

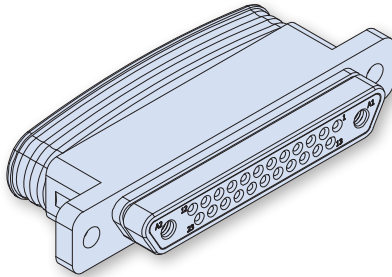
**790-046S**  
**Crimp Terminated Cable Plug Connector with**  
**Integrated Banding Porch, Socket Contacts**  
**How To Order**



Series 79  
Cable  
Connectors

## 790-046S Cable Plugs

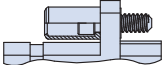
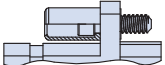
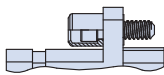
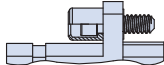
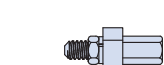
### CRIMP SOCKET CONTACTS, INTEGRATED BANDING PORCH



Rugged, lightweight 790-046S connectors feature machined aluminum shells, fluorosilicone face seals and wire grommets for environmental protection. Contacts are rear-release snap-in crimp. 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. Connector shell features an integrated banding porch for attachment of EMI shielding.

#### HOW TO ORDER

##### Sample Part Number

| 790-046S                                                                              | H-10P4                                                                                                                                                                                                                                                                                                                                                        | E                                                                      | M                                                                                                                                                                                                                                                                                                                                                                         | B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Base Part Number                                                                      | Shell Size - Insert Arrangements                                                                                                                                                                                                                                                                                                                              | Ground Spring Option                                                   | Shell Finish                                                                                                                                                                                                                                                                                                                                                              | Mounting Hardware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>790-046S</b><br>Cable Plug with Crimp Socket Contacts and Integrated Banding Porch | 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>E</b><br>EMI Ground Spring Supplied<br><br><b>N</b><br>Not Supplied | <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. | <br><b>B</b><br>Thru-Hole, No Hardware<br><br><br><b>MF</b><br>Low-profile captive jack screw, hex socket, floating<br><br><br><b>SF</b><br>Low-profile captive Jackscrew, slotted, floating<br><br><br><b>M</b><br>Low-profile captivated jackscrew, hex socket, jacking<br><br><br><b>S</b><br>Low-profile captivated Jackscrew, slotted, jacking<br><br><br><b>P</b><br>Jackpost, female, with nut and split washer |

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

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

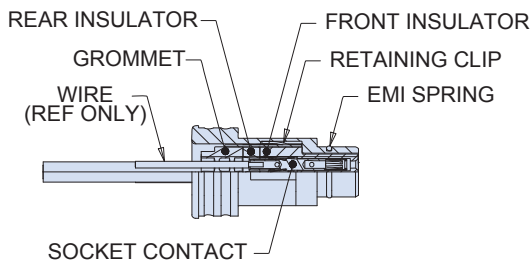
# 790-046S

## Crimp Terminated Cable Plug Connector with Integrated Banding Porch, Socket Contacts Dimensions

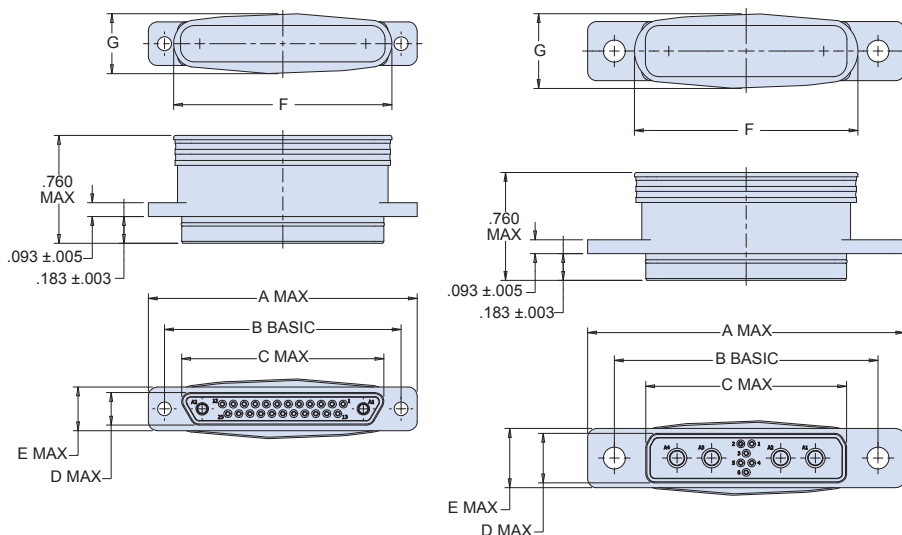
Table I Contact Arrangements

| 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 790-046S



## 790-046S Dimensions

SHELL SIZES A, B, C, D,  
E, F, G, J, K

SHELL SIZES H, L

## 790-046S DIMENSIONS

| Shell Size | A Max. |       | B Basic |       | C Max. |       | D Max. |       | E Max. |       | F Max. |       | G Max. |       |
|------------|--------|-------|---------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|            | In.    | mm.   | In.     | mm.   | In.    | mm.   | In.    | mm.   | In.    | mm.   | In.    | mm.   | In.    | mm.   |
| A          | .785   | 19.94 | .565    | 14.35 | .335   | 8.51  | .233   | 5.92  | .308   | 7.82  | .440   | 11.18 | .360   | 9.14  |
| B          | .935   | 23.75 | .715    | 18.16 | .485   | 12.32 | .233   | 5.92  | .308   | 7.82  | .590   | 14.99 | .370   | 9.40  |
| C          | 1.085  | 27.56 | .865    | 21.97 | .635   | 16.13 | .233   | 5.92  | .308   | 7.82  | .740   | 18.80 | .390   | 9.91  |
| D          | 1.185  | 30.10 | .965    | 24.51 | .735   | 18.67 | .233   | 5.92  | .308   | 7.82  | .840   | 21.34 | .400   | 10.16 |
| E          | 1.335  | 33.91 | 1.115   | 28.32 | .885   | 22.48 | .233   | 5.92  | .308   | 7.82  | .990   | 25.15 | .400   | 10.16 |
| F          | 1.485  | 37.72 | 1.265   | 32.13 | 1.035  | 26.29 | .233   | 5.92  | .308   | 7.82  | 1.140  | 28.96 | .410   | 10.41 |
| G          | 1.435  | 36.45 | 1.215   | 30.86 | 1.010  | 25.65 | .320   | 8.13  | .395   | 10.03 | 1.130  | 28.70 | .490   | 12.45 |
| H          | 2.175  | 55.25 | 1.800   | 45.72 | 1.385  | 35.18 | .349   | 8.86  | .410   | 10.41 | 1.525  | 38.74 | .510   | 12.95 |
| J          | 1.845  | 46.86 | 1.615   | 41.02 | 1.390  | 35.31 | .233   | 5.92  | .308   | 7.82  | 1.490  | 37.85 | .410   | 10.41 |
| K          | 2.240  | 56.90 | 2.015   | 51.18 | 1.795  | 45.59 | .233   | 5.92  | .308   | 7.82  | 1.890  | 48.01 | .430   | 10.92 |
| L          | 2.420  | 61.47 | 2.036   | 51.71 | 1.623  | 41.22 | .349   | 8.86  | .410   | 10.41 | 1.760  | 44.70 | .520   | 13.21 |
| M          | 2.575  | 65.41 | 2.200   | 55.88 | 1.745  | 44.32 | .407   | 10.34 | .470   | 11.94 | 1.850  | 46.99 | .615   | 15.62 |

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