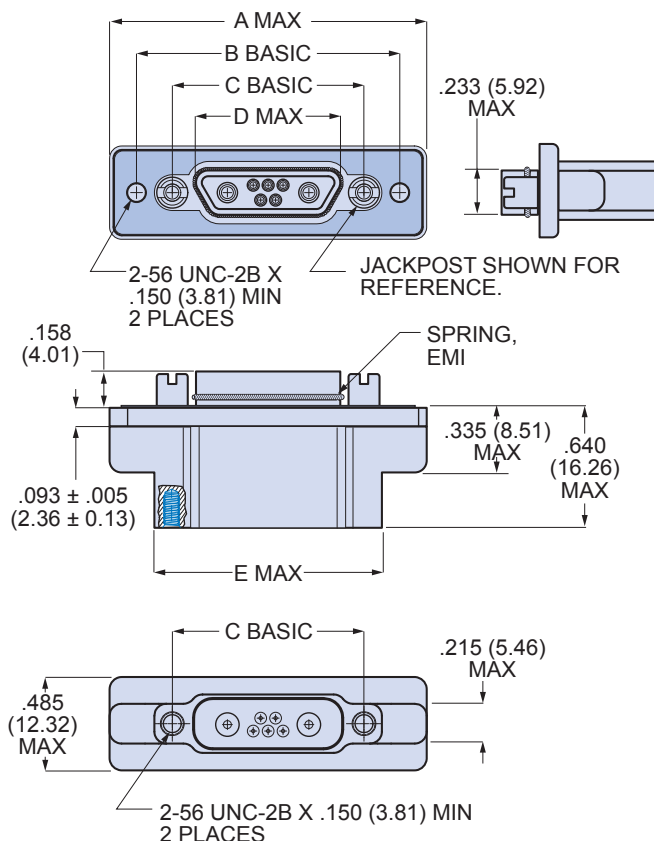
Connector is supplied with stainless steel non-removable bushings. Mates with type "G" guide pins on corresponding receptacle connector.

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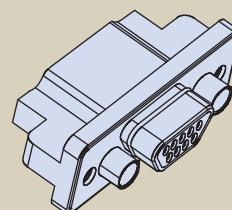


# 790-027S Crimp Terminated Panel Mount Plugs, Socket Contacts Dimensions

## 790-027S Shell Size A, B, C, D, E, F, J and K Dimensions



### BLIND MATE



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

## 790-027S Shell Size A-F, J and K Dimensions

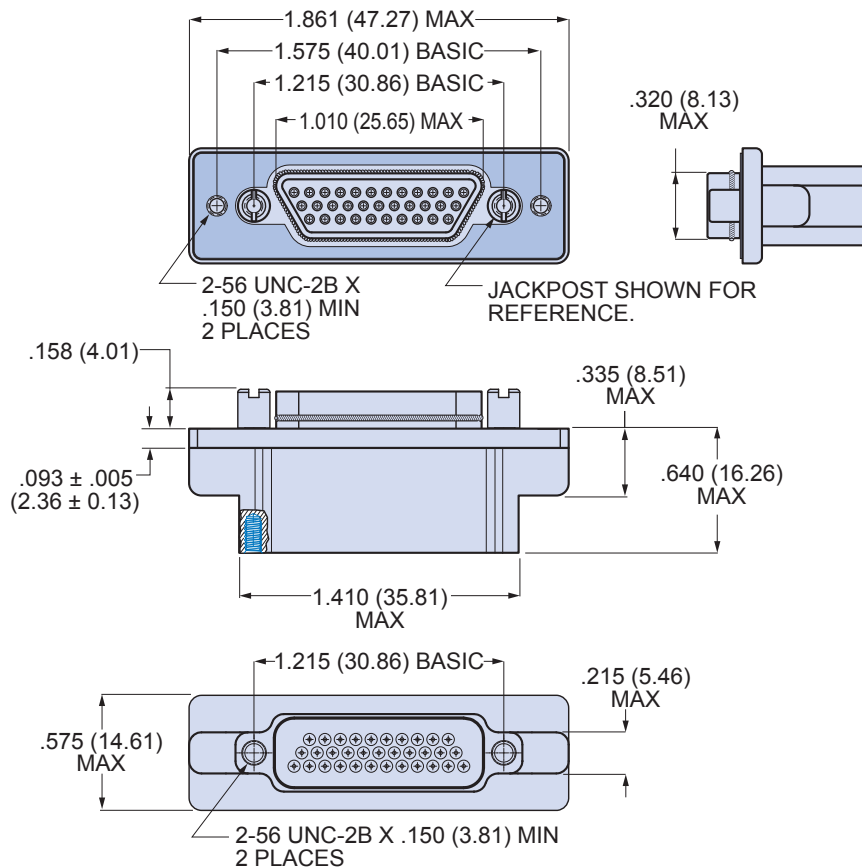
| 790-027S SIZE A-F, J, K DIMENSIONS |        |       |         |       |         |       |        |       |        |       |
|------------------------------------|--------|-------|---------|-------|---------|-------|--------|-------|--------|-------|
| Shell Size                         | A Max. |       | B Basic |       | C Basic |       | D Max. |       | E Max. |       |
|                                    | In.    | mm.   | In.     | mm.   | In.     | mm.   | In.    | mm.   | In.    | mm.   |
| A                                  | 1.211  | 30.76 | .925    | 23.50 | .565    | 14.35 | .335   | 8.51  | .760   | 19.30 |
| B                                  | 1.361  | 34.57 | 1.075   | 27.31 | .715    | 18.16 | .485   | 12.32 | .910   | 21.11 |
| C                                  | 1.511  | 38.38 | 1.225   | 31.12 | .865    | 21.97 | .635   | 16.13 | 1.060  | 26.92 |
| D                                  | 1.611  | 40.92 | 1.325   | 33.66 | .965    | 24.51 | .735   | 18.67 | 1.160  | 29.46 |
| E                                  | 1.761  | 44.73 | 1.475   | 37.47 | 1.115   | 28.32 | .885   | 22.48 | 1.310  | 33.27 |
| F                                  | 1.911  | 48.54 | 1.625   | 41.28 | 1.265   | 32.13 | 1.035  | 26.29 | 1.460  | 37.08 |
| J                                  | 2.261  | 57.43 | 1.975   | 50.17 | 1.615   | 41.02 | 1.390  | 35.31 | 1.810  | 45.97 |
| K                                  | 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.

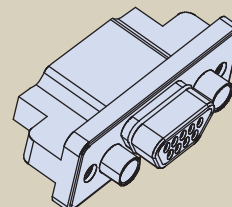
**790-027S**  
**Crimp Terminated Panel Mount Plugs,  
 Socket Contacts**  
**Dimensions**



**790-027S Shell Size G Dimensions**



**BLIND MATE**



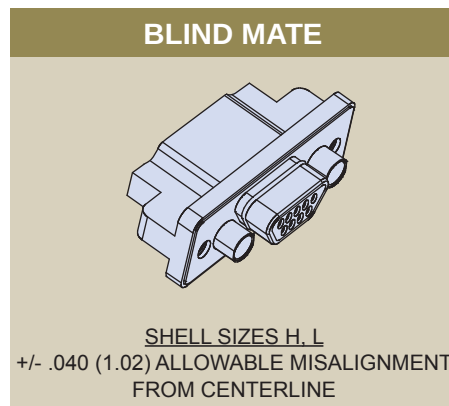
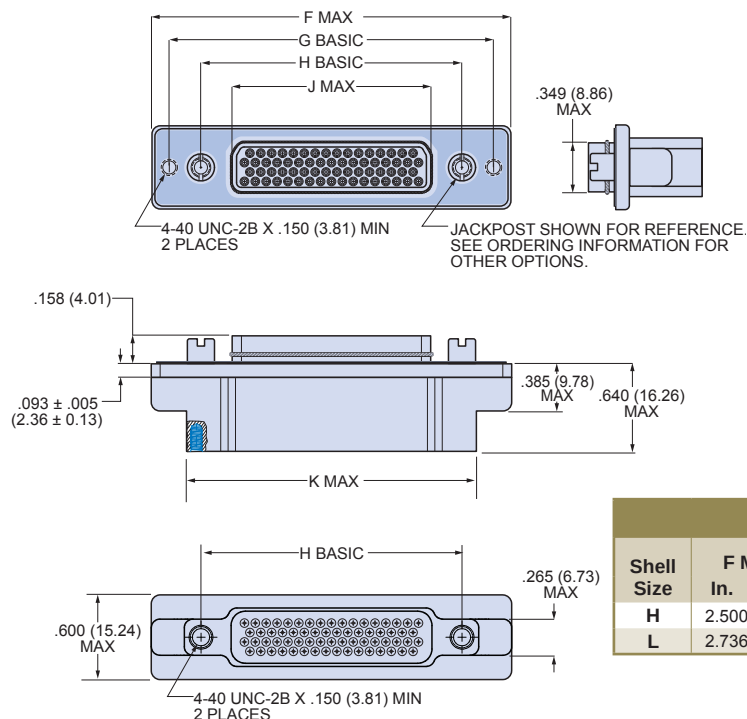
SHELL SIZES A, B, C, D, E, F, G, J, K  
 +/- .030 (0.76) ALLOWABLE  
 MISALIGNMENT FROM CENTERLINE

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



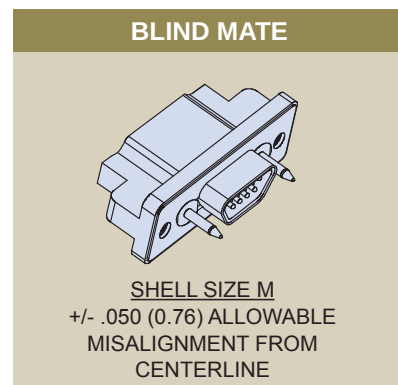
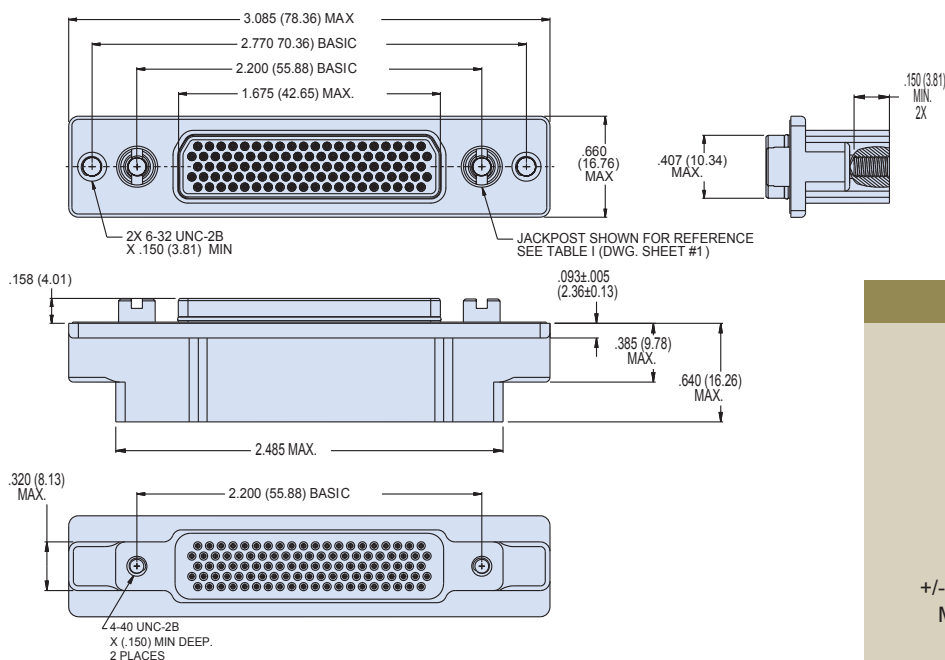
# 790-027S Crimp Terminated Panel Mount Plugs, Socket Contacts Dimensions

## 790-027S Shell Size H and L Dimensions



| 790-027S 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 |

## 790-027S Shell Size M Dimensions



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