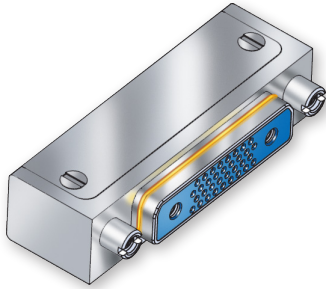


**790-042S**  
**Right Angle PCB Terminated**  
**Free-Standing Plugs, Socket Contacts**  
**How To Order**



Series 79  
 90° PCB  
 Connectors

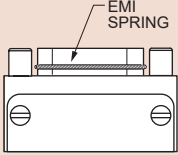
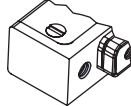
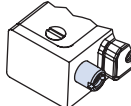
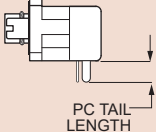
**790-042S Right Angle PCB Free-Standing Plugs**  
**SOCKET CONTACTS WITH PCB TERMINATION**



Free-standing rugged right angle headers feature gold-plated PC tail contacts for thru-hole printed circuit board termination. Not for panel mounting. Contacts are permanently installed and are sealed with epoxy. Shells are aluminum alloy. EMI shroud improves shielding performance. 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. Mates with 790-024p cable receptacles.

**HOW TO ORDER**

**Sample Part Number**

<b>790-042S</b>	<b>L-6P6</b>	<b>M</b>	<b>E</b>	<b>P</b>	<b>A</b>
<b>Part Number</b>	<b>Shell Size - Insert Arrangements</b>	<b>Shell Finish</b>	<b>EMI Spring</b>	<b>Hardware Option</b>	<b>PC Tail Length</b>
<b>790-042S</b> Right Angle Plug with 90° PC Tail Contacts for Termination to Backplanes or Flexible Circuits	See Table 1 for Available Insert Arrangements	<b>M</b> Electroless Nickel <i>general purpose applications</i>  <b>MT</b> Nickel-PTFE 1000 Hour Grey™ <i>maximum corrosion protection and durability (non-reflective grey)</i>  <b>ZNU</b> Zinc-Nickel with Black Chromate <i>tactical applications (non-reflective black)</i>  Additional shell finishes are listed on page C-9.	<b>E</b> EMI Spring <b>N</b> No Spring   <b>Note:</b> EMI Spring is not compatible with chromate finishes including cadmium and zinc-nickel	 <b>N</b> No Hardware   <b>P</b> Female Jackpost	<b>A</b> .125 Inch (3.2 mm.)  <b>B</b> .250 inch (6.4 mm.)   PC TAIL LENGTH

**SPECIFICATIONS**

Current Rating	#23 5 AMPS, #16 13 A., #12 23 A.
Dielectric Withstanding Voltage	#23 750 VAC RMS, #12 and #16 1800 VAC RMS
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +150° C.
Shock	300 g.
Vibration	20 g.

**MATERIALS AND FINISHES**

Shell	Aluminum alloy
Contacts	Copper alloy, gold plated
Insulator	Liquid crystal polymer (LCP)
PCB Tray	Thermoplastic
EMI Shroud	Aluminum alloy
Hardware	300 series stainless steel
Panel Gasket	Fluorosilicone, conductive
Encapsulant	Epoxy

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



# 790-042S Right Angle PCB Terminated Free-Standing Plugs, Socket Contacts How To Order

Table 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 790-042S

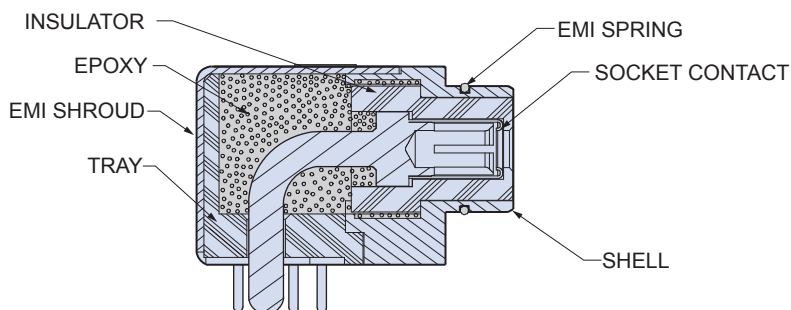
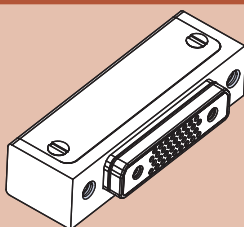


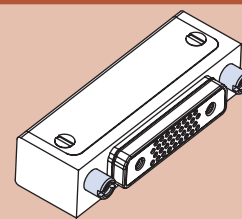
TABLE 2 HARDWARE OPTION



**N**

### No Mating Hardware

Connector is supplied with blind, tapped holes. Shell size M have 8-32 UNC-2B thread, shell sizes H and L have 6-32 UNC-2B thread, other sizes are #4-40. Minimum thread depth is .150" (3.81).



**P**

### Jackposts

Connector is supplied with non-removable jackposts. Shell size M have 6-32 UNC-2B thread, shell sizes H and L have #4-40 UNC-2B thread, other sizes have #2-56 thread.

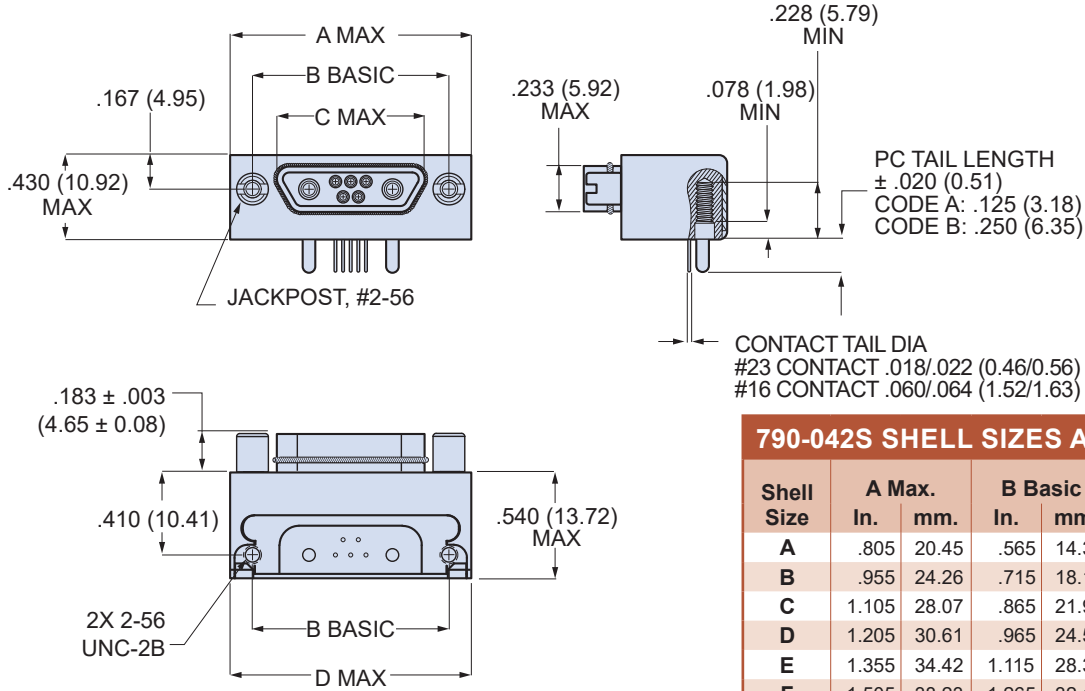
Dimensions in Inches (millimeters) are subject to change without notice.

**790-042S**  
**Right Angle PCB Terminated**  
**Free-Standing Plugs, Socket Contacts**  
**Dimensions**



Series 79  
 90° PCB  
 Connectors

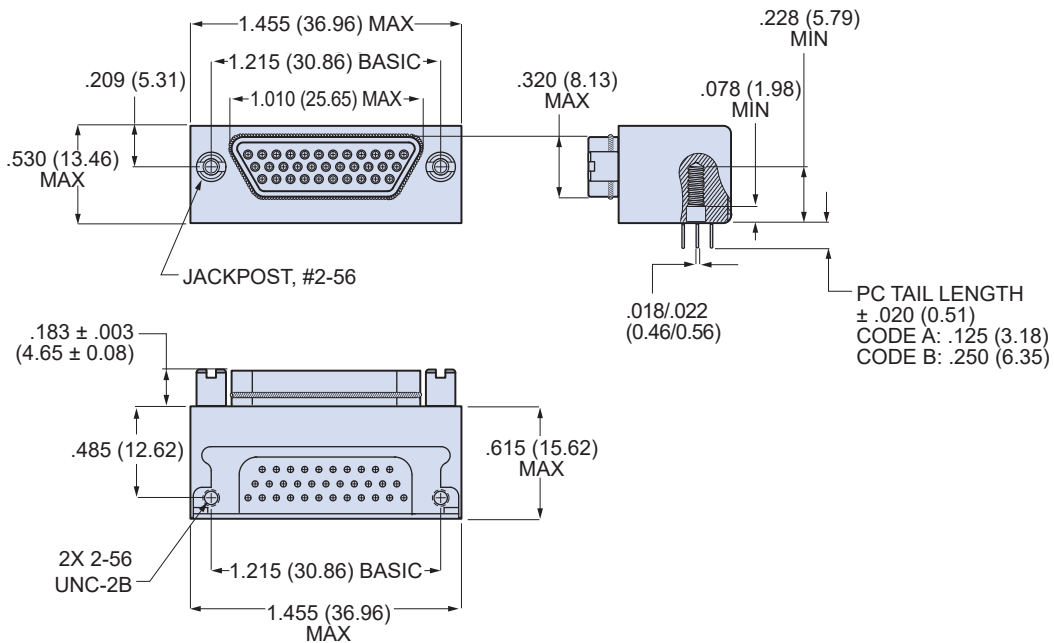
**790-042S Shell Sizes A-F, J and K Dimensions**



**790-042S SHELL SIZES A-F, J AND K**

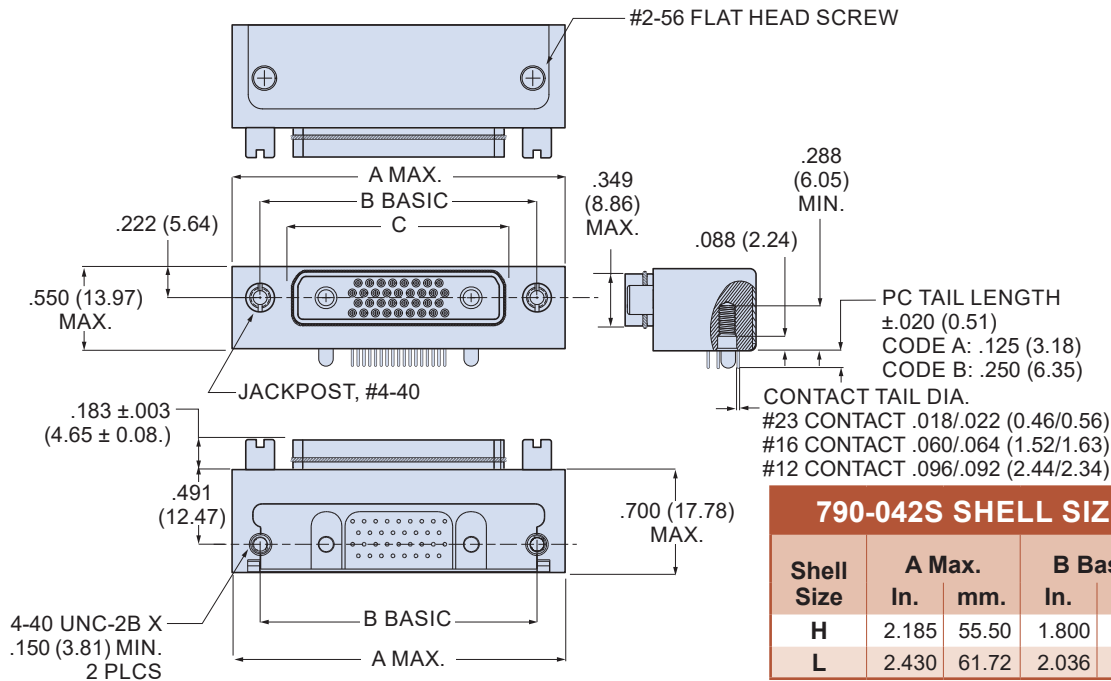
Shell Size	A Max.		B Basic		C Max.	
	In.	mm.	In.	mm.	In.	mm.
A	.805	20.45	.565	14.35	.335	8.51
B	.955	24.26	.715	18.16	.485	12.32
C	1.105	28.07	.865	21.97	.635	16.13
D	1.205	30.61	.965	24.51	.735	18.67
E	1.355	34.42	1.115	28.32	.885	22.48
F	1.505	38.23	1.265	32.13	1.035	26.29
J	1.855	47.12	1.615	41.02	1.380	35.05
K	2.255	57.28	2.015	51.18	1.783	45.29

**790-042S Shell Size G Dimensions**



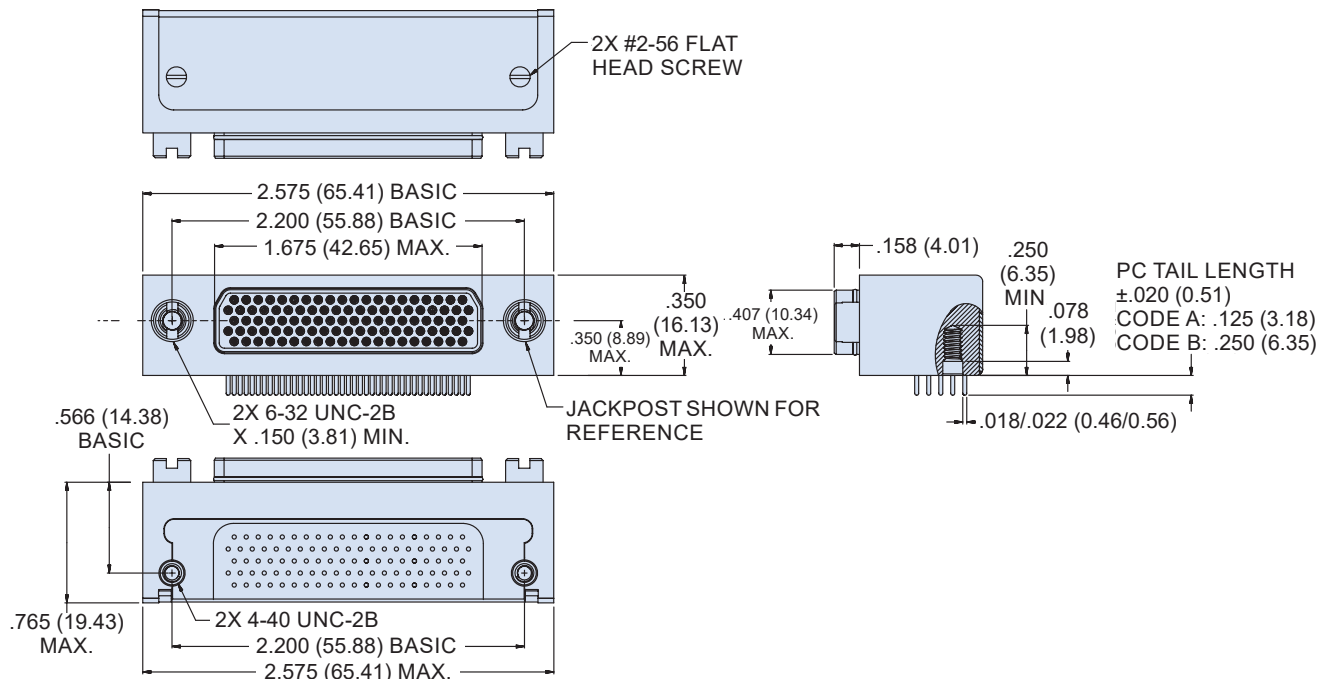
Dimensions in Inches (millimeters) are subject to change without notice.

## 790-042S Shell Sizes H and L Dimensions



790-042S SHELL SIZES H AND L						
Shell Size	A Max.		B Basic		C Max.	
	In.	mm.	In.	mm.	In.	mm.
H	2.185	55.50	1.800	45.72	1.385	35.18
L	2.430	61.72	2.036	51.71	1.623	41.22

## 790-042S Shell Size M Dimensions



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